

# manuscript

## 1. Exclusion

	Eastern	Southern	Western	All
Reason to exclude				
N without exclusion	3,877	5,333	18,292	27,502
Careless responding	156 (4.0%)	82 (1.5%)	256 (1.4%)	494 (1.8%)
Confusion	752 (19.4%)	658 (12.3%)	1,718 (9.4%)	3,128 (11.4%)
Familiarity with moral dilemmas	1,669 (43.0%)	2,501 (46.9%)	10,332 (56.5%)	14,502 (52.7%)
Technical problem	531 (13.7%)	413 (7.7%)	1,225 (6.7%)	2,169 (7.9%)
Non-native speaker	347 (9.0%)	177 (3.3%)	1,305 (7.1%)	1,829 (6.7%)
Failed attention check (Study1a)	720 (18.6%)	943 (17.7%)	1,311 (7.2%)	2,974 (10.8%)
Failed attention check (Study1b)	849 (21.9%)	1,042 (19.5%)	1,336 (7.3%)	3,227 (11.7%)
Failed attention check (Study2a)	1,102 (28.4%)	1,071 (20.1%)	4,900 (26.8%)	7,073 (25.7%)
Failed attention check (Study2b)	1,195 (30.8%)	1,367 (25.6%)	5,528 (30.2%)	8,090 (29.4%)
Final sample				
Study1a	381	622	566	1,569
Study1b	327	553	546	1,426
Study2a	323	690	2,971	3,984
Study2b	277	576	2,660	3,513

## 2. Main replication analysis

### Study 1a and 1b

#### Bayesian analysis

The effect of personal force on moral dilemma judgements on Trolley dilemmas

Exclusion	Cluster	BF	RR	t	df	p	Cohen's d	Raw effect
Exclude	Eastern	1.9e+02	7.00e-03, 14.00	-3.69	366.23	<.001	0.38	0.85
	Southern	2.44e+07	1.00e-05, 2.80e+06	-6.32	619.93	<.001	0.51	1.10
	Western	8.01e+01	1.20e-02, 4.30	-3.41	553.15	0.001	0.29	0.59
Including familiar	Eastern	9.21e+04	<1.00e-05, 1.10e+04	-5.19	806.76	<.001	0.36	0.79
	Southern	5.91e+12	<1.00e-05, 6.30e+14	-8.09	1345.85	<.001	0.44	0.94
	Western	4.95e+05	<1.00e-05, 9.80e+07	-5.51	1338.48	<.001	0.30	0.65

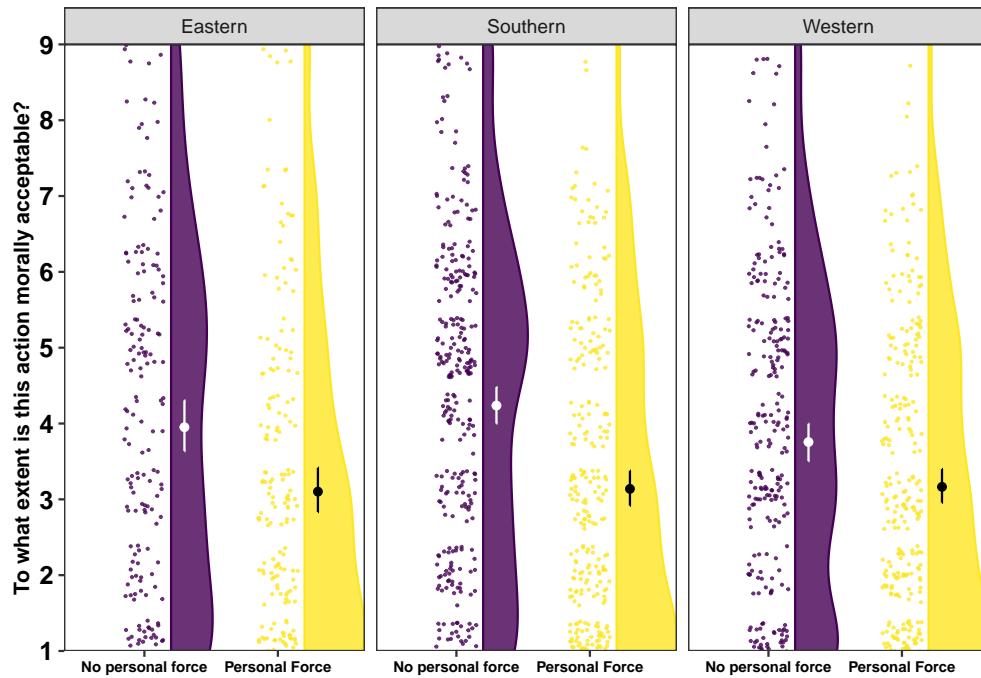


Figure 1: Results on Trolley dilemmas in Study 1 with all exclusion criteria applied.

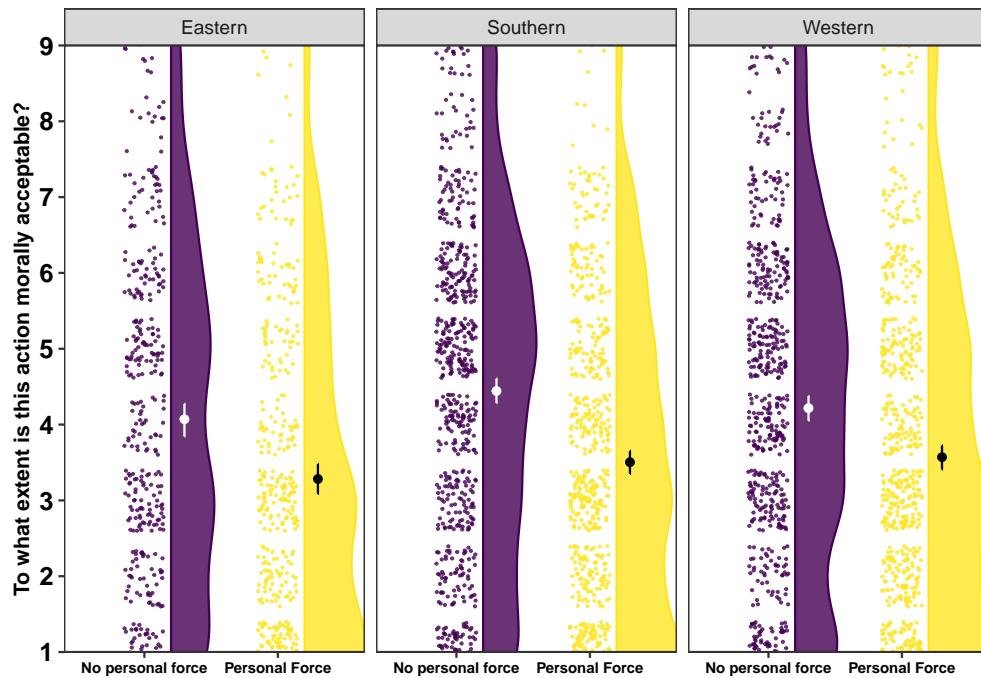


Figure 2: Results on Trolley dilemmas in Study 1 with including familiar participants

The effect of personal force on moral dilemma judgements on Speedboat dilemmas

Exclusion	Cluster	BF	RR	t	df	p	Cohen's d	Raw effect
Exclude	Eastern	1.16e+05	1.50e-0.3, 1.70e+04	-5.26	283.92	<.001	0.59	1.18
	Southern	1.01e+03	1.30e-03, 74.00	-4.19	436.86	<.001	0.37	0.72
	Western	2.52e+01	3.30e-02, 1.2	-3.01	437.36	0.003	0.27	0.51
Including familiar	Eastern	2.4e+04	<1.00e-05, 9.50e+03	-4.88	680.10	<.001	0.37	0.74
	Southern	7.8e+06	<1.00e-05, 2.10e+08	-5.94	908.97	<.001	0.36	0.69
	Western	5.53e+07	<1.00e-05, 1.0e+08	-6.34	1140.72	<.001	0.35	0.71

