

Series of ERUDITE Working Papers

N° 08-2023

Title

How does Religious Rule affect the strength of women's empowerment?

A micro-level empirical analysis for Afghanistan

Authors

Qahraman Kakar

How does Religious Rule affect the strength of women's empowerment?

A micro-level empirical analysis for Afghanistan

Qahraman Kakar*

October 16, 2023

Abstract

This study evaluates the impact of religious rules on women empowerment measurement. For women empowerment, we use a set of indicators from the Demographic and Health Survey for Afghanistan (the latest survey first time conducted in 2015). For the empirical purpose, we use the diff-and-diff method to examine the impact of religious rule on women's empowerment. we rely on the fact that, depending on their year of birth and province of residence, individuals differed in the number of years they were exposed to the Taliban government while of school age. Our difference in differences estimates shows that an increase of 2.6 years in the number of years of exposure to Taliban rule, while the women were of school age decreased women's education by 0.27 years compared to the control group. Similarly, 2.6 years of women's exposure to Taliban rule resulted in a lower likelihood of 1.5 percentage points of completion of 9th-grade schooling compared to the women in the control group. For our outcome variable of women empowerment in the economic outcomes. We find that women, who were exposed to the Taliban rule, are roughly 2 percentage points more likely to own land, compared to women who were in the control group. Moreover, they are 3 percentage points less likely to have a say in how to spend their husband's income. For the decision-making autonomy, the results show that women who were exposed to Taliban rule are 4 percentage points less likely to decide about their healthcare, 6 percentage points less likely to visit their relatives, and 5 percentage points less likely to decide on household purchases compared to the control group. The results of this study show that in general, religious rule negatively affects women's empowerment. We compute a set of placebo regressions to support the assumption of parallel trends for the treatment and control groups. This is essential while using the difference and difference method. Our results for the placebo regression are statistically insignificant which gives us validation for the methodology difference and difference model we have adopted. It also supports the idea that our findings are not because of any policy shift and government change before the Taliban.

Keywords: Taliban; Religious rule; Women empowerment; Demographic and Health Survey; Diff-and-Diff method

1 Introduction

Gender inequality exists in a major part of the world but is severe in developing countries. Girls have fewer educational opportunities, reduced labour force participation, less autonomy over choosing a partner, and childbearing (Dhar et al., 2018; Duflo, 2001). Studies suggest that cultural norms play an important role in shaping women's roles in society (see for example; (Fernández et al., 2004). Gender discriminatory practices such as cultural stereotypes at school

^{*}ERUDITE, Université Gustave Eiffel, France 77420. Qahramankakar1@gmail.com

and work, restriction of women's mobility in public spaces, parental attitude towards their daughter's education, and early child marriage are a few hurdles in achieving gender equality goals. Moreover, studies have emphasised the importance of cultural norms in shaping gender gaps (Bertrand et al., 2015). Societies have different cultural beliefs about the appropriate role of women in a society deeply embedded in their historical roots (Fernandez, 2007; Nunn, 2009). Societies differ in gender norms regarding women's role in labour participation, getting an education, marriage, fertility choice, and domestic violence. Gender norms directly influence women's well-being (Giuliano, 2017). These norms pass from one generation to another and continue to persist (Attias-Donfut, 2000). Radical religious rules and traditions constitute one of the several factors that may widen these gender gaps and inequalities. Moreover, there is some evidence that early childhood and youth exposure to conflict impact attitudes to domestic violence in later life (La Mattina et al., 2017). Similarly, a study shows that civil war and genocide have some impact on the bargaining power of women in later life (La Mattina, 2017). Afghanistan was under Taliban rule from (1996 -2001) and imposed gender-specific restrictions throughout its rule. Women were restricted to the four walls of the boundaries. Taliban banned women from appearing in public. The group banned girls from attending schools and accessing health care (Ahmed, 2000). The event of 9/11 and the subsequent invasion of the United States resulted in the removal of the Taliban from power in 2001; a new government was replaced by an elected president (Larson, 2009). This article analyses whether the individual's exposure to Taliban rule has an impact on women's empowerment. More specifically, we employ three different dimensions of women's pluralistic rights: 1) Labour outcomes 2) educational outcomes of women and 3) women empowerment. For empirical purposes, we use primary-level data from the DHS household survey conducted by USAID for Afghanistan in 2015. To the best of my knowledge, studies that have quantified the rule of radical religious rule and its impact on human capital and women's empowerment in the context of Afghanistan are limited.

We use the Diff-and-Diff method to examine the impact of religious rules on women's empowerment. The results of this study show that in general, religious rule negatively affects women's empowerment. Our results show an increase of 2.6 years in the number of years of exposure to Taliban rule, while the women of her school age decreased in women's education by 0.27 years compared to the control group. Similarly, 2.6 years of women's exposure to Taliban rule resulted in a lower likelihood of 1.5 percentage points of completion of 9th-grade schooling compared to the women in the control group. For our outcome variable of women empowerment in the economic outcomes. We find that women, who were exposed to the Taliban rule, are roughly 2 percentage points more likely to own land, compared to women who were in the control group. Moreover, they are 3 percentage points less likely to have a say in how to spend their husband's income. For the decision-making autonomy, the results show that women who were exposed to Taliban rule are 4 percentage points less likely to decide about their healthcare, 6 percentage points less likely to visit their relatives, and 5 percentage points less likely to decide on household purchases compared to the control group. For our outcome variables of emotional autonomy, women's perception of beating. Women who were exposed to the Taliban's rule were 2 percentage points more likely to view their beating by husbands as justified. Finally, We find that men who were exposed to the Taliban rule are roughly 4 percentage points more likely to justify wife-beating when she goes out without informing him compared to men who were in the control group. We compute a set of placebo regressions to support the assumption of parallel trends for the treatment and control groups. This is essential while using the difference and difference method. For our placebo regression, we excluded all those individuals who were of school age during the Taliban rule. we compare all those individuals who were of school age (5-17) and were exposed to the rule of President Burhanuddin Rabbani in the year (1992-1996) with women of school age who were exposed to the government of President Najibullah (1987-1992). Our results for the placebo regression are statistically insignificant which gives us a validation for the

methodology difference and difference model we have adopted. It also supports the idea that our findings are not because of any policy shift and government change before the Taliban.

The remainder of this paper is organized as follows. Section 2 explains the theory and literature related to this topic. Section 3 offers the transitional background of the Afghan economy. Section 4 presents data and method. The results are described in section 5. Finally, section 6 concludes the study with policy recommendations.

2 Theory and Literature

2.1 Women empowerment issues and challenges

Women empowerment is a multidimensional concept that aims to measure not only women's ability to control resources but also their ability to choose and control different outcomes and enhance their self-esteem (Narayan-Parker, 2005). Empowerment refers to the process of achieving agency - that is, achieving the ability to make a choice on one's own behalf (Kabeer, 2005). The empowerment process involves various level of changes that assists women in achieving the agency (Njoh and Ananga, 2016). Empowerment is not merely the ability to exert power over people and resources. It involves the exercise rather than possession of power. Empowerment is a process allowing both men and women to get involved as well as to oppose and subvert power relationships. It is an institutionalised and discursive practice, where individuals and groups experience and encounter empowerment through developing skills and consciousness and making decisions. Developing consciousness, making decisions, and skill development take place within the structural and institutional constraints of society. Groups are empowered through collective actions, but they are hampered by the structure of power they come across. In the words of Naila Kabeer, 'empowerment is both a process and an outcome. It is a process that it is fluid, often unpredictable, and requires attention to the specificities of struggles over time and place. Empowerment can also be seen as an outcome that can be measured against expected accomplishments. In recent years, subjective measures of well-being on subjective judgments have been helpful in measuring human development (Anand, 2016). Empowerment for women only happens when they can envisage a different life and consider themselves able and entitled to make decisions, studies have assessed empowerment across multiple domains (see, for example, detailed discussion on the topic (Malhotra et al., 2002; Mishra and Sam, 2016; Pratley, 2016; Sharaunga et al., 2019)).

Researchers came up with two different approaches to using the information contained in the women's responses are prominent. The first approach focuses on specific dimensions of autonomy. It reflects the rationale that female autonomy is context-specific and that the importance of different dimensions may vary from one setting to the next Jejeebhoy and Sathar (2001), for instance, consider women's autonomy in terms of freedom from violence, mobility, control over resources, and contributions to decision making while Vlassoff (1992), Jejeebhoy and Sathar (2001), as well as Morgan and Niraula (1995), consider three dimensions of autonomy, control over resources and contributions to decision-making power and mobility. Chavoshi et al. (2004) use distinct variables on mobility, decision-making access, control over resources, and freedom from threat to analyse women's reproductive behavior in Iran. A drawback of this approach is the underlying assumption that the answers to the questions provide a perfect measure of the underlying unobserved autonomy trait. The second approach employs summary indices constructed from answers to the questions mentioned above. For example, Hogan et al. (1999) construct an index using questions on who purchases major items, consumption patterns, resource allocation, joining a women's club, sending children to school, and the age at which girls should marry. Afridi (2005) summarises the various aspects of female autonomy into a single index

as do Chakraborty and De (2011) create an index from the principal components of a variety of household variables on which the mother of a child takes decisions. However, Agarwala and Lynch (2006) criticises this approach on the grounds that it is too simplistic and ignores differences across measures. The addition of qualitative answers into a single index implies that each answer is given equal weight in determining women's autonomy. However, there are good reasons to believe that some aspects of a woman's life are more important for her autonomy than others. Ewerling et al. (2017) developed a SWPER index, constructed by using Demographic and Health Survey data of 34 African countries by targeting currently partnered women. The principal component analysis method is used to extract the components. The index encompasses three well-recognised domains of women's empowerment (attitude to violence, social independence, and decision making. The SWPER enables within-country and between-country comparisons.

These indices have three significant limitations: first, the weightings used for the items were chosen subjectively, they are only applied to married women because most questions related to empowerment are restricted to this group; and third, they were designed for specific countries or small groups of countries preventing broader comparisons across countries.

In summary, all measures of autonomy used to date have faced problems of endogeneity of covariates in the model or measurement errors. The set of variables concerning women's empowerment included in our analysis is justified in the context of Afghanistan. The demographic and health survey asked a wide range of questions that assess maternal decision-making autonomy on a range of issues. We consider women's empowerment based on a different set of questions asked from women in the survey as our outcome variables independently.

2.2 Social constraints and access to public goods

A burgeoning economic literature has examined the delivery of public goods such as security, justice, education, and health by radical religious groups. Studies suggest that radical religious groups may become a major provider of public services in countries with weaker institutions (Berman, 2003; Berman and Laitin, 2008; Iannaccone, 1998; Iannaccone and Berman, 2006). In the context of Afghanistan, "The Taliban deal with a wide range of public delivery services such as health, education, finance, and media relations (Jackson and Weigand, 2019).

Similar groups in other parts of the world exist, such as Hamas in the Gaza Strip and Hezbollah in Lebanon. The three groups share the attributes of being radical militant groups. However, there are some differences in the type of public goods based on the demand by their people in each country (see (Berman, 2011)). Each group legitimises their rule and increases support for their respective groups where there is a high demand for each type of public goods service. Hamas and Hezbollah provided public goods such as education and health whereas, the Taliban provided Public safety and justice (Berman, 2003). In addition, the diversion of the US army to the Iraq war witnessed the expansion of public services such as justice, health, and education by the Taliban (Noury and Speciale, 2016). Religious groups or sects view secular society as threatening and therefore distance themselves from secular society by employing prohibitions and sacrifice. Religious prohibitions put restrictions on behaviour, for example, dietary restrictions, dress codes, restrictions on sexual behaviour etc. Sacrifices are acts, which are expensive or impossible to reverse, such as circumcision, bloodletting, and other initiation rites. The group usually demand high levels of commitment and high rates of participation. The rational choice framework for the study of religious sects, proposed by studies predicts that the threat of group member's defection can rationally explain episodes of destructive behaviour and gratuitous cruelty for example in the case of the Afghanistan Taliban subjugated women, homosexuals, and minorities (Berman and Laitin, 2008). The control of behaviour is not only limited to the members of the religious or political group but also the non-group members of the society (Iannaccone, 1998).

