Supporting Information for "At War and at Home: The Consequences of US Women Combat Casualties"

September 17, 2020

Contents

1 Survey Instruments for Follow-Up Studies

Follow-Up Study 1—Multiple Fatalities. Administered to 1,800 respondents on Mechanical Turk.

Respondents received the following initial prompt and vignette:

> Please consider the following hypothetical scenario.
>
> Over the last year, members of United States military have been deployed abroad to train local government forces to combat [a rebel group based in Africa. The rebel group poses a threat to the local African government where the fighting is occurring. // an Islamic terrorist organization based in Africa. The terrorist organization poses an imminent threat to US interests in the region and is known to have a desire to attack the US homeland.]
>
> During the year they've been deployed, 56 US soldiers have been killed in combat, [blank // 2 of whom were women // 12 of whom were women], fighting against the organization.

Respondents then answered a question evaluating whether the mission was a mistake. They did not receive questions on gender equality in this study.

> Please indicate to what extent you agree or disagree with the following statement. In light of what happened, the United States made a mistake sending in the soldiers.

Follow-Up Study 2—Combatant Fatality and Survival. Administered to 2,800 respondents on Mechanical Turk.

Respondents received the following initial prompt and vignette:

> Please consider the following hypothetical scenario.
>
> Over the last year, members of United States Special Forces have been deployed abroad to work with local government forces to combat an Islamic terrorist organization based in Africa. The terrorist organization poses an imminent threat to US interests in the region and is known to have a desire to attack the US homeland.

During a recent patrol, enemy forces ambushed the Special Forces unit, causing a fire-fight to erupt. Commanding officers reported that during the fighting, a US soldier named [Todd Ryan // Molly Ryan] performed admirably, [BLANK//sacrificing his/her life] in order to ensure the unit's safe evacuation.

Respondents then answered questions evaluating whether the mission was a mistake, conveying their support for gender equality in the public and private spheres, and indicating their interest in military service.

Please indicate to what extent you agree or disagree with the following statement[s].

In light of what happened, the United States made a mistake sending in the soldiers.

On the whole, men make better military leaders than women do.

On the whole, men make better political leaders than women do.

On the whole, men make better business leaders than women do.

It is important for men and women to share household work equally.

Supposing you could do just what you'd like and nothing stood in your way, would you want to serve in the US armed forces in the next few years?

2 Results and Robustness Tests

2.1 Mistake Results

Mistake. Main results from across three surveys on whether the operation was a mistake. Models 1 and 2 used to generate Figure 1 in the manuscript. In all models, we fail to reject the null hypothesis of no difference between male and female military casualties.

Table A1: Female Combatants and Attitudes on Using Force

	Single Death		Multiple Deaths	Death & Survival
	(1)	(2)	(3)	(4)
Female Combatant	−0.03	−0.04		0.01
	(0.08)	(0.11)		(0.06)
2 Female Casualties			−0.09	
			(0.09)	
12 Female Casualties			0.04	
			(0.09)	
Male Respondent	0.10	0.08	−0.03	−0.06
	(0.09)	(0.12)	(0.07)	(0.06)
Female Combatant*Male		0.02		
		(0.17)		
Rebel Group	0.16*	0.16*	0.46***	
	(0.08)	(0.08)	(0.07)	
Combatant Survives				−0.10*
				(0.06)
Age	−0.02***	−0.02***	−0.01**	−0.02***
	(0.003)	(0.003)	(0.003)	(0.002)
White	−0.30***	−0.30***	−0.04	−0.27***
	(0.09)	(0.09)	(0.09)	(0.07)
Education	0.003	0.003	0.02	−0.03
	(0.08)	(0.08)	(0.03)	(0.02)
Ideology	−0.32***	−0.32***	−0.12***	−0.28***
	(0.04)	(0.04)	(0.02)	(0.03)
Constant	5.80***	5.80***	4.75***	5.30***
	(0.25)	(0.25)	(0.20)	(0.18)
N	1,436	1,436	1,799	2,488
Sample	HH	HH	MT1	MT2

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with standard errors in parentheses. Outcome ranges from 1 to 7 with higher values indicating agreement that operation was a mistake. 'HH' sample indicates Harvard Harris survey; 'MT1' sample indicates the first follow-up study completed on MTurk; 'MT2' sample indicates the second follow-up study completed on MTurk. Baseline for Model 3 is no mentioned female fatalities.

