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Growing up in the Iran-Iraq War and Preferences for Strong Defense

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Abstract

The purpose of this study is to examine the effect of individuals' memories of the Iran-Iraq war (1980-1988) during early adulthood (18-25 years) on their preference for strong national defense forces and their willingness to fight for Iran (in the event of another war). Using the World Value Survey (WVS) data, we provide evidence that Iranians who experienced the war during early adulthood give top priority to strong defense forces. However, we find that there is no significant association between individuals' memories of the war during early adulthood and their willingness to fight for Iran. The results are robust, controlling for a set of individuals' socio-economic and political characteristics.

Keywords: Preferences for defense; Iran-Iraq war; Impressionable years hypothesis; Beliefs

JEL Codes: H56, P16, Z13

1. Introduction

In this paper, we explore if individuals' memories of the Iran-Iraq war (1980 - 1988) during early adulthood affect Iranians' preferences for having strong national defense forces (DEFENSE) and a willingness to fight for their country (FIGHT).

Our interest in the relationship between experiencing a war during individuals' early adulthood (impressionable years) and DEFENSE and FIGHT was sparked by the works of Alesina and Fuchs-Schündeln (2007), Ehrmann and Tzamourani (2012) and Giuliano and Spilimbergo (2014) on the role of the historical macroeconomic environment and political regime on preferences for redistribution and price stability. Giuliano and Spilimbergo (2014) find that "individuals who grew up during a recession tend to support more government redistribution and believe that luck is more relevant than effort in determining economic success in life" (p.813). They also argue that large macroeconomic shocks experienced during early adulthood shape preferences for redistribution. They mainly justified their results by *the impressionable years hypothesis* which states that core attitudes, beliefs, and values crystallize during a period of great mental plasticity in early adulthood (the so-called impressionable years – between 18 and 25 years of age) and remain largely unchanged thereafter (Krosnick and Alwin 1989). Alesina and Fuchs-Schündeln (2007) show that, after German reunification, East Germans (who lived under a Communist regime) are more in favor of redistribution and state intervention than West Germans. Ehrmann and Tzamourani (2012) find that inflation memories play an important role in shaping the preferences of economic agents about price stability. In addition, they provide

evidence that memories of hyperinflation last for a long while, whereas those of moderate inflation experiences tend to erode after approximately a decade.

Relying on the findings of the above-mentioned studies as a foundation and using case study of Iran, we hypothesize that individuals who experienced the Iran-Iraq war during their early adulthood would prefer stronger national defense forces and are willing to fight for Iran in the event of another war. We are interested in testing how experiences of war affect individuals' thinking toward having strong national defense forces and a willingness to fight for the country.

If several conflicts have impacts on individuals' preferences, one should think of two possible reactions to these conflicts. One may argue that Iranian people with memories of conflicts may turn strongly against conflicts and not want to experience them again. The opposite hypothesis is that, under the continuous influence of domestic media, many Iranians still believe that a stronger national defense force is essential to their people's welfare and protection. This belief has especially sprouted since the Iraq-Iran war. As noted by Marcus (2010), when Iran was attacked by Iraq in 1980, the international community did not come to its aid, nor did it sanction Iraq, which is remembered by Iranians. According to *The Foundation for Maintenance and Publication of Sacred Defence Works and Values*, in total, five million Iranians were involved in the war, another 190,000 became martyrs (in Shi'a Muslims' beliefs), 672,000 people were wounded, and 42,000 Iranians were taken prisoner in Iraq. Among the martyrs, 33,000 were school students and 3,500 university students. The damage costs for Iran estimated by the United Nations was about 97 billion dollars

(BBC 2015). The Iran-Iraq war had three distinguishing characteristics: first, it was longer than either world war mainly because Iraq could not end it and Iran did not want to call a ceasefire until 1988. Second, it was significantly an asymmetrical war: both countries were financing their military needs through exports of oil, yet Iraqis were getting significant financial help from other Arab countries, while Iran was under sanctions. Third, it included three modes of warfare, which were not observed in previous wars since 1945: indiscriminate ballistic-missile attacks on cities from both sides, but mainly by Iraq[1]; the significant use of chemical weapons by Iraq; and approximately 520 attacks on third-country oil tankers in the Persian Gulf.[2]

The Iranian Foreign Minister Mohammad Javad Zarif defended Iran's ballistic missile program in defiance of Western and Israeli criticism in an interview with CNN's Fareed Zakaria[3], referring to the memories of the Iran-Iraq war:

> "[Y]ou know, we go back to a history where our cities were being showered with missiles from Saddam Hussein… and Iran did not have a single missile to work as a deterrence against its citizens".

The long-term mental effects of experiencing war conditions is also discussed by Behrouzan (2013) in her article in *Foreign Policy* on "The Psychological Impact of the

[1] A famous episode of the Iran-Iraq war was the War of the Cities. It comprised five series of air raids, missile attacks and artillery shellings on major cities and urban areas as initiated by the Iraqi Army, with the aim of breaking the unity of civilians in Iran in their support of Islamic revolution. The main urban areas, far from war fronts (e.g., Tehran, Qom, Isfahan, Tabriz, and Shiraz among others), were under significant missile and air attacks. The Iran-Iraq War (1980-88) convinced Tehran that a strong, capable missile force is critical to the country's security (Nadimi 2015).

