Results of

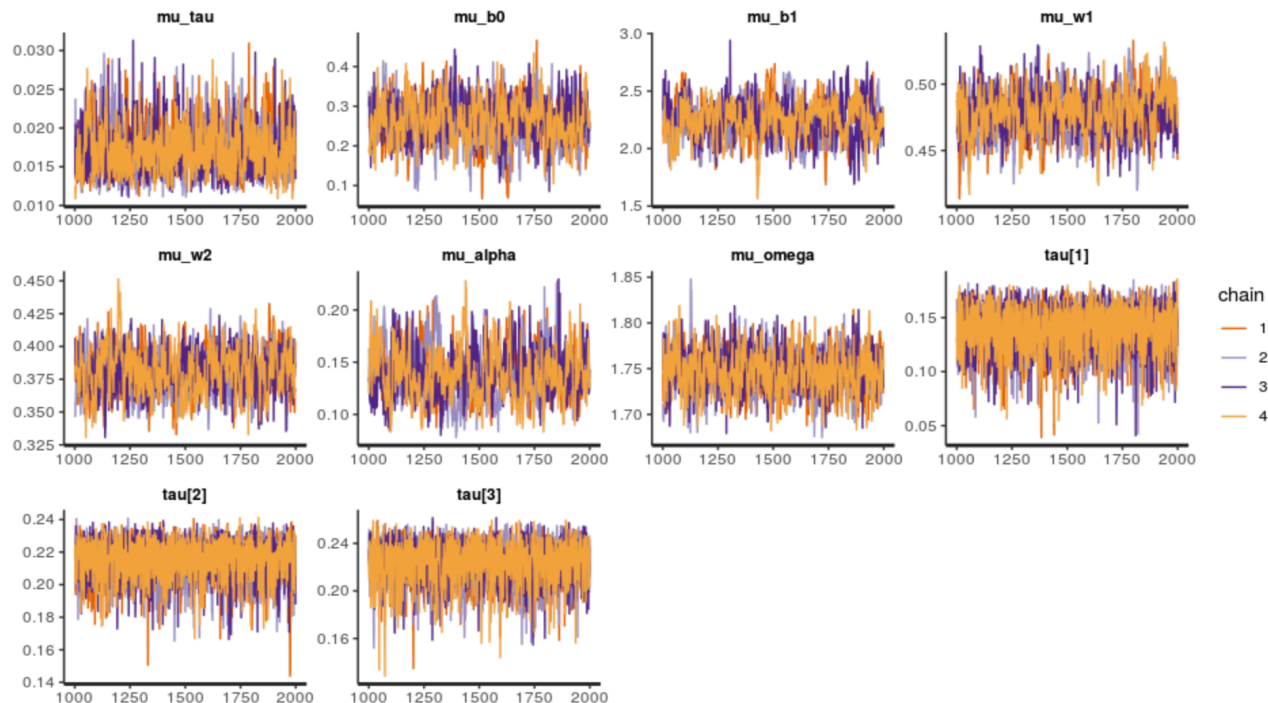# Running Original Model in rStan with

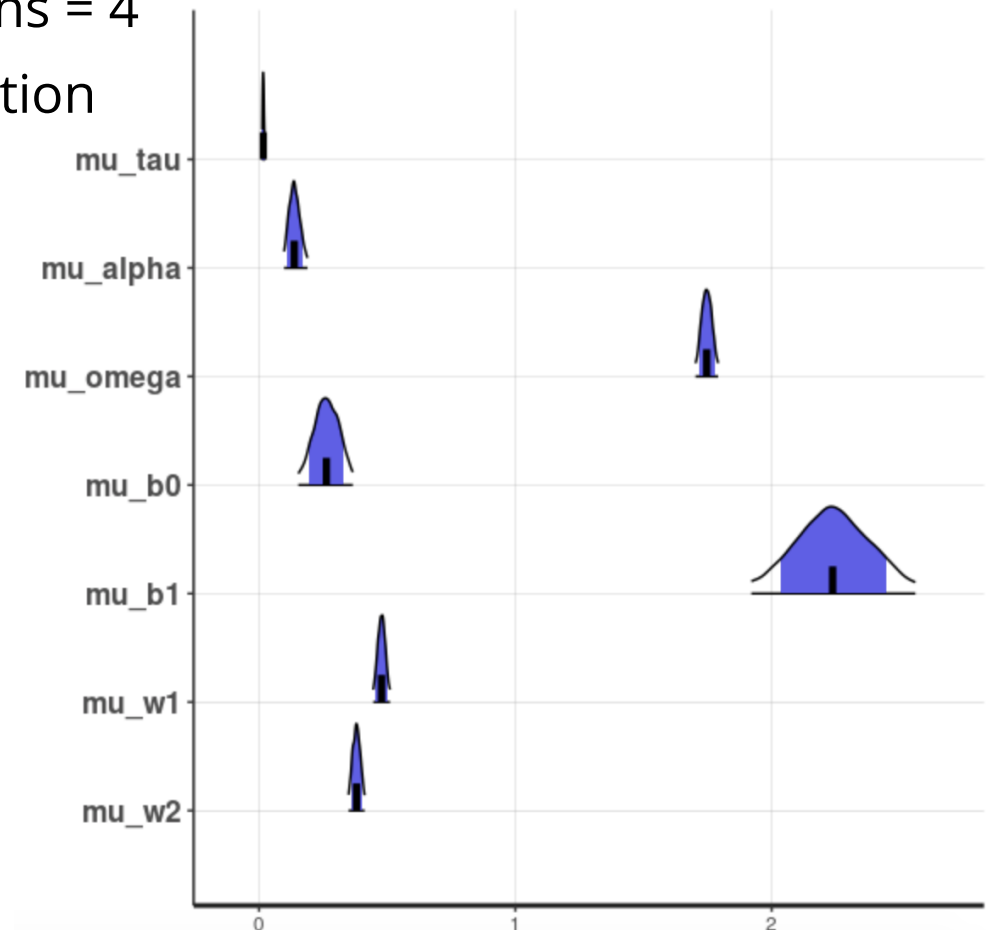# All Subjects (129)