Mistake–By Age. Figure A1 plots the treatment effect of a women dying in combat rather than a man on whether respondents deemed the operation a mistake, split by respondent age. Results based on the Harvard Harris survey. A specification interacting Age as a linear variable with the treatment condition similarly shows no substantively or statistically significant treatment effect heterogeneity. The results help rule out the possibility that older respondents are particularly sensitive to female casualties while younger respondents are not.

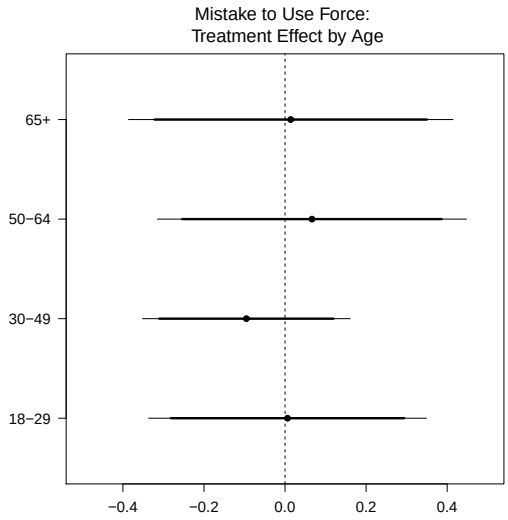

Figure A1: Marginal effect of shifting from male to female fatality on whether mission was a mistake, split by respondent age. Thick lines represent 90% confidence intervals; thin lines represent 95% confidence intervals.

2.2 Gender Equality Results

Gender Equality—All Respondents. Main results from Harvard Harris and second follow-up survey on support for gender equality in the public and private spheres. All models used to generate Figure 2's left side in the manuscript. We find evidence that a female combatant's death (rather than male combatant's death) produces greater support for gender equality in the public sphere, as operationalized by support for women holding leadership positions.

Table A2: Female Combatants and Gender Equality: All Respondents

	Military		Political		Business	Chores	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female Combatant	0.10	0.14**	0.04	0.11*	0.12**	0.14**	0.03
	(0.13)	(0.07)	(0.12)	(0.06)	(0.06)	(0.07)	(0.05)
Rebel Group	0.005		0.09			−0.06	
	(0.13)		(0.12)			(0.07)	
Combatant Survives		0.02		0.08	0.05		0.05
		(0.07)		(0.06)	(0.06)		(0.05)
Male	−0.52***	−0.79***	−0.90***	−0.60***	−0.75***	−0.02	−0.17***
	(0.13)	(0.07)	(0.13)	(0.06)	(0.06)	(0.07)	(0.05)
Age	0.002	−0.01*	0.02***	0.01**	0.004	0.0002	−0.001
	(0.004)	(0.003)	(0.004)	(0.002)	(0.002)	(0.002)	(0.002)
White	−0.06	0.27***	0.24*	0.21***	0.22***	0.04	0.04
	(0.14)	(0.08)	(0.14)	(0.07)	(0.07)	(0.08)	(0.06)
Education	0.14	0.04	0.15	0.04	0.02	0.03	0.03
	(0.11)	(0.03)	(0.11)	(0.02)	(0.02)	(0.06)	(0.02)
Ideology	−0.42***	−0.62***	−0.41***	−0.58***	−0.49***	−0.21***	−0.30***
	(0.06)	(0.03)	(0.05)	(0.03)	(0.03)	(0.03)	(0.02)
Constant	5.24***	6.14***	4.88***	6.32***	6.33***	6.19***	6.51***
	(0.38)	(0.20)	(0.36)	(0.17)	(0.18)	(0.20)	(0.15)
N	719	2,488	717	2,488	2,488	1,436	2,488
Sample	HH	MT2	HH	MT2	MT2	HH	MT2

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with standard errors in parentheses. Outcome ranges from 1 to 7 with higher values indicating more progressive views on gender equality. 'HH' sample indicates Harvard Harris survey; 'MT2' sample indicates the second follow-up study completed on MTurk.

