

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

Estimating the percentage of respondents who pass all the exclusion criteria when familiarity does not matter in contrast to all the respondents.

```
#> [1] 36.20669
```

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	89% CI
Exclude	Eastern	1.9e+02	7.00e-03, 14.00	-3.69	366.23	<.001	0.38	0.85	[0.4, 1.14]
	Southern	2.44e+07	1.00e-05, 2.80e+06	-6.32	619.93	<.001	0.51	1.10	[0.76, 1.34]
	Western	8.01e+01	1.20e-02, 4.30	-3.41	553.15	0.001	0.29	0.59	[0.27, 0.82]
Including familiar	Eastern	9.21e+04	<1.00e-05, 1.10e+04	-5.19	806.76	<.001	0.36	0.79	[0.53, 1.02]
	Southern	5.91e+12	<1.00e-05, 6.30e+14	-8.09	1345.85	<.001	0.44	0.94	[0.72, 1.1]
	Western	4.95e+05	<1.00e-05, 9.80e+07	-5.51	1338.48	<.001	0.30	0.65	[0.43, 0.8]

Fig 1 left

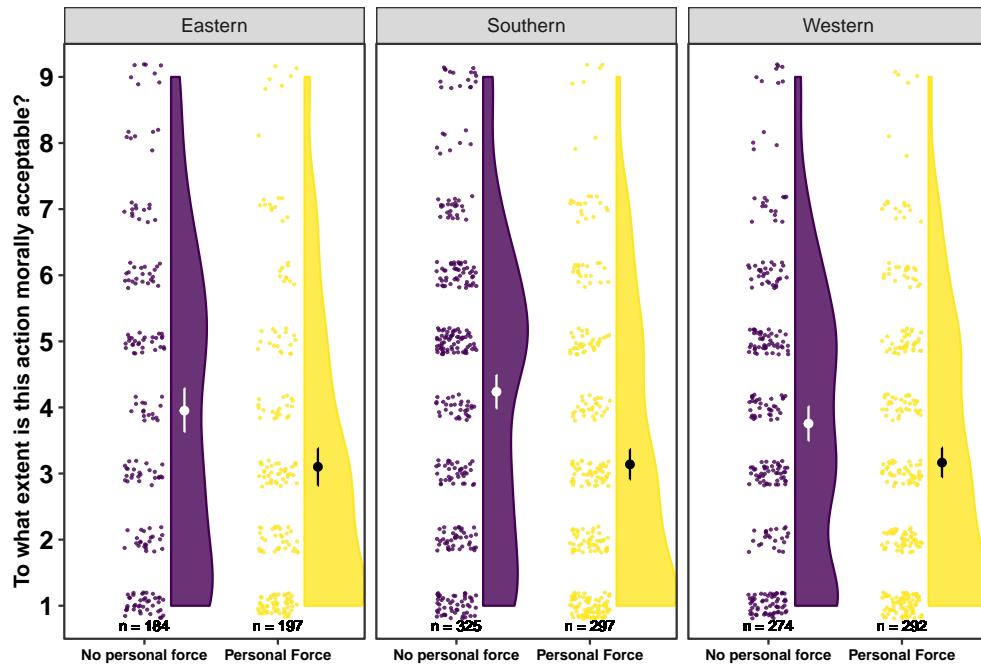


Figure 1: Results on Trolley dilemmas in Study 1 with all exclusion criteria applied.

Fig 1 right

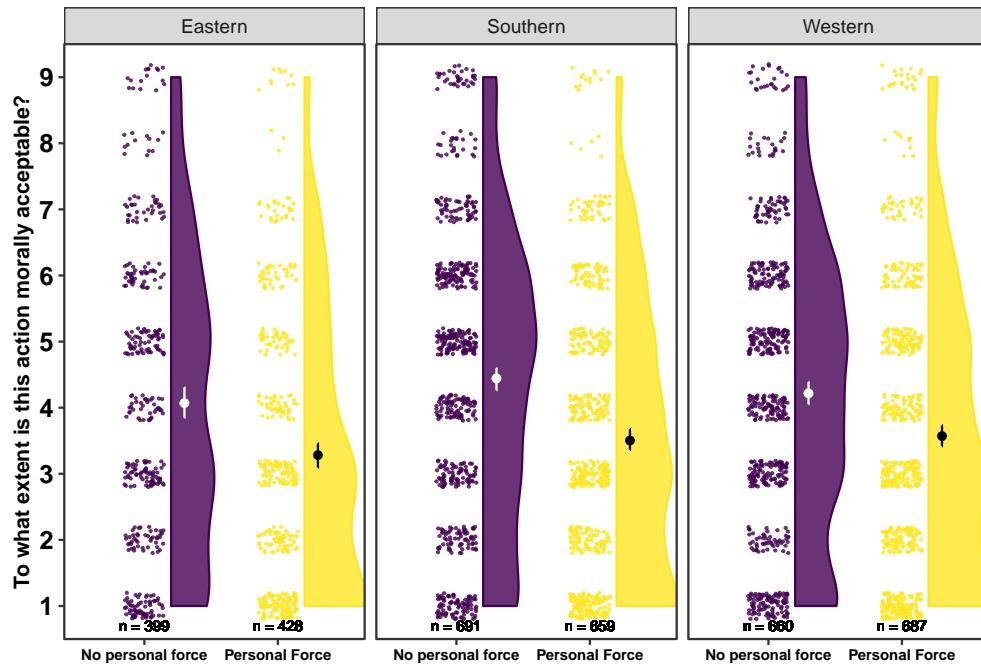


Figure 2: Results on Trolley dilemmas in Study 1 with including familiar participants

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

Exclusion	Cluster	BF	RR	t	df	p	Cohen's d	Raw effect	89% CI
Exclude	Eastern	1.16e+05	1.50e-03, 1.70e+04	-5.26	283.92	<.001	0.59	1.18	[0.75, 1.47]
	Southern	1.01e+03	1.30e-03, 74.00	-4.19	436.86	<.001	0.37	0.72	[0.37, 0.93]
	Western	2.52e+01	3.30e-02, 1.2	-3.01	437.36	0.003	0.27	0.51	[0.19, 0.73]
Including familiar	Eastern	2.4e+04	<1.00e-05, 9.50e+03	-4.88	680.10	<.001	0.37	0.74	[0.44, 0.92]
	Southern	7.8e+06	<1.00e-05, 2.10e+08	-5.94	908.97	<.001	0.36	0.69	[0.5, 0.86]
	Western	5.53e+07	<1.00e-05, 1.0e+08	-6.34	1140.72	<.001	0.35	0.71	[0.52, 0.88]

Fig 2 left

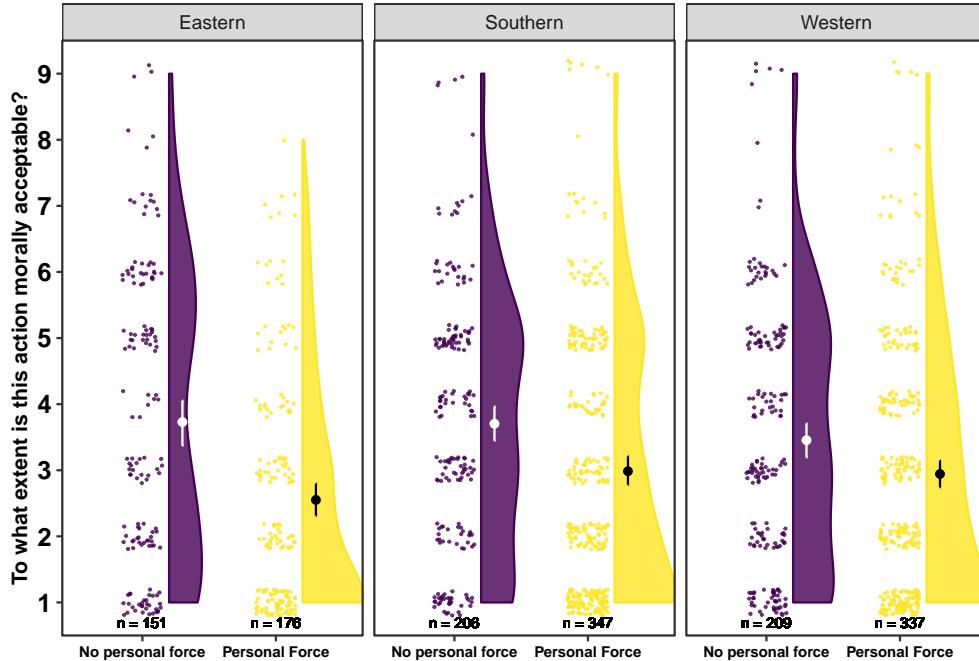


Figure 3: Results on Trolley dilemmas in Study 1 with all exclusion criteria applied.