Similarly, Berman and Laitin (2008) suggested that the repression and abuses of the masses in Afghanistan strengthen the Taliban's control fraternity in both higher ranks and troops, restricting members' defection by mixing with outsiders. Likewise, studies have documented early-age exposure to civil war on domestic violence in later life (La Mattina et al., 2017). Consequently, these studies indicate that exposure to gender-inclusive or discriminatory interventions can have an impact on gender attitudes over a lifetime (Dhar et al., 2018).

Noury and Speciale (2016) by using data from the National Risk and Vulnerability Assessment (NRVA) 2007-2008 survey found that an additional year of exposure to the religious rule in Afghanistan reduces the probability of women completing basic schooling by two percentage points. They are more likely to be employed on an agricultural farm of the household and less likely to be employed outside. Further, exposure to religious rules increases their chance of getting married at an early age and having more children. However, the study is limited to the human capital outcomes of women under the Taliban's rule.

Recent years have seen a surge in the amount of literature in the context of Afghanistan. However, it continues to be understudied when compared to other underdeveloped countries. To our knowledge, no other study has examined the economic consequences and well-being of women under Taliban rule. The research is of considerable importance in a country where the literacy rate, school enrolment, and women's well-being depict a bleak picture. Also, women are historically excluded from the public sphere and deprived of their fundamental human rights. The US and Taliban agreed on a conditional peace deal in February 2020 (Pilster, 2020). All these advancements will have both economic and social consequences for women in the future. Therefore, this study will be an important contribution to the literature on Afghanistan particularly the effect of social constraints on educational outcomes and women empowerment.

3 Transitional Background of Afghanistan

Afghanistan is a landlocked country with approximately 32 million inhabitants (Bindu, 2017). Women and girls make up half of the total population (United States Central Intelligence Agency 2017). Afghanistan scores very low on the human development index (GROUP et al., 2018). The country ranked last on the United Nations gender inequality index out of 170 nations (Blum et al., 2019). Women face extreme economic and social constraints, owing to three decades of civil conflict. Women live under strict tribal codes and cultural mores that curtail interactions between unmarried men and women. Afghanistan is a strictly gender-segregated society, women's virtue is associated with family honor, and men have the power to exercise the authority to restrict their behavior and movement (Moghadam, 2002). The principle of purdah dictates that women should be away from public view. These norms render local governance a strictly male-dominated activity (Boesen, 2004). Besides historical, religious, and legal forces, ethnicity is an important factor at play (Chiovenda, 2014). There are regional variations in norms among different ethnic groups, with women being restricted to houses in the majority of Pashtun areas (Azarbaijani-Moghaddam, 2010). The foundation of governance in rural Afghanistan is the local jirga or shura; a participatory council made up of men (Behera and Pfeffer, 1999; Ginsburg, 2011).

Historically, the shura has traditionally managed local public goods and adjudicated disputes

due to incompetence and lack of resources of the central government to exercise local control and provide resources in any part of the country (Barfield, 1984). The primary role of rural Afghan women is in the household, taking care of children and other family obligations. Though women also look after livestock and tend to have small plots of land, few of them own such assets (Grace, 2005). Women's autonomy over their own economic and family affairs is severely restricted by the commonly held norms that women and their offspring are under the proprietary control of the male head of household as manifested in their inability to inherit property and make choices about marriage partners and their children (Boesen, 2004). One such example in these societies is the occasional practice of giving girls in marriage to settle intra-household feuds or debts. Female mobility is also constrained by customs that require a woman traveling outside her village to have a male relative as an escort and even place restrictions on women's movement within their village. These measures prevent girls from attending school beyond a certain grade. Lack of access to education and free mobility, women are left with few opportunities to generate income and exercise control over any assets in their possession (Blum et al., 2019).

The country has been in armed conflict for more than four decades. From the Soviet invasion to the civil war and the consequent years of Taliban rule, women have experienced the wrath of the conflict in the form of severe human rights violations. Historically the gender issue in Afghanistan served as a symbolic instrument serving to foster large political ideals. The most significant state-initiated gender policies occurred during King Amanullah's reign (1919-1929) as part of his modernisation plan; the Marxist regime (1978-1989) as part of their revolutionary political scheme; the Mujaheddin/Taliban regime (1992-2001) as part of 'pure Islamization' of the nation. The US-backed government of the Islamic Republic of Afghanistan (2002 to 2021) with the establishment of the first-ever Ministry of women affairs (Zulfacar, 2006). Finally, the return of the Taliban on August 15, 2021. Taliban (1996-2001) is a religious and political group whose majority members belong to ethnic Pashtuns (Johnson and Mason, 2007). The majority of Taliban leadership studied in Pakistani (Deobandi) madrasas, which had their origin from India. Taliban emerged during the 1994 civil war in Kandahar province under the leadership of Mullah Omar during the provisional government of Burhanuddin Rabbani after the fall of the last Soviet-backed government (1992-1994) of President Muhammad Najibullah. The rule of the Taliban was gradual (see Map in Figure 1) on the occupation timing at the provincial level. The yellow colour represents the provinces captured by the Taliban in the Year 1994, such as Zabul, Uruzgan, Daikondi, and Kandahar, which is also (the birthplace of its supreme leader Mullah Umar). The year 1995 saw major territorial gain for the Taliban, and provinces in the grey such as Hilmand, Nimroz, Farah, Ghor, Herat, Ghazni, Paktika, Khost Logar, and Wardak were captured. The group announced the Islamic Emirate of Afghanistan in September 1996 after seizing Kabul along with provinces coloured in pink such as Paktya, Nangarhar, Logar, Kunar, Nuristan, and Badghis (Magnus, 1997).

After the announcement of the Islamic Emirates of Afghanistan, the group made further territorial gains in 1997; the provinces Takhar, Faryab, Sari Paul, Jawzjan, and Balkh were captured in 1997 (see Map in Figure 1 coloured in black) followed by Bamyan, Samangan, and Baghlan in 1998 (see Map in Figure 1 coloured in green). The last provinces captured by the Taliban were Kunduz, and Parwan coloured in Orange. However, the Taliban failed to capture two provinces in the north of Afghanistan. Panjshir and Badakhshan provinces remained under the control of the rival group Northern Alliance (5see map coloured in red). The Northern Alliance was a group of opponent parties that resisted the Taliban's rule under the nominal leadership of President Burhanuddin Rabbani. Influential leaders of the Northern Alliance were mainly non-Pashtuns, such as Ahmad Shah Masood of Jamiat-i-Islami, General Abdul Rashid Dostum ethnic Uzbek Junbish-i-Milli (National Movement). Karim Khalili of The Hizb-i-Wahadat-i-Islami-ye-Afghanistan (Islamic Unity Party Of Afghanistan) among others (Ghufran, 2001). Provinces

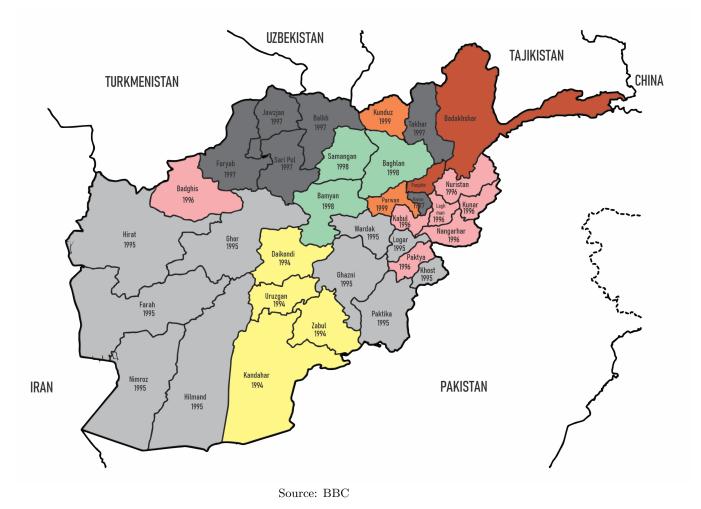


Figure 1: Taliban occupation of Afghanistan

such as Baghlan, Kapisa, Laghman, Kunar, Nuristan, and Takhar were captured or contested until the United States and its allies overthrew the Taliban in response to the 9/11 attacks (Katzman, 2010; Magnus, 1998; Rashid, 2000). The group implemented Shariyah. Women were restricted to their homes, not allowed to seek healthcare or visit relatives without donning a burqa and being accompanied by a male family member (Rubin, 1999).

Girls older than eight years were not allowed to interact with any male outside the family (Griffin, 2001); the Taliban used violence in the form of public punishments to enforce such restriction (Goodson, 2001). The regime was termed as an extremist religious group by major world powers Russia and the United States, and the UN. Among other differences, three countries, Pakistan, Saudi Arabia, and the United Arab Emirates, recognised Afghanistan's government. On the contrary, the Northern Alliance government represented Afghanistan on the diplomatic front in the major part of the world, despite having two provinces in their control.

The attack on the World Trade Centre on 9/11 led to the US invasion of Afghanistan which eventually resulted in formally ending the rule of the Taliban and paved the way for the establishment of a new democratic government in 2002. The invasion was ideologically justified under the banner of democracy and women's rights. The new government undertook several initiatives to improve the situation of women, including policy changes and programmatic supports for women and children (Samar et al., 2014). The Taliban regrouped in neighbouring

Pakistan and launched attacks on government installations, schools, hospitals, offices, and public spaces along with attacks on the allied forces international security assistance force (ISAF) and the Afghan security forces. In the words of Jackson and Weigand (2019): "The Taliban are no longer a shadowy insurgency; they are now a full-fledged parallel political order." The US withdrawal and the escape of President Ashraf Ghani on August 15 2021 resulted in the announcement of the Taliban's government. Afghan women still face widespread discrimination such as domestic violence, abduction, rape by armed groups, trafficking, and forced and child marriages. Girls can no longer go to school and the strict rules for women are put in place. Gender relations in Afghanistan are not static. They are constantly in the process of change (Shalinsky, 1996; Smith, 2009). Li et al. (2018) found that the majority of Afghans, both men and women justify interpersonal violence such as husbands beating wives and parents beating children. Human Rights Watch reported that due to early marriages and domestic violence, an estimated 2,000 Afghan women attempt suicide by setting themselves on fire every year. Despite post-Taliban legal reforms, including enshrining gender equity and the introduction of new laws against domestic violence in the constitution of Afghanistan the country ranked 154th out of 157 in gender equality (UNDP, 2015). Young girls are raised and dressed as boys to avoid rigid gender norms. This serves as an alternative for women and girls to get an education, acquire mobility, and participate in income it is a way for girls and women to acquire education, and mobility and engage in revenue-generating activities (Corboz et al., 2019).

In Afghanistan, primary education consists of grades 1 to 6 starting at age six, lower secondary education consists of grades 7-9 (twelve to fourteen years old), and higher secondary for grades 10-12 (fifteen to eighteen years old). Education is free at public institutions from grade 1 until the undergraduate level. Enrolment is heavily skewed toward the lower grades and boys. There exist significant disparities by province and gender exists in the enrolment. The country has a long way to meet the universal primary enrolment rate (Arooje and Burridge, 2020).

4 Data and sample description

4.1 Demographic and Health Survey (DHS) 2015 data: an overview

The data used in this analysis come from the 2015-16 Afghanistan Demographic and Health Surveys (AFDHS). The data is the first of its kind from the war-torn country and is nationally representative. The sample survey provides detailed information on household demographic and socioeconomic information, including fertility rates, family planning, childhood care, adult and childhood mortality, domestic violence, decision-making, and other questions. The survey interviewed 29,461 women aged 15-49 concerning well-being and women empowerment for example if the women have ever experienced domestic violence, they can go outside shopping and meet relatives, etc. Further, the survey also obtained information on the schooling of all household members such as the highest grade achieved, level of literacy, and current school enrolment of the household member.