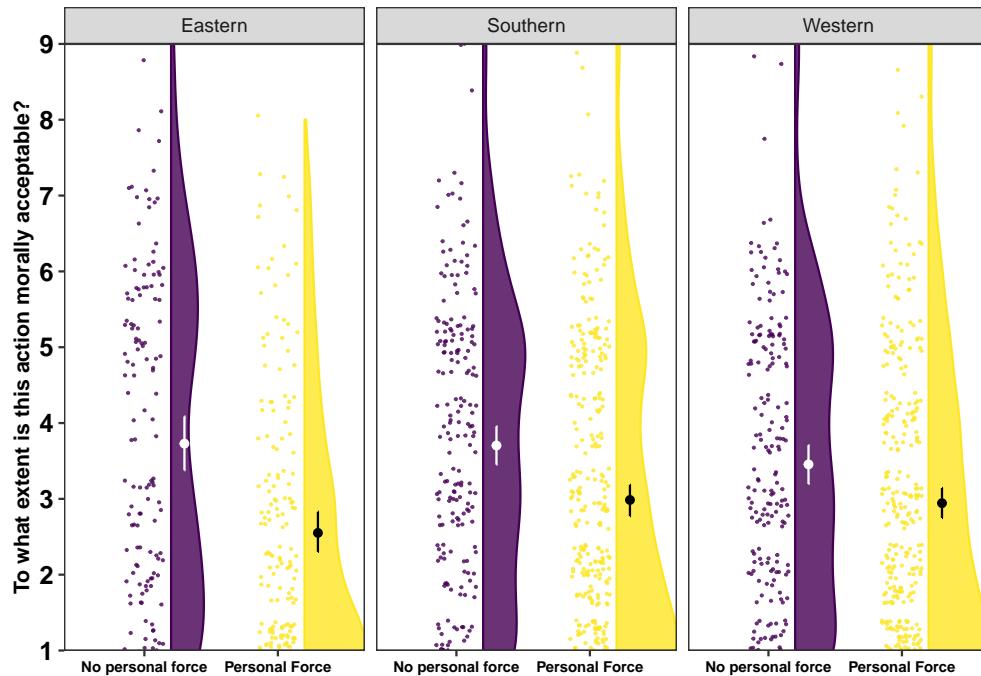


Figure 3: Results on Trolley dilemmas in Study 1 with all exclusion criteria applied.

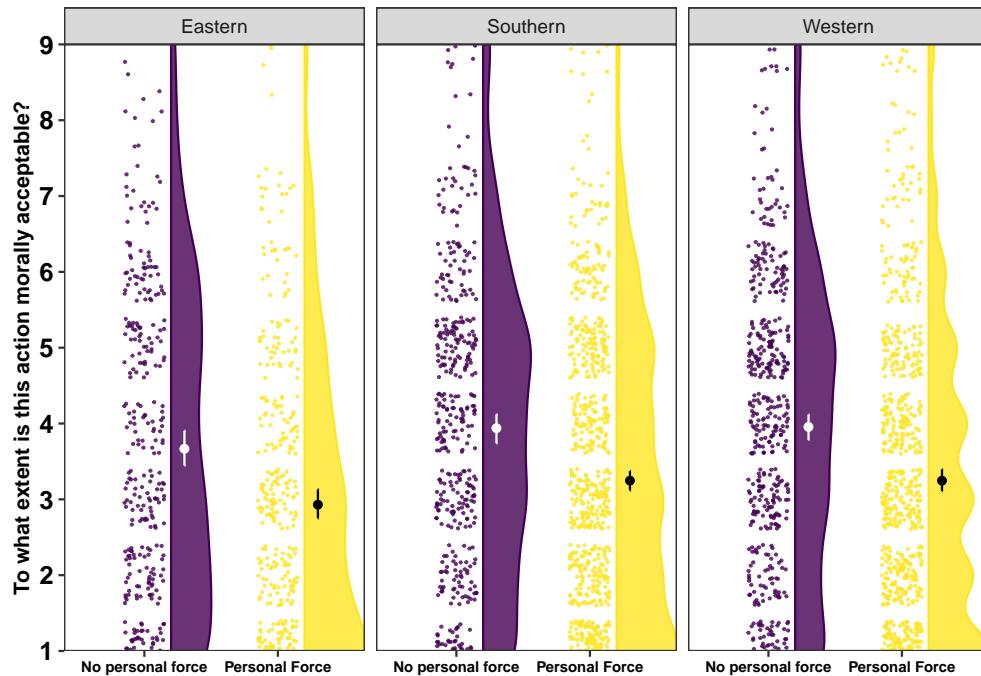


Figure 4: Results on Speedboat dilemmas in Study 1 with including familiar participants.

## Study 2a and 2b

Do personal force interact with intention on Trolley dilemmas?

Exclusion	Cluster	BF	RR	b	89% CI	p	Partial $\eta^2$	Raw effect
Exclusion	Eastern	5.88e-01	0.03, 0.64	0.027	[-0.15, 0.2]	0.84	0.000	0.11
	Southern	9.38e+00	0.03, 0.2	-0.250	[-0.36, -0.1]	0.002	0.014	-1.00
	Western	1.37e+11	6.00e-05, 1.80e+03	-0.306	[-0.37, -0.24]	<.001	0.019	-1.23
Include familiar	Eastern	2.81e+00	2.50e-02, 0.91	-0.213	[-0.33, -0.03]	0.031	0.008	-0.85
	Southern	3.13e+06	8.00e-05, 1.70e+03	-0.348	[-0.43, -0.24]	<.001	0.026	-1.39
	Western	1.24e+30	<1.00e-05, 2.30e+14	-0.292	[-0.33, -0.25]	<.001	0.018	-1.17

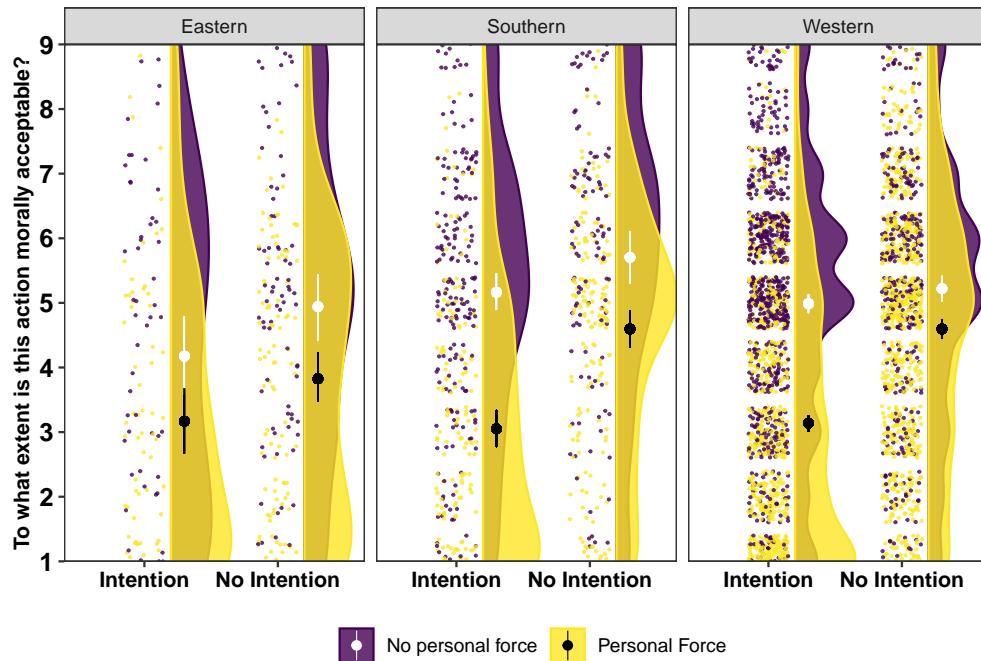


Figure 5: Results on Trolley dilemmas in Study 2 when all exclusion criteria are applied. Error bars are 95% confidence intervals on the mean.