Computational Modeling

Jihyun Hur

Replication

- Number of subjects = **129** (85 suicidal, 44 non-suicidal)
- Step size = 0.04, iters = 2000, warmup = 1000, chains = 4
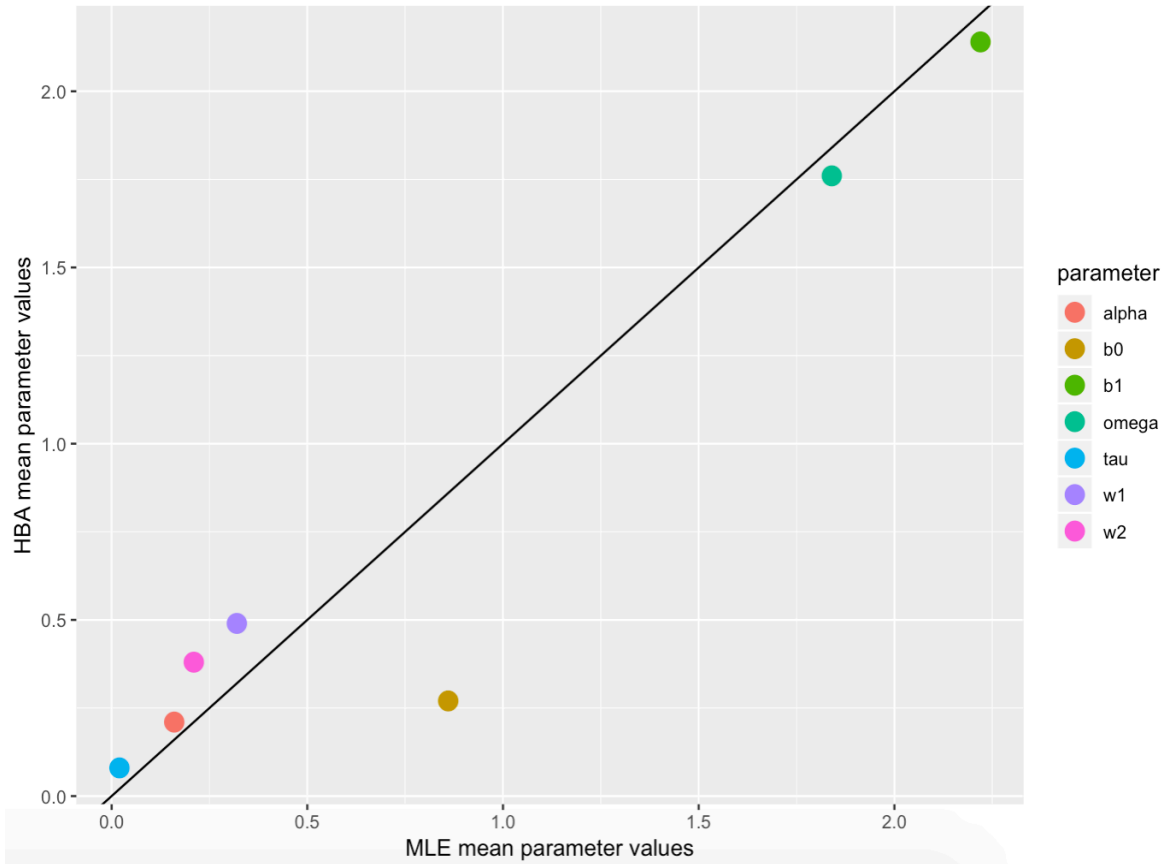- Hierarchical Bayesian, two starting points by condition

