

**Assessing Automatic Approach-Avoidance Behavior
in an Immersive Virtual Environment**

Supplemental Materials

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Table S.1 Summary of Multiverse Analyses of the AAVR & VAAST task (as pre-registered)

Trim criterion	AAVR	VAAST
Un-trimmed		
raw RT	$F(1,73)=5.135, p=.026, \eta_p^2=.066$	$F(1,74)=12.173, p=.001, \eta_p^2=.141$
Ln RT	$F(1,73)=4.290, p=.042, \eta_p^2=.055$	$F(1,74)=23.877, p<.000, \eta_p^2=.244$
Inv RT	$F(1,73)=3.210, p=.077, \eta_p^2=.042$	$F(1,74)=25.937, p<.000, \eta_p^2=.260$
RT < 1000ms		
raw RT	$*F(1,58)=3.295, p=.075, \eta_p^2=.054$	$F(1,74)=19.845, p<.000, \eta_p^2=.211$
Ln(RT)	$*F(1,58)=2.776, p=.101, \eta_p^2=.046$	$F(1,74)=25.996, p<.000, \eta_p^2=.260$
Inv(RT)	$*F(1,58)=1.915, p=.172, \eta_p^2=.032$	$F(1,74)=26.250, p<.000, \eta_p^2=.262$
RT < 1500ms		
Raw RT	$F(1,73)=6.941, p=.010, \eta_p^2=.087$	$F(1,74)=12.444, p=.001, \eta_p^2=.144$
Ln(RT)	$F(1,73)=5.377, p=.023, \eta_p^2=.069$	$F(1,74)=24.030, p<.000, \eta_p^2=.245$
Inv(RT)	$F(1,73)=3.841, p=.054, \eta_p^2=.050$	$F(1,74)=25.639, p<.000, \eta_p^2=.257$
RT < 2000ms		
Raw RT	$F(1,73)=5.227, p=.025, \eta_p^2=.067$	$F(1,74)=12.321, p=.001, \eta_p^2=.143$
Ln(RT)	$F(1,73)=4.327, p=.041, \eta_p^2=.056$	$F(1,74)=23.642, p<.000, \eta_p^2=.242$
Inv(RT)	$F(1,73)=3.225, p=.077, \eta_p^2=.042$	$F(1,74)=25.709, p<.000, \eta_p^2=.258$
RT < M+1.5*SD		
Raw RT	$F(1,73)=3.235, p=.076, \eta_p^2=.042$	$F(1,74)= 8.836, p=.004, \eta_p^2=.107$
Ln(RT)	$F(1,73)=2.497, p=.118, \eta_p^2=.033$	$F(1,74)=20.096, p<.000, \eta_p^2=.214$
Inv(RT)	$F(1,73)=1.720, p=.194, \eta_p^2=.023$	$F(1,74)=21.899, p<.000, \eta_p^2=.228$

Note. The table reports the 2 (Stimulus: spider vs. butterfly) x 2 (Movement: approach vs. avoid) interaction of response times after apply different trimming and transformation criteria.

RT = response time, ln = log-transformed, inv = inverse-transformed (1/x). Given that there were very few trials with fast responses that fall under the pre-registered trimming criteria (RT < 100ms, < 200ms, < 300ms), results were identical to the un-trimmed results and are not further reported.

*Because the average RT in the AAVR was $M = 1043\text{ms}$ ($SD = 85$), the pre-registered trimming criterion of RT < 1000ms eliminates a high number of potentially valid responses of this task and is thus not recommendable as trim criterion in the future.

Table S.2 Summary of the Multiverse Analyses for each Block of the AAVR (à 16 trials)