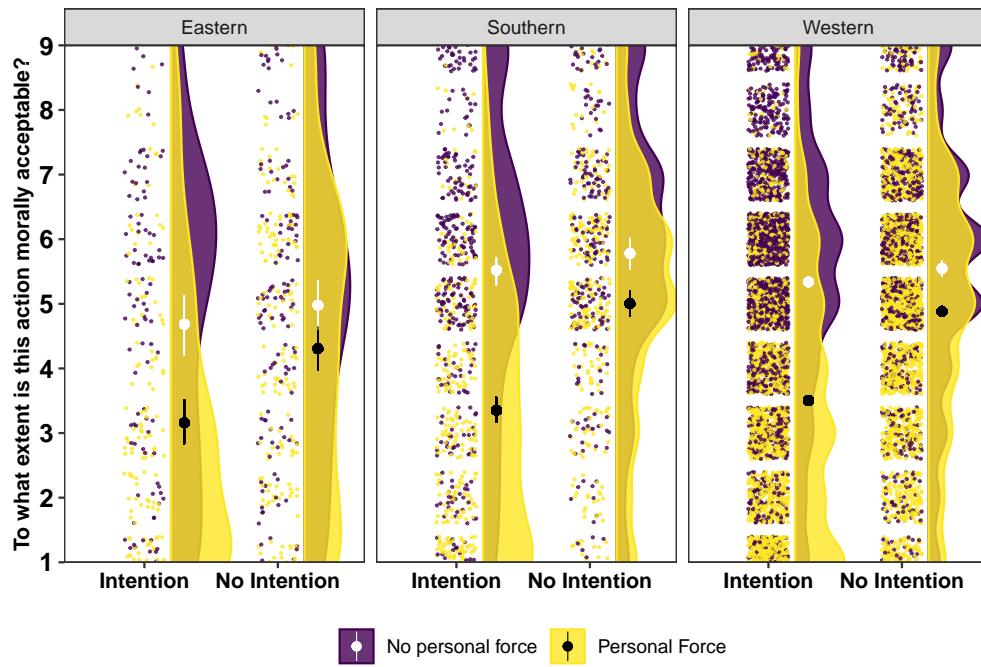


Figure 6: Results on Trolley dilemmas in Study 2 while not applying familiarity exclusion. Error bars are 95% confidence intervals on the mean.

Do personal force interact with intention on Speedboat dilemmas?

Exclusion	Cluster	BF	RR	b	89% CI	p	Partial $\eta^2$	Raw effect
Exclusion	Eastern	4.30e-01	4.90e-02, 0.69	-0.007	[-0.18, 0.18]	0.959	0.000	-0.03
	Southern	3.70e-01	5.10e-02, 0.63	0.028	[-0.13, 0.16]	0.794	0.000	0.11
	Western	2.21e+02	3.60e-02, 1.10	-0.160	[-0.22, -0.09]	<.001	0.005	-0.64
Include familiar	Eastern	4.10e-01	2.60e-02, 0.72	0.010	[-0.13, 0.17]	0.926	0.000	0.04
	Southern	1.14e+00	2.50e-02, 0.95	-0.132	[-0.23, 0.01]	0.097	0.002	-0.53
	Western	5.01e+07	1.40e-02, 1.30	-0.152	[-0.19, -0.11]	<.001	0.005	-0.61

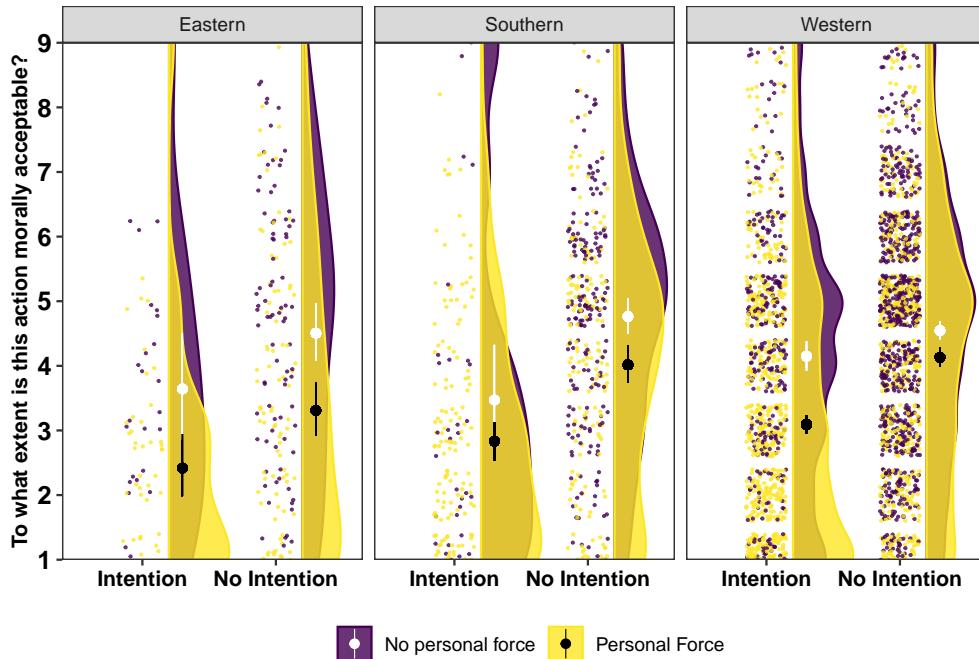


Figure 7: Results on the Speedboat dilemmas in Study 2 when all exclusion criteria are applied. Error bars are 95% confidence intervals on the mean.

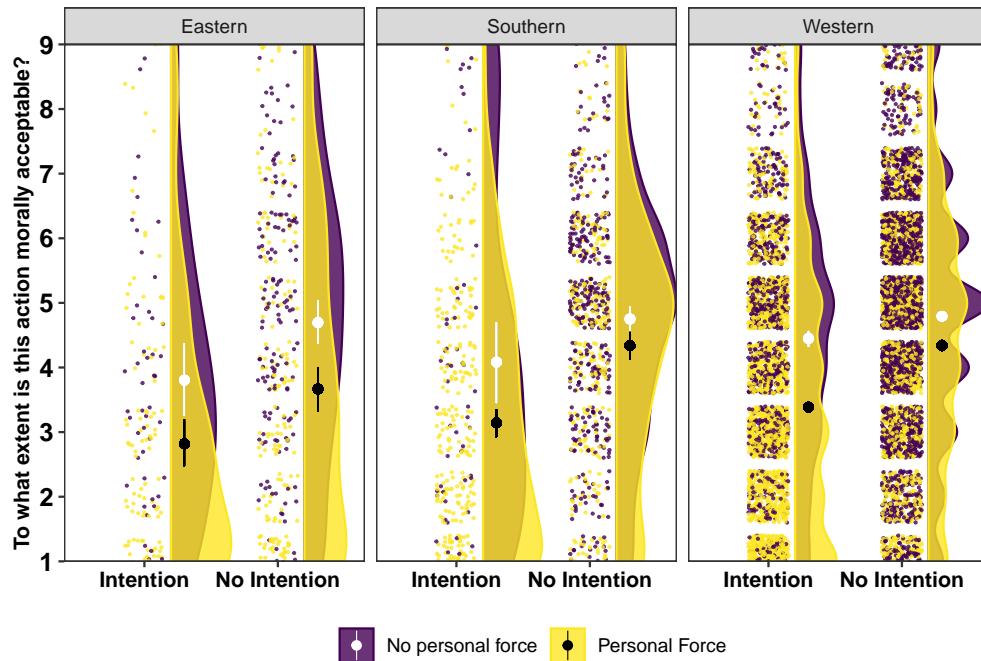


Figure 8: Results on the Speedboat dilemmas in Study 2, not applying familiarity exclusion. Error bars are 95% confidence intervals on the mean.

### 3. Individualism-collectivism analysis

#### With all exclusions

Is the interaction of personal force and intention affected by individualism/collectivism (Trolley)?