[2] See https://www.history.com/topics/middle-east/iran-iraq-war

[3] See https://edition.cnn.com/videos/tv/2017/09/25/exp-gps-0924-zarif-interview-iran.cnn

Iraq War". Behrouzan highlights the importance of investigating this issue in the affected countries:

> "Understanding the psychological impact of war on civilians is important because wars change a society's relationship with the future. War conditions create memories and wounds that outlive the wars themselves. Their images and sounds persist in art, economics, politics, and private lives through multiple generations. They create corrosive memories that take decades to work through. But they also resonate, belatedly, in higher rates of physical and mental illness (…) The internalized, normalized, and assimilated memories of war will (…) shape a society's sense of well-being, and can then translate to medical, political, and economic consequences."

Using data from Iranian respondents to the World Values Surveys (WVS 2005–2009), we provide evidence that individuals who experienced the Iran-Iraq war during their early adulthood (18-25 years) prefer a stronger national defense. However, we do not find a significant association between these individuals and their willingness to fight for the country in another war in the future.

We focus on Iran for three reasons. First, the country has experienced different types of conflicts at different levels of intensity over the past century. Second, Iran's economy has been suffering from low economic growth (excluding oil exports) and high unemployment over the past three decades[4]. Despite slow economic

[4] The average annual unemployment rate over the period of 1991-2017 was 11.36 for Iran whereas the rate was 5.86 for the upper-middle-income economies (which Iran belongs to this income group),

development, the governments of Iran typically allocate a large amount of their annual budgets to organizations related to national defense, as opposed to investing in major drivers of sustainable long-run economic growth (expenditures in technology and environment). Tables 1 and 2 provide some insights about the size of government military expenditure in Iran, alongside its comparable countries and the world average. As can be seen from Table 1, the military expenditure as a percentage of central government expenditure (15.2%) is much higher than the world average (6.03%) and upper-middle-income economies (5.78%) in 2016. However, the ratio is slightly lower than the average of Middle East and North Africa countries (16.29%). A clear picture of governments' interest in national defense can be seen in Table 2. Government expenditure per capita in three very important sections of contemporary Iran (water resources, environment and communication & technology) is only about 15% of government expenditure per capita in defense.

Third, there is an increasing international focus on military spending and projects of Iran since the new round of sanctions by the United States Administration (Dizaji and Farzanegan 2018; Farzanegan 2014). In May 2018, president Trump withdrew the US from the Iran Nuclear Deal. He further criticized this deal and the lifting of sanctions by declaring that "[I]n the years since the deal was reached, Iran's military budget has grown by almost 40 percent — while its economy is doing very

according to the World Bank (https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS). Similarly, the average annual growth rate of gross domestic product (GDP) per capita over 1991-2017 is 2.01 whereas the average for the upper-middle-income economies is 3.64 (https://data.worldbank.org/indicator/NY.GDP.PCAP.KD.ZG).

badly…". Some observers argue that the sanctions might lead to very strong nationalist resentment in Iran itself (Marcus, 2010). It is therefore interesting to understand the determinants of Iran's military spending beyond the often-discussed socio-economic and institutional drivers at macro level, focusing more on perceptions of Iranians regarding the importance of defense as well as social values, which are shaping such perceptions[5].

Hence, the Iranian sample provides a motivating context to find out if government expenditures in defense are supported by Iranian citizens who experienced a war during their early adulthood.

Table 1. Military expenditure and armed forces personnel in Iran, comparable countries and the world, 2016

	Military expenditure (% of central government expenditure)	Armed forces personnel (% of total labor force)
Iran	**15.20**	**2.07**
Middle East & North Africa	16.29	2.34
Upper middle income	5.78	0.72
World	6.03	0.80

Source: World Bank (2018)

[5] For key details about Iran's nuclear deal, see https://www.bbc.com/news/world-middle-east-33521655

Table 2. Government expenditures per capita by function, 2017

	US$
Social welfare	281
Education & research	213
Health	184
Defence	153
Water resources	19
Environment	1.8
Communication & technology	1.2

Note: The data come from government's budget report in 2017 (or 1396 in Iranian calendar). The exchange rate: $US 1 = Rial 32,850. Source: Ghadimi (2017). Available at http://www.bbc.com/persian/iran-features-40916317

Our study contributes to three strands of the literature: (I) the impact of historical macroeconomic and political events on preference formation; (II) the long-run impact of wars and violence on political attitude; and (III) the (historical and psychological) determinants of government military spending. First, while Alesina and Fuchs-Schündeln (2007), Ehrmann and Tzamourani (2012) and Giuliano and Spilimbergo (2014) and others have examined the effects of historical recession and inflation on individuals' preference on redistribution, government intervention and price stability, to the best of our knowledge, no empirical study has tested the relationship between memories of wars during early adulthood and DEFENSE and FIGHT for a country in the Middle East, where the words of "war" and "conflict" are on everyday news. Second, there are a large number of studies that have examined the long-term consequences of conflicts on political attitudes and actions (e.g. Dicicco and Fordham (2018) on elite opinion about foreign policy; Freitag et al., (2017) on

political participation; Hong and Kang (2017) on people's attitudes toward the government; Oto-Peralías (2015) on knowledge and engagement in politics; and Mueller (1991) on attitudes towards war). However, little empirical work has been devoted to the relationship between war memories and DEFENSE and FIGHT. Third, the literature on determinants of government defense spending is mostly focused on the socio-economic conditions and institutional factors of countries (e.g. Albalate et al. 2012; Eichenberg and Stoll 2012), underestimating the importance of perceptions of individuals shaped by historical events in pressing the state for current spending on defense (for a review see Dizaji and Farzanegan 2018). This article covers these gaps in the literature.