Fig 2 right

Study 2a and 2b

Do personal force interact with intention on Trolley dilemmas?

Exclusion	Cluster	BF	RR	b	89% CI	p	Partial η^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	9.62e+00	0.03, 0.2	-0.250	[-0.35, -0.09]	0.002	0.014	-1.00
	Western	1.44e+11	6.00e-05, 1.80e+03	-0.306	[-0.37, -0.24]	<.001	0.019	-1.23
Include familiar	Eastern	2.86e+00	2.50e-02, 0.91	-0.213	[-0.33, -0.03]	0.031	0.008	-0.85
	Southern	3.05e+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

Fig 3 left

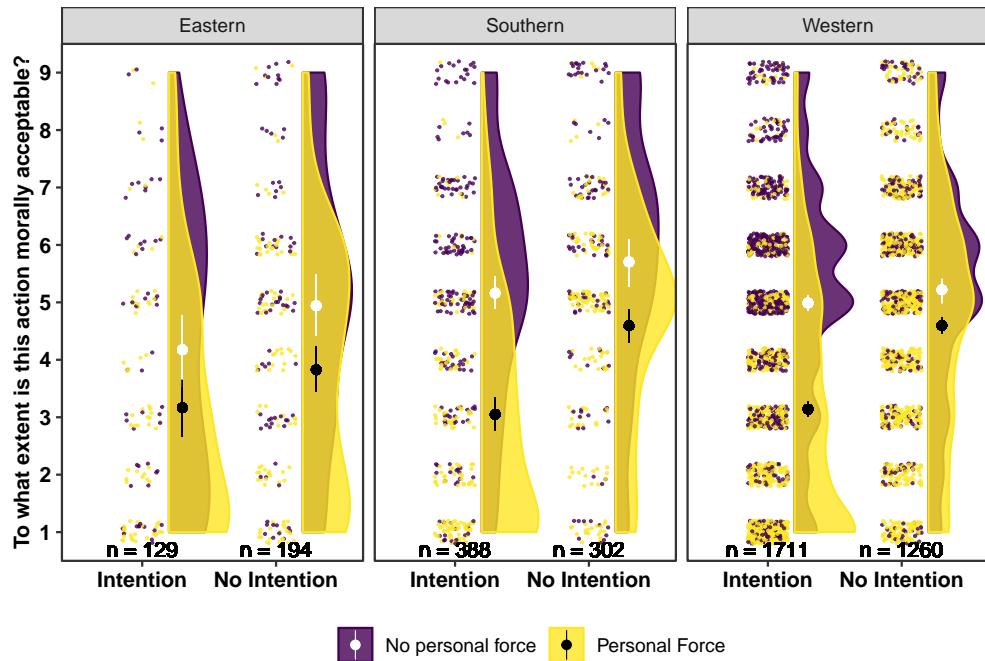


Figure 4: Results on Trolley dilemmas in Study 2 when all exclusion criteria are applied. Error bars are 95% confidence intervals on the mean.

Fig 3 right

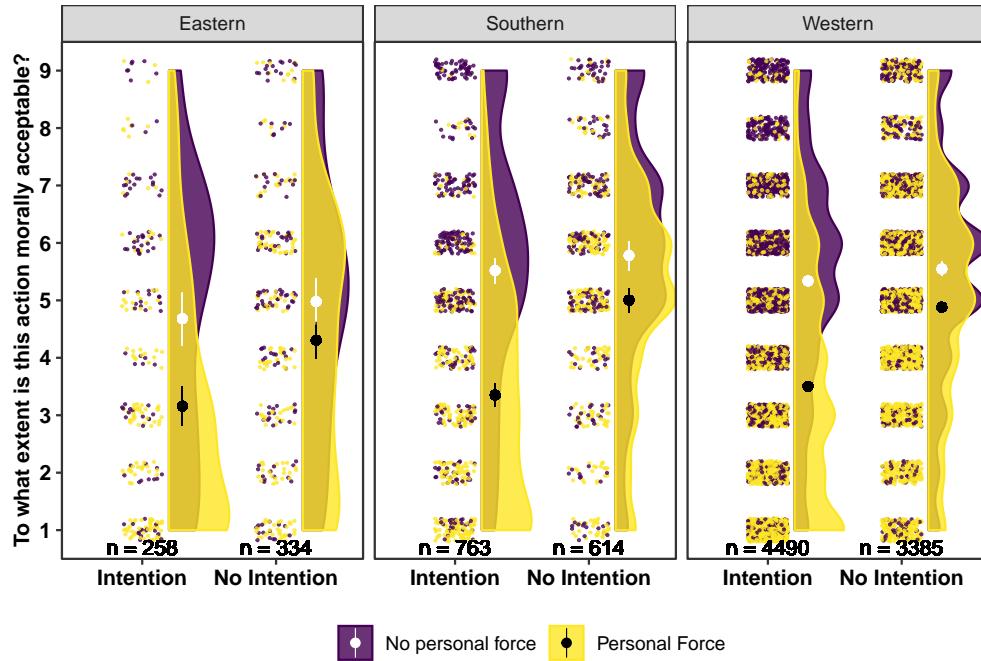


Figure 5: Results on Trolley dilemmas in Study 2 while not applying familiarity exclusion. Error bars are 95% confidence intervals on the mean.

Do personal force interact with intention on Speedboat dilemmas?

Exclusion	Cluster	BF	RR	b	89% CI	p	Partial η^2	Raw effect
Exclusion	Eastern	4.20e-01	4.90e-02, 0.69	-0.007	[-0.18, 0.19]	0.959	0.000	-0.03
	Southern	3.50e-01	5.10e-02, 0.63	0.028	[-0.11, 0.17]	0.794	0.000	0.11
	Western	2.24e+02	3.60e-02, 1.10	-0.160	[-0.22, -0.09]	<.001	0.005	-0.64
Include familiar	Eastern	4.20e-01	2.60e-02, 0.72	0.010	[-0.14, 0.16]	0.926	0.000	0.04
	Southern	1.19e+00	2.50e-02, 0.95	-0.132	[-0.23, 0.01]	0.097	0.002	-0.53
	Western	4.94e+07	1.40e-02, 1.30	-0.152	[-0.19, -0.11]	<.001	0.005	-0.61

Fig 4 left

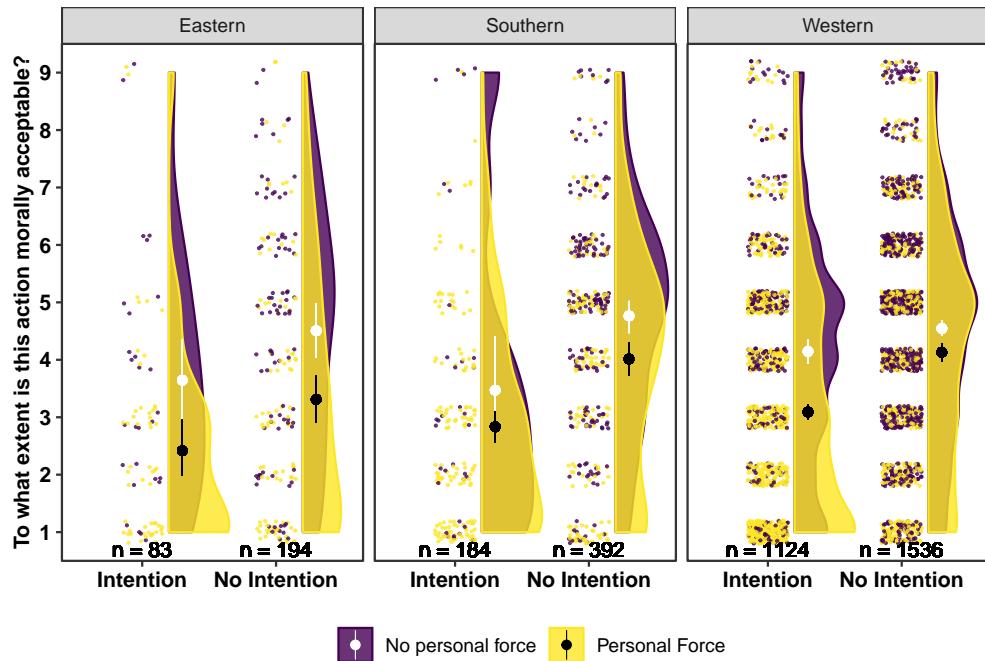


Figure 6: Results on the Speedboat dilemmas in Study 2 when all exclusion criteria are applied. Error bars are 95% confidence intervals on the mean.