Trim criterion	1st block	2nd block	3rd block	4th block
Un-trimmed				
raw RT	$F(1,73)=13.588, p<.001, \eta_p^2=.157$	$F(1,72)=2.159, p=.146, \eta_p^2=.029$	$F(1,72)=0.480, p=.491, \eta_p^2=.007$	$F(1,72)=0.362, p=.549, \eta_p^2=.005$
Ln RT	$F(1,73)=12.406, p=.001, \eta_p^2=.145$	$F(1,72)=1.900, p=.172, \eta_p^2=.026$	$F(1,72)=0.223, p=.638, \eta_p^2=.003$	$F(1,72)=0.175, p=.677, \eta_p^2=.002$
Inv RT	$F(1,73)=9.864, p=.002, \eta_p^2=.119$	$F(1,72)=1.577, p=.213, \eta_p^2=.021$	$F(1,72)=0.015, p=.902, \eta_p^2=.000$	$F(1,72)=0.010, p=.920, \eta_p^2=.000$
RT < 1000ms*				
raw RT	$F(1,46)=0.109, p=.742, \eta_p^2=.002$	$F(1,48)=0.076, p=.784, \eta_p^2=.002$	$F(1,42)=1.600, p=.213, \eta_p^2=.037$	$F(1,39)=4.751, p=.035, \eta_p^2=.109$
Ln(RT)	$F(1,46)=0.235, p=.630, \eta_p^2=.005$	$F(1,48)=0.048, p=.827, \eta_p^2=.001$	$F(1,42)=1.876, p=.178, \eta_p^2=.043$	$F(1,39)=4.364, p=.043, \eta_p^2=.101$
Inv(RT)	$F(1,46)=0.420, p=.520, \eta_p^2=.009$	$F(1,48)=0.003, p=.956, \eta_p^2=.000$	$F(1,42)=2.428, p=.127, \eta_p^2=.055$	$F(1,39)=3.487, p=.069, \eta_p^2=.082$
RT < 1500ms				
Raw RT	$F(1,73)=17.087, p<.001, \eta_p^2=.190$	$F(1,72)=2.606, p=.111, \eta_p^2=.035$	$F(1,72)=0.947, p=.334, \eta_p^2=.013$	$F(1,72)=0.693, p=.408, \eta_p^2=.010$
Ln(RT)	$F(1,73)=13.987, p<.001, \eta_p^2=.161$	$F(1,72)=2.170, p=.145, \eta_p^2=.029$	$F(1,72)=0.449, p=.505, \eta_p^2=.006$	$F(1,72)=0.348, p=.557, \eta_p^2=.005$
Inv(RT)	$F(1,73)=10.428, p=.002, \eta_p^2=.125$	$F(1,72)=1.755, p=.189, \eta_p^2=.024$	$F(1,72)=0.068, p=.795, \eta_p^2=.001$	$F(1,72)=0.053, p=.818, \eta_p^2=.001$
RT < 2000ms				
Raw RT	$F(1,73)=15.371, p<.001, \eta_p^2=.174$	$F(1,72)=2.120, p=.150, \eta_p^2=.029$	$F(1,72)=0.629, p=.430, \eta_p^2=.009$	$F(1,72)=0.251, p=.618, \eta_p^2=.003$
Ln(RT)	$F(1,73)=13.250, p=.001, \eta_p^2=.154$	$F(1,72)=1.854, p=.178, \eta_p^2=.025$	$F(1,72)=0.291, p=.591, \eta_p^2=.004$	$F(1,72)=0.114, p=.737, \eta_p^2=.002$
Inv(RT)	$F(1,73)=10.215, p=.002, \eta_p^2=.123$	$F(1,72)=1.544, p=.218, \eta_p^2=.021$	$F(1,72)=0.029, p=.865, \eta_p^2=.000$	$F(1,72)=0.001, p=.969, \eta_p^2=.000$
RT < M+1.5*SD				
Raw RT	$F(1,73)=9.816, p=.002, \eta_p^2=.119$	$F(1,72)=2.002, p=.161, \eta_p^2=.027$	$F(1,72)=0.545, p=.463, \eta_p^2=.008$	$F(1,72)=0.041, p=.840, \eta_p^2=.001$
Ln(RT)	$F(1,73)=7.964, p=.006, \eta_p^2=.098$	$F(1,72)=1.702, p=.196, \eta_p^2=.023$	$F(1,72)=0.209, p=.649, \eta_p^2=.003$	$F(1,72)=0.002, p=.962, \eta_p^2=.000$
Inv(RT)	$F(1,73)=5.903, p=.018, \eta_p^2=.075$	$F(1,72)=1.396, p=.241, \eta_p^2=.019$	$F(1,72)=0.005, p=.941, \eta_p^2=.000$	$F(1,72)=0.046, p=.830, \eta_p^2=.001$

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