The remainder of this article is structured as follows. Section 2 describes the data and our empirical strategy. The results are presented and discussed in Section 3. Section 4 concludes the paper.

2. Data and empirical strategy

2.1. *Data*

Our analysis relies on data from the World Values Survey (WVS) developed by Inglehart et al. (2018). The surveys were conducted by a network of social scientists at leading universities all around world, coordinated by the WVS Association. The survey were carried out six times (1981–1984, 1990–1994, 1995–1998, 1999–2004, 2005–2009 and 2010–2014). The surveys monitor cultural values, attitudes and beliefs towards gender, family, and religion; attitudes and experience of poverty; education,

health, and security; social tolerance and trust; attitudes towards multilateral institutions; cultural differences and similarities between regions and societies[6]. The surveys also contain information on the socio-demographic characteristics of respondents, such as age, gender, educational level, employment status, income and marital status.

2.2. *Dependent variables*

In this study, we use data from WVS Wave 5 (2005-2009) due to the availability of information for respondents' preferences, of which we are particularly interested in DEFENSE and FIGHT. We estimate regressions using two different but related questions as the dependent variables.

2.2.1. *Preference for strong national defense*

First, among the various belief and preference questions, the survey contains a set of questions regarding individuals' views about what should be the country's aims for the next ten years. The question asks the respondents, "People sometimes talk about what the aims of this country should be for the next ten years. On this card are listed some of the goals which different people would give top priority. Would you please say which one of these you, yourself, consider the most important? (Code one answer

[6] The WVS official questionnaire can be found at http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp

only under "first choice")". In particular, respondents are asked to indicate which of the following goals is considered to be their "first choice":

- A high level of economic growth
- *Making sure this country has strong defense forces*
- Seeing that people have more say about how things are done at their jobs and in their communities
- Trying to make our cities and countryside more beautiful

Excluding a few cases with "no answers" from a total number of 2,618 valid responses in Wave 5 (2005-2009), 1,566 persons (about 60%) voted for "economic growth", 539 persons (about 21%) for "more freedom of speech", 334 persons (about 13%) voted for "strong defense", and 179 persons (about 7%) for "beautifications of urban areas". For our analysis, we have recoded the responses by a dummy variable which equals 1 if the respondents mention "strong defense forces" as their first choice and 0 otherwise.

2.2.2. *Willingness to fight for country*

The other key dependent variable is a question asking the respondents if the country were to come to a war, would you be willing to fight for your country[7]. We call this variable as willingness to fight for country (FIGHT). The answers can take the values 0 (No) or 1 (Yes). From total number of 2,286 valid responses, 1,864 persons (about

[7] The question in the WVS survey is: "Of course, we all hope that there will not be another war, but if it were to come to that, would you be willing to fight for your country?".

81%) replied positively to this question and 422 persons (about 18%) rejected the fight for Iran if the country were to go to war.

2.3. *Explanatory variable of interest*

Our main explanatory variable of interest is a dummy equal to 1 if an individual has experienced the Iran-Iraq war (1980-1988) and/or has lived under this war condition during his or her early adulthood. Following Giuliano and Spilimbergo (2014), we define early adulthood (or the impressionable years) as between 18 and 25 years of age. As noted by Giuliano and Spilimbergo (2014) and in line with the frequently discussed *impressionable years hypothesis* in social psychology, the impressionable years are those years that shape the basic values, attitudes, and world views of individuals. Krosnick and Alwin (1989) and Newcomb et al. (1967) also present evidence on significant (political) socialization between the ages of 18-25. Giuliano and Spilimbergo (2014) show that those individuals who experienced macroeconomic shocks during their impressionable years (18-25) have significantly different preferences for redistribution and the role of the state in the economy. Other studies also find evidence on the important role of historical environment during the impressionable years on basic attitudes and worldviews of individuals (Greenstein 1965; Hess and Torney 1967; Easton and Dennis 1969; Dennis 1973; Cutler 1974; Sears 1975, 1981, 1983).

Among the total 2,650 respondents in the Wave 5 of WVS in Iran, 704 persons (about 26%) were in their impressionable years of life when the Iran-Iraq war happened (from 1980 to 1988).

2.4. *Control variables*

In order to model how the historical war relates to DEFENSE and FIGHT, it is crucial to control for other possible determinants, which may shape the perception of individuals regarding their first choice for the aim of country and their willingness to fight. In the empirical estimations, we control for a range of socio-demographic characteristics such as gender, employment status, marital status, number of children, income, education status, patriotism, confidence in government, religiosity, and voting to the right or for more conservative parties.