Variable	With familiarity exclusion				No familiarity exclusion			
	BF	b	89% CI	p	BF	b	89% CI	p
Country-level collectivism	0.83	-1.13	[-3.07, 1.14]	0.405	1.52	-1.27	[-2.43, -0.02]	0.096
H. Collectivism	1.62	-0.03	[-0.06, 0.01]	0.263	2.37	-0.03	[-0.05, 0]	0.096
H. Individualism	0.69	0.00	[-0.04, 0.04]	0.921	0.91	0.02	[-0.01, 0.04]	0.325
V. Collectivism	0.88	0.00	[-0.03, 0.04]	0.988	0.75	-0.01	[-0.03, 0.02]	0.538
V. Individualism	0.72	-0.02	[-0.05, 0.02]	0.451	0.43	-0.01	[-0.03, 0.01]	0.607

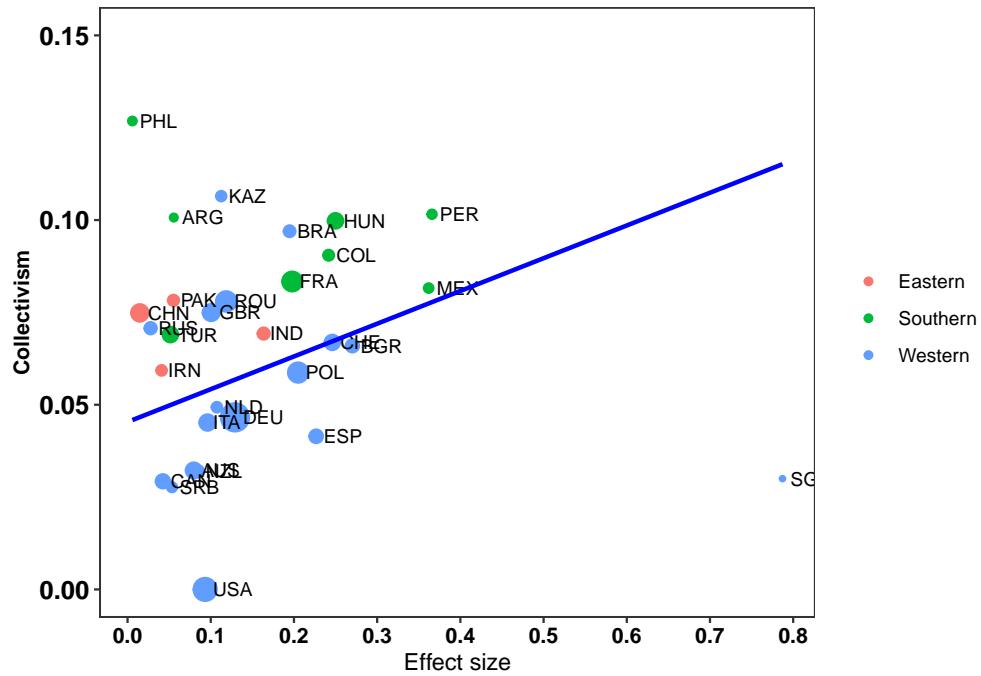


Figure 9: Correlation between country-level individualism/collectivism and the effect of personal force in Eta squared on the Trolley dilemmas (all exclusions applied)

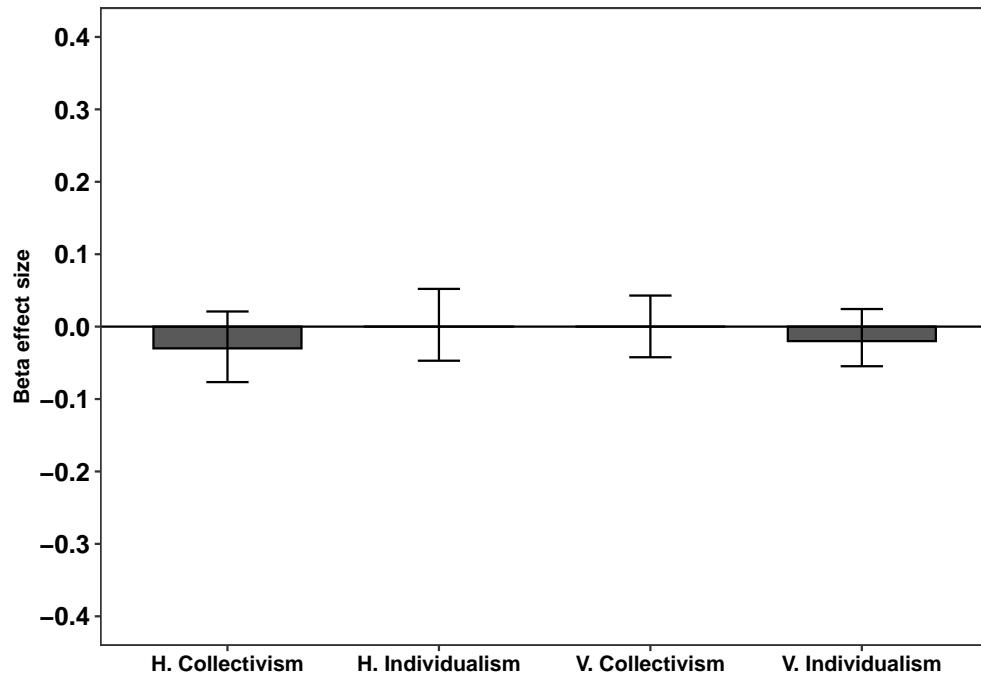


Figure 10: Personal level individualism/collectivism effects on the interaction of personal force and intention (trolley dilemmas, all exclusions applied)

Is the interaction of personal force and intention affected by individualism/collectivism (Speedboat)?

Variable	With familiarity exclusion				No familiarity exclusion			
	BF	b	\$89\%\$ CI	p	BF	b	\$89\%\$ CI	p
Country-level collectivism	1.22	0.66	[-1.29, 3.01]	0.631	0.09	-0.32	[-1.56, 0.91]	0.684
H. Collectivism	3.04	-0.04	[-0.08, 0]	0.114	0.84	-0.01	[-0.04, 0.01]	0.396
H. Individualism	1.06	-0.01	[-0.06, 0.03]	0.611	0.69	0.00	[-0.02, 0.03]	0.852
V. Collectivism	1.67	0.02	[-0.01, 0.06]	0.311	0.99	0.01	[-0.01, 0.04]	0.357
V. Individualism	0.67	0.00	[-0.04, 0.03]	0.952	0.51	0.01	[-0.01, 0.03]	0.590

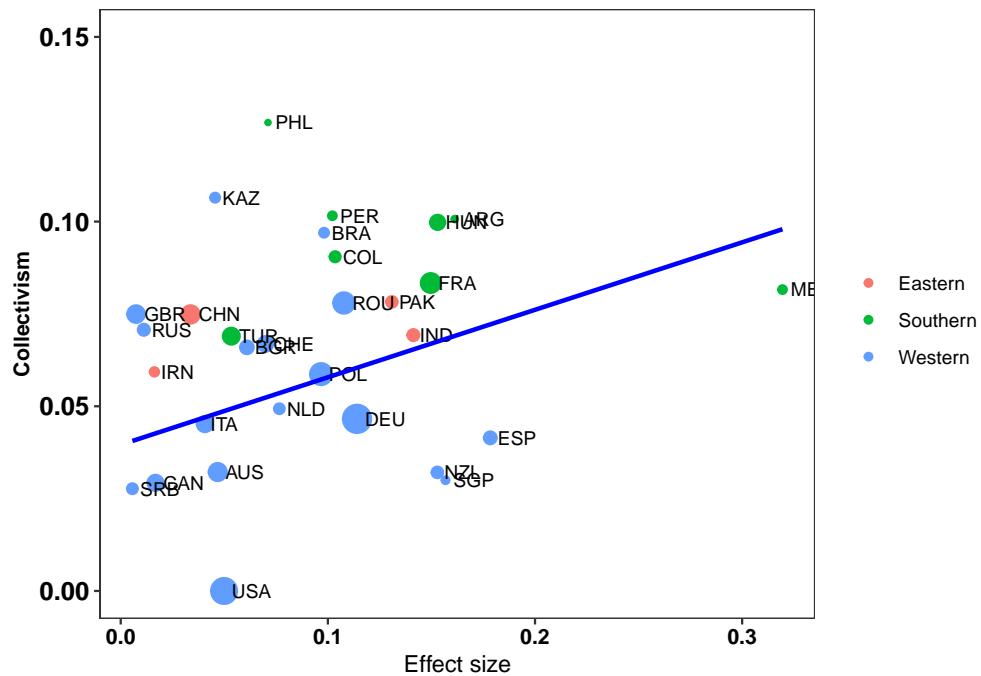


Figure 11: Correlation between country-level individualism/collectivism and the interactional effect of personal force and intention in Eta squared on Speedboat dilemmas (all exclusions applied)