Gender Equality—Female Respondents Only. Main results from Harvard Harris and second follow-up survey on support for gender equality in the public and private spheres among women respondents. All models used to generate Figure 2's right side in the manuscript. We find evidence that a female combatant's death (rather than male combatant's death) produces greater support for gender equality in the public sphere, as operationalized by support for women holding leadership positions.

Table A3: Female Combatants and Gender Equality: Female Respondents Only

	Military		Political		Business	Chores	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female Combatant	0.37**	0.17*	0.22	0.14*	0.14*	0.21**	−0.003
	(0.17)	(0.09)	(0.16)	(0.08)	(0.08)	(0.09)	(0.07)
Rebel Group	0.09		−0.02			−0.03	
	(0.17)		(0.16)			(0.10)	
Combatant Survives		0.10		0.09	0.09		0.10
		(0.09)		(0.08)	(0.08)		(0.07)
Male							
Age	−0.002	−0.01**	0.01*	0.004	−0.001	0.002	−0.003
	(0.01)	(0.004)	(0.01)	(0.003)	(0.003)	(0.003)	(0.003)
White	−0.23	0.20*	0.24	0.11	0.17*	−0.05	0.08
	(0.19)	(0.11)	(0.19)	(0.09)	(0.09)	(0.11)	(0.08)
Education	0.14	0.06*	0.31**	0.06**	0.05	0.15*	0.06**
	(0.16)	(0.04)	(0.14)	(0.03)	(0.03)	(0.08)	(0.03)
Ideology	−0.50***	−0.58***	−0.66***	−0.57***	−0.44***	−0.29***	−0.32***
	(0.08)	(0.04)	(0.07)	(0.03)	(0.03)	(0.04)	(0.03)
Constant	5.61***	5.99***	5.58***	6.26***	6.25***	6.10***	6.45***
	(0.53)	(0.28)	(0.48)	(0.23)	(0.23)	(0.28)	(0.20)
N	393	1,283	387	1,283	1,283	780	1,283
Sample	HH	MT2	HH	MT2	MT2	HH	MT2

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with standard errors in parentheses. Outcome ranges from 1 to 7 with higher values indicating more progressive views on gender equality. 'HH' sample indicates Harvard Harris survey; 'MT2' sample indicates the second follow-up study completed on MTurk.

Gender Equality—Interaction by Respondent Gender. Results from Harvard Harris and second follow-up survey on support for gender equality in the public and private spheres. Figures A2 plot results split by respondent gender. As shown, treatment effects among male respondents are generally substantively small and statistically insignificant. While effects among male respondents are consistently smaller than among female respondents, the difference is only statistically significant in Model 1.

Table A4: Female Combatants and Gender Equality: All Respondents–Interaction by Respondent Gender

	Military		Political		Business	Chores	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female Combatant	0.36**	0.17*	0.17	0.14*	0.14*	0.20**	−0.003
	(0.17)	(0.09)	(0.17)	(0.08)	(0.08)	(0.09)	(0.07)
Male	−0.22	−0.75***	−0.78***	−0.57***	−0.73***	0.05	−0.21***
	(0.19)	(0.09)	(0.17)	(0.08)	(0.08)	(0.10)	(0.07)
Female Combatant*Male	−0.57**	−0.07	−0.27	−0.07	−0.05	−0.13	0.07
	(0.26)	(0.13)	(0.25)	(0.12)	(0.12)	(0.14)	(0.10)
Rebel Group	0.02		0.09			−0.06	
	(0.13)		(0.12)			(0.07)	
Combatant Survives		0.02		0.08	0.05		0.05
		(0.07)		(0.06)	(0.06)		(0.05)
Age	0.003	−0.01*	0.02***	0.01**	0.004	0.0002	−0.001
	(0.004)	(0.003)	(0.004)	(0.002)	(0.002)	(0.002)	(0.002)
White	−0.06	0.27***	0.23	0.22***	0.22***	0.04	0.03
	(0.14)	(0.08)	(0.14)	(0.07)	(0.07)	(0.08)	(0.06)
Education	0.14	0.04	0.15	0.04	0.02	0.03	0.03
	(0.11)	(0.03)	(0.11)	(0.02)	(0.02)	(0.06)	(0.02)
Ideology	−0.42***	−0.62***	−0.41***	−0.58***	−0.49***	−0.21***	−0.30***
	(0.06)	(0.03)	(0.05)	(0.03)	(0.03)	(0.03)	(0.02)
Constant	5.09***	6.13***	4.84***	6.31***	6.31***	6.17***	6.53***
	(0.38)	(0.20)	(0.36)	(0.18)	(0.18)	(0.20)	(0.15)
N	719	2,488	717	2,488	2,488	1,436	2,488
Sample	HH	MT2	HH	MT2	MT2	HH	MT2