Traceplots

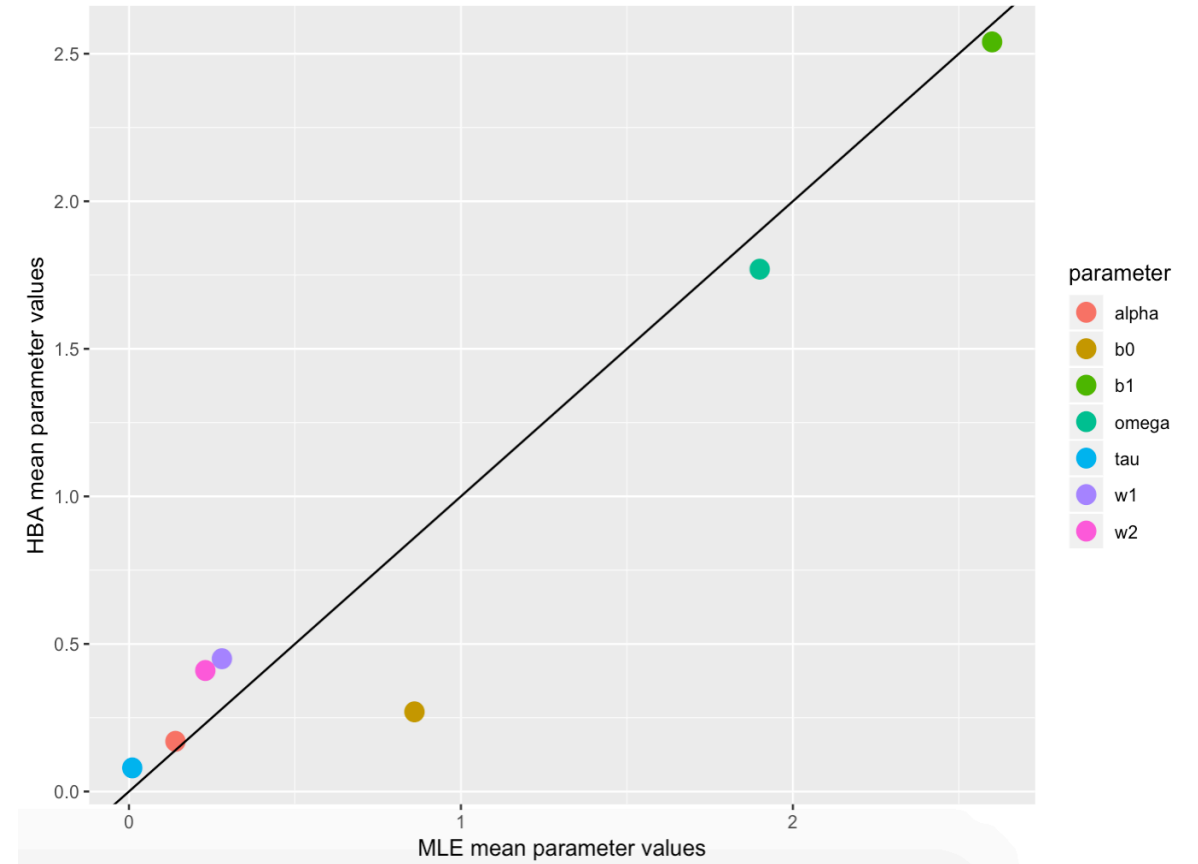Group Parameter Posterior Distributions