Fig 4 right

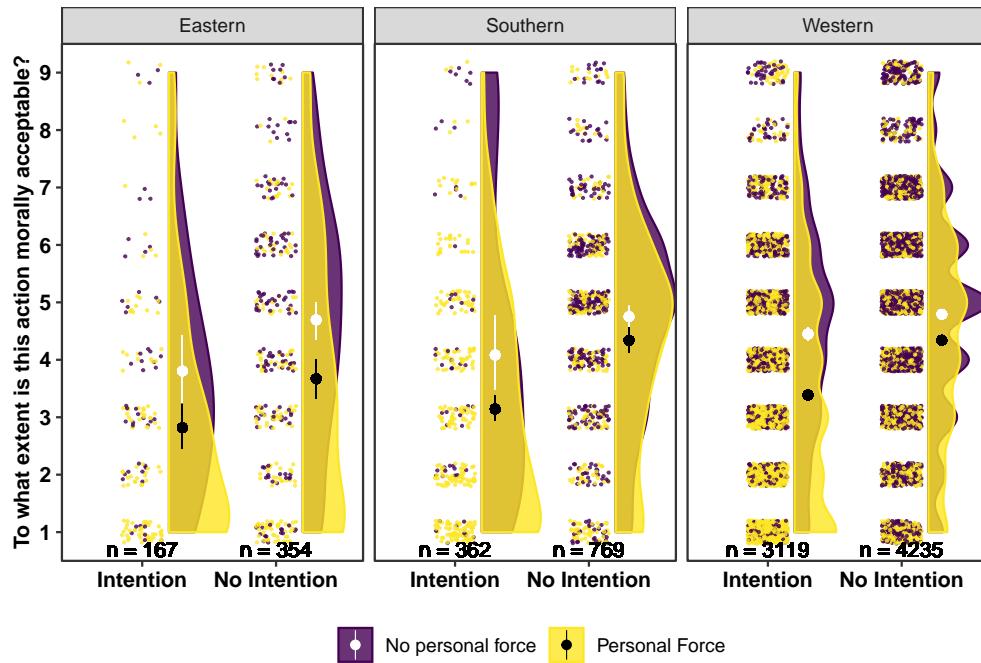


Figure 7: Results on the Speedboat dilemmas in Study 2, not applying familiarity exclusion. Error bars are 95% confidence intervals on the mean.

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	1.24	-1.13	[-3.16, 1.23]	0.405	2.21	-1.27	[-2.53, -0.12]	0.096
H. Collectivism	1.62	-0.03	[-0.07, 0.01]	0.263	2.33	-0.03	[-0.05, 0]	0.096
H. Individualism	0.71	0.00	[-0.04, 0.04]	0.921	0.88	0.02	[-0.01, 0.04]	0.325
V. Collectivism	0.65	0.00	[-0.03, 0.04]	0.988	0.65	-0.01	[-0.03, 0.01]	0.538
V. Individualism	0.69	-0.02	[-0.05, 0.02]	0.451	0.47	-0.01	[-0.03, 0.01]	0.607

Figure 5 left

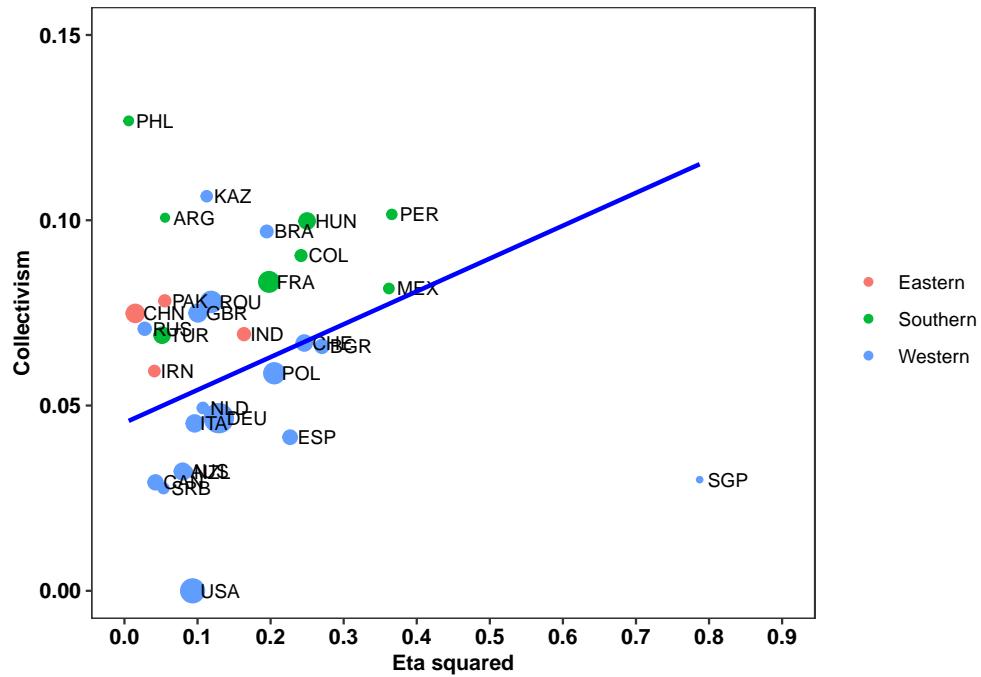


Figure 8: Correlation between country-level individualism/collectivism and the effect of personal force in Eta squared on the Trolley dilemmas (all exclusions applied)

Figure 6 left

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	0.71	0.66	[-1.49, 2.79]	0.631	0.36	-0.32	[-1.6, 0.88]	0.684
H. Collectivism	3.15	-0.04	[-0.08, 0]	0.114	0.86	-0.01	[-0.04, 0.01]	0.396
H. Individualism	1.08	-0.01	[-0.06, 0.03]	0.611	0.67	0.00	[-0.02, 0.03]	0.852
V. Collectivism	1.56	0.02	[-0.02, 0.06]	0.311	0.92	0.01	[-0.01, 0.04]	0.357
V. Individualism	0.69	0.00	[-0.04, 0.03]	0.952	0.53	0.01	[-0.01, 0.03]	0.590