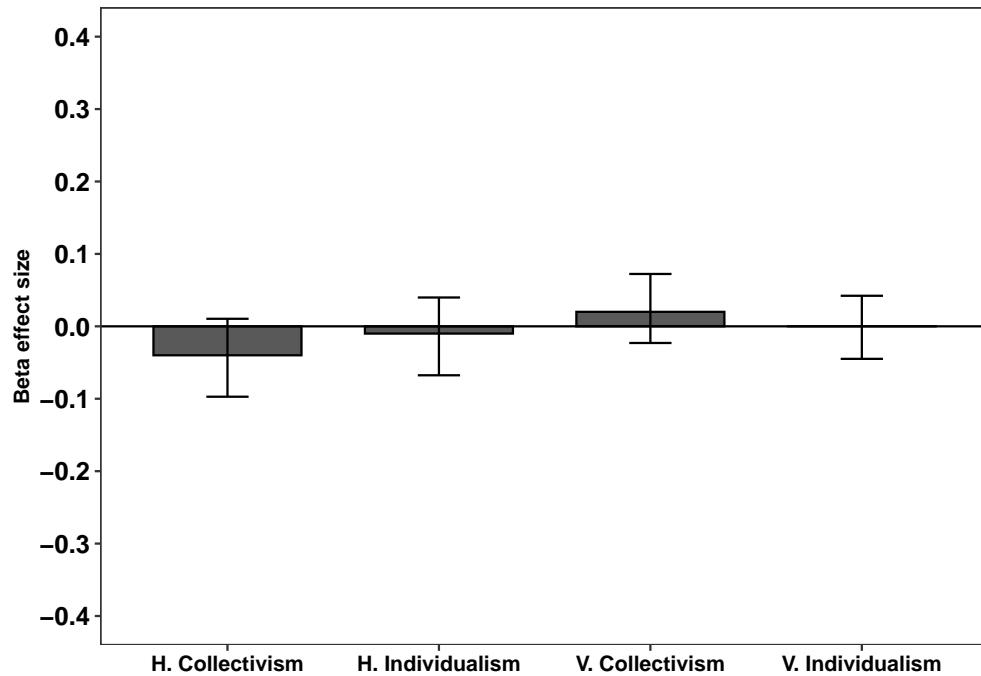


Figure 12: Personal level individualism/collectivism effects on the interaction of personal force and intention (speedboat dilemmas, all exclusions applied)

### Including familiar participants

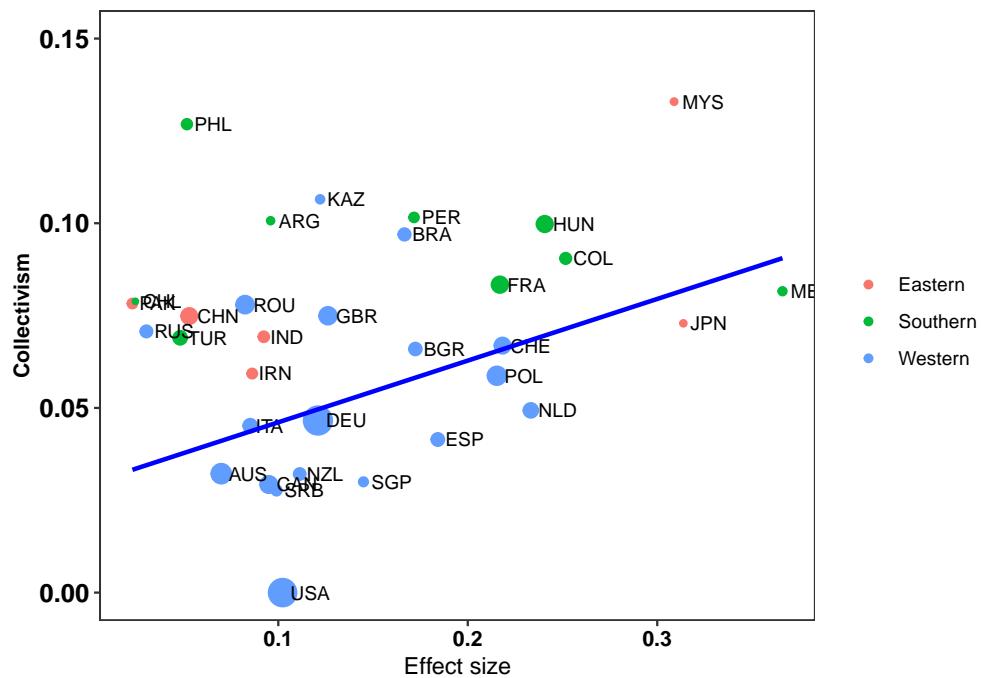


Figure 13: Correlation between country-level individualism/collectivism and the effect of personal force in Eta squared on the Trolley dilemmas (familiarity exclusion not applied)

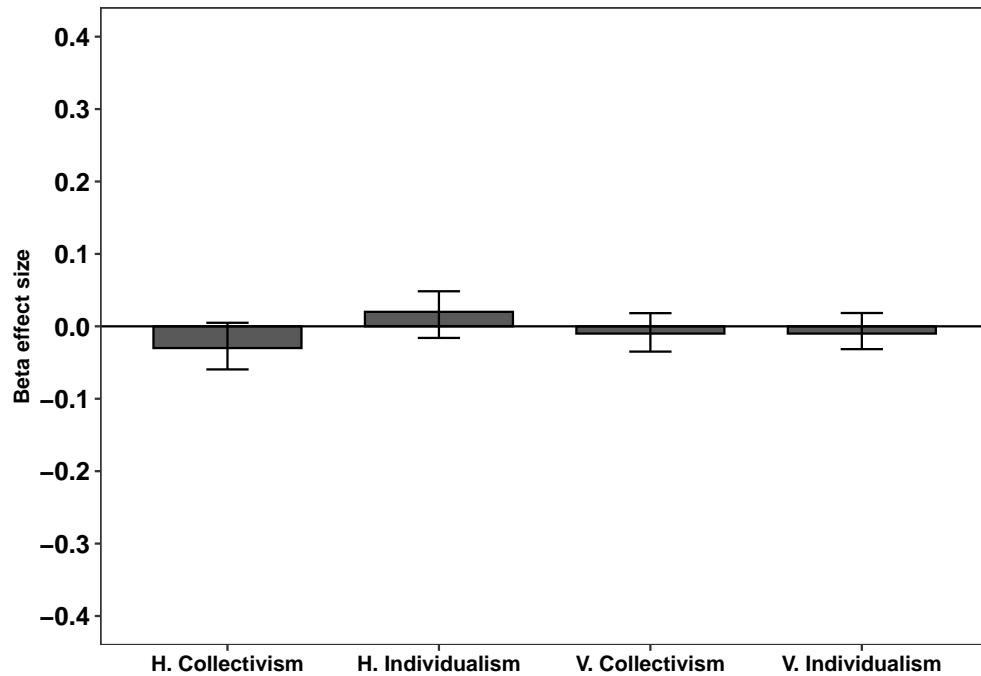


Figure 14: Personal level individualism/collectivism effects on the interaction of personal force and intention (trolley dilemmas, familiarity exclusion not applied)

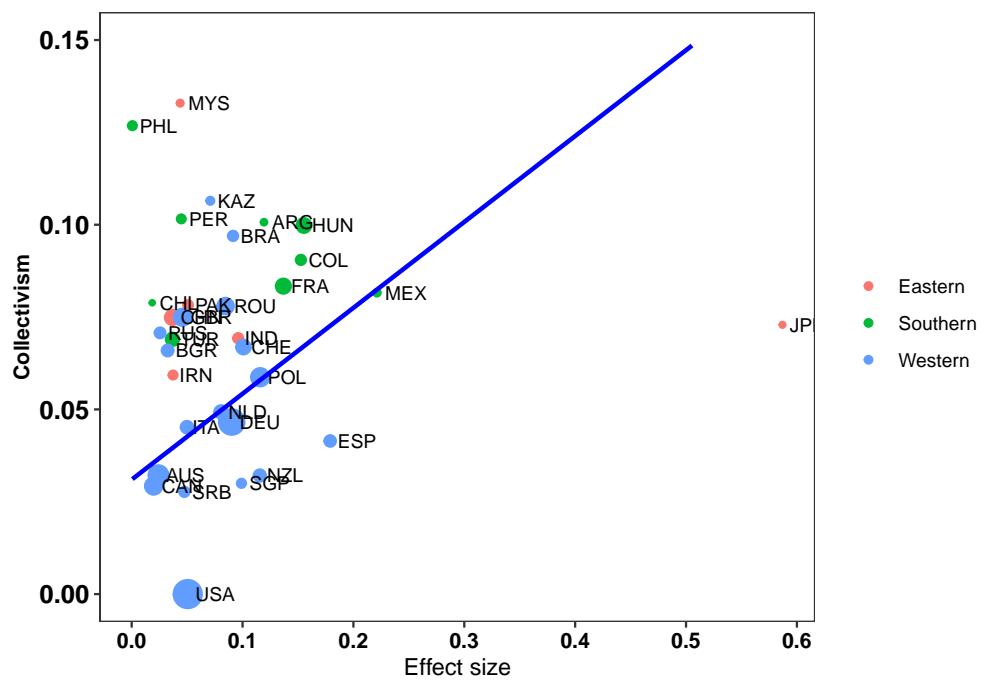


Figure 15: Correlation between country-level individualism/collectivism and the interactional effect of personal force and intention in Eta squared on Speedboat dilemmas (familiarity exclusion not applied)