Our control for gender is a dummy variable that is equal to 1 for males and 0 for females. We also created a dummy variable for employment status (1 if a person has full-time employment and 0 otherwise) and marital status (1 if married and 0 otherwise e.g. single, divorced or widow). We also use a binary variable for income status in which the individuals in the top three deciles (8^{th}, 9^{th}, and 10^{th}) are recorded with 1 and others with 0. Our expectation is that higher income groups of society may prefer a stronger order and security due to their higher economic interests at risk if security is undermined. In other words, while higher national defense standards afford citizens a similar protection from foreign threats, the costs of not having a

strong defense would be felt more by higher income individuals (Beamer 1999 pp. 22-23). The lower income individuals may prefer a stronger focus on economic growth.

In addition, individuals with higher degrees of national pride may be more willing to fight if the country call them at the war condition (Anderson et al., 2018). We use the WVS question that asks respondents to indicate "How proud are you to be Iranian?". The possible answers are very proud, quite proud, not very proud, not proud at all, no answer and do not know).

Higher degrees of confidence and trust in the government system may also increase the probability of voting for stronger defense and willingness to fight for own country (Anderson et al. 2018). Lower confidence because of perceptions of grand corruption may reduce the citizens' trust in the government, especially in allocation of budgets to military projects, as well as undermine the willingness of people to defend a corrupt system at the time of external invasion. To measure this variable, we use a question from WVS about confidence in government: "I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them [government in our study]: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?."

Higher levels of religiosity may also stimulate the decision to fight for one's own country by increasing the non-materialistic values in the cost-benefit analysis. For example, Anderson et al. (2018) find that respondents who indicate that they do not belong to any denomination are less likely to say that they are willing to fight for

their country than respondents who indicate religious affiliation. The question from WVS that we use is "Independently of whether you attend religious services or not, would you say you are". We include a dummy variable equal to 1 if a person indicates that he/she is a religious person, and equal to 0 if otherwise (not a religious person and a convinced atheist).

Finally, the political orientation of individuals to the right and conservative parties (fundamentalists) may also shape their preferences in giving more weight to the defense category and willingness to fight. To control for the political orientation of respondents, we use the following question from WVS: "If there were a national election tomorrow, for which party on this list would you vote? Just call out the number on this card. If you are uncertain, which party appeals to you most?". We include a dummy variable equal to 1 if a person indicates that he/she votes for fundamentalists, and equal to 0 if otherwise (reformists, independents and others).

2.5. *Model specification*

As mentioned earlier, our main hypothesis is that "Individuals who have experienced the Iran-Iraq war in their early adulthood have a higher preference for stronger national defense forces and a willingness to fight for Iran, *ceteris paribus*." To test our hypothesis, we develop the following model (1):

$$\text{Beliefs}_i = \beta 0 + \beta 1 \text{ Age 18-25} + \beta 2 \, X_i + \varepsilon_i \quad (1)$$

where *Beliefs* indicates the response to one of the two questions described above (DEFENSE and FIGHT) of individual *i*. It is coded as 1 if an individual mentioned "strong defense" as the first choice of the country's aims or when an individual indicated the willingness to fight for Iran in the event of another war. The variable *Age 18-25* is a dummy indicating whether an individual experienced the Iran-Iraq war during his/her impressionable years (18-25 years). *X* is a vector that includes the control variables and ε is an error term.

We use logistic regression to predict the probability of DEFENSE and FIGHT based on individuals' experiences of the Iran-Iraq war during their impressionable years and other control variables. Table 3 shows the first overall relationship between those who support a strong defense as the first choice of Iran in the Wave 5 of WVS and whether they experienced the Iran-Iraq war while aged 18-25 years. The probability of supporting strong defense and having not experienced the war during the impressionable years is 25% while this probability increases to 31% if the individuals experienced the war during his/her impressionable years. This looks like a relatively significant difference.

Table 3. Experience of war during the impressionable years and preference for strong defense as the first choice of Iran

	Age 18-25 during the Iran-Iraq war		
	0	1	Total
0	1,699	585	2,284
	(74.39%)	(25.61%)	(100%)
1	231	103	334
	(69.16%)	(30.84%)	(100%)
Total	1,930	688	2,618
	(73.72%)	(26.28%)	(100%)

Our logistic regressions rely on maximum likelihood estimation rather than ordinary least squares (OLS). This is an iterative approach where we estimate different solutions until the best solution of having the maximum likelihood is achieved.

3. Results

3.1. *Strong defense as the first choice of country*

Table 4 shows the results of the logistic regression by using the binary dependent variable of support of strong defense as the first choice of the country. We follow a specific to general approach and in Model 1, we use only early adulthood experience of the Iran-Iraq war (*Age 18-25*) as the explanatory variable. In subsequent models, we control for other individual socio-economic and political factors and check the robustness of *Age 18-25* effect.