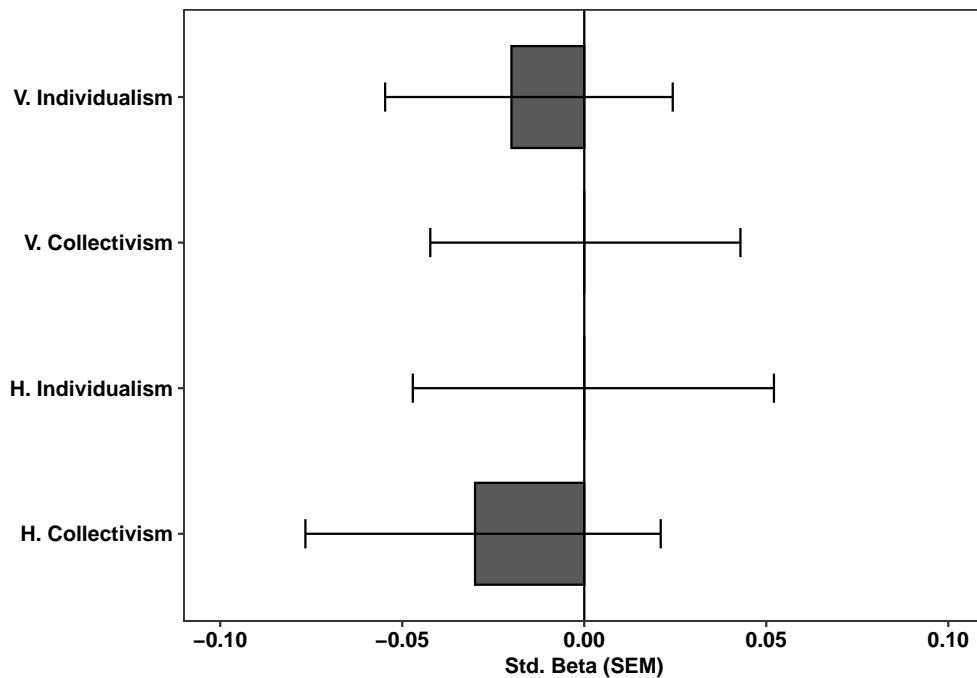


Figure 9: Personal level individualism/collectivism effects on the interaction of personal force and intention (trolley dilemmas, all exclusions applied)

Figure 7 left

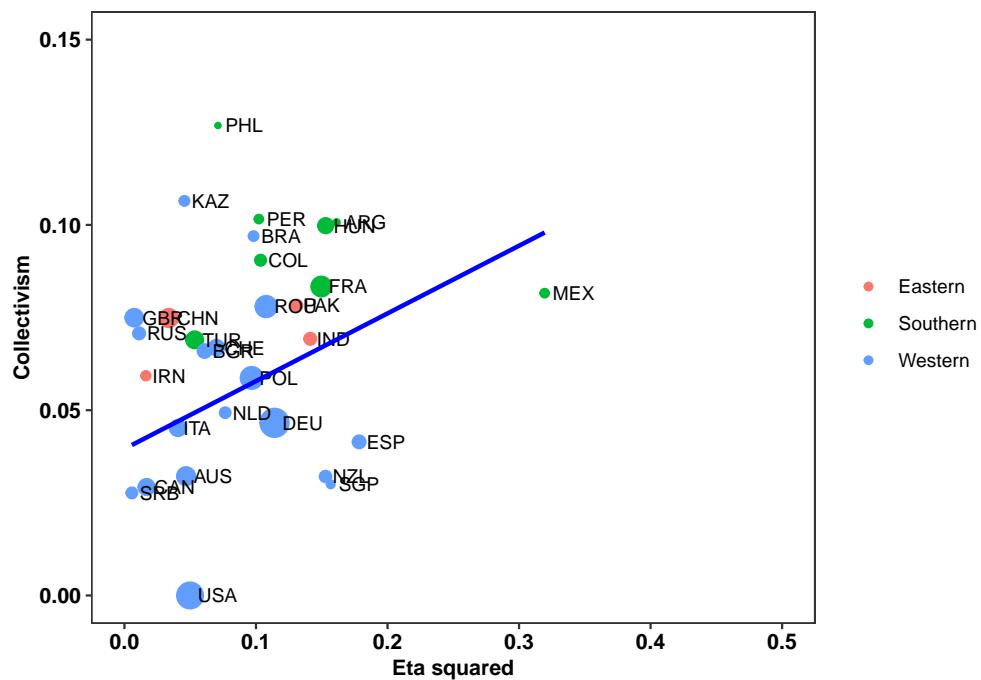


Figure 10: Correlation between country-level individualism/collectivism and the interactional effect of personal force and intention in Eta squared on Speedboat dilemmas (all exclusions applied)

Figure 8 left

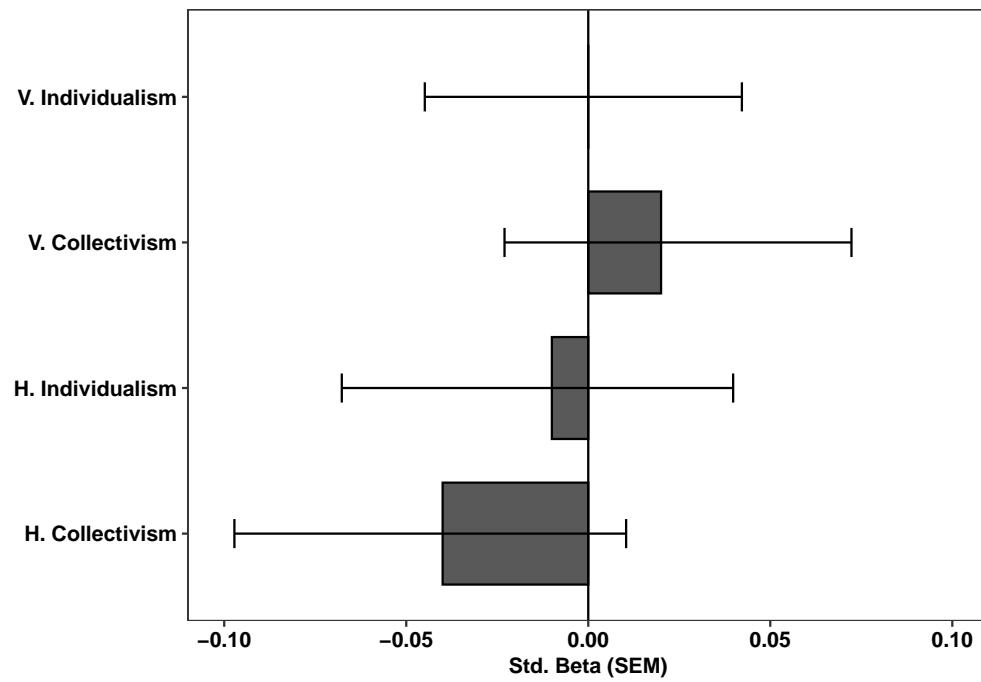


Figure 11: Personal level individualism/collectivism effects on the interaction of personal force and intention (speedboat dilemmas, all exclusions applied)

Including familiar participants

Figure 5 right

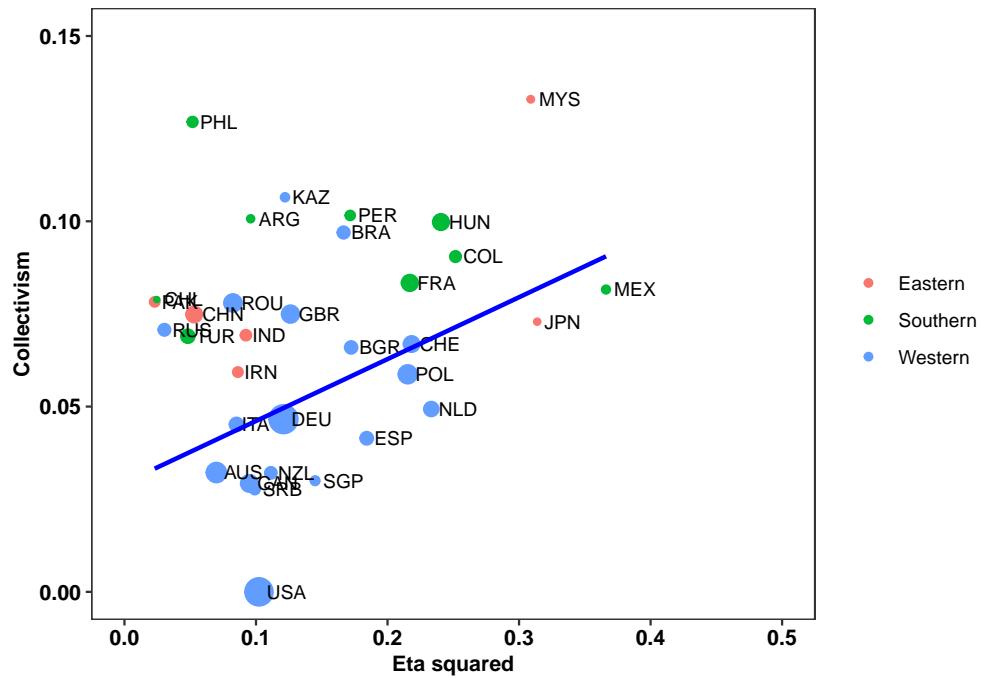


Figure 12: Correlation between country-level individualism/collectivism and the effect of personal force in Eta squared on the Trolley dilemmas (familiarity exclusion not applied)