The AFDHS followed a stratified two-stage sample design in urban and rural areas and for each of the 34 provinces of Afghanistan. The difficulty in gathering quality data in the presence of a prolonged conflict suggests that the available literature in social sciences subjects such as economics and political science that utilised that uses data from Afghanistan is relatively recent. The ethical responsibility of the AFDHS lies with the respective institution that completed the survey. The data is available for research purposes upon request to the DHS authorities.

We utilise the data on violence intensity complied by the Uppsala Conflict Data Program (UCDP). This data records all the events of organised violence and armed conflicts. The data for

Afghanistan has been available since 1989. The type of violence (State-based conflict, non-state conflict, and one-sided violence) disaggregates the data. Previously used in various studies (see for example (Noury and Speciale, 2016; Oskorouchi, 2019).

During the decade of wars, many Afghans migrated to neighboring countries, the two main destinations for the Afghans were Pakistan and Iran (Margesson, 2007). In our regression analysis, we include emigration rates at the province level. we sum up the number of Afghans in Iran and the number of Afghans in Pakistan. we then normalise this stock variable by the population in each province of origin to get emigration rates. The data for emigration rates come from the United Nations High Commissioner for Refugees Iran (UNHCR). whereas the data of Pakistan comes from the census of Afghan refugees in Pakistan.

4.2 Descriptive Statistics

Table 1 shows detailed descriptive statistics of our human capital variables such as completed years of education, high school completion, and basic literacy (individuals who can read and write). Other variables include labour force participation; wage work, family work, either individual is employed within household agriculture, the rate of non-agriculture employment within the household, the total number of children, age at the time of first marriage, and years of exposure to the Taliban's rule.

The total mean years of education of women in our sample is 1.40 compared to 3.22 years for men. The mean years of education decreased to 0.86 years for Pashtun women. Our next outcome variable of interest is if an individual has completed high school, which shows that only 6 percent of women have completed 9th grade compared to 17 percent of men who have completed 9th grade. Only 4 percent of Pashtun women have completed the 9th grade of schooling. Similarly, only 14 percent of women in our estimation can read and write compared to 51 percent of men, which decreases to 9 percent for women living in rural areas and 7 percent for Pashtun women.

Next, in our outcome variables of labour force participation, 13 percent of women were employed before the survey, compared to 97 percent of men. Similarly, roughly 9 percent of women are employed as wage workers compared to 85 percent of men. Wage work participation is only 5 percent for Pashtun women. On average, each couple has 4 kids in total. The mean age at first cohabitation is 18 years for women. The fact that a number of provinces that came under Taliban control were ethnic Pashtun majority provinces. The descriptive statistics evidently show that overall women's exposure to Taliban rule is higher at 4.1 years for Pashtun women compared to 3.1 for non-Pashtun women.

The data used on violence comes from the Uppsala Conflict Data Program (UCDP). The type of violence recorded in the survey (State-based conflict, non-state conflict, and one-sided violence) disaggregates the data. We observe three different periods; violence and death before, during, and after the Taliban rule. The first period is before Taliban rule which includes 1989 (the period when the data of the year 1989 is available) to 1994 (The year when the Taliban captured Kandahar). The second period was during Taliban rule which started from the year 1995 until 2001 when the Taliban were ousted. Finally, the third period starts from 2002 to 2015). The mean value of the number of people killed before the Taliban occupation is 1028, and the dead during the Taliban occupation increased to 1299, and lastly, the number of deaths jumps to 2496 after the Taliban period to 2496. In our analysis in this paper, we divide the total number of people killed by the province population. we get the mean value of 0.709 total number of deaths before the Taliban period (per 1000 people) 1.697 total number of deaths during the Taliban period (per 1000 people) and 3.531 total number of death after the Taliban (per 1000 people).

Table 1: Descriptive statistics

	Women		Rural Women		Pashtun Women		Men	
Individual characteristics	Mean (Std. Dev)		Mean (Std. Dev)		Mean (Std. Dev)		Mean (Std. Dev)	
Complete years of education	1.408	(3.052)	1.042	(2.570)	0.86	(2.383)	3.225	(4.309)
Completed 9 grade of schooling	0.065	(0.246)	0.044	(0.205)	0.039	(0.194)	0.171	(0.377)
Literacy	0.146	(0.196)	0.095	(0.168)	0.072	(0.161)	0.483	(0.220)
Labor force participation	0.131	(0.194)	0.127	(0.204)	0.086	(0.141)	0.967	(0.298)
Wage work	0.09	(0.148)	0.086	(0.147)	0.053	(0.119)	0.875	(0.282)
Family work	990.0	(0.159)	0.068	(0.174)	0.039	(0.104)		
Agricultural employment within the household	0.019	(0.112)	0.025	(0.129)	0.018	(0.064)		
Non-agricultural employment within the household	0.046	(0.114)	0.042	(0.117)	0.021	(0.082)		
No. of kids	3.923	(2.675)	3.882	(2.674)	3.849	(2.680)		
Age at first Cohabitation	17.91	(3.525)	18.02	(3.445)	18.09	(3.356)		
Age at first birth	19.28	(3.522)	19.36	(3.460)	19.31	(3.370)		
Year exposure to Taliban	3.182	(2.683)	3.139	(2.704)	4.145	(2.65)	2.367	(2.810)
Province Variables			All provinces	es	Treatment	t.		Control
Violent events before Taliban (normalised by population)	ed by population)		0.018	(0.021)	0.018	(0.022)	0.006	(0)
Violent events during Taliban (normalised by population)	ed by population)		0.758	(0.715)	0.796	(0.719)	0.126	(0.093)
Violent events after Taliban (normalised by population)	d by population)		0.059	(0.062)	0.061	(0.062)	9000	(0)
Total No. of deaths before Taliban (per 1000 people)	er 1000 people)		0.709	(1.163)	0.731	(1.180)	0.139	(0)
Total No. of deaths during Taliban (per 1000 people)	er 1000 people)		1.697	(1.830)	1.751	(1.835)	0.0540	(0)
Total No. of deaths after Taliban (per 1000 people)	r 1000 people		3.531	(3.624)	3.697	(3.663)	0.771	(0.638)
		4				0		

Data source: Author (using data from Afghan Demographic and Health survey 2015 for individual characteristic. The Uppsala Conflict Data Program (UCDP), for the violent events). N = 29,461.

Table 2: Descriptive statistics women empowerment, household, emigration and violence

Variable	Mean	Std. Dev.	Min	Max
Women				
Economic autonomy				
Own house	0.478	0.500	0	1
Own land	0.329	0.470	0	1
Earn more than husband	0.0200	0.140	0	1
Work (last 12 months)	0.131	0.337	0	1
How to spend husband earn	0.326	0.469	0	1
How to spend own earning	0.0480	0.213	0	1
Decision-making autonomy	0.0100	0.210		1
Who decides on:				
Respondent's health care	0.429	0.495	0	1
Large HH purchases	0.429 0.397	0.489	0	1
Visits to family or relatives	0.491	0.489	0	1
Emotional autonomy	0.431	0.0	0	1
· ·				
Beating justified if wife;	0.710	0.459	0	4
Goes out without asking	0.712	0.453	0	1
Neglects children	0.507	0.5	0	1
Argue with him	0.63	0.483	0	1
Refuse to have sex	0.395	0.489	0	1
Burns food	0.204	0.403	0	1
Men				
Mens attitude towards violence				
Beating justified if wife;				
Goes out without asking	0.625	0.484	0	1
Neglects children	0.313	0.464	0	1
Argue with him	0.445	0.497	0	1
Refuse to have sex	0.198	0.398	0	1
Burns food	0.0880	0.284	0	1
Household characteristics				
Household size	9.654	5.054	1	48
Sibling under 5	2.166	1.682	0	16
Wealth index	2.944	1.334	1	5
Women characteristics (All sample)	2.344	1.004	1	0
(1 /	1.816	2.141	0	5
Years exposure to Najib govt. (Women only)			-	-
Years exposure to Rabbani govt. (Women only)	1.831	2.132	0	5
Years exposure to Taliban (Women only)	3.597	2.574	0	8
Women educational attainment	1.298	3.234	0	13
Women Literacy	0.157	0.364	0	1
Women Labor force participation	0.132	0.338	0	1
Women wage work	0.075	0.263	0	1
Women family work	0.086	0.28	0	1
Women agricultural employment within the household	0.043	0.203	0	1
Women non-agricultural employment within the house-	0.043	0.202	0	1
hold				
Women age at first birth	18.93	3.211	10	38
Women age at first cohabitation	17.65	3.241	8	35
Men characteristics				
Years exposure to Najib govt. (Men only)	2.402	2.164	0	5
Years exposure to Rabbani govt. (Men only)	3.333	1.877	0	5
Years exposure to Taliban (Men only)	3.83	2.679	0	8
Father educational attainment	1.504	1.773	0	5
Men literacy	0.518	0.5	0	1
Men Labor force participation	0.965	0.183	0	1
Men wage work	0.965	0.165	0	1
-	0.001	0.55	U	1
Emigration and violence	147.0	120.0	19 71	161 7
Emigration rate	147.8	130.2	13.71	461.7
Violence Information	05 41	60.06	-	907
Violent events before Taliban occupation	25.41	69.06	1	387
•			0	322
Violent events during Taliban occupation	44.23	59.05	2	
Violent events during Taliban occupation Violent events after Taliban	547.7	582.5	5	2928
Violent events during Taliban occupation Violent events after Taliban Deaths before Taliban occupation	547.7 1028	582.5 2946	5 1	$2928 \\ 16256$
Violent events before Tahban occupation Violent events during Taliban occupation Deaths before Taliban occupation Deaths during Taliban occupation	547.7	582.5	5	2928

Data source: Author using data from Afghan Demographic and Health survey 2015 for individual characteristic. The Uppsala Conflict Data Program (UCDP), for the violent events. Census for Afghan in Pakistan 2005 (UNHCR) and United Nations High Commissioner for Refugees Iran for the emigration rate.

4.3 Women empowerment

In Table 2, we present the summary statistic of variables related to women's empowerment. We include different sets of questions that are important indicators of women's empowerment in the Afghan context.

4.3.1 Economic Autonomy

They all are dummy variables assuming a value of 1 if a woman alone and jointly owns a house and 0 otherwise. 47 percent of women own a house alone or jointly with their husband. Similarly, 32 percent of women own land alone or jointly with their husbands. Our variable of interest, if a Woman earns more than her husband, shows that only 2 percent of women earn more than their husbands. Likewise, 32 percent of women have a say in how to spend their husband's earnings. And only 4 percent of women have to say in spending their own earnings. The labour market participation variable takes the value of 1 if the woman has participated in the labour market during the past 12 months of the survey and 0 otherwise. We find that only 13 percent of women have worked and participated in the labour market.

4.3.2 Decision-making Autonomy

The decision-making autonomy variable is a dummy variable that takes the value of 1 if a woman alone decides to visit healthcare and 0 otherwise. 42 percent of women can decide alone to seek healthcare. Next, our variable of interest is coded 1 if she can alone decide on a visit to family or relatives and 0 otherwise. 49 percent of women can decide to visit their family and relatives. The decision-making regarding large household purchases takes the value of 1 if she can decide on a household purchase and 0 otherwise. Similarly, 39 percent of women can decide about large household purchases.

4.3.3 Emotional Autonomy

The emotional autonomy variable includes several variables that take a value of 1 if a woman feels that beating is justified under different circumstances and 0 otherwise. 71 percent of women think that beating is justified if their wife goes outside without her husband's permission. Also, 50 per cent of women think that beating a wife is justified if she neglects the children. 63 per cent of women are of the view that beating is justified if the wife argues with her husband. Similarly, 39 per cent of women think that beating is justified if the wife refuses to have sex with her husband. Lastly, 20 per cent of women think that beating is justified if the wife burns the food.

