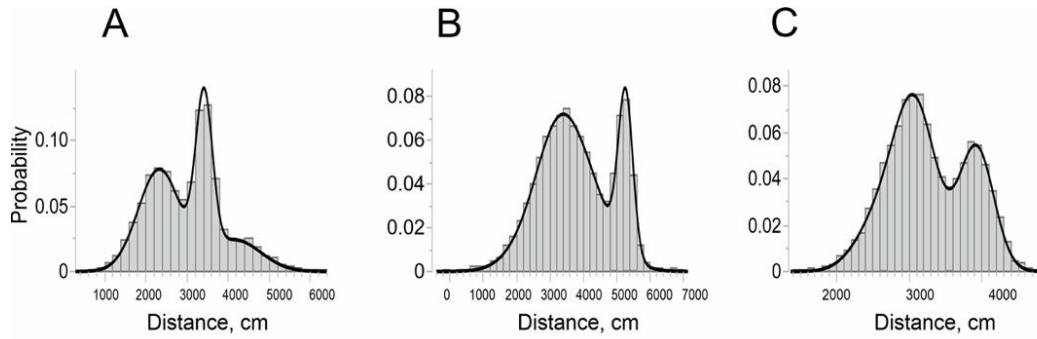


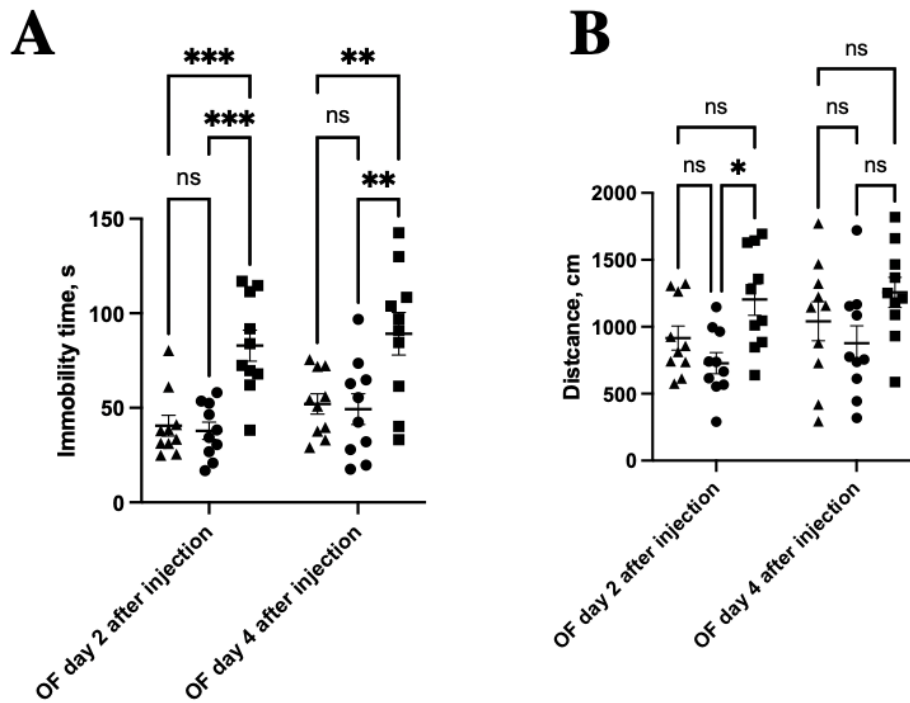
Supplementary Table S1: Factor loadings derived from varimax orthogonal rotation. Bold fonts denote factors with maximal loadings on variables. Absolute value of 0.7 denotes significant correlation between the factors and variables.

Var/Fact	Factor 1	Factor 2	Factor 3	Factor 4
n-vel	-0.31258	-0.58612	0.129564	0.043169
h-vel	0.08962	0.068127	0.068364	0.972943
s-vel	-0.24837	-0.25202	0.835511	0.284956
n-center	-0.89255	-0.19604	0.03754	0.153862
h-center	-0.94213	0.150922	0.15712	-0.05103
s-center	0.067447	-0.90292	-0.28188	-0.07561
n-corner	0.807638	0.336838	0.153048	0.394285
h-corner	0.603094	0.221748	-0.50304	0.351449
s-corner	0.03073	0.415601	0.754129	-0.08403
n-margin	0.737266	0.569087	-0.14574	0.107134
h-margin	0.942126	-0.15092	-0.15712	0.05103
s-margin	-0.04096	0.948798	-0.04814	0.097211