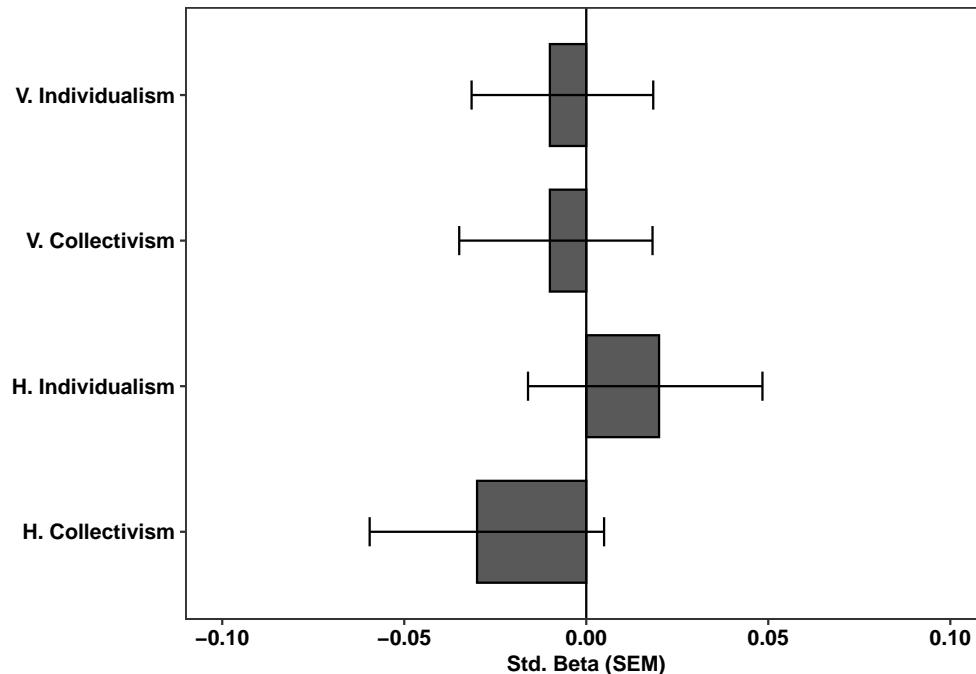


Figure 13: Personal level individualism/collectivism effects on the interaction of personal force and intention (trolley dilemmas, familiarity exclusion not applied)

Figure 6 right

Figure 7 right

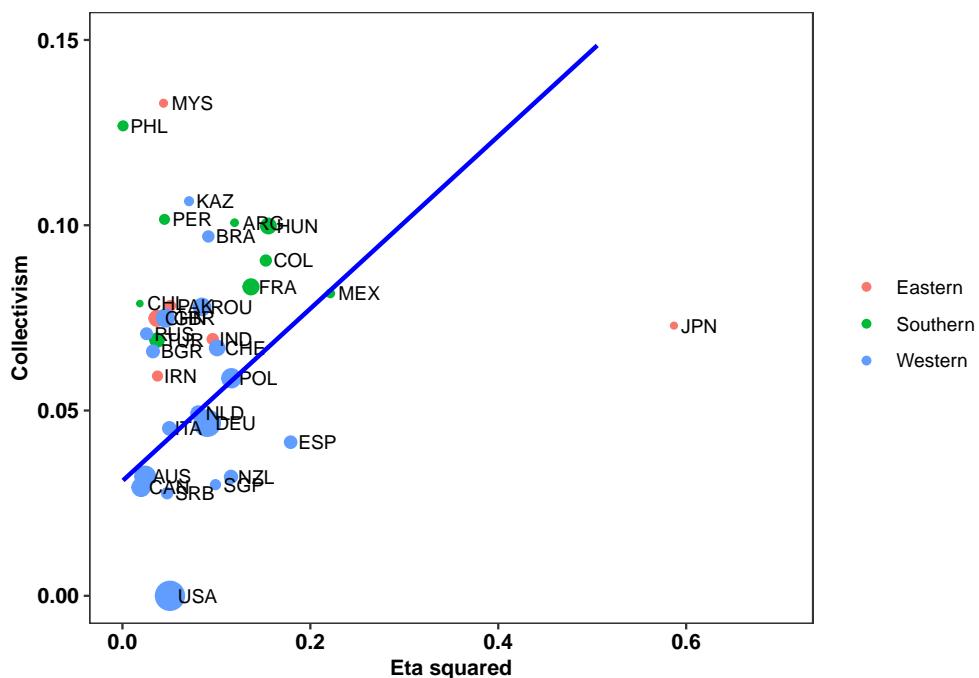


Figure 14: Correlation between country-level individualism/collectivism and the interactional effect of personal force and intention in Eta squared on Speedboat dilemmas (familiarity exclusion not applied)

Figure 8 right

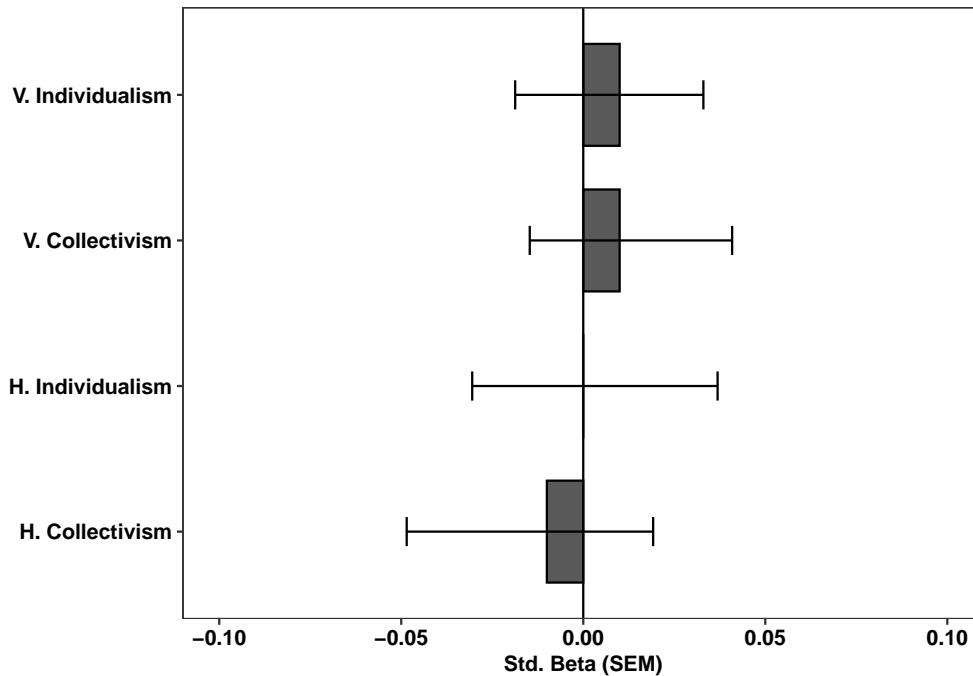


Figure 15: Personal level individualism/collectivism effects on the interaction of personal force and intention (speedboat dilemmas, familiarity exclusion not applied)

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	[0.66, 0.98]
	Southern	6.11e+22	-10.61	2504.19	<.001	0.42	0.91	[0.75, 1.03]
	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	[0.48, 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, 0.8]