4.4 Men's perception towards violence

We also consider men's perception of wife beating. The variables take a value of 1 if men think that beating their wives is justified in different circumstances and 0 otherwise. In our sample, 62 per cent of Men think that beating a wife is justified if she goes out without her permission. 31 per cent of husbands think that beating is justified if she neglects the children. Similarly, 45 per cent of men justify violence if she argues with their husband. Likewise, 19 per cent of them justify beating them if she refuses sex with their husband. Finally, 8 per cent feel that beating is justified if she burns food.

The set of variables included in our analysis will measure the extent to which the woman is involved in the decision-making process of the household. Physical autonomy denotes how much freedom the woman has to move around, and economic autonomy quantifies the woman's control

over her finances. The variables regarding men's perception of wife beating signify intimate partner violence. All variables signify women's status and attitude toward women in society.

4.5 Econometric framework: Model Specification

The econometric strategy adopted for this study is inspired by the previous study of Noury and Speciale (2016) which computed the impact of social constraints on women's education and employment in Afghanistan by using the National Risk and Vulnerability Assessment (NRVA) 2007/2008 survey. We extend the study by using the first-ever demographic and health survey for the year (DHS) 2015 and extend the model by including various outcome variables such as educational outcome and women empowerment variables.

We report outcomes for the main sample based on the following two empirical models. First, we present our analysis of the effects of the Taliban's rule on the education outcomes of Afghan women (see equation 1). Next, we analyse the effect of the Taliban's rule on women's empowerment (see equation 2).

4.6 Education outcomes of Afghan women

For our analysis, we have adopted a difference-in-difference approach see for example (Duflo, 2001; Galiani et al., 2005). The treatment group comprises all those individuals who were living in the provinces, partially or fully occupied by the Taliban (see Figure 1 provinces in Yellow). The control group includes all those individuals who were living in the provinces that never came under Taliban rule (see Figure 1 provinces in red). Alternatively, we will check the robustness of our results by only using the provinces that came in later years under Taliban control as our treatment group (see Figure 1 provinces in black). The control group will include all provinces contested between the Northern Alliance and the Taliban. Which include (Takhar, Nooristan, Kunar, Laghman, Baghlan, Kapisa). Whereas the treatment group comprises all those individuals who were exposed to the Taliban occupation while they were of school age. Individuals in, the control group were in the territories of the Northern Alliance). The major differences between both groups are ethnic and ideological. The Northern Alliance ideologically differed in practicing Islam and women were not subject to restriction, girls' education remained in place in provinces and districts under Northern Alliance control.

$$Y_{idt} = \alpha_0 + \alpha_1 \times \text{Exposure to Taliban's rule } \text{Years}_{ipt} + \alpha_2 \times \text{Pashtun}_{idt}$$

 $+ \alpha_3 \times \text{Exposure to Taliban's rule } \text{Years}_{ipt} \times \text{Pashtun}_{idt}$ (1)
 $+ \gamma_{idt} + \beta_d + \beta_t + \epsilon_{idt}$

Where Y_{ipt} , are three alternative outcome variables. First, we assess the number of years of completed education. Next, we add a dummy variable equal to 1 if the individual finished schooling to grade 9th, and zero otherwise. Finally, we include a dummy variable equal to one if the individual can read and write, zero otherwise. "Exposure to Taliban's rule years" corresponds to the period a woman was exposed to Taliban's rule while she was of school age. It is equal to zero for all cohorts of birth if the individual resided in a province of the control group. It varies from zero to eight years of exposure depending on the year of birth for women living in a province of the treatment group as well as the year of Taliban occupation of the province.

In our analysis of women's education, we restrict our sample to women whose birth year is between 1976 and 1998 i.e. $1976 \le t \le 1998$. This makes women aged over 15 years at the time of the survey, women in the earlier cohort are excluded from the sample.

In our regression analysis, we perform a difference and difference model by using sampling weights and cluster standard errors at the cohort of birth and provincial levels. The two-way clustering follows the dimensions of variation of our independent variable and makes sure that we have a large number of clusters i.e. (34 provinces x 23 cohorts of birth).

The mean value of exposure to the Taliban is about three years. "Pashtun" is a dummy variable if a woman is ethnic Pashtun, zero otherwise. The ethnic composition is important in the Afghanistan case as the Northern Alliance were mostly Persian-speaking Tajiks and Uzbeks and the Taliban are the majority of Pashtun people. This lets us remove the biases that could result from the permanent difference in the outcome of interest between the groups of individuals living in the area under the control of the Northern Alliance.

We include additional control variables, the residence of individual Urban/rural, and wealth index that influence our outcome variables and are denoted by γ_{ipt} . β_d and β_t are dummies for district and year of birth, respectively.

4.7 Women empowerment

$$Y_{idt} = \alpha_1 \times \text{Mother's years of exposure to Taliban's rule Years}_{ipt}$$

 $+ \alpha_2 \times \text{Father's years of exposure to Taliban's rule Years}_{ipt}$ (2)
 $+ \gamma_{idt} + \beta_d + \beta_t + \epsilon_{idt}$

In the second part of our analysis (Equation 2), Y_{idt} indicates the outcome variable. The outcome variables are economic autonomy, decision-making autonomy, and emotional autonomy. Men Years of Exposure Taliban" and "Women Year's Exposure Taliban" represent the number of years a father/mother was exposed to the Taliban rule (1996-2001) while he/she was a school-going age. It is equal to zero for all cohorts of birth if the individual resided in a province of the control group. It varies from zero to eight years of exposure depending on the year of birth for the father/mother living in a province of the treatment group as well as a year of Taliban occupation of the province.

We also include additional control variables such as gender, ethnicity, and rural residence, parental education, wealth index that influence our outcome variables and are denoted by γ_{ipt} . β_d are dummies for districts. Our assumption is that the main data/hypothesis on the assumption that in the absence of the Taliban regime, the educational outcomes and women empowerment would have similar trends regardless of which group administered the province.

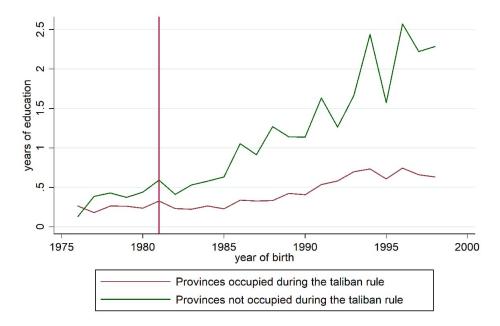
5 Results and discussion

5.1 Parallel trends assumption

In order to check for the internal validity of the parallel trend assumption that is essential when using different and difference methods, we assume that in the absence of the Taliban rule; women in the provinces who were ruled by the Taliban would have experienced the same evolution in our outcome variables compared to the provinces who were not controlled by Taliban. In Figure 2 we graphically present the average years of education of women by birth cohort i.e. $1976 \le t \le 1981$ and residence of provinces that were governed by Taliban and the provinces that were not. We analyse the exposure of the rule of the Taliban when in the year 1996 Taliban officially declared the Emirates of Afghanistan. The graphs show that women who were not of school age i.e. $1976 \le t \le 1981$ during the times of Taliban's Emirates of Afghanistan the lines are

parallel and flat for both provinces. The provinces that were later occupied by the Taliban and the provinces that were not. The graph provides some evidence of the pre-treatment data that without the rule of the Taliban the two groups would have similar trends. However, women in the age cohort who might have been exposed to the rule of the Taliban's Islamic Emirates of Afghanistan (1996-2001), whose birth year was i.e. $1981 \le t \le 1992$ in the provinces controlled by the Taliban and those who were not during the Taliban rule, the years of education increases for women who were exposed to Taliban rule, stressing that younger women have more years of education compared to those born in an earlier birth cohort.

Similarly, in Figure 3 we present the secondary school completion of women by birth cohort which suggests that in provinces that were not occupied by Taliban rule individuals have a better rate of completion of secondary schooling compared to those individuals who were living in the provinces that were under Taliban rule. The graph shows a sharp decline in secondary school completion during the Taliban rule. Next, Figure 4 suggests that the provinces that were not under Taliban control have better literacy rates compared to the provinces that later came under their control. Our parallel trends evidently show that exposure to Taliban rule has significantly affected the educational outcomes of women. Moreover, the trends provide some evidence that there has been an increase in investment in education. The trends show that exposure to the Taliban has negatively impacted women's years of education, completion, and literacy.



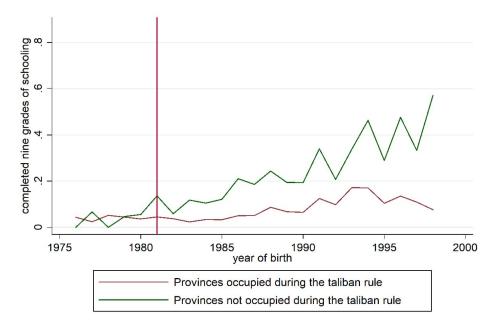
Source: Author by using data from Central Statistics Organization (CSO), Ministry of Public Health (MoPH) (2015)

Figure 2: Years of education

5.2 Placebo regression

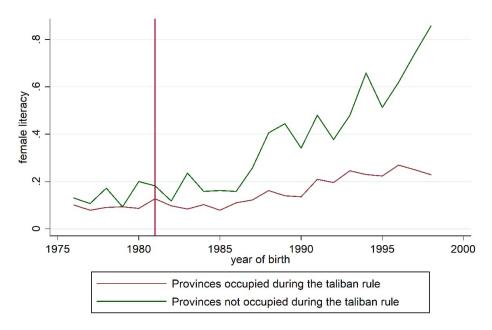
In 1992 the Soviet-backed President of Afghanistan Mohammad Najibullah was replaced by the leader of the Mujaheddin Burhanuddin Rabbani, and later in the year, 1996 Taliban overtook Kabul by establishing the Islamic Emirates of Afghanistan. We would like to test a placebo regression that will be additional support for our parallel trend assumption.

The estimation of difference and difference for our robustness check is the same as above except that we estimate the educational outcomes of those women who resided in the provinces that were later ruled by the Taliban and those who were not between the age of 6 and 15 during the Taliban's occupation.



Source: Author by using data from Central Statistics Organization (CSO), Ministry of Public Health (MoPH) (2015)

Figure 3: Completed 9th grade of schooling



Source: Author by using data from Central Statistics Organization (CSO), Ministry of Public Health (MoPH) (2015)

Figure 4: Literacy

In this placebo regression, we compute whether exposure to the Mujaheddin government of Burhanuddin Rabbani (1992-1996) while women were of school age affected the educational outcomes differently in the provinces that were later ruled by the Taliban and those provinces that were not Badakhshan and Panjsher as a control group. In the analysis, we excluded all those women from regression who were between the ages of 6 to 15 (i.e. we consider those with a year of birth less than 1980). we compare women who were of school age and were exposed to Burhanuddin Rabbani's government in the Years between (1992-1996) with those of Soviet-backed President Muhammad Najeebullah in the year between (1987-1992).

The result presented in Table 3 of the placebo regression supports our parallel trend assumption. The result shows that none of the coefficients of our interest in the model is statistically significant. it provides some evidence that the differences in the educational outcomes between provinces later governed by the Taliban and the provinces in the control group were not due to the advent of President Burhanuddin Rabbani's government.

Table 4 presents our results from estimating equation 1. The treatment group comprises all those individuals who were living in the provinces, partially and fully occupied by the Taliban (see Figure 1 provinces in Yellow). The control group includes all those individuals who were living in the provinces that never came under the Taliban rule of Badakhshan and Panjsher.

Our estimation results for the impact of the Taliban rule on women's education show an increase of 2.6 years in the number of years of exposure to Taliban rule while the women of her school age decreased in women's education by 0.27 years compared to the control group.