We can identify a consistent, robust and statistically significant long-run effect of war shock during the early adulthood period on the individuals' preferences to support strong defense as the first choice of Iran. The logit coefficient of war shock is positive in Models 1 to 10. This finding provides empirical support to the

impressionable years hypothesis and is in line with studies that show impressionable years of life (18-25) are very important in shaping an individuals' core attitudes, beliefs, and values (e.g. Alesina and Fuchs-Schündeln 2007; Ehrmann and Tzamourani 2012; Giuliano and Spilimbergo 2014). In addition, our results support the view that wars and conflicts have long-lasting impacts on individuals' political attitudes and actions in societies that have experienced wars and conflicts (e.g., Dicicco and Fordham 2018; Freitag et al. 2017; Hong and Kang 2017; Oto-Peralías 2015; Mueller 1991).

We can also see a consistent positive relationship between being in higher income deciles and preferences for strong defense. Apparently, those who have higher endowments in Iran hold greater beliefs in putting security at the top of the national agenda. This may be owing to the higher economic loss they may befall during such times of instability.

Being proud of one's Iranian nationality is positively correlated with individual preference for strong defense forces but it is far from statistical significance. We also find that when there is a great deal of confidence in the government, individuals feel more comfortable to mention strong defense as the first choice for the country. Often, lower confidence in the government is a symptom of higher perceptions of corruption. In such a case, individuals may be more suspicious of defense spending as a channel of enriching corrupt government employees. This is especially true considering the lower transparency in defense projects in Iran: according to the Government Defence Anti-Corruption Index (GI) published by Transparency International, Iran's GI

ranking in Band E places it in the high-risk category for corruption in the defense and security sector. The highest risk area is Finance and Procurement[8].

We do not observe a robust and significant effect of other co-variates such as gender, employment status, religiosity, number of children and voting for the right parties on the dependent variable of DEFENSE. We have also estimated the odds ratios. An odds ratio of 1 means that the odds are equally likely and that the predictor makes no difference. If those with and without Iran-Iraq wartime experience during their early adulthood were equally likely to support the strong defense as the first choice of Iran, the odds ratio would be 1. On average, across all specifications in Table 4, the odds of individuals with experience of the Iran-Iraq war during their impressionable years supporting "strong defense" as the first choice of Iran are 36% greater than the odds of those who did not have such experience in their early adulthood.

To better compare the relative importance of each variable for explaining the dependent variable of support of strong defense, Table 5 provides a summary of effects. There are three significant predicators of individuals' support for strong defense as the first choice of the Iranian government; namely, a great deal of confidence in the government, high-income groups, and experiencing the Iran-Iraq war during the early adulthood. The percent change in odds for a one standard deviation (SD) increase in X column shows that the strongest effect is related to higher

[8] See http://government.defenceindex.org/generate-report.php?country_id=6297

confidence in the government, followed by high-income groups status and age cohort during the war shock.

In the next step, we estimate the difference in *probability* of supporting "strong defense" as the first priority of the country if an individual was in his/her early adulthood during the Iran-Iraq war compared with an individual who was not in this age cohort during the war. For this to be meaningful, we need to set the covariates at some meaningful value. We will fix other variables at the mean. Thus, the question we want to answer is as follows: *What is the difference between those with war experience during the impressionable years and others who are average on the other covariates in the probability that they support a strong defense as the first choice of the country?*

The results are shown in Table 6. Individuals who have had war experience while aged 18-25 years and are average on other covariates are 4% more likely to support strong defense as the country's first choice than those who did not have war experience in their early adulthood.

Table 4. Support of strong defense as the first choice of Iranian government among Iranians