Figure 9 left

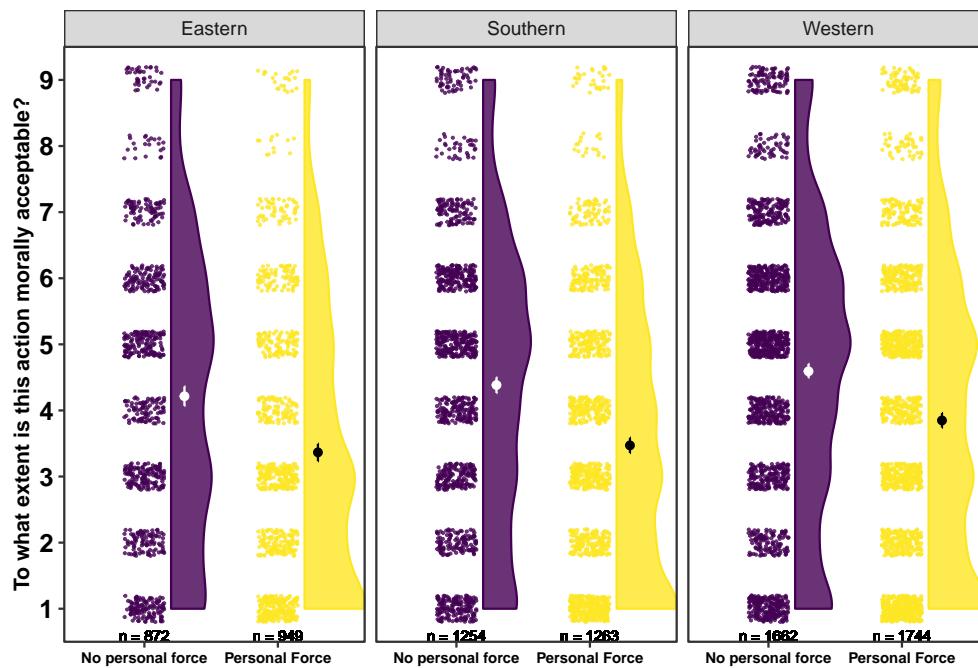


Figure 16: Results on Trolley dilemmas in Study 1 with no exclusion criteria applied

Figure 9 right

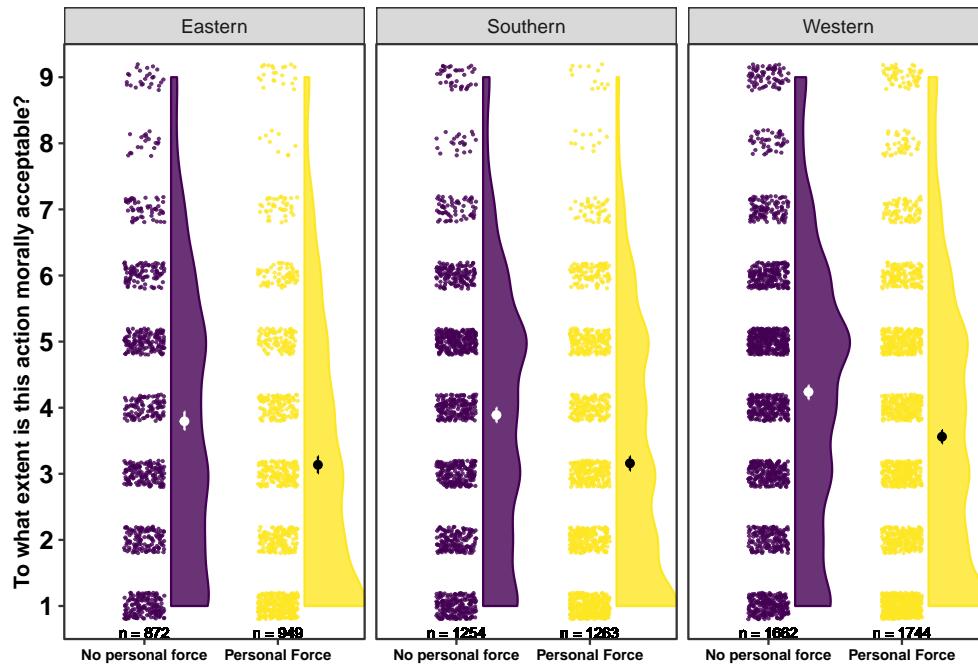


Figure 17: Results on Speedboat dilemmas in Study 1 with no exclusion criteria applied.

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 η^2	Raw effect
Trolley	Eastern	1.86e+03	-0.222	[-0.3, -0.14]	<.001	0.009	-0.89
	Southern	3.33e+16	-0.375	[-0.44, -0.31]	<.001	0.029	-1.50
	Western	2.17e+58	-0.288	[-0.31, -0.26]	<.001	0.019	-1.15
Speedboat	Eastern	3.65e-01	-0.001	[-0.08, 0.07]	0.979	0.000	-0.01
	Southern	1.12e+00	-0.066	[-0.12, 0]	0.096	0.001	-0.26
	Western	2.05e+01	-0.054	[-0.08, -0.03]	0.001	0.001	-0.22

Figure 10 left

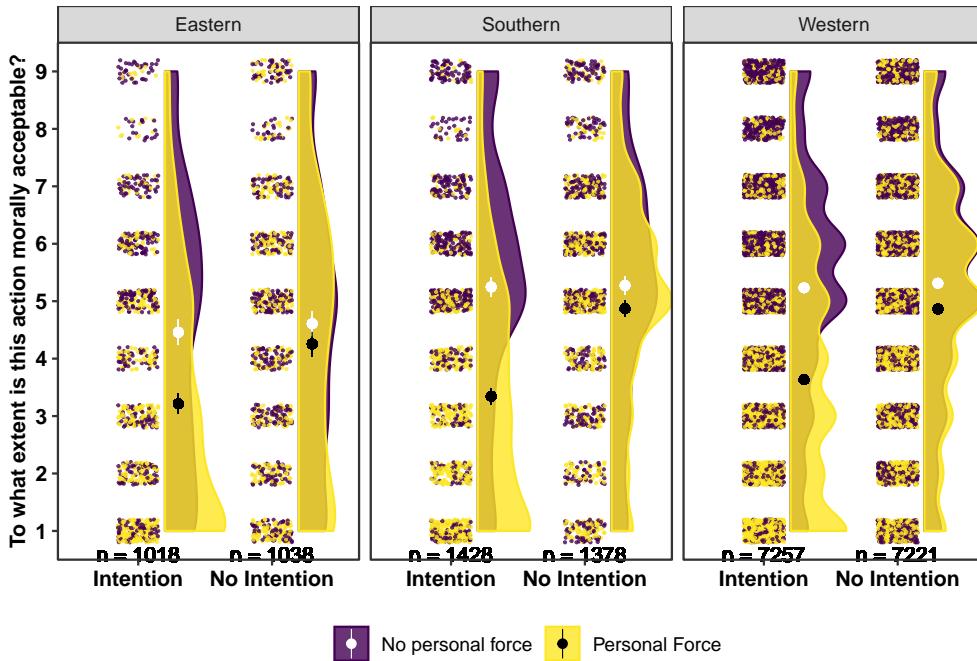


Figure 18: Results on Trolley dilemmas in Study 2 when no exclusion criteria are applied. Error bars are 95% confidence intervals on the mean.

Figure 10 right

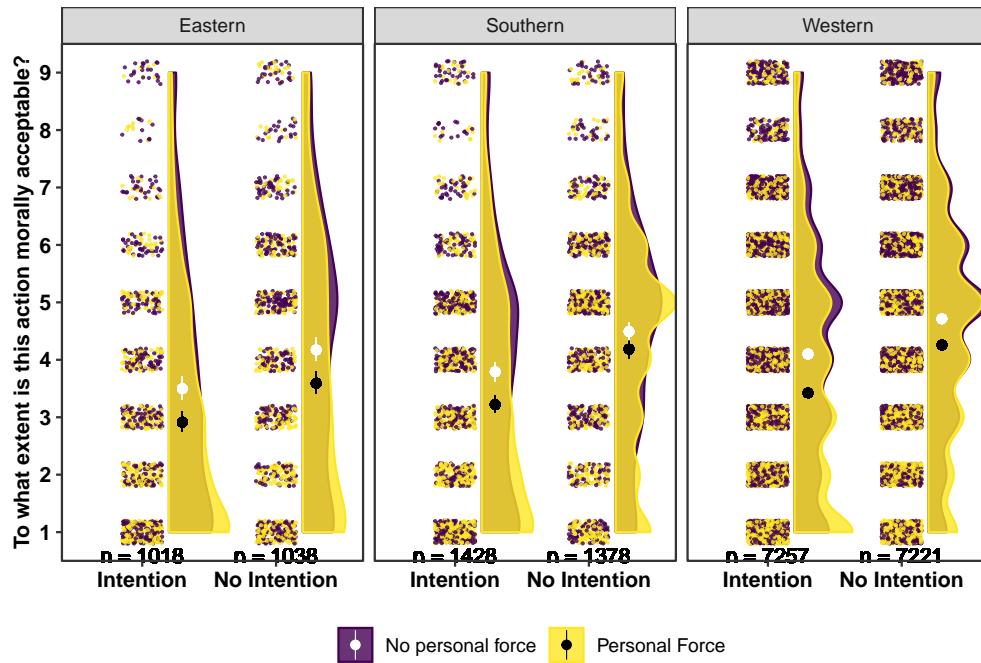


Figure 19: Results on the Speedboat dilemmas in Study 2 when no exclusion criteria are applied. Error bars are 95% confidence intervals on the mean.