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with standard errors in parentheses. Outcome ranges from 1 to 7 with higher values indicating more progressive views on gender equality. 'HH' sample indicates Harvard Harris survey; 'MT2' sample indicates the second follow-up study completed on MTurk.

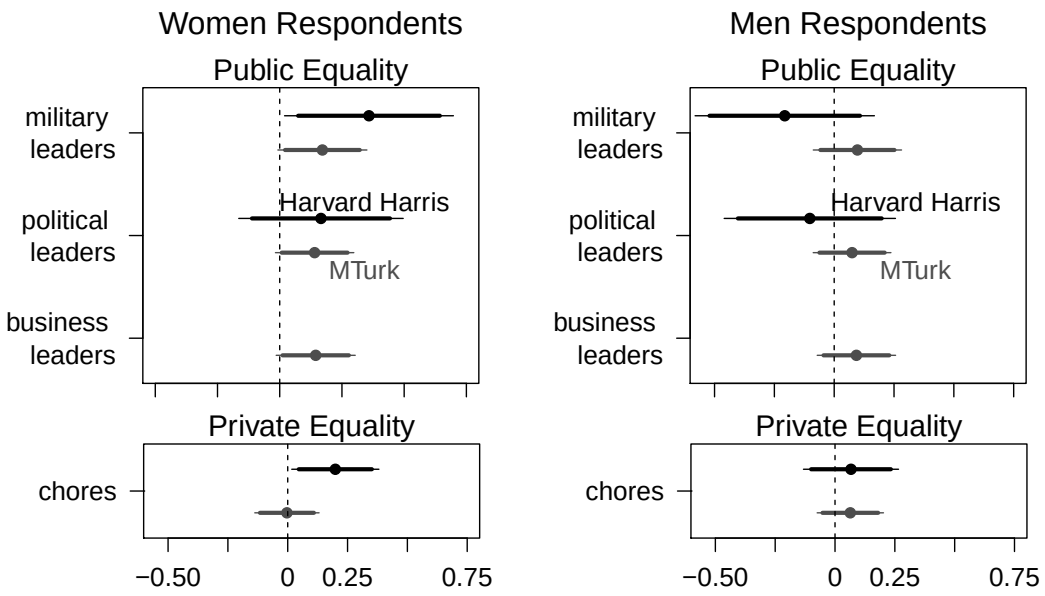

Figure A2: Marginal effect of shifting from male to female combatants on support for gender equality, *among women (left) and men (right) respondents*. Higher values (1-7 scale) indicate greater support for equality. Thick segments indicate 90% confidence interval; thin segments indicate 95% confidence interval. Harvard-Harris survey did not ask about business leaders due to space constraints.