Table 3: Placebo regression

	(1)	(2)	(3)
VARIABLES	Years of education	Completed 9 grades of schooling	Literacy
Cohort of birth 1977–1980	-0.0150	0.00343	0.00481
\times province Taliban	(0.132)	(0.00820)	(0.0155)
Pushtun	-0.449***	-0.0305***	-0.0595***
	(0.124)	(0.0103)	(0.0154)
Women age $(35 - 39)$	-0.376	-0.0412	-0.0413
	(0.434)	(0.0443)	(0.0494)
Household size	-0.0266**	-0.00129	-0.00256
	(0.0124)	(0.00107)	(0.00165)
Rural	-0.441	-0.0329	-0.0348
	(0.277)	(0.0245)	(0.0308)
Poor	0.307***	0.00636	0.0438***
	(0.0802)	(0.00579)	(0.0124)
Middle	0.289***	0.0117	0.0325***
	(0.0910)	(0.00823)	(0.0124)
Rich	0.593***	0.0359***	0.0671***
	(0.150)	(0.0125)	(0.0173)
Richest	1.456***	0.0864***	0.202***
	(0.323)	(0.0285)	(0.0401)
Year of birth dummies	Yes	Yes	Yes
District dummies	Yes	Yes	Yes
Constant	0.644	0.0532	0.0653
	(0.434)	(0.0447)	(0.0495)
Observations	3,741	3,757	3,757
R-squared	0.110	0.079	0.128

Note. Robust standard errors in brackets, clustered at the province and cohort of birth level. * significant at 10%; *** significant at 5%; *** significant at 1%. The estimation sample includes women whose year of birth is $1972 \le t \le 1980$. "Cohort of birth 1977-1980" is a dummy variable equal to 1 if the woman was born between 1977 and 1980, 0 otherwise. "Province Taliban" is a dummy variable equal to 1 if the woman resided in a province occupied by the Taliban, 0 otherwise. The control group includes Badakhshan and Panjsher. "Years of education" is the number of years of completed education. "Completed 9 grades of schooling is a dummy variable equal to 1 if the woman completed nine grades of schooling, 0 otherwise. "Can read and write" is a dummy variable equal to 1 if a woman can read and write, 0 otherwise

Table 4: Difference-in-Difference estimation of the effect of Taliban exposure on Women's educational outcomes

	(1)	(2)	(3)
VARIABLES	Years of education	Completed 9 grades of schooling	Literacy
Year Exposure to Taliban	-0.106***	-0.00591**	-0.00566
	(0.0371)	(0.00277)	(0.00455)
Yrs exposure Taliban \times Emigration rate	6.87005	7.20006	5.75006
	(0.000135)	(1.09e-05)	(1.58e-05)
Emigration rate	-0.000691	-7.73e-05	-4.63e-05
	(0.000618)	(4.90005)	(7.07005)
Household size	-0.00238	-0.000649	-0.000788
	(0.00837)	(0.00103)	(0.000929)
Rural	-0.146	-0.0319	0.00337
	(0.182)	(0.0366)	(0.0247)
Pushtun	-1.216***	-0.0744***	-0.148***
	(0.105)	(0.0108)	(0.0113)
Year Exposure to Najibullah govt.	-2.140	0.145	0.00921
	(2.570)	(0.218)	(0.379)
Year Exposure to Rabbani govt.	0.801	-0.00644	0.0388
	(0.613)	(0.0523)	(0.0924)
Year of birth dummies	Yes	Yes	Yes
District dummies	Yes	Yes	Yes
Constant	11.30***	0.889***	0.802***
	(0.490)	(0.0542)	(0.0550)
Observations	$22,\!822$	$23,\!104$	23,104
R-squared	0.187	0.129	0.183

Note - Robust standard errors in brackets, clustered at the province and cohort of birth level.

Similarly, an increase of 2.6 years of exposure to Taliban rule while the woman is of her school age result in a lower likelihood of 1.5 percentage points of complete grade 9th schooling compared to the control group. Our next outcome variable literacy shows that the same size increase in Taliban exposure will decrease women's ability to read and write by 1 percentage point. Being a Pashtun in the treatment group Pashtun women have 1.359 fewer years of education compared to the control group.

5.3 The role of cultural differences among ethnic groups

To test for the heterogeneity in the effect of Taliban rule on education we will try to look into whether there is any change in the results across ethnic groups in Afghanistan. As previously discussed the movement of Taliban emerged from Pashtun majority provinces and the majority of them were ethnic Pashtuns. Moreover, the occupation of Pashtun districts took less time compared to their advancement and occupation of the non-Pashtun districts of the country. The Pashtuns follow the tribal code of Pashtunwali, which might influence women's education and mobility through its concept of gender boundaries (Kakar, 2004). According to Steul (1981) in Pashtunwali, women are subordinate to men but at the same time, the locus of honour is to be look after and protected above all. The seclusion of women through the Purdah veil reduces

^{*} significant at 10%; ** significant at 5%; *** significant at 1%. The estimation sample includes women whose year of birth is $1976 \le t \le 1998$. "Cohort of birth 1976-1998" is a dummy variable equal to 1 if the woman was born between 1976 and 1998, 0 otherwise. "Province Taliban" is a dummy variable equal to 1 if the woman resided in a province occupied by the Taliban, 0 otherwise. The control group includes Badakhshan and Panjsher. "Years of education" is the number of years of completed education. "Completed 9 grades of schooling is a dummy variable equal to 1 if the woman completed nine grades of schooling, 0 otherwise. "Can read and write" is a dummy variable equal to 1 if a woman can read and write, 0 otherwise

Table 5: Difference-in-Difference estimation of the effect of Taliban exposure on women's educational outcomes. Heterogeneity of effects of ethnicity non-Pashtun vs Pashtuns

VARIABLES	Years of education	Completed 9 grades of schooling	Literacy
Year Exposure to Taliban	-0.107***	-0.00612**	-0.00427
•	(0.0390)	(0.00293)	(0.00478)
Year Exposure to Taliban * Pashtun	-1.234***	-0.0779***	-0.124***
	(0.155)	(0.0138)	(0.0164)
Pashtun	0.00480	0.000958	-0.00635*
	(0.0331)	(0.00335)	(0.00382)
Yrs Exposure to Taliban * Emigration rate	-0.000659	-7.09e-05	-8.87e-05
	(0.000619)	(4.84e-05)	(7.25e-05)
Emigration rate	5.99 e-05	5.45e-06	1.74e-05
_	(0.000137)	(1.26e-05)	(1.69e-05)
20 - 24	-0.415	0.0624*	-0.0671
	(0.418)	(0.0352)	(0.0769)
25 - 29	-2.354***	-0.107	-0.290***
	(0.669)	(0.0665)	(0.0959)
30 - 34	-2.212***	-0.112	-0.255**
	(0.797)	(0.0751)	(0.111)
35 - 39	-2.416***	-0.140	-0.279**
	(0.904)	(0.0873)	(0.120)
Household size	-0.00240	-0.000654	-0.000757
	(0.00836)	(0.00103)	(0.000926)
Rural	-0.146	-0.0318	0.00320
	(0.182)	(0.0366)	(0.0246)
Poor	0.303***	0.0227***	0.0349***
	(0.0713)	(0.00564)	(0.00859)
Middle	0.483***	0.0501***	0.0665***
	(0.108)	(0.0122)	(0.0132)
Rich	1.019***	0.0792***	0.105***
	(0.135)	(0.0149)	(0.0153)
Richest	2.895***	0.162***	0.330***
	(0.286)	(0.0392)	(0.0298)
Year Exposure to Najibullah govt.	-2.138	0.145	0.00630
	(2.570)	(0.218)	(0.377)
Year Exposure to Rabbani govt.	0.800	-0.00652	0.0394
	(0.613)	(0.0522)	(0.0919)
Year of birth dummies	Yes	Yes	Yes
District dummies	Yes	Yes	Yes
Constant	11.31***	0.890***	0.792***
	(0.499)	(0.0552)	(0.0564)
Observations	$22,\!822$	23,104	23,104
R-squared	0.187	0.129	0.183

Note. Robust standard errors in brackets, clustered at the province and cohort of birth level. * significant at 10%; ** significant at 5%; *** significant at 1%

women's ability to freely access public goods (Ginsburg, 2011).

The effect of culture on education has relevance; we would expect the effect of Taliban rule greater on the non-Pashtuns. The estimation in Table 5 shows that the effect of Taliban rule is significantly different between Pashtuns and non-Pashtuns for our outcome variables. For our outcome variable years of education of women, a one standard deviation increase in the number of years of exposure to Taliban's rule reduces the number of years of education of women by $3.48 \text{ years } (-0.0107-1.234)\times 2.6 \text{ and } 0.2 \ (-0.107\times 2.6) \text{ in non-Pashtun areas.}$ Similarly for our outcome variable completed 9th grade of schooling, a one standard deviation increase in the number of years of exposure to Taliban reduces the completed 9th grade of schooling by 0.2

grades (-0.00612-0.0779)×2.6 of women. Next, moving to our variable Literacy ability to read and write the impact is larger for Pashtuns compared to non-Pashtuns. Our results show that the impact of the Taliban's rule is larger in the ethnic majority Pashtun areas.

5.4 The role of violence and uncertainty

The effect of violence on educational outcomes is well documented in various studies (Akresh et al., 2014; La Mattina et al., 2017; Lee, 2014; Verwimp and Van Bavel, 2014). In the regression analysis, we divide the total number of deaths by the province population. The mean value of this variable is about 0.2% during the Taliban and 0.1% before and after the Taliban. We control for the effect of violent events that took place in the decades of war in Afghanistan. Various studies suggest that wars and deteriorating security situations disrupt and destroy the education system. Afghanistan has witnessed a prolonged period of violence in both the treatment and control provinces. We use the Uppsala Conflict Data Program (UCDP) data information that includes data on the number of violent events and deaths due to violence. We put it in three periods; before, during, and after the Taliban's rule. Similarly, the total number of deaths before, during, and after the Taliban's rule. Our result in table 6 shows that our variable of interest 'years of exposure to Taliban rule' does not link to the violence channel.

5.5 Results

5.5.1 Economic autonomy

Table 7 reports our coefficient of interest. We find that women who were exposed to the Taliban rule are roughly 2 percentage points more likely to own land compared to women who were in the control group. It is estimated that there are roughly 1 million widows in Afghanistan. These widows might have the land rights inherited from deceased husbands in the decade-long conflict (Wily, 2004). There are very few studies pertaining to land ownership in Afghanistan, especially for women. Also, it is not only a question of ownership but involves a high degree of uncertainty in land ownership see for example more details on the land rights in Afghanistan (Wily, 2003).

Similarly, our results in the economic category of women empowerment outcome show that women who were exposed to the Taliban rule are 3 percentage points less likely to have a say in how to spend their husband's income compared to the women in the control group.

5.5.2 Decision-making autonomy

Table 8 presents our result for women's decision-making autonomy. The result shows that women who were exposed to Taliban rule are 4 percentage points less likely to decide about their health care compared to the women in the control group who were not exposed to the Taliban rule. Our findings are similar to a recent study done on the determinants of maternal healthcare utilisation in Afghanistan. Mumtaz et al. (2019) found large disparities and low utilisation of maternal healthcare services in Afghanistan. similarly, women are 6 percentage points less likely to visit their family and relatives. Finally, women exposed to Taliban rule are 5 percentage points less likely to decide on household purchases compared to the control group. These results are consistent with the previous studies where despite making mandatory participation in development programs does not change the status of women in decision-making and the role of women in the Afghan society (Beath et al., 2013).