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	7.46	-1.00	[-1.84, -0.17]	0.055	2.02	1.18	[0.38, 1.95]	0.019
H. Collectivism	8.96	-0.03	[-0.05, -0.01]	0.013	0.56	-0.01	[-0.02, 0.01]	0.491
H. Individualism	3.40	-0.02	[-0.04, 0]	0.042	0.51	0.00	[-0.02, 0.01]	0.733
V. Collectivism	0.54	-0.01	[-0.02, 0.01]	0.516	0.45	0.00	[-0.01, 0.02]	0.874
V. Individualism	0.32	0.00	[-0.01, 0.01]	0.929	0.34	0.00	[-0.01, 0.01]	0.920

Figure 11 left

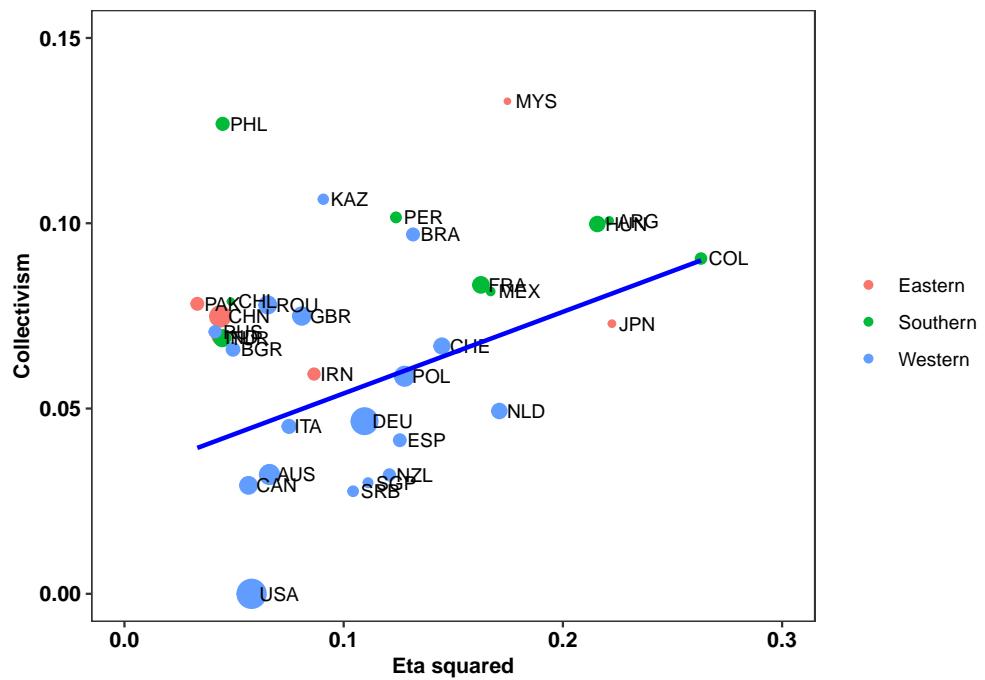


Figure 20: Correlation between country-level individualism/collectivism and the interaction effect of personal force and intention in Eta squared on the Trolley dilemmas (no exclusion)

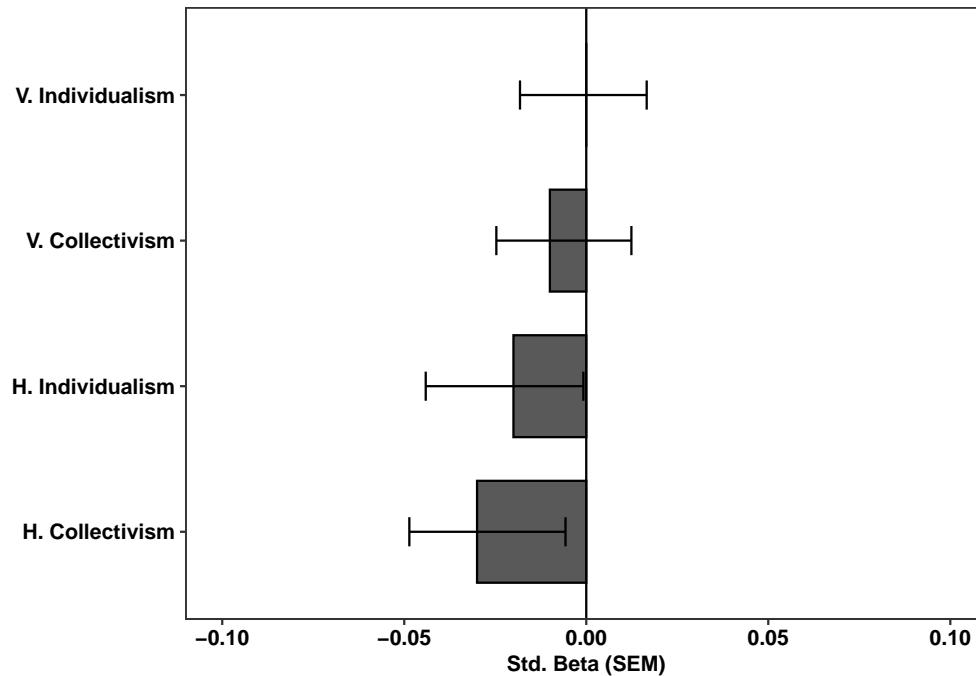


Figure 21: Personal level individualism/collectivism effects on the interaction of personal force and intention (trolley dilemma, no exclusions)

Figure 12 left

Figure 11 right

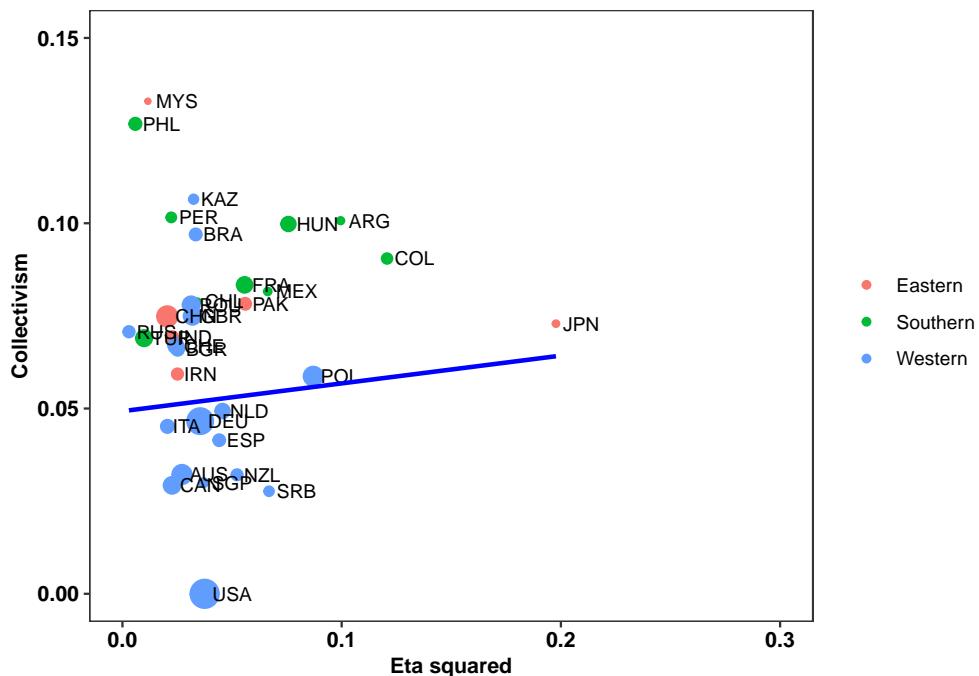


Figure 22: Correlation between country-level individualism/collectivism and the interactional effect of personal force and intention in Eta squared on Speedboat dilemmas (no exclusions)