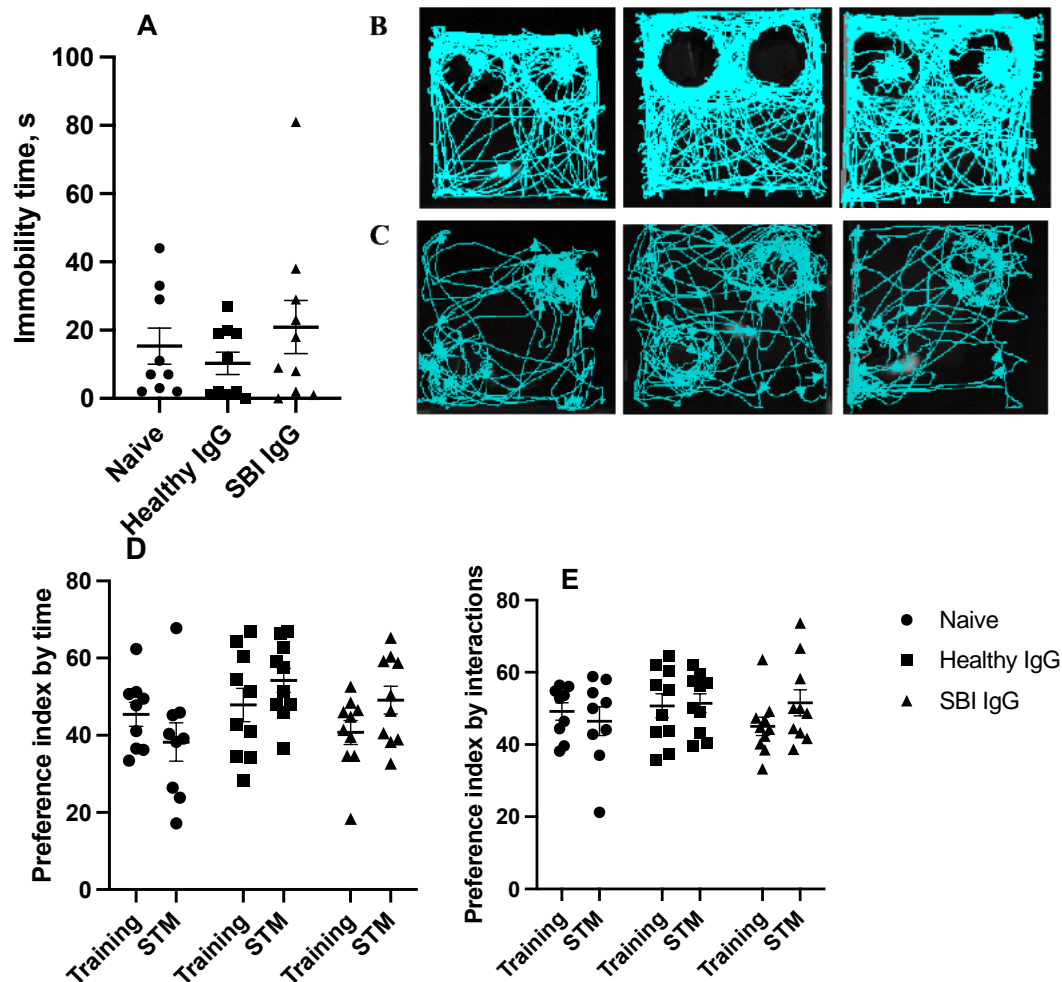
Supplementary figures:



Supplementary Figure S1: Bootstrapped data derived from simulation based on distribution of traveled distances. (A)—Naïve, (B)—healthy IgG, (C)—SBI IgG injected. Simulation was conducted for 10,000 points in each group. Obtained data has been sampled and the histogram was fitted using 3-mixed component gaussian function (solid black line depicting fit).



Supplementary Figure S2: Immobility time and moved distance analysis in open field test. (A). Immobility time was analyzed as immobile state cumulative time, counted as time where velocity of animal was under 20% of the threshold of average velocity of a mouse. (B). Distance moved by the animals in the central region of the arena. * $-p < 0.05$; *** $-p < 0.001$. Solid triangles, circles and squares depict control IgG, naïve and SBI-IgG injected mice, respectively.



Supplementary Figure S3: Forced swim test and short-term version of novel object location paradigm. (A). Forced swim test conducted on the experimental groups. Immobility time measured during the last 2 minutes of the paradigm (6 min). (B)–(E). Novel object location test. (B) and (C). Representative trajectories of mice from each group per training (B) and learning (C) phases. Location index as defined in Methods derived from time spent near (D) and interaction with (E) the novel location of the object. Data presentation as in Figure 4.