2.3 Combatant Survival as Moderator

Gender Equality—Interaction by Combatant Survival: All Respondents (Table A5) and Women Respondents (Table A6). Results from Harvard Harris and second follow-up survey on support for gender equality in the public and private spheres as moderated by whether the combatant dies or survives. Figure A3 plots the substantive effects. As shown in the tables and figure, combatant survival does not introduce statistically or substantively significant effect heterogeneity on the public sphere equality measures (Models 1-3). Effects are substantively similar, though somewhat less precisely estimated, as those presented that pool across combatant survival (Table A2). The results indicate that death does not produce unique or disparate effects compared to service more generally. It also provides no evidence for a backlash effect where respondents learn of a woman's death, infer woman are unfit for serving in traditionally male roles, and indicate a lack of support for public sphere gender equality. Importantly, the vignette in the second follow-up study indicates the combatant performed admirably. This potentially stacks the deck against a backlash effect by precluding an interpretation whereby the woman is unable to perform combat tasks. We address the design choice elsewhere. Empirically, we can leverage results from the Harvard-Harris survey (black lines in manuscript Figure 2) which makes no mention of combatant performance quality. There is no compelling evidence of a backlash effect there. Results for public sphere equality are somewhat attenuated, but there is no strong negative effect when learning that a woman died absent any additional information on how she performed. Results could plausibly differ if the report of a woman combatant's death was accompanied with disparaging information about her battlefield performance but we think it unlikely individuals would regularly encounter such information. For gender equality in the private sphere, operationalized in terms of chores obligations, we find some effect heterogeneity with a statistically significant interaction term. However, there is no compelling evidence for a backlash effect. While attitudinal shifts on household chores are smaller (and slightly negative) following a female combatant death, these effects are not sufficiently strong to preclude the null hypothesis of no effect. Thus, in none of our four outcome measures for gender equality do we observe effects pointing to negative (non-progressive) attitudinal shifts in response to a woman combatant death. Rather, in three of the four we find very similar effect sizes as those observed when the combatant survives.

Table A5: Gender Equality: **All Respondents**–Interaction by Combatant Survival

	Military	Political	Business	Chores
	(1)	(2)	(3)	(4)
Female Combatant	0.12	0.09	0.14*	−0.07
	(0.09)	(0.08)	(0.08)	(0.07)
Combatant Survives	0.004	0.06	0.07	−0.05
	(0.09)	(0.08)	(0.08)	(0.07)
Female Combatant*Survives	0.03	0.04	−0.05	0.21**
	(0.13)	(0.12)	(0.12)	(0.10)
Male	−0.79***	−0.60***	−0.75***	−0.18***
	(0.07)	(0.06)	(0.06)	(0.05)
Age	−0.01*	0.01**	0.004	−0.001
	(0.003)	(0.002)	(0.002)	(0.002)
White	0.27***	0.21***	0.22***	0.03
	(0.08)	(0.07)	(0.07)	(0.06)
Education	0.04	0.04	0.02	0.03
	(0.03)	(0.02)	(0.02)	(0.02)
Ideology	−0.62***	−0.58***	−0.49***	−0.31***
	(0.03)	(0.03)	(0.03)	(0.02)
Constant	6.15***	6.34***	6.31***	6.58***
	(0.20)	(0.18)	(0.18)	(0.15)
N	2,488	2,488	2,488	2,488
Sample	MT2	MT2	MT2	MT2

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with standard errors in parentheses. Outcome ranges from 1 to 7 with higher values indicating more progressive views on gender equality. 'MT2' sample indicates the second follow-up study completed on MTurk.

Table A6: Gender Equality: **Female Respondents**–Interaction by Combatant Survival

	Military	Political	Business	Chores
	(1)	(2)	(3)	(4)
Female Combatant	0.20	0.18*	0.21*	−0.12
	(0.13)	(0.11)	(0.11)	(0.09)
Combatant Survives	0.14	0.14	0.16	−0.02
	(0.13)	(0.11)	(0.11)	(0.09)
Female Combatant*Survives	−0.07	−0.09	−0.14	0.24*
	(0.18)	(0.16)	(0.15)	(0.13)
Age	−0.01**	0.004	−0.001	−0.003
	(0.004)	(0.003)	(0.003)	(0.003)
White	0.20*	0.11	0.17*	0.08
	(0.11)	(0.09)	(0.09)	(0.08)
Education	0.06*	0.06**	0.05	0.06**
	(0.04)	(0.03)	(0.03)	(0.03)
Ideology	−0.58***	−0.56***	−0.44***	−0.32***
	(0.04)	(0.03)	(0.03)	(0.03)
Constant	5.97***	6.23***	6.21***	6.53***
	(0.28)	(0.24)	(0.24)	(0.21)
N	1,283	1,283	1,283	1,283
Sample	MT2	MT2	MT2	MT2

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with standard errors in parentheses. Outcome ranges from 1 to 7 with higher values indicating more progressive views on gender equality. 'MT2' sample indicates the second follow-up study completed on MTurk.