Figure 12 right

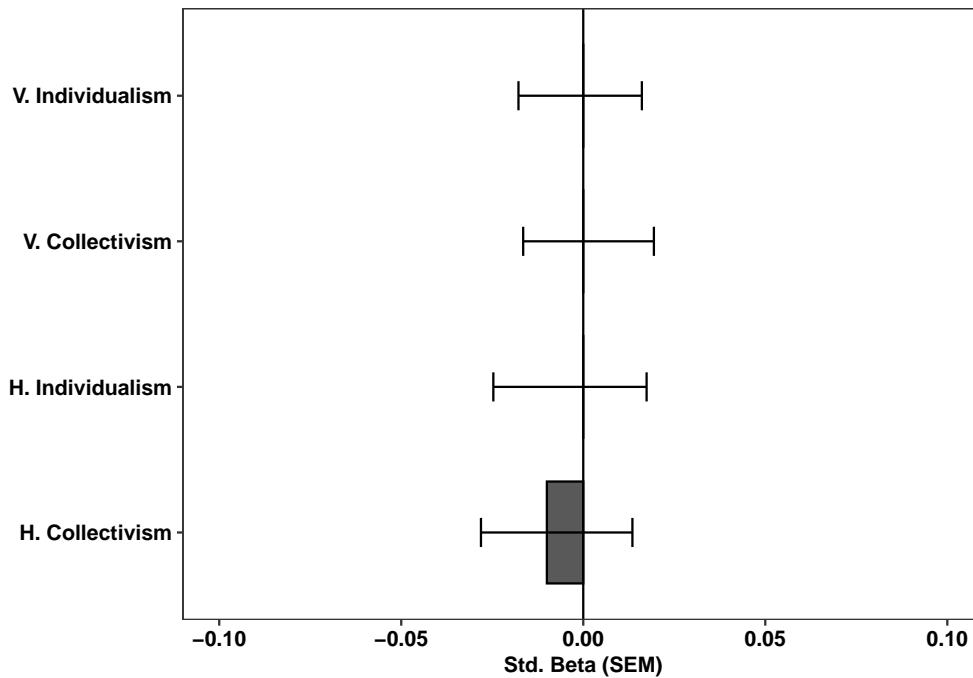


Figure 23: Personal level individualism/collectivism effects on the interaction of personal force and intention (speedboat dilemma, no exclusion)

Merge Figures

```
# fig1_2 <-
#   fig1_left +
#   labs(subtitle = "A Trolley problem - all exclusion criteria applied") +
#   fig1_right +
#   labs(subtitle = "B Trolley problem - familiarity exclusion not applied") +
#   fig2_left +
#   labs(subtitle = "C Speedboat problem - all exclusion criteria applied") +
#   fig2_right +
#   labs(subtitle = "D Speedboat problem - familiarity exclusion not applied") +
#   plot_layout(ncol = 2)
#
# fig1_2
#
# ggsave(plot = fig1_2,
#        filename = "vignettes/figures/fig1_2.pdf",
#        device = "pdf", dpi = 300, scale = 2.3)
#
# fig3_4 <-
#   fig3_left +
#   labs(subtitle = "A Trolley problem - all exclusion criteria applied") +
#   fig3_right +
#   labs(subtitle = "B Trolley problem - familiarity exclusion not applied") +
#   fig4_left +
#   labs(subtitle = "C Speedboat problem - all exclusion criteria applied") +
```

```

#   fig4_right +
#     labs(subtitle = "D Speedboat problem - familiarity exclusion not applied") +
#   plot_layout(ncol = 2, guides = "collect") & theme(legend.position = 'bottom')
#
#   # fig3_4
#
# ggsave(plot = fig3_4,
#        filename = "vignettes/figures/fig3_4.pdf",
#        dpi = 300, scale = 2.3)
#
#   # fig5 <-
#   fig5_left +
#     labs(subtitle = "A Trolley problem (all exclusions applied)") +
#   fig5_right +
#     labs(subtitle = "B Trolley problem (familiarity exclusion not applied)") +
#   plot_layout(ncol = 2, guides = "collect") & theme(legend.position = 'right')
#
#   # fig5
#
# ggsave(plot = fig5,
#        filename = "vignettes/figures/fig5.pdf",
#        dpi = 300, scale = 2)
#
#   # fig6 <-
#   fig6_left +
#     labs(subtitle = "A Trolley problem (all exclusions applied)") +
#   fig6_right +
#     labs(subtitle = "B Trolley problem (familiarity exclusion not applied)") +
#   plot_layout(ncol = 2)
#
#   # fig6
#
# ggsave(plot = fig6,
#        filename = "vignettes/figures/fig6.pdf",
#        dpi = 300, scale = 2)
#
#   # fig7 <-
#   fig7_left +
#     labs(subtitle = "A Speedboat problem (all exclusions applied)") +
#   fig7_right +
#     labs(subtitle = "B Speedboat problem (familiarity exclusion not applied)") +
#   plot_layout(ncol = 2, guides = "collect") & theme(legend.position = 'right')
#
#   # fig7
#
# ggsave(plot = fig7,
#        filename = "vignettes/figures/fig7.pdf",
#        dpi = 300, scale = 2)
#
#   # fig8 <-
#   fig8_left +
#     labs(subtitle = "A Speedboat problem (all exclusions applied)") +
#   fig8_right +

```

```

#       labs(subtitle = "B Speedboat problem (familiarity exclusion not applied)") +
#   plot_layout(ncol = 2)
#
# fig8
#
# ggsave(plot = fig8,
#        filename = "vignettes/figures/fig8.pdf",
#        dpi = 300, scale = 2)
#
#
# fig9 <-
#   fig9_left +
#   labs(subtitle = "A Trolley problem - no exclusion criteria applied") +
#   fig9_right +
#   labs(subtitle = "B Speedboat problem - no exclusion criteria applied") +
#   plot_layout(ncol = 1)
#
# fig9
#
# ggsave(plot = fig9,
#        filename = "vignettes/figures/fig9.pdf",
#        dpi = 300, scale = 2)
#
# fig10 <-
#   fig10_left +
#   labs(subtitle = "A Trolley problem - no exclusion criteria applied") +
#   fig10_right +
#   labs(subtitle = "B Speedboat problem - no exclusion criteria applied") +
#   plot_layout(ncol = 2, guides = "collect") & theme(legend.position = 'bottom')
#
# fig10
#
# ggsave(plot = fig10,
#        filename = "vignettes/figures/fig10.pdf",
#        dpi = 300, scale = 2)
#
# fig11 <-
#   fig11_left +
#   labs(subtitle = "A Trolley problem - no exclusion criteria applied") +
#   fig11_right +
#   labs(subtitle = "B Speedboat problem - no exclusion criteria applied") +
#   plot_layout(ncol = 2, guides = "collect")
#
# fig11
#
# ggsave(plot = fig11,
#        filename = "vignettes/figures/fig11.pdf",
#        dpi = 300, scale = 2)
#
# fig12 <-
#   fig12_left +
#   labs(subtitle = "A Trolley problem - no exclusion criteria applied") +
#   fig12_right +

```

```
#     labs(subtitle = "B Speedboat problem - no exclusion criteria applied") +
#     plot_layout(ncol = 2)
#
# fig12
#
# ggsave(plot = fig12,
#        filename = "vignettes/figures/fig12.pdf",
#        dpi = 300, scale = 2)
```

Table 1