5.5.3 Emotional Autonomy

Table 9 reports the findings for women's outcomes. In particular, it reports the results on attitudes to wife-beating among women. The first row reports our coefficient of interest. We find

Table 6: Difference-in-Difference estimation of the effect of Taliban exposure on Women's educational outcomes. Controlling for violence before, during and after the Taliban regime

VARIABLES		Years of education		Complete	Completed 9 grades of schooling	schooling		Literacy	
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)
Year Exposure to Taliban	-0.106***	-0.0778*	-0.0778*	-0.00591**	-0.00302	-0.00220	-0.00566	-0.00484	-0.00541
Year Exposure to Taliban * Emigration rate	(0.0371) $6.87e-05$	(0.0427) $4.11e-05$	(0.0435) $4.13e-05$	(0.00277) 7.20e-06	(0.00346) $6.85e-06$	(0.00379) $6.71e-06$	(0.00455) 0.00000575	(0.00527) -0.00000022	(0.00525) $6.72e-07$
Emigration rate	(0.000135)	(0.000145)	(0.000146)	(1.09e-05)	(1.19e-05)	(1.19e-05)	(1.58e-05)	(1.65e-05)	(1.66e-05)
	(0.000618)	(0.000652)	(0.000668)	(4.90e-05)	(4.89e-05)	(5.04e-05)	(7.07e-05)	(7.28e-05)	(7.38e-05)
Household size	-0.00238 (0.00837)	0.00765 (0.00974)	$0.00796 \\ (0.00991)$	-0.000649 (0.00103)	0.000134 (0.00117)	2.86e-05 (0.00123)	-0.000788 (0.000929)	0.000457 (0.00107)	0.000739 (0.00108)
Rural	-0.146	0.0299	0.0326	-0.0319	-0.0209	-0.0153	0.00337	0.0264	0.0160
Pushtun	(0.182) $-1.216***$	(0.206) $-0.971***$	(0.203) $-0.967***$	(0.0366) $-0.0744***$	(0.0396) $-0.0566***$	(0.0343) $-0.0548***$	(0.0247) $-0.148***$	(0.0274) $-0.123***$	(0.0250) $-0.123***$
Voor Evrocure to Najihullah mart	(0.105)	(0.118)	(0.120)	(0.0108)	(0.0113)	(0.0112)	(0.0113)	(0.0128)	(0.0127)
real Lyposure to trajiounan Bove.		(2.825)	(2.792)		(0.250)	(0.254)		(0.393)	(0.389)
rear Exposure to Kabbani govt.		0.000 (0.677)	0.628 (0.669)		-0.0202 (0.0598)	-0.0308 (0.0610)		0.0381 (0.0962)	(0.0949)
"Violent events before Taliban (normalized by population)		-4.859*			-0.674**			-0.0687	
"Violent events during Taliban (normalized by population)		(2.493) $-1.880**$			(0.339) -0.111			(0.281) $-0.330***$	
		(0.773)			(0.0764)			(0.0903)	
"Violent events after Taliban (normalized by population) "		$-0.416^{\pi\pi}$ (0.0843)			-0.0355^{++} (0.00912)			-0.0398^{***} (0.00842)	
Total No. of deaths before Taliban (per 1000 poeple)		•	-0.0759			-0.00945*			-0.00642
Total No. of deaths during Taliban (per 1000 poeple)			(0.0505) 0.0109			(0.00501) 0.00630			(0.00532) $-0.00847**$
Total No. of deaths after Taliban (per 1000 poeple)			(0.0220) -0.0644***			(0.00524) $-0.00446***$			(0.00340) -0.00847***
Year of birth dummies	Yes	Yes	(0.0145) Yes	Yes	Yes	(0.00113) Yes	Yes	Yes	(0.00151) Yes
District dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	11.30***	11.35*** (0.576)	11.17*** (0.570)	0.889***	0.896***	0.875***	0.802***	0.815*** (0.0644)	0.801***
Mean value of dependent variable for control group	3.698608	3.698608	3.698608	0.8673656	0.8673656	0.8673656	0.0056995	0.0056995	0.0056995
Mean value violence before occupation (1989-1994) Mean value violence during occupation (1995-2001)	0.0063095	0.0063095	0.0063095	0.0063095	0.0063095	0.0063095	0.0063095	0.0063095	0.0063095 0.0063095
Mean value violence after occupation (2002-2015)	0.1263922	0.1263922	0.1263922	0.1263922	0.1263922	0.1263922	0.1263922	0.1263922	0.1263922
Mean value deaths before occupation (1989-1994)	0.1388081	0.1388081	0.1388081	0.1388081	0.1388081	0.1388081	0.1388081	0.1388081	0.1388081
Mean value deaths during occupation (1995-2001) Mean value deaths after occupation (2002-2015)	0.0536304	0.0536304	0.0536304	0.0536304	0.0536304	0.0536304	0.0536304	0.0536304	0.0536304
Observations	22,822	16,727	16,727	23,104	16,909	16,909	23,104	16,909	16,909
R-squared	0.187	0.193	0.192	0.129	0.141	0.141	0.183	0.188	0.188

Note. Robust standard errors in brackets, clustered at the province and cohort of birth level. * significant at 10%; *** significant at 5%; **** significant at 1%. The estimation sample includes women whose year of birth is $1976 \le t \le 1998$. "Cohort of birth 1976-1998" is a dummy variable equal to 1 if the woman was born between 1976 and 1998, 0 otherwise. "Province Taliban" is a dummy variable equal to 1 if the woman resided in a province occupied by the Taliban, 0 otherwise. The control group includes Badakhshan and Panjsher. "Years of education" is the number of years of completed education. "Completed 9 grades of schooling is a dummy variable equal to 1 if the woman completed nine grades of schooling, 0 otherwise. "Can read and write" of otherwise.

Table 7: Economic autonomy

Variables	Own House	Own Land	Earn more than husband/partner	Work	How to spend husband earn?	How to spend respondent earn?
Year Exposure to Taliban	0.0102	0.0248***	-0.00251*	0.00503	-0.0384***	-0.00513*
•	(0.00909)	(0.00712)	(0.00137)	(0.00448)	(0.00707)	(0.00295)
Year Exposure to Taliban * Emigration rate	-2.2905	-3.8405	<u>-9.47007</u>	3.5605*	-4.77005**	2.19005**
	(4.17005)	(3.2205)	(3.3906)	(1.9905)	(2.3505)	(1.0605)
Emigration rate	0.000822***	0.000686^{***}	2.40e-05	1.86e-05	0.000129	$-1.21\mathrm{e}\text{-}05$
	(0.000146)	(0.000112)	(1.70e-05)	(7.79e-05)	(0.000121)	(4.61e-05)
Year Exposure to Najibullah govt.	0.331	0.639*	-0.154*	0.147	-0.623*	-0.114
	(0.489)	(0.361)	(0.0917)	(0.308)	(0.351)	(0.133)
Year Exposure to Rabbani govt.	-0.0501	-0.158*	0.0403*	-0.0278	0.154*	0.0325
	(0.115)	(0.0842)	(0.0223)	(0.0736)	(0.0835)	(0.0321)
20 - 24	-0.0166	0.0733	-0.0220	0.0107	0.0851	-0.0130
	(0.0674)	(0.0501)	(0.0197)	(0.0566)	(0.0615)	(0.0254)
25 - 29	-0.105	0.0544	-0.0171	-0.00924	0.111	-0.00340
	(0.0919)	(0.0929)	(0.0212)	(0.0723)	(0.101)	(0.0356)
30 - 34	0.0562	0.0794	-0.0108	-0.127	0.205*	-0.000182
	(0.117)	(0.106)	(0.0229)	(0.128)	(0.121)	(0.0473)
35 - 39	0.104	0.0830	-0.0204	-0.156	0.489***	-0.0281
	(0.131)	(0.120)	(0.0255)	(0.131)	(0.136)	(0.0575)
Household size	0.00911***	0.00844***	0.000561*	0.00201*	-0.00416***	-2.88e-05
	(0.00131)	(0.00109)	(0.000312)	(0.00106)	(0.00111)	(0.000652)
Rural	0.206***	0.161***	-0.00149	-0.0288	0.0485**	-0.0180
	(0.0233)	(0.0178)	(0.00698)	(0.0189)	(0.0245)	(0.0112)
Poor	0.118***	0.0549***	0.00288	0.0505***	-0.0221	0.0163*
	(0.0169)	(0.0154)	(0.00424)	(0.0136)	(0.0140)	(0.00921)
Middle	0.0822***	0.0262	0.00737	0.0442***	-0.0112	0.0287**
	(0.0203)	(0.0177)	(0.00448)	(0.0161)	(0.0173)	(0.0111)
Rich	0.100***	-0.0216	0.00521	0.0186	0.0480***	0.0242**
	(0.0223)	(0.0177)	(0.00419)	(0.0161)	(0.0186)	(0.0101)
Richest	0.120***	-0.0168	0.00296	0.0280	0.0655**	0.0241*
	(0.0311)	(0.0245)	(0.00784)	(0.0231)	(0.0291)	(0.0139)
Pushtun	0.0352*	0.0970***	-0.0146***	-0.0896***	-0.0504***	-0.0377***
	(0.0200)	(0.0168)	(0.00290)	(0.0124)	(0.0152)	(0.00643)
Year of birth dummies	Yes	Yes	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-0.212**	-0.0787	-0.0130	-0.0613	-0.0259	-0.0491
	(0.0951)	(0.0690)	(0.0125)	(0.0586)	(0.0679)	(0.0316)
Observations	23,104	23,104	22,940	23,104	23,104	23,104
B_constad	0.109	0110	0.019	0 0 0	1000	060 0

Note: Outcomes are dummy variables that assume value 1 if the variable description is true and is 0 otherwise. Omitted category are individuals aged below 17 years or above 37 years. Data source is AfDHS (2015). ***, ** and * indicate statistical significance at the 1%, 5% and 10% level of significance respectively. "Other Controls" include dummies for household wealth quintile; whether the household is in rural area

22

Table 8: Decision-making autonomy

	(1)	(2)	(3)
Variables	Respondent decide on	Respondent decide on	Respondent decide
	health care	visit to family or relatives	on household purchase
Year Exposure to Taliban	-0.0460***	-0.0646***	-0.0560***
•	(0.00667)	(0.00797)	(0.00696)
Year Exposure to Taliban * Emigration rate	3.11e-05	-1.42e-06	-4.67e-06
	(2.04e-05)	(2.36e-05)	(2.46e-05)
Emigration rate	-0.000248**	-5.99e-05	-0.000110
	(0.000104)	(0.000117)	(0.000113)
Year Exposure to Najibullah govt.	-1.003**	-0.945**	-0.325
	(0.457)	(0.478)	(0.420)
Year Exposure to Rabbani govt.	0.277**	0.283**	0.133
	(0.111)	(0.113)	(0.101)
20 - 24	-0.0555	0.0862	0.113
	(0.0827)	(0.0865)	(0.0829)
25 - 29	-0.0960	-0.0693	0.0319
	(0.107)	(0.140)	(0.120)
30 - 34	-0.0511	0.0619	0.132
	(0.138)	(0.163)	(0.156)
35 - 39	0.0512	0.175	0.182
	(0.165)	(0.193)	(0.178)
Household size	-0.00280**	-0.00651***	-0.0100***
	(0.00127)	(0.00125)	(0.00133)
Rural	0.0508*	0.0496*	0.0489
	(0.0292)	(0.0276)	(0.0318)
Poor	-0.00649	-0.0439***	-0.0553***
	(0.0157)	(0.0147)	(0.0154)
Middle	-0.0105	-0.0330*	-0.0545***
	(0.0192)	(0.0187)	(0.0174)
Rich	0.0413**	0.000995	-0.0164
	(0.0198)	(0.0194)	(0.0216)
Richest	0.129***	0.0107	-0.00262
	(0.0323)	(0.0309)	(0.0377)
Pushtun	-0.148***	-0.0790***	-0.138***
	(0.0168)	(0.0156)	(0.0170)
Year of birth dummies	Yes	Yes	Yes
District dummies	Yes	Yes	Yes
Constant	-0.113	0.0120	0.0185
	(0.0818)	(0.0766)	(0.0703)
Observations	23,104	23,104	23,104
R-squared	0.087	0.094	0.114

Note: Outcomes are dummy variables that assume value 1 if the variable description is true and is 0 otherwise. Omitted category are individuals aged below 17 years or above 37 years. Data source is AfDHS (2015). ***, ** and * indicate statistical significance at the 1%, 5% and 10% level of significance respectively. "Other Controls" include dummies for household wealth quintile; whether the household is in rural area

that women who were exposed to the Taliban rule are roughly 2 percentage points more likely to justify wife-beating when she goes out without informing him compared to women who were in the control group. Similarly, the results show that women who were exposed to the Taliban rule are close to a 2-percentage point less likely to think that a woman's beating is justified when she neglects children. The results suggest a strong effect of social constraints on women's mobility and rationalisation of violence. It might be the effect of the tribal code (Pashtunwali) in the sedimentary societies see for a detailed discussion on the subject (Ginsburg, 2011; Kakar, 2004). Our results are consistent with past available studies on Afghanistan where strict social norms restrict a woman's autonomy to have control over her body and mobility (Samar et al., 2014; Wylie, 2003).