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Explanatory variables	*Dependent variables*: Strong Defense as first choice of country (DEFENSE)									
War shock during 18-25 years of age	**0.258****	**0.290****	**0.267****	**0.275****	**0.258***	**0.282****	**0.362****	**0.361****	**0.354****	**0.424***
	(2.02)	(2.25)	(2.06)	(2.10)	(1.94)	(2.09)	(2.42)	(2.41)	(2.15)	(1.78)
Upper Income (deciles of 8th,9th, 10th)		**0.575*****	**0.564*****	**0.547*****	**0.563*****	**0.572*****	**0.552*****	**0.541*****	**0.560*****	**0.522****
		(3.20)	(3.11)	(2.98)	(3.03)	(3.08)	(2.97)	(2.91)	(3.00)	(2.13)
Proud nationality: (Not very proud)			0.219	0.108	0.012	0.021	0.049	0.047	0.016	-0.259
			(0.37)	(0.18)	(0.02)	(0.03)	(0.08)	(0.08)	(0.03)	(-0.31)
Proud nationality (Quite proud)			0.646	0.438	0.266	0.286	0.324	0.330	0.295	0.368
			(1.22)	(0.83)	(0.50)	(0.53)	(0.59)	(0.60)	(0.53)	(0.50)
Proud nationality (Very proud)			0.698	0.479	0.280	0.308	0.347	0.355	0.297	0.210
			(1.34)	(0.91)	(0.52)	(0.58)	(0.63)	(0.65)	(0.54)	(0.28)
Confidence government (Not very much)				0.557	0.563	0.550	0.570*	0.579*	0.531	0.578
				(1.63)	(1.64)	(1.59)	(1.65)	(1.67)	(1.53)	(1.06)
Confidence in government (Quite a lot)				**0.629***	**0.606***	**0.587***	**0.617***	**0.622***	0.563	0.671
				(1.81)	**(1.73)**	**(1.67)**	**(1.75)**	**(1.76)**	(1.59)	(1.21)
Confidence in government (A great deal)				**0.936*****	**0.944*****	**0.922****	**0.955*****	**0.965*****	**0.908****	**0.959***
				(2.62)	(2.63)	(2.56)	(2.64)	(2.67)	(2.50)	(1.69)
Religious person					0.144	0.128	0.137	0.127	0.102	0.168
					(0.81)	(0.72)	(0.77)	(0.71)	(0.56)	(0.70)
Full time employment						-0.284	-0.264	-0.242	-0.235	-0.426
						(-1.64)	(-1.52)	(-1.33)	(-1.27)	(-1.61)
Married							-0.192	-0.193	-0.224	0.078
							(-1.37)	(-1.37)	(-1.29)	(0.33)
Male								-0.074	-0.074	-0.214
								(-0.58)	(-0.57)	(-1.21)
1 Child									0.005	-0.066
									(0.02)	(-0.23)
2 Children									0.167	0.149
									(0.75)	(0.51)
3 Children									-0.037	**-0.784***
									(-0.14)	**(-1.85)**
4 Children									0.001	-0.617
									(0.00)	(-1.43)
5 Children									0.293	0.044
									(0.93)	(0.10)
6 Children									-0.176	-0.095
									(-0.41)	(-0.17)
7 Children									0.273	-1.199
									(0.58)	(-1.13)
8 and more children									0.512	1.144
									(1.04)	(1.31)
Vote to right parties										0.082
										(0.47)
Observations	2,618	2,593	2,584	2,561	2,479	2,468	2,460	2,432	2,393	1,273

Notes: Estimation method: Logit regressions. Robust t statistics are in paracenteses. * significant at 10%,** significant at 5% and ***significant at 1%.

Table 5. Logistic (N=2,393): Percentage Change in Odds for Model 9 in Table 4

	b	z	P>z	%	%StdX	SDofX
War shock during 18-25 years of age	**0.353**	**2.15**	**0.032**	**42.4**	**16.9**	**0.440**
Upper Income (deciles of 8th,9th, 10th)	**0.560**	**3.002**	**0.003**	**75.2**	**17.3**	**0.284**
Proud nationality (Not very proud)	0.015	0.026	0.979	1.6	0.4	0.241
Proud nationality (Quite proud)	0.295	0.534	0.593	34.4	14.2	0.450
Proud nationality (Very proud)	0.297	0.54	0.589	34.6	15.4	0.481
Confidence in government (Not very much)	0.530	1.528	0.127	70.1	30.3	0.498
Confidence in government (Quite a lot)	0.562	1.585	0.113	75.6	30	0.466
Confidence in government (A great deal)	**0.907**	**2.496**	**0.013**	**147.9**	**40.1**	**0.371**
Religious person	0.101	0.562	0.574	10.7	3.8	0.370
Full time employment	-0.234	-1.274	0.203	-20.9	-8.7	0.385
Married	-0.224	-1.292	0.196	-20.1	-10.4	0.488
Male	-0.073	-0.57	0.569	-7.1	-3.6	0.500
1 Child	0.004	0.02	0.984	0.5	0.2	0.351
2 Children	0.167	0.752	0.452	18.2	6.5	0.375
3 Children	-0.037	-0.139	0.889	-3.6	-1.1	0.300
4 Children	0.001	0.004	0.997	0.1	0	0.254
5 Children	0.292	0.93	0.352	34	6	0.198
6 Children	-0.175	-0.414	0.679	-16.1	-2.8	0.162
7 Children	0.272	0.583	0.56	31.4	3.4	0.123
8 and more children	0.5116	1.045	0.296	66.8	6	0.113

Notes: b = raw coefficient, z = z-score for test of b = 0, P>|z| = p-value for z-test, % = percent change in odds for unit increase in X, %StdX = percent change in odds for SD increase in X, SDofX = standard deviation of X.

Table 6. Conditional marginal effects

Expression: Pr(strong defense as the first choice), predict()