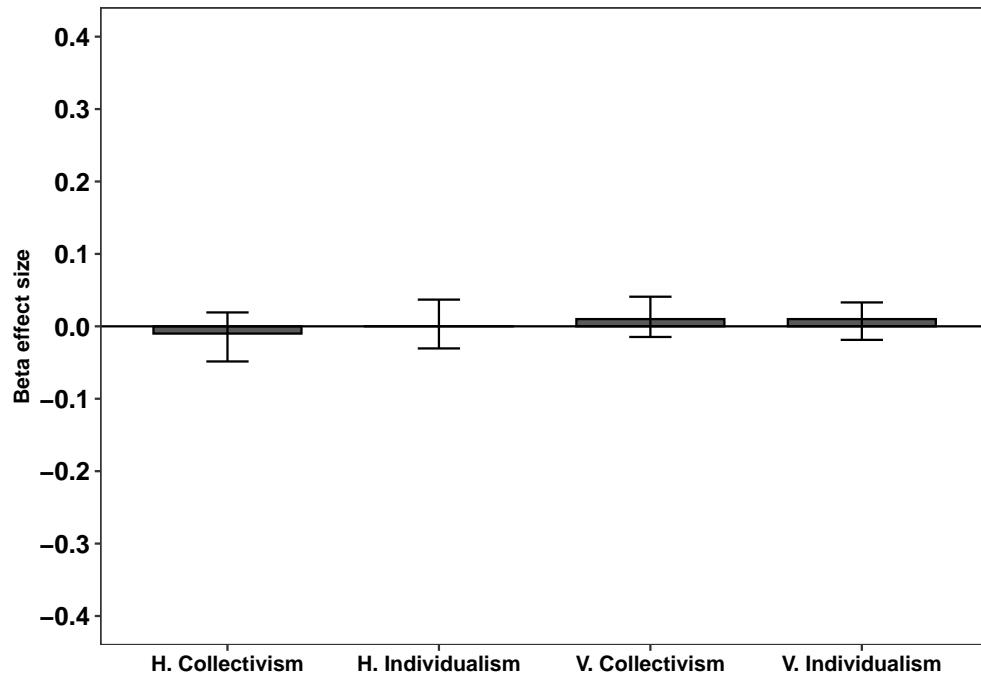


Figure 16: Personal level individualism/collectivism effects on the interaction of personal force and intention (speedboat dilemmas, familiarity exclusion not applied)

### 3. No exclusion analysis

#### Study 1a and 1b

The effect of personal force on moral dilemma judgements (no exclusion)

Dilemma	Cluster	BF	t	df	p	Cohen's d	Raw effect	\$89\%\$ CI
Trolley	Eastern	7.17e+13	-8.34	1783.67	<.001	0.39	0.85	[0.67, 0.99]
	Southern	6.11e+22	-10.61	2504.19	<.001	0.42	0.91	[0.76, 1.04]
	Western	2.97e+18	-9.55	3397.97	<.001	0.33	0.74	[0.61, 0.85]
Speedboat	Eastern	5.28e+08	-6.69	1789.34	<.001	0.31	0.66	[0.49, 0.8]
	Southern	8.83e+16	-9.18	2503.63	<.001	0.37	0.73	[0.59, 0.85]
	Western	5.69e+16	-9.12	3401.62	<.001	0.31	0.68	[0.55, 0.79]

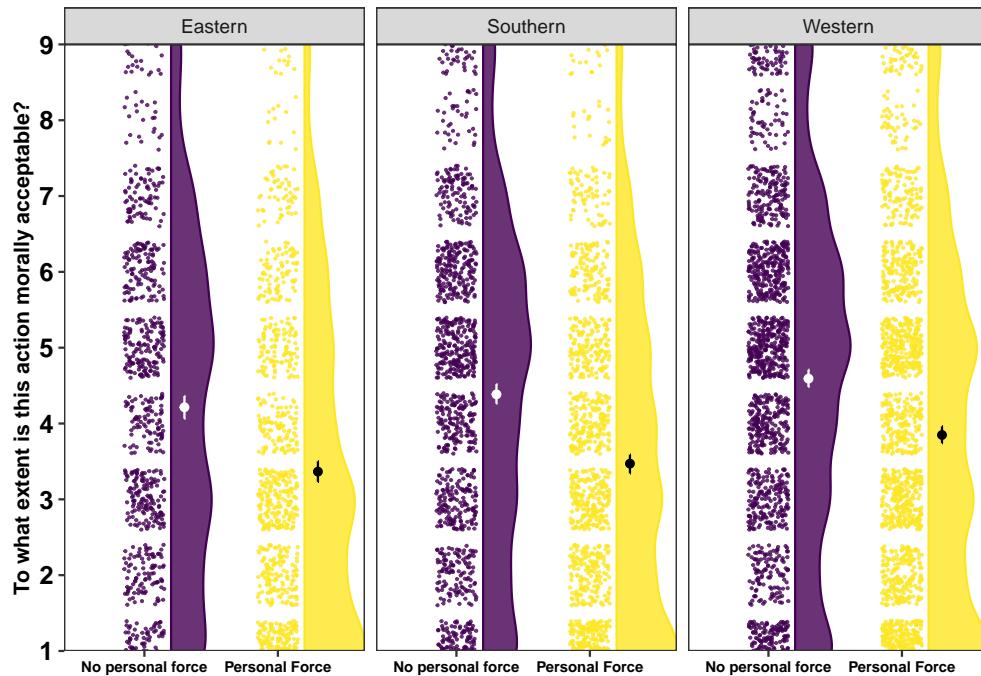


Figure 17: Results on Trolley dilemmas in Study 1 with no exclusion criteria applied

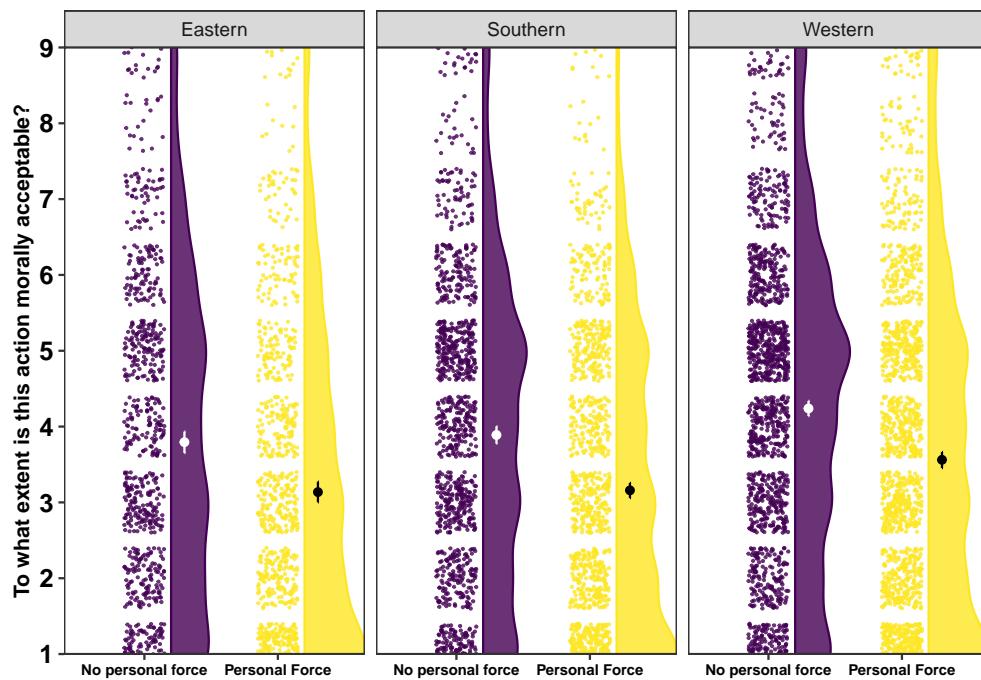


Figure 18: Results on Speedboat dilemmas in Study 1 with no exclusion criteria applied.