Table 9: Emotional autonomy

	(1)	(6)	(8)	9	(E)	(8)	(4)
Variables	Goes without	(2) Neglects	(5) Argue	(*) Refuses to husband	(9) Burns	Accuses of	Afraid of
	telling him?	children	with husband	have sex with husband	pooj	unfaithfulness	husband
Year Exposure to Taliban	0.0162**	-0.0188***	0.00859	0.00463	-0.00200	-0.00598	0.0366***
•	(0.00763)	(0.00716)	(0.00638)	(0.00829)	(0.00629)	(0.00454)	(0.00675)
Year Exposure to Taliban * Emigration rate	5.79e-05***	3.73e-05	3.71e-05*	2.85e-05	7.65e-05***	-7.64e-06	-2.94e-05
	(2.00e-05)	(2.69e-05)	(2.24e-05)	(2.62e-05)	(2.23e-05)	(1.52e-05)	(2.17e-05)
Emigration rate	0.000114	0.000177	-0.000270***	0.000342***	1.58e-05	0.000187***	0.000103
	(0.000107)	(0.000124)	(0.000103)	(0.000117)	(8.90e-05)	(6.67e-05)	(9.15e-05)
Year Exposure to Najibullah govt.	0.380	-0.607	0.0648	0.320	0.0984	0.0539	0.706**
Year Exnosure to Babbani cout	(0.421) -0.131	$(0.618) \\ 0.112$	(0.437) -0 0595	(0.402) -0.106	(0.324) -0.0342	(0.378) -0 0245	(0.345) -0 177**
ton taposate to tablean gove.	(0.103)	(0.151)	(0.103)	(0.0951)	(0.0776)	(0.0906)	(0.0819)
20 - 24	0.0359	-0.0223	-0.0429	0.0508	-0.0196	0.176**	0.0513
	(0.0703)	(0.111)	(0.0720)	(0.0514)	(0.0510)	(0.0691)	(0.0518)
25 - 29	0.147*	0.136	0.158	0.165*	0.00750	0.301***	0.0718
	(0.0787)	(0.132)	(0.115)	(0.0895)	(0.0731)	(0.0917)	(0.0683)
30 - 34	0.174	0.118	-0.0368	-0.116	-0.134	0.338***	-0.0739
	(0.138)	(0.184)	(0.127)	(0.144)	(0.110)	(0.103)	(0.127)
35 - 39	0.246	0.255	0.0151	-0.0135	-0.161	0.338***	-0.112
	(0.158)	(0.215)	$(0.153)_{}$	(0.155)	(0.135)	(0.114)	(0.152)
Household size	-0.000726	-0.00462***	-0.00271**	0.000926	0.000960	-0.0322***	-0.0122***
	(0.00125)	(0.00137)	(0.00121)	(0.00118)	(0.000947)	(0.00138)	(0.00103)
Rural	-0.00577	-0.0593**	-0.0217	0.0479*	-0.0369*	0.0106	-0.00603
1	(0.0356)	(0.0287)	(0.0275)	(0.0284)	(0.0215)	(0.0363)	(0.0216)
Poor	-0.0518***	-0.0574***	-0.0587***	-0.0803***	-0.0222*	-0.00479	-0.00910
	(0.0155)	(0.0200)	(0.0152)	(0.0180)	(0.0124)	(0.0129)	(0.0128)
Middle	-0.0180	-0.0435**	-0.06/3***	-0.110***	-0.0277*	-0.00875	0.0107
Rich	(0.0169) -0.0107	(0.0190) -0.0163	(0.010.0) -0.0783***	(0.0211) $-0.118***$	(0.0155) $-0.0590***$	(0.0137) -0.0439**	(0.0172) -0.0133
	(0.0201)	(0.0218)	(0.0191)	(0.0236)	(0.0157)	(0.0194)	(0.0173)
Richest	-0.128***	-0.118***	-0.138***	-0.157***	-0.108***	-0.0219	-0.0253
	(0.0414)	(0.0367)	(0.0316)	(0.0361)	(0.0256)	(0.0399)	(0.0271)
Pushtun	0.0374***	-0.0146	-0.0428***	-0.0379***	-0.00488	-0.0203	-0.0297**
	(0.0141)	(0.0153)	(0.0149)	(0.0144)	(0.0117)	(0.0141)	(0.0115)
Year of birth dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.135*	0.115	0.147**	0.129*	0.149***	1.009***	0.964***
	(0.0751)	(0.101)	(0.0717)	(0.0781)	(0.0560)	(0.0656)	(0.0662)
Observations	21,856	21,488	21,676	20,580	21,056	23,104	22,118
R-squared	0.058	0.025	0.029	0.038	0.034	0.141	0.058

Note: Outcomes are dummy variables that assume value 1 if the variable description is true and is 0 otherwise. Omitted category are individuals aged below 17 years or above 37 years. Data source is AfDHS (2015). ***, ** and * indicate statistical significance at the 1%, 5% and 10% level of significance respectively. "Other Controls" include dummies for household wealth quintile; whether the household is in rural area.

Table 10: Men's perception towards violence

Variables	(1) Goes without	(2) Neglects	(3) Argue with	(4) Refuses to have	(5) Burns
variables	telling him?	children	husband	sex with husband	food
Year Exposure to Taliban	0.0404***	0.0187**	0.0220***	0.00501	0.00147
•	(0.00824)	(0.00810)	(0.00840)	(0.00568)	(0.00466)
Emigration rate	0.000424***	0.000101	0.000315***	-2.01e-05	0.000234***
	(7.30e-05)	(7.81e-05)	(8.34e-05)	(7.00e-05)	(5.41e-05)
Year Exposure to Najibullah govt.	-0.107	-0.796**	1.089*	0.0323	-0.206
	(0.653)	(0.366)	(0.605)	(0.399)	(0.188)
Year Exposure to Rabbani govt.	0.00995	0.189**	-0.282*	-0.0119	0.0492
	(0.161)	(0.0787)	(0.146)	(0.0972)	(0.0418)
Household size	0.00310	-0.000614	-0.00447**	-0.00235*	-8.55e-05
	(0.00210)	(0.00134)	(0.00202)	(0.00128)	(0.000930)
Rural	0.0223	0.104***	-0.0908**	0.0510**	0.0562**
	(0.0466)	(0.0274)	(0.0387)	(0.0246)	(0.0241)
Poor	-0.144***	-0.104***	-0.0787***	-0.0427*	-0.00687
	(0.0249)	(0.0245)	(0.0272)	(0.0227)	(0.0170)
Middle	-0.144***	-0.0324	-0.0938***	-0.0993***	-0.0327**
	(0.0245)	(0.0286)	(0.0292)	(0.0213)	(0.0159)
Rich	-0.195***	-0.0894***	-0.174***	-0.166***	-0.0601***
	(0.0283)	(0.0305)	(0.0302)	(0.0232)	(0.0149)
Richest	-0.249***	-0.160***	-0.263***	-0.214***	-0.0389
	(0.0557)	(0.0340)	(0.0440)	(0.0273)	(0.0338)
Pushtun	0.0623***	0.0671***	0.0521**	0.0419**	0.000752
	(0.0210)	(0.0174)	(0.0221)	(0.0169)	(0.0123)
Year of birth dummies	Yes	Yes	Yes	Yes	Yes
District dummies	Yes	Yes	Yes	Yes	Yes
Constant	0.0301	-0.0998*	0.453***	0.182*	-0.0395
	(0.171)	(0.0587)	(0.146)	(0.0994)	(0.0432)
Observations	7,643	7,643	7,643	7,643	7,643
R-squared	0.085	0.058	0.041	0.055	0.038

Note: Outcomes are dummy variables that assume value 1 if the variable description is true and is 0 otherwise. Omitted category are individuals aged below 17 years or above 37 years. Data source is AfDHS (2015). ***, ** and * indicate statistical significance at the 1%, 5% and 10% level of significance respectively. "Other Controls" include dummies for household wealth quintile; whether the household is in rural area.

5.5.4 Men's perception towards violence

Table 10 of our analysis shows men's perception of partner violence. The first row of table 10 reports our coefficient of interest. We find that men who were exposed to the Taliban rule are roughly 4 percentage points more likely to justify wife-beating when she goes out without informing him compared to men who were in the control group. Similarly, the results show that men who were exposed to the Taliban rule are close to 2 percentage points more likely to think that a woman's beating is justified when she neglects children, and 2 percentage points more likely to beat her if she argues with the husband.

6 Conclusion and Policy Implication

In this article, we studied the impact of social constraints on women's empowerment in Afghanistan. We have explained the effect of the behavior of the Taliban such as the imposition of a ban on women's education, and the subjugation of women by these groups. Our estimation results for the effect of the Taliban on women's education show that exposure to social constraints and gender-discriminatory behavior reduces women's education. Moreover, this article tries to fill the gap in the literature on the debate of the economic theory of radical religious clubs which anticipates that religious groups such as the Taliban who provide public

goods may rationally choose disruptive behavior to minimise the outside option of members' defection (Berman and Laitin, 2008; Noury and Speciale, 2016). There will be likely long-term consequences of the rule of the Taliban on women. In this context, we explored the impact of social constraints on women's empowerment. We found that women who were exposed to the Taliban rule were roughly more likely to own land and more likely to work compared to women who were in the control group. Similarly, we find that women who were exposed to the Taliban rule are less likely to have a say in how to spend their husband's income compared to women in the control group. Also, We find that women who were exposed to the Taliban rule are less likely to decide to seek health care on their own, less likely to visit their family, and less likely to have a say in household purchases. Finally, regarding the husband's perception of the wife's beating. We find that men who were exposed to the Taliban rule are more likely to justify wife-beating when she goes out without informing him compared to men who were in the control group. Similarly, men who were exposed to the Taliban rule are more likely to think that a woman's beating is justified when she neglects her children and if she argues with her husband. The study has policy implications related to education, intimate partner violence, and other aspects of the well-being of women.

In order to achieve the objective of education for all and gender equality, it is necessary to guarantee friendly and welcoming environments for girls and women where they can participate and perform in a wide range of activities next to men without any difficulty or stigma. The international community must engage the Taliban's de-facto government in respecting human rights. In conclusion, this study has highlighted the plight of women under religious rule. This warrants dialogues and reforms in the ruling system of the Taliban. Women's education and empowerment should be prioritised in the current talks between the Taliban and the international community especially, the United States and the European Union. The world should compel the Taliban to respect women's rights and let women work, go to school, and seek healthcare.

References

Afridi, F., 2005. Intra-household bargaining, birth order and the gender gap in schooling in india. Retrieved January 4, 2007.

Agarwala, R., Lynch, S. M., 2006. Refining the measurement of women's autonomy: an international application of a multi-dimensional construct. Social Forces 84 (4), 2077–2098.

Ahmed, R., 2000. Taliban: Militant islam, oil and fundamentalism in central asia.

Akresh, R., Caruso, G. D., Thirumurthy, H., 2014. Medium-term health impacts of shocks experienced in utero and after birth: Evidence from detailed geographic information on war exposure. Tech. rep., National Bureau of Economic Research.

Anand, P., 2016. Happiness, well-being and human development: The case for subjective measures.