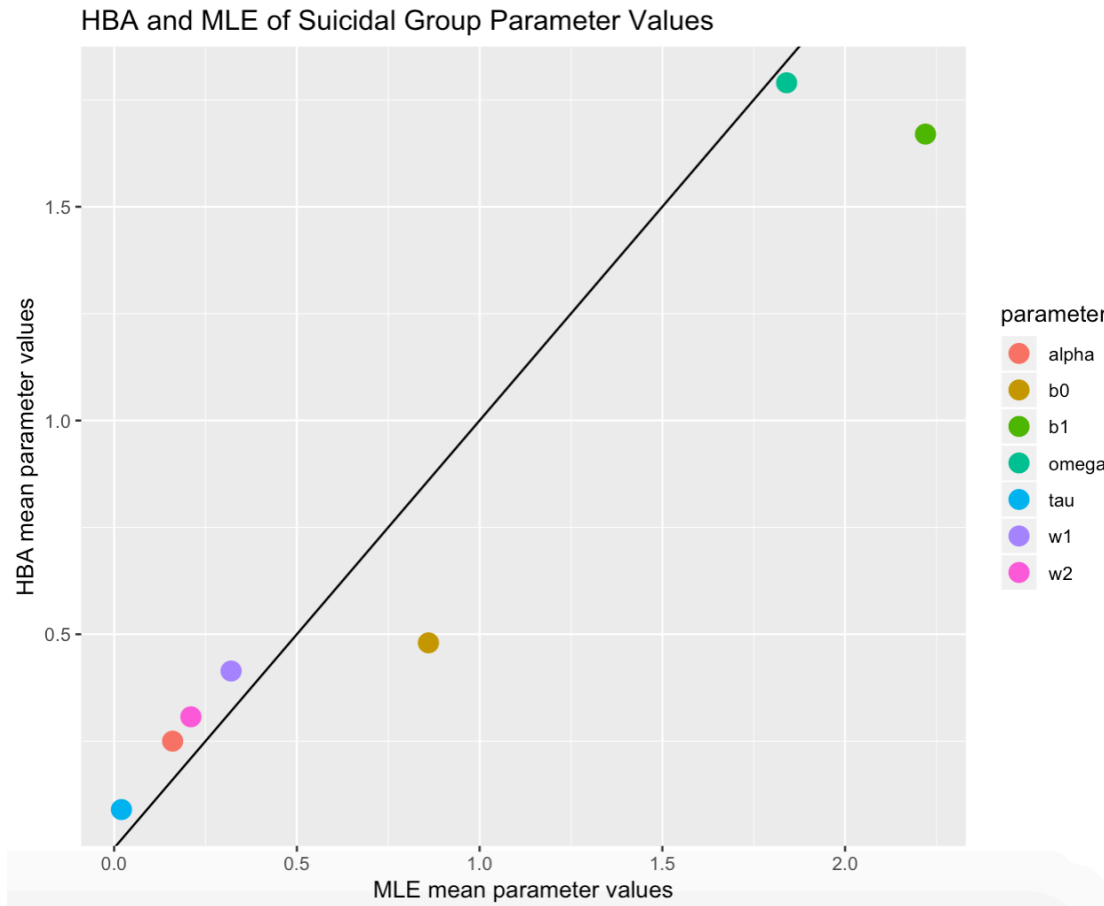# Correlation with MLE Estimates (129 subjects)