## Study 2a and 2b

The interaction of personal force and intention on moral dilemma judgements (no exclusions)

Dilemma	Cluster	BF	b	89% CI	p	Partial $\eta^2$	Raw effect
Trolley	Eastern	1.91e+03	-0.222	[-0.29, -0.13]	<.001	0.009	-0.89
	Southern	3.37e+16	-0.375	[-0.43, -0.3]	<.001	0.029	-1.50
	Western	2.15e+58	-0.288	[-0.31, -0.26]	<.001	0.019	-1.15
Speedboat	Eastern	3.6e-01	-0.001	[-0.07, 0.07]	0.979	0.000	-0.01
	Southern	1.09e+00	-0.066	[-0.12, 0]	0.096	0.001	-0.26
	Western	2.06e+01	-0.054	[-0.08, -0.03]	0.001	0.001	-0.22

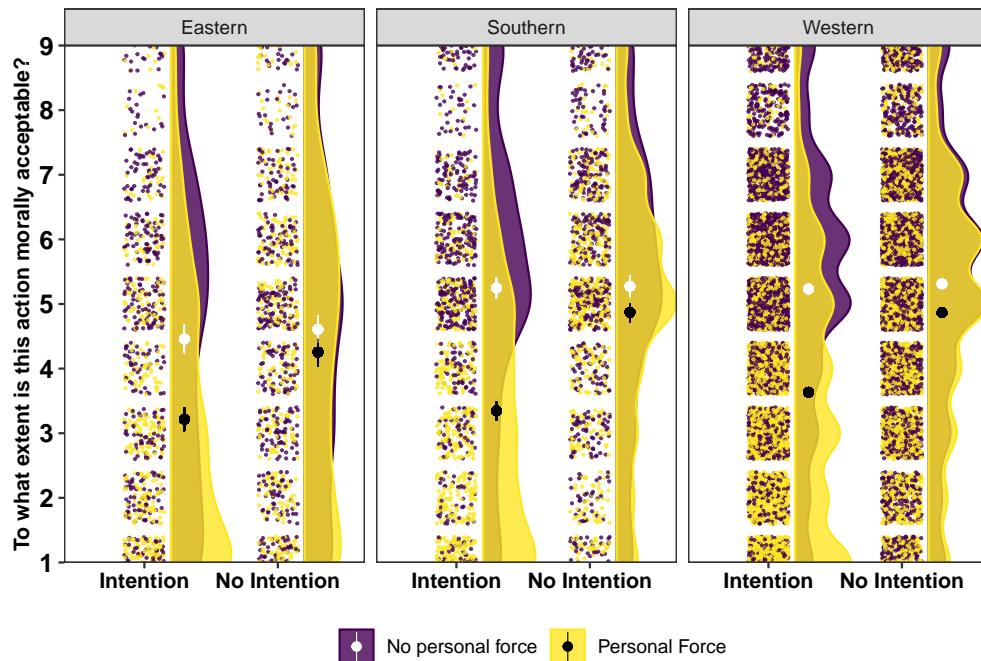


Figure 19: Results on Trolley dilemmas in Study 2 when no exclusion criteria are applied. Error bars are 95% confidence intervals on the mean.

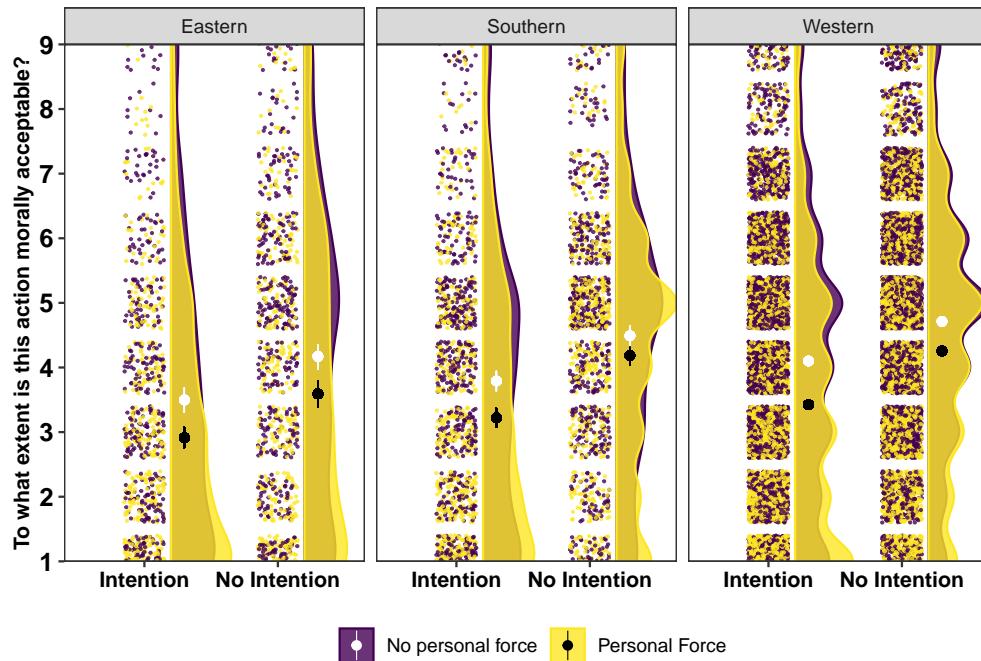


Figure 20: Results on the Speedboat dilemmas in Study 2 when no exclusion criteria are applied. Error bars are 95% confidence intervals on the mean.

### Individualism-collectivism analysis

Is the interaction of personal force and intention affected by individualism/collectivism?

Variable	Trolley					Speedboat				
	BF	b	\$89\%\$ CI	p	BF	b	\$89\%\$ CI	p		
Country-level collectivism	4.96	-1.00	[-1.82, -0.17]	0.055	0.55	1.18	2.1594	0.019		
H. Collectivism	8.92	-0.03	[-0.04, -0.01]	0.013	0.55	-0.01	0.0135	0.491		
H. Individualism	3.18	-0.02	[-0.04, -0.01]	0.042	0.45	0.00	0.0174	0.733		
V. Collectivism	0.55	-0.01	[-0.02, 0.01]	0.516	0.48	0.00	0.0194	0.874		
V. Individualism	0.31	0.00	[-0.01, 0.01]	0.929	0.33	0.00	0.0161	0.920		

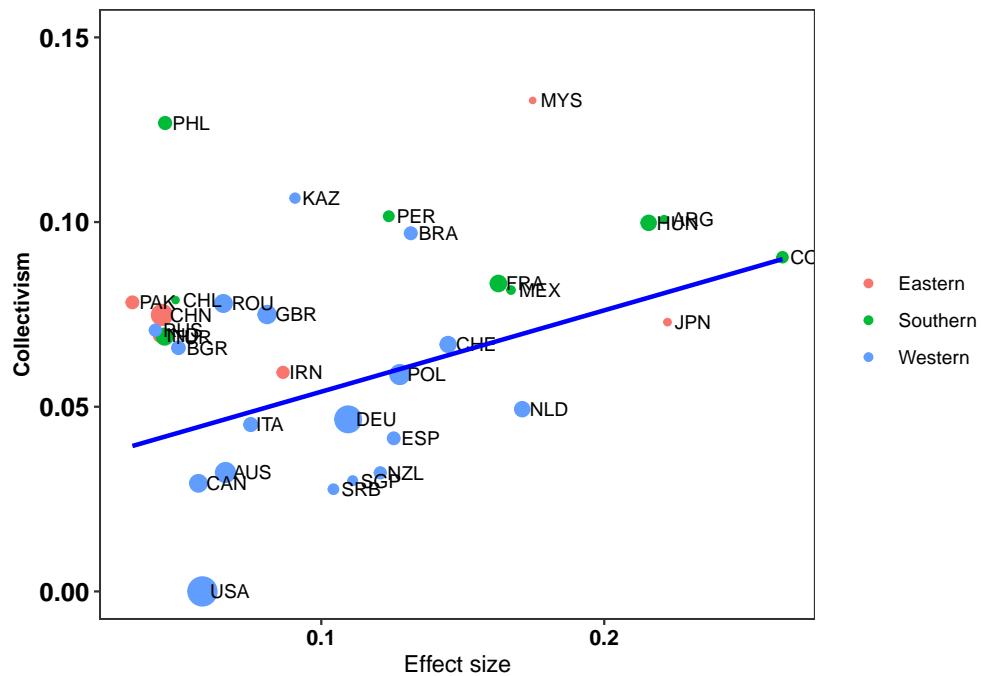


Figure 21: Correlation between country-level individualism/collectivism and the effect of personal force in Eta squared on the Trolley dilemmas (no exclusion)