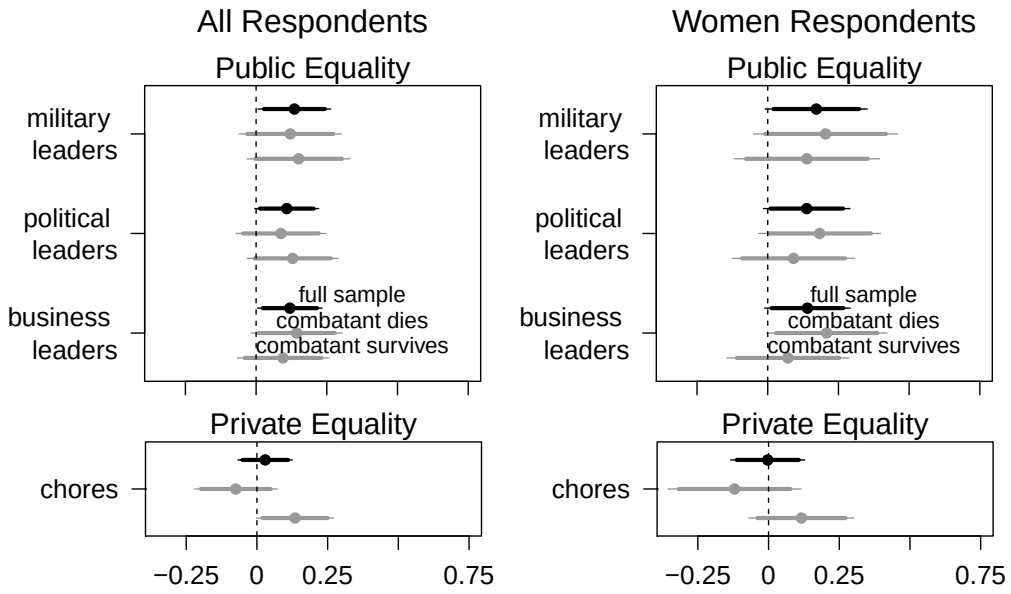

Figure A3: Marginal effect of shifting from male to female combatants on support for gender equality. Higher values (1-7 scale) indicate greater support for equality. Thick segments indicate 90% confidence interval; thin segments indicate 95% confidence interval. Black bars show effects from the full sample of the second follow-up MTurk survey; grey bars show effects depending on whether the combatant died or survived.

2.4 Stakes as Moderator

Mistake—Effect across opponent conditions. To gauge the stability of combatant gender effects and external validity, the Harvard-Harris and first follow-up surveys varied the opponent types. As shown, we do not find substantively or statistically significant heterogeneity across the opponents being faced on whether the operation was a mistake.

Table A7: Attitudes on Using Force–Interaction by Stakes

	Single Death	Multiple Deaths
	(1)	(2)
Female Combatant	−0.09	
	(0.12)	
2 Female Fatalities		−0.06
		(0.13)
12 Female Fatalities		0.17
		(0.12)
Rebel Group	0.10	0.57***
	(0.12)	(0.13)
Female Combatant*Rebel Group	0.11	
	(0.17)	
2 Female Casualties*Rebel Group		−0.06
		(0.18)
12 Female Casualties*Rebel Group		−0.26
		(0.18)
Male	0.09	−0.03
	(0.09)	(0.07)
Age	−0.02***	−0.01**
	(0.003)	(0.003)
White	−0.30***	−0.03
	(0.09)	(0.09)
Education	0.001	0.02
	(0.08)	(0.03)
Ideology	−0.32***	−0.12***
	(0.04)	(0.02)
Constant	5.83***	4.68***
	(0.25)	(0.21)
N	1,436	1,799
Sample	HH	MT1

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with standard errors in parentheses. Outcome ranges from 1 to 7 with higher values indicating agreement that operation was a mistake. 'HH' sample indicates Harvard Harris survey; 'MT1' sample indicates the first follow-up study completed on MTurk. Baseline for Model 2 is no mentioned female fatalities.

Gender Equality—Effect across opponent conditions. To gauge the stability of combatant gender effects and external validity, the Harvard-Harris survey varied the opponent types. As shown, we do not find substantively or statistically significant heterogeneity across the opponents being faced on measures of gender equality.