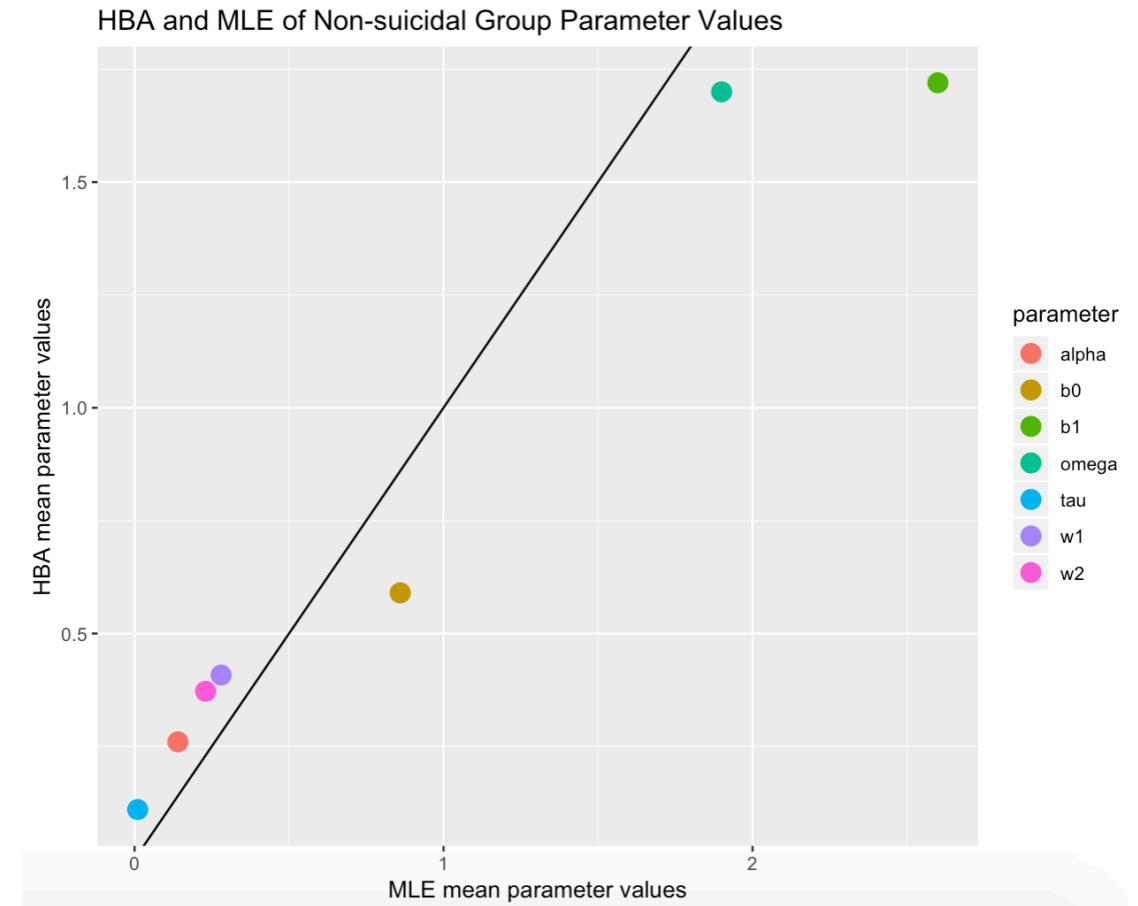HBA: **85** suicidal participants

HBA: **44** non-suicidal participants