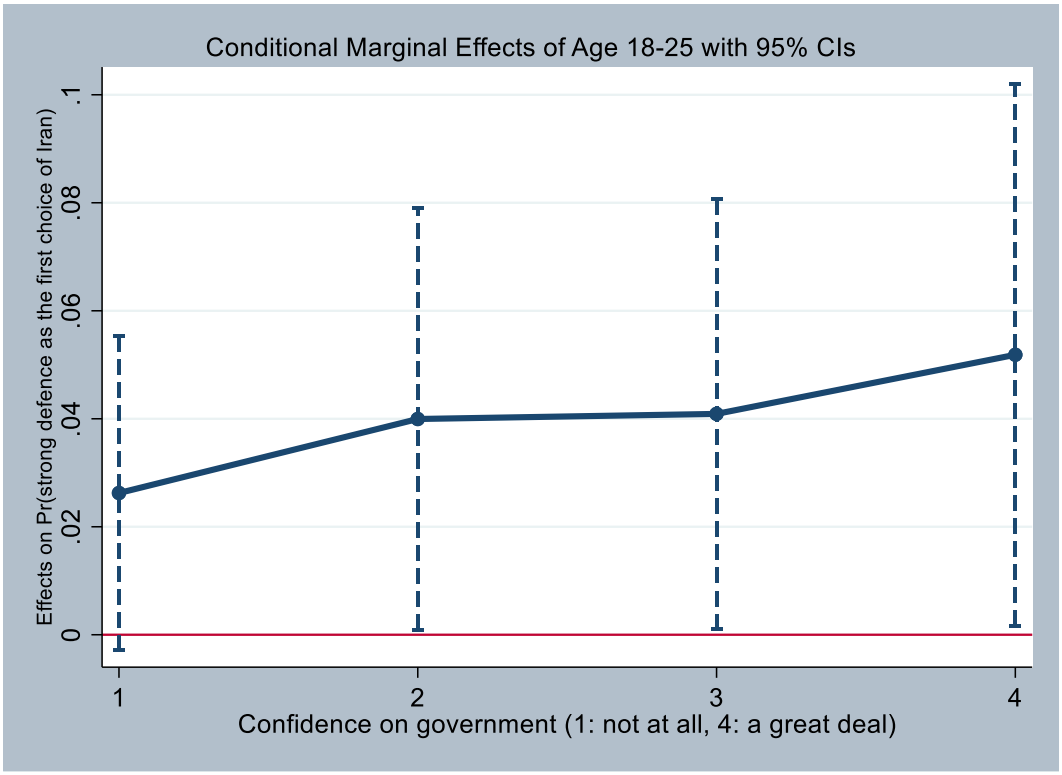
dy/dx w.r.t.: War shock during 18-25 years of age

Conditional marginal effects		Delta-method		
	dy/dx	Std. Err.	z	P>z
War shock during 18-25 years of age	0.04	0.02	2.0	0.04

We also examine the marginal effects of experiencing war shock during early adulthood, conditional on different levels of individuals' confidence on the government performance (keeping other covariates at their average level). Interestingly, there is a significant interaction between these two variables and the

support for strong defense by individuals with war experience during their impressionable years increases at higher levels of confidence in the government. If there is no confidence in the government, the support for strong defense by the average person living during the Iran-Iraq war is not statistically significant at the 5% level. Figure 1 shows the conditional marginal effects.

Figure 1. Conditional marginal effects



3.2. *Willingness to fight for Iran and experience of war conditions in impressionable years*

We investigate to what extent the experience of war conditions during early adulthood may influence the response of individuals on their willingness to fight for Iran in the event of another war. The concept of willingness to fight is not identical to support for strong defense as the first choice of Iran. The former has more weight of

willingness of an individual to pay the high costs of joining the fight while the latter is rather silent on who should pay the costs of defense. As we will see in the estimation results, while the richer deciles of the country had a consistent support of strong defense, their association with willingness to fight is statistically insignificant. They may prefer a strong defense for higher security and stability given their economic endowments but may prefer for defense costs and fighting to be carried by other levels of society.

We also expect to observe a stronger positive relationship between national pride and willingness to defend the country at the time of war. Also, the higher levels of confidence in government stimulate the willingness of an individual to fight on behalf of such a system. People are less willing to pay for the costs of war under a corrupt and inefficient political regime. We also expect to see a stronger role of religiosity in explaining the willingness to fight for one's country. Part of the high costs associated with warfare can be recompensed by attaching to it religious significance, such as introducing it as a holy war against the enemies of Islam. We have observed this phenomenon in the Iran-Iraq war where Saddam Hossein was introduced as *Kafir* and Iranian soldiers as *Razmandegan-e-Islam.* The role of religion in the mobilization of the Iranian people and their participation in the war against Saddam's army is undeniable (for a review see Rezamand, 2010). Logically, the religious influence is stronger for those who are more committed to religion and its regular practices such as going to mosques or fasting during Ramadan.

In addition, we expect to observe a negative effect of number of children and marriage on willingness to fight due to the higher costs of such involvement for big and young families. Those who are also politically closer to the right and conservative parties in Iran may also be more likely to engage in military campaigns compared with those who are more affiliated with reformists (or left) parties.

The relationship between Iranians with memories of war during their early adulthood and those with the willingness to fight in future wars is not evident. Such memories of destruction in a war and the costs that their families may have paid, combined with the post-war enrichments of opportunists, can have a significant negative effect on their willingness to pay similar costs again. The economic enrichment of parts of "*Sardaran-e-Defa Moghadas*" (i.e. the commanders of the Iran-Iraq war), while a significant number of younger generations of Iranians paid the costs of fight with their life, may have a significant discouraging effect on their willingness to fight in future.

Table 7 shows the logit regression results using "FIGHT" as a dependent variable while the covariates are the same as in early estimations. We can observe that there is no statistically significant relationship between individuals with experience of the Iran-Iraq war during their early adulthood and their willingness to fight in the event of another war, controlling for other factors. Our earlier expectations as to the role of other individuals' socio-economic and political characteristics and FIGHT is supported.