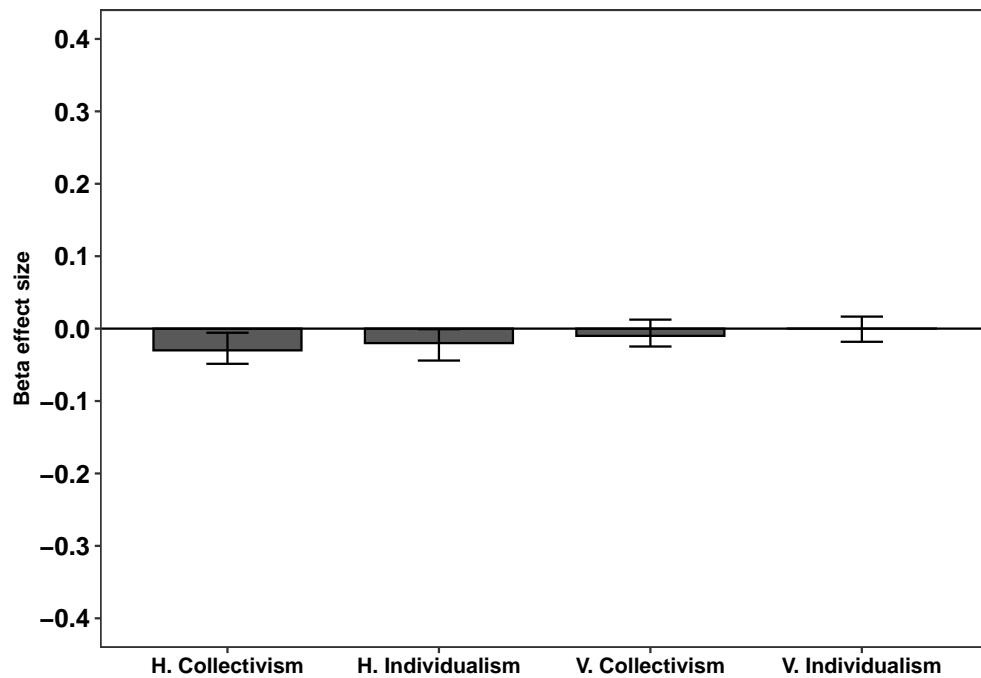


Figure 22: Personal level individualism/collectivism effects on the interaction of personal force and intention (trolley dilemma, no exclusions)

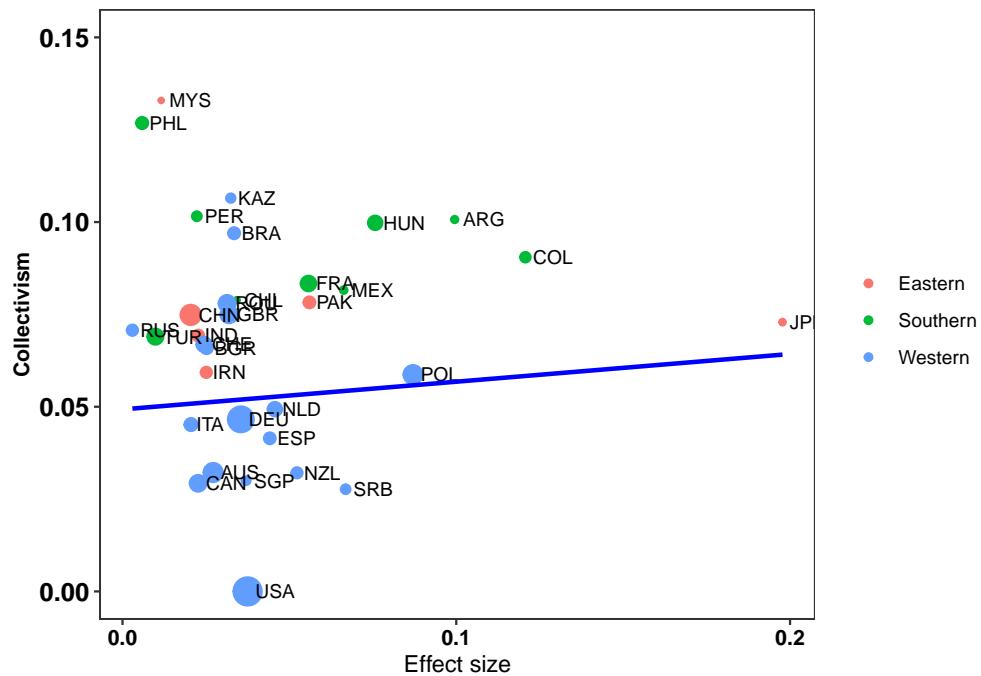


Figure 23: Correlation between country-level individualism/collectivism and the interactional effect of personal force and intention in Eta squared on Speedboat dilemmas (no exclusions)

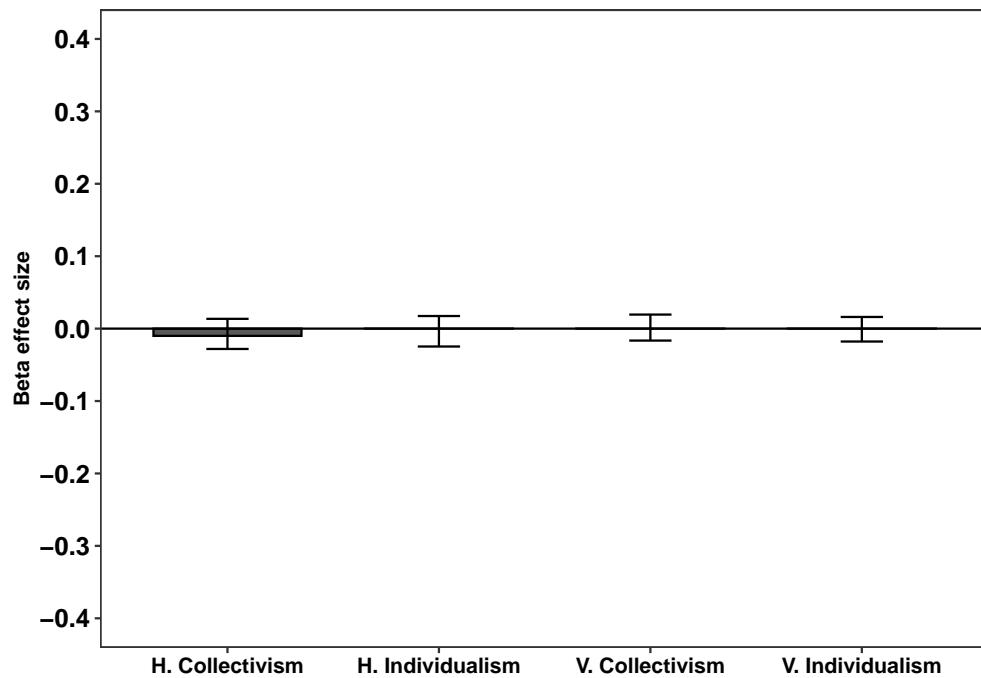


Figure 24: Personal level individualism/collectivism effects on the interaction of personal force and intention (speedboat dilemma, no exclusion)

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Eastern

China, India, Iran, Japan, Lebanon, Malaysia, North Macedonia, Pakistan, Thailand, United Arab Emirates Argentina,

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## Table 1

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#>   region     n
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#> 2 Southern    12
#> 3 Western     23
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#>   <int>
#> 1 45
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#> [1] "Australia, Austria, Brazil, Bulgaria, Canada, Croatia, Denmark, Germany, Greece, Italy, Kazakhstan"
#> [1] "Argentina, Chile, Colombia, Czechia, Ecuador, France, Hungary, Mexico, Peru, Philippines, Slovakia"
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