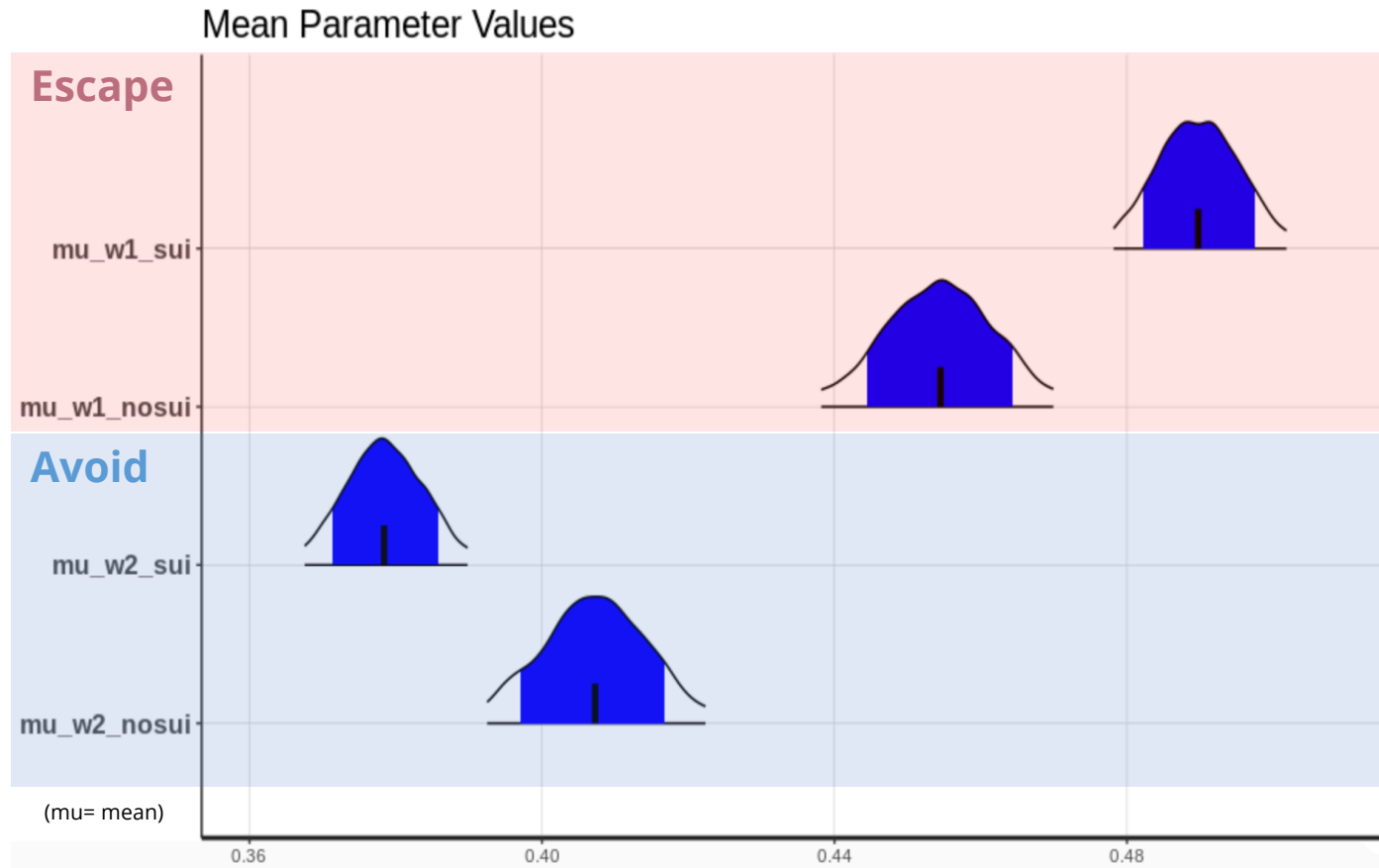
Correlation with MLE Estimates (30 subjects)