Table A8: Gender Equality–Interaction by Stakes

	All Respondents			Female Respondents		
	Military	Political	Chores	Military	Political	Chores
	(1)	(2)	(3)	(4)	(5)	(6)
Female Combatant	0.24	−0.04	0.20**	0.24	0.16	0.17
	(0.18)	(0.17)	(0.10)	(0.25)	(0.23)	(0.14)
Rebel Group	0.14	0.01	0.001	−0.02	−0.08	−0.08
	(0.19)	(0.17)	(0.10)	(0.24)	(0.23)	(0.13)
Female Combatant*Rebel Group	−0.26	0.16	−0.12	0.23	0.13	0.09
	(0.26)	(0.25)	(0.14)	(0.34)	(0.33)	(0.19)
Male	−0.51***	−0.91***	−0.02			
	(0.13)	(0.13)	(0.07)			
Age	0.002	0.02***	0.0001	−0.002	0.01*	0.002
	(0.004)	(0.004)	(0.002)	(0.01)	(0.01)	(0.003)
White	−0.06	0.24*	0.04	−0.22	0.24	−0.05
	(0.14)	(0.14)	(0.08)	(0.19)	(0.19)	(0.11)
Education	0.15	0.15	0.03	0.14	0.31**	0.15*
	(0.11)	(0.11)	(0.06)	(0.16)	(0.14)	(0.08)
Ideology	−0.42***	−0.41***	−0.21***	−0.50***	−0.66***	−0.28***
	(0.06)	(0.05)	(0.03)	(0.08)	(0.07)	(0.04)
Constant	5.16***	4.92***	6.16***	5.65***	5.61***	6.12***
	(0.39)	(0.36)	(0.20)	(0.53)	(0.48)	(0.29)
N	719	717	1,436	393	387	780
Sample	HH	HH	HH	HH	HH	HH

*p < .1; **p < .05; ***p < .01

Notes: OLS regression with standard errors in parentheses. Outcome ranges from 1 to 7 with higher values indicating more progressive views on gender equality. 'HH' sample indicates the Harvard-Harris survey.

3 Causal Mechanisms on the Use of Force

After gauging overall support, we next ask about two factors that could mediate the relationship between our treatment and overall support. First, the sex of a casualty may affect perceptions of the combat unit's efficacy. The first mechanism question below aims to tap into these beliefs. Reducing perceived efficacy would alter overall support for a conflict because respondents expect the forces to either suffer more casualties or be less likely to accomplish the mission. The second mechanism assesses whether respondents, after learning of a female casualty, evince heightened levels of paternalism. Greater paternalism implies, at best, a stronger protective inclination to keep women away from battlefield dangers. Given the reality of gender integration in combat units, the most direct way to achieve this desired protection for women would be to reduce support for conflict generally.

Regardless of whether you think the United States was right to send in the team of Special Forces soldiers, would you agree that in the future a similar group of soldiers would be likely to accomplish a similar mission, but without incurring any casualties?

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

Regardless of whether you think the United States was right to send in the team of Special Forces soldiers, would you agree that the United States should have done more to protect the soldiers.

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

The results for the main outcome question (was the mission a mistake) along with the results for the two mechanism questions are presented in Figure A4. We observe a null effect of female casualties across all three.

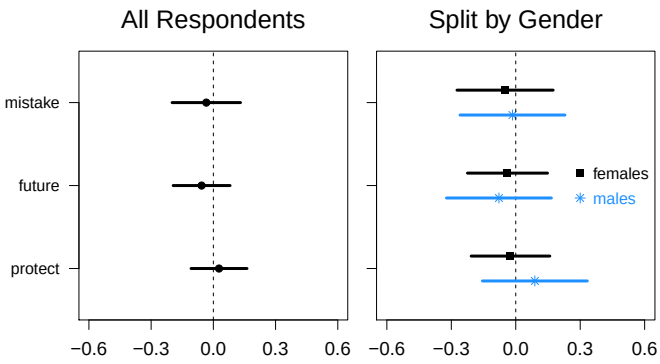

Figure A4: Marginal effect of shifting from male to female fatality on whether mission was a mistake, whether a similar team would succeed in the future, and whether the US should have done more to protect the soldiers. The left panel presents the main effect, while the right panel presents results split by respondent gender. Higher values (1-7 scale) indicate greater agreement it was a mistake, that a team would succeed in the future, and that the US should have done more to protect the soldiers.