

OBIWAN BEHAVIORAL ANALYSIS

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Setup

This file was automatically created via `repro::automate()`

Demographics

Summary statistics:

Table 1: AGE

intervention	mean	sd	min	max
Placebo	40.27	13.74	18	62
Liraglutide	38.61	11.72	22	64

Table 2: BMI

intervention	mean	sd	min	max
Placebo	35.08	2.96	30.5	41.0
Liraglutide	35.74	2.93	31.8	43.5

Table 3: GENDER

gender	intervention	n
Men	Placebo	10
Men	Liraglutide	7
Women	Placebo	16
Women	Liraglutide	16

Table 4: Group

intervention	n
Placebo	26
Liraglutide	23

Description

Weight Loss

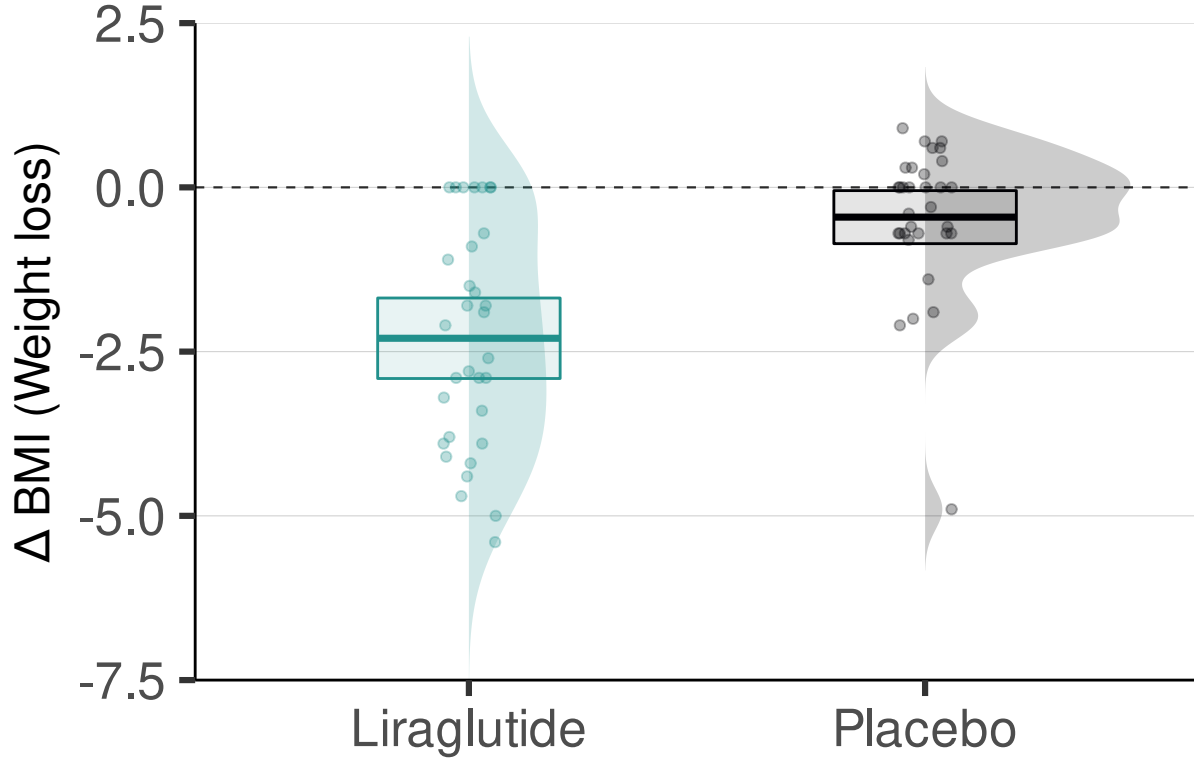
Effect	df	MSE	F	p.value
intervention	1, 23	0.95	29.24 ***	<.001
gender	1, 23	0.95	0.69	.415
age	1, 23	0.95	1.24	.278
BMI_t1	1, 23	0.95	1.17	.291
OEA	1, 23	0.95	3.13 +	.090
PEA	1, 23	0.95	5.39 *	.030
X2.AG	1, 23	0.95	0.03	.864
AEA	1, 23	0.95	0.06	.809
Leptin	1, 23	0.95	0.00	.964
Resistin	1, 23	0.95	0.75	.395
adiponectin	1, 23	0.95	0.67	.423
reelin	1, 23	0.95	0.36	.552
glucagon	1, 23	0.95	0.32	.576
Ghrelin	1, 23	0.95	0.26	.616
obestatin	1, 23	0.95	1.88	.184
GLP1	1, 23	0.95	0.01	.931
insulin	1, 23	0.95	0.09	.771
Fast_glu	1, 23	0.95	0.93	.346

```
## [1] "PES: intervention: Overall lower weight loss for Placebo"
```

```
## Partial eta-squared 90 % CI lower limit 90 % CI upper limit
```

```
##          0.5394568          0.3615859          0.6477978
```

Weight Loss X Intervention



Pavlovian Conditioning Task (Analysis: Latency)

Latency = time to detect the target (ms) & condition = CS+ or CS-

Table 5: Latency (ms)