Arooje, R., Burridge, N., 2020. School education in afghanistan: Overcoming the challenges of a fragile state. Handbook of Education Systems in South Asia, 1–33.

Attias-Donfut, C., 2000. Cultural and economic transfers between generations: One aspect of age integration. The Gerontologist 40 (3), 270–272.

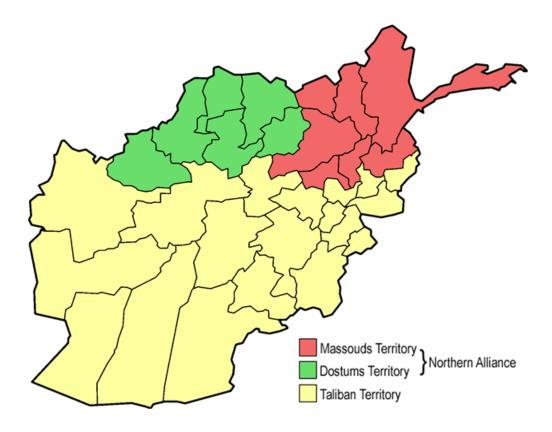
Azarbaijani-Moghaddam, S., 2010. A study of gender equity through the national solidarity programme's community development councils. Kabul: DACAAR.

- Barfield, T. J., 1984. Weak links on a rusty chain: Structural weaknesses in afghanistan's provincial government administration. Berkeley, CA: Institute of International Studies, University of California.
- 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.
- Behera, D. K., Pfeffer, G., 1999. Contemporary society: Tribal studies. Concept Publishing Company.
- Berman, E., 2003. Hamas, taliban and the jewish underground: an economist's view of radical religious militias. Tech. rep., National Bureau of Economic Research.
- Berman, E., 2011. Radical, religious, and violent: The new economics of terrorism. MIT press.
- Berman, E., Laitin, D. D., 2008. Religion, terrorism and public goods: Testing the club model. Journal of public Economics 92 (10-11), 1942–1967.
- Bertrand, M., Kamenica, E., Pan, J., 2015. Gender identity and relative income within households. The Quarterly Journal of Economics 130 (2), 571–614.
- Bindu, H., 2017. Afghanistan-a country profile. CAS, Afghanistan.
- Blum, R. W., 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.
- Boesen, I. W., 2004. From subjects to citizens: Local Participation in the national solidarity programme. Afghanistan Research and Evaluation Unit Kabul.
- Central Statistics Organization (CSO), Ministry of Public Health (MoPH), 2015. Demographic and health survey 2015. Tech. rep.
- Chakraborty, T., De, P. K., 2011. Mother's autonomy and child welfare: A new measure and some new evidence.
- Chavoshi, M. H., Abbasi-Shavazi, M. J., McDonald, P., 2004. Women's autonomy and reproductive behavior in iran. In: 12th Biennial Conference of the Australian Population Conference, Camberra.
- Chiovenda, M. K., 2014. The illumination of marginality: how ethnic hazaras in bamyan, afghanistan, perceive the lack of electricity as discrimination. Central Asian Survey 33 (4), 449–462.
- Corboz, J., Gibbs, A., Jewkes, R., 2019. Bacha posh in afghanistan: factors associated with raising a girl as a boy. Culture, health & sexuality, 1–14.
- Dhar, D., Jain, T., Jayachandran, S., 2018. Reshaping adolescents' gender attitudes: Evidence from a school-based experiment in india. Tech. rep., National Bureau of Economic Research.
- Duflo, E., 2001. Schooling and labor market consequences of school construction in indonesia: Evidence from an unusual policy experiment. American economic review 91 (4), 795–813.
- Ewerling, F., Lynch, J. W., Victora, C. G., van Eerdewijk, A., Tyszler, M., Barros, A. J., 2017. The swper index for women's empowerment in africa: development and validation of an index based on survey data. The Lancet Global Health 5 (9), e916–e923.

- Fernandez, R., 2007. Women, work, and culture. Journal of the European Economic Association 5 (2-3), 305–332.
- Fernández, R., Fogli, A., Olivetti, C., 2004. Mothers and sons: Preference formation and female labor force dynamics. The Quarterly Journal of Economics 119 (4), 1249–1299.
- Galiani, S., Gertler, P., Schargrodsky, E., 2005. Water for life: The impact of the privatization of water services on child mortality. Journal of political economy 113 (1), 83–120.
- Ghufran, N., 2001. The taliban and the civil war entanglement in afghanistan. Asian Survey 41 (3), 462–487.
- Ginsburg, T., 2011. An economic interpretation of the pashtunwali. U. Chi. Legal F., 89.
- Giuliano, P., 2017. Gender: An historical perspective. Tech. rep., National Bureau of Economic Research.
- Goodson, L. P., 2001. Perverting islam: Taliban social policy toward women. Central Asian Survey 20 (4), 415–426.
- Grace, J., 2005. Who owns the farm?: rural women's access to land and livestock. Afghanistan Research and Evaluation Unit (AREU).
- Griffin, M., 2001. Reaping the whirlwind: the Taliban movement in Afghanistan. Pluto Press London.
- GROUP, W. B., et al., 2018. World development report 2019: The changing nature of work. World Bank.
- Hogan, D. P., Berhanu, B., Hailemariam, A., 1999. Household organization, women's autonomy, and contraceptive behavior in southern ethiopia. Studies in family planning 30 (4), 302–314.
- Iannaccone, L. R., 1998. Introduction to the economics of religion. Journal of economic literature 36 (3), 1465–1495.
- Iannaccone, L. R., Berman, E., 2006. Religious extremism: The good, the bad, and the deadly. Public choice 128 (1-2), 109–129.
- Jackson, A., Weigand, F., 2019. The taliban's war for legitimacy in afghanistan. Current History 118 (807), 143–148.
- Jejeebhoy, S. J., Sathar, Z. A., 2001. Women's autonomy in india and pakistan: the influence of religion and region. Population and development review 27 (4), 687–712.
- Johnson, T. H., Mason, M. C., 2007. Understanding the taliban and insurgency in afghanistan. Orbis 51 (1), 71–89.
- Kabeer, N., 2005. Gender equality and women's empowerment: A critical analysis of the third millennium development goal 1. Gender & Development 13 (1), 13–24.
- Kakar, P., 2004. Tribal law of pashtunwali and women's legislative authority. Retrieved from Harvard Law School's website: http://www.law.harvard.edu/programs/ilsp/research/kakar.pdf.
- Katzman, K., 2010. Afghanistan: Post-taliban governance, security, and us policy. LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE.
- La Mattina, G., 2017. Civil conflict, domestic violence and intra-household bargaining in post-genocide rwanda. Journal of Development Economics 124, 168–198.

- La Mattina, G., Shemyakina, O., et al., 2017. Domestic violence and childhood exposure to armed conflict: attitudes and experiences. Households in Conflict Network.
- Larson, A., 2009. Toward an Afghan Democracy?: Exploring Perceptions of Democratisation in Afghanistan. Universitäts-und Landesbibliothek Sachsen-Anhalt.
- Lee, C., 2014. In utero exposure to the korean war and its long-term effects on socioeconomic and health outcomes. Journal of health economics 33, 76–93.
- Li, M., Rao, K., Natiq, K., Pasha, O., Blum, R., 2018. Coming of age in the shadow of the taliban: Adolescents' and parents' views toward interpersonal violence and harmful traditional practices in afghanistan. American journal of public health 108 (12), 1688–1694.
- Magnus, R. H., 1997. Afghanistan in 1996: Year of the taliban. Asian Survey 37 (2), 111–117.
- Magnus, R. H., 1998. Afghanistan in 1997: The war moves north. Asian Survey 38 (2), 109–115.
- Malhotra, A., Schuler, S. R., Boender, C., 2002. Measuring women's empowerment as a variable in international development. In: background paper prepared for the World Bank Workshop on Poverty and Gender: New Perspectives. Vol. 28.
- Margesson, R., 2007. Afghan refugees: Current status and future prospects. LIBRARY OF CONGRESS WASHINGTON DC CONGRESSIONAL RESEARCH SERVICE.
- Mishra, K., Sam, A. G., 2016. Does women's land ownership promote their empowerment? empirical evidence from nepal. World Development 78, 360–371.
- Moghadam, V. M., 2002. Islamic feminism and its discontents: Toward a resolution of the debate. Signs: Journal of Women in Culture and Society 27 (4), 1135–1171.
- Morgan, S. P., Niraula, B. B., 1995. Gender inequality and fertility in two nepali villages. Population and Development Review, 541–561.
- Mumtaz, S., Bahk, J., Khang, Y.-H., 2019. Current status and determinants of maternal healthcare utilization in afghanistan: Analysis from afghanistan demographic and health survey 2015. PloS one 14 (6), e0217827.
- Narayan-Parker, D., 2005. Measuring empowerment: Cross-disciplinary perspectives. World Bank Publications.
- Njoh, A. J., Ananga, E., 2016. The development hypothesis of women empowerment in the millennium development goals tested in the context women's access to land in africa. Social Indicators Research 128 (1), 89–104.
- 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.
- Nunn, N., 2009. The importance of history for economic development. Annu. Rev. Econ. 1 (1), 65–92.
- Oskorouchi, H. R., 2019. Learning to fight: Afghan child health and in-utero exposure to conflict. Population and Development Review 45 (2), 275–300.
- Pilster, U., 2020. Afghanistan: Peace through power-sharing? The Washington Quarterly 43 (1), 121–141.
- Pratley, P., 2016. Associations between quantitative measures of women's empowerment and access to care and health status for mothers and their children: a systematic review of evidence from the developing world. Social Science & Medicine 169, 119–131.

- Rashid, A., 2000. "taliban (militant islam, oil and fundamentalism in central asia), yale university press.
- Rubin, B. R., 1999. Afghanistan under the taliban. Current History 98 (625), 79.
- Samar, S., Aqil, A., Vogel, J., Wentzel, L., Haqmal, S., Matsunaga, E., Vuolo, E., Abaszadeh, N., 2014. Towards gender equality in health in afghanistan. Global public health 9 (sup1), S76–S92.
- Shalinsky, A. C., 1996. Gender issues in the afghanistan diaspora: Nadia's story. Frontiers: A Journal of Women Studies 17 (3), 102–123.
- Sharaunga, S., Mudhara, M., Bogale, A., 2019. Conceptualisation and measurement of women's empowerment revisited. Journal of Human Development and Capabilities 20 (1), 1–25.
- Smith, D. J., 2009. Community-based dispute resolution processes in Nangarhar province. Afghanistan Research and Evaluation Unit Kabul, Afghanistan.
- Steul, W., 1981. Paschtunwali: ein Ehrenkodex und seine rechtliche Relevanz. Vol. 54. Harrassowitz Verlag.
- UNDP, 2015. Afghanistan local governance project.
- Verwimp, P., Van Bavel, J., 2014. Schooling, violent conflict, and gender in burundi. The World Bank Economic Review 28 (2), 384–411.
- Vlassoff, C., 1992. Progress and stagnation: changes in fertility and women's position in an indian village. Population Studies 46 (2), 195–212.
- Wily, L. A., 2003. Land rights in crisis: Restoring tenure security in afghanistan. Tech. rep.
- Wily, L. A., 2004. Land relations in faryab province: Findings from a field study in 11 villages. Tech. rep.
- Wylie, G., 2003. Women's rights and righteous war' an argument for women's autonomy in afghanistan. Feminist Theory 4 (2), 217–223.
- Zulfacar, M., 2006. The pendulum of gender politics in afghanistan. Central Asian Survey 25 (1-2), 27–59.



 $Source: \ CNN \ Afghanistan \ Map \ in \ 1996 \ ; \ used \ under \ public \ domain \ license \ from \ Wikipedia.org \ Islamic \ Emirates \ of \ Afghanistan: \ Map \ of \ the \ situation \ in \ Afghanistan \ in \ late \ 1996.$

Figure 5: Map of treatment and control provinces

Appendix