Table 7. Willingness to fight for country among Iranians

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Explanatory variables	Dependent variable: Willingness to fight for country									
War shock during 18-25 years of age	0.093	0.103	-0.016	-0.030	-0.069	-0.076	-0.119	-0.110	-0.217	0.093
	(0.76)	(0.84)	(-0.12)	(-0.23)	(-0.52)	(-0.56)	(-0.83)	(-0.76)	(-1.36)	(0.37)
Upper Income (deciles of 8th,9th, 10th)		0.061	0.064	0.054	0.129	0.122	0.127	0.126	0.134	0.175
		(0.31)	(0.30)	(0.26)	(0.60)	(0.57)	(0.60)	(0.59)	(0.62)	(0.61)
Proud nationality (Not very proud)			1.132***	1.028***	0.977***	0.954**	0.939**	0.973**	1.173***	1.611***
			(3.01)	(2.71)	(2.58)	(2.51)	(2.47)	(2.55)	(2.87)	(2.76)
Proud nationality (Quite proud)			2.332***	2.067***	1.845***	1.822***	1.791***	1.796***	1.934***	2.253***
			(6.69)	(5.85)	(5.30)	(5.21)	(5.12)	(5.13)	(5.08)	(4.15)
Proud nationality (Very proud)			3.023***	2.697***	2.426***	2.422***	2.404***	2.410***	2.530***	2.819***
			(8.80)	(7.74)	(7.05)	(7.01)	(6.95)	(6.97)	(6.71)	(5.21)
Confidence in government (Not very much)				0.549**	0.531**	0.561**	0.554**	0.548**	0.538**	0.609*
				(2.53)	(2.41)	(2.56)	(2.52)	(2.47)	(2.34)	(1.88)
Confidence in government (Quite a lot)				1.289***	1.213***	1.244***	1.225***	1.242***	1.221***	1.222***
				(5.47)	(5.09)	(5.22)	(5.13)	(5.17)	(4.93)	(3.52)
Confidence in government (A great deal)				1.353***	1.282***	1.311***	1.293***	1.325***	1.338***	1.521***
				(5.06)	(4.71)	(4.82)	(4.75)	(4.82)	(4.71)	(3.66)
Religious person					0.670***	0.656***	0.627***	0.652***	0.613***	0.469**
					(4.67)	(4.54)	(4.31)	(4.44)	(4.11)	(2.28)
Full time employment						0.131	0.107	0.027	0.046	-0.004
						(0.83)	(0.68)	(0.16)	(0.27)	(-0.01)
Married							0.137	0.144	-0.040	0.180
							(1.05)	(1.10)	(-0.20)	(0.65)
Male								0.205	0.190	0.084
								(1.60)	(1.48)	(0.47)
One Child									0.156	-0.136
									(0.66)	(-0.41)
2 Children									0.374	-0.028
									(1.59)	(-0.08)
3 Children									0.520*	0.002
									(1.73)	(0.00)
4 Children									0.080	-0.259
									(0.28)	(-0.64)
5 Children									0.469	-0.325
									(1.21)	(-0.65)
6 Children									0.235	0.493
									(0.56)	(0.68)
7 Children									1.120	-0.428
									(1.41)	(-0.50)
8 and more children									1.550	
									(1.60)	
Vote to right parties										0.300*
										(1.68)
Observations	2,286	2,266	2,260	2,240	2,163	2,153	2,147	2,121	2,092	1,103

Notes: Estimation method: Logit regressions. Robust t statistics are in parentheses. * significant at 10%,** significant at 5%, *** significant at 1%.

4. Conclusion

This study shows that the Iran-Iraq war shocks experienced during the critical years of early adulthood influence individuals' preferences for strong defense as the first choice of the Iranian government. Individuals who grew up during the Iran-Iraq war (1980-1988) tend to support stronger defense forces compared rather than other aims such as economic growth, environmental quality and freedom of speech. Our findings are supported using evidence from the Wave 5 (2005-2009) of the World Value Survey, and are robust to the inclusion of a diverse set of controls and various specifications. We also find that the effect of war shocks during the impressionable years of individuals on their support for strong defense increases at higher levels of confidence in government. Higher confidence in government is often due to lower perceptions of corruption by individuals and thus, more trust in the government to manage the defense projects for sustainable order and stability.

Using the willingness to fight for country in the event of another war shows a different picture. Iranians who experienced the destruction of the Iran-Iraq war during their early adulthood show no significant positive correlation with support of another fight. This may be due to the post-war economic and political enrichments of part of military while the fatalities/causalities of war were paid by a large number of ordinary Iranians. As a result, people may be less willing to pay the high costs of joining another destructive war in which the military and political elites may ultimately enrich themselves in post-war period.

In addition, we find that higher levels of confidence in government is positively and significantly associated with support of strong defense and the willingness to fight for the country. Higher income groups support stronger defense but do not show a significant positive correlation with willingness to fight in the event of another war. While stronger defense and stability due to higher economic endowments of top income deciles is desired, the costs of fatalities/causalities/destruction should carried out by other levels of society. Our study helps to understand the individuals' socio-economic factors, which may shape their support for stronger defense at the country level.

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