HBA: **20** suicidal participants

HBA: **10** non-suicidal participants

Results (129 subjects)

Mean Parameter Values

Escape
mu_w1_sui
mu_w1_nosui

Avoid
mu_w2_sui
mu_w2_nosui

(mu= mean)

0.36   0.40   0.44   0.48

Bias parameter estimates

Escape bias parameter (w_{escape})
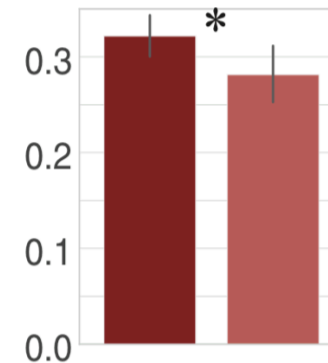
Avoid bias parameter (w_{avoid})

Escape	Avoid	
		Suicidal
		Non-suicidal

Suicidal Non-suicidal

Suicidal Non-suicidal
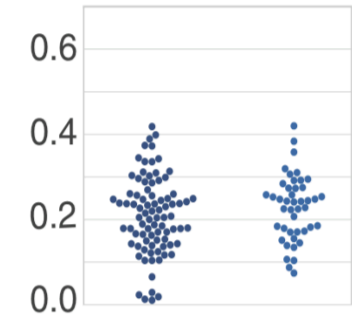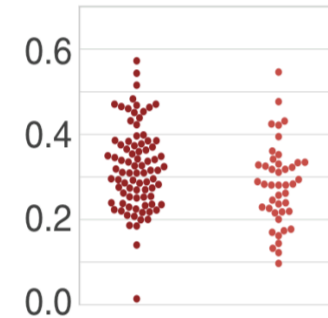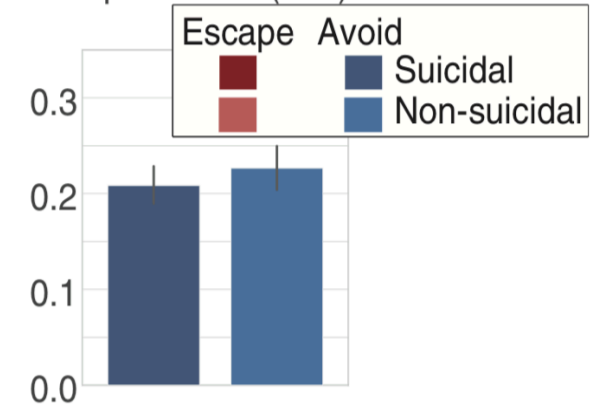
Millner et al. (2019)

Results (129 subjects)

	mean	se_mean	sd	X2.5.	X25.	X50.	X75.	X97.5.
mu_b0_sui	0.2650453	0.0003978	0.0214243	0.2235768	0.2503732	0.2652380	0.2797317	0.3066929
mu_b0_nosui	0.2703895	0.0004979	0.0290312	0.2122404	0.2504239	0.2700602	0.2897818	0.3281059
mu_b1_sui	2.1406806	0.0060055	0.1126192	1.9385625	2.0604430	2.1380372	2.2123985	2.3791164
mu_b1_nosui	2.5386101	0.0054798	0.1417609	2.2859626	2.4402961	2.5301018	2.6315014	2.8358303
mu_w1_sui	0.4897829	0.0001170	0.0060469	0.4781764	0.4856925	0.4897396	0.4938607	0.5018095
mu_w1_nosui	0.4543723	0.0001425	0.0079197	0.4381950	0.4490970	0.4544949	0.4596107	0.4699313
mu_w2_sui	0.3785119	0.0001068	0.0056975	0.3675516	0.3747624	0.3783978	0.3822700	0.3898126
mu_w2_nosui	0.4072023	0.0001349	0.0076121	0.3925090	0.4022237	0.4072666	0.4123985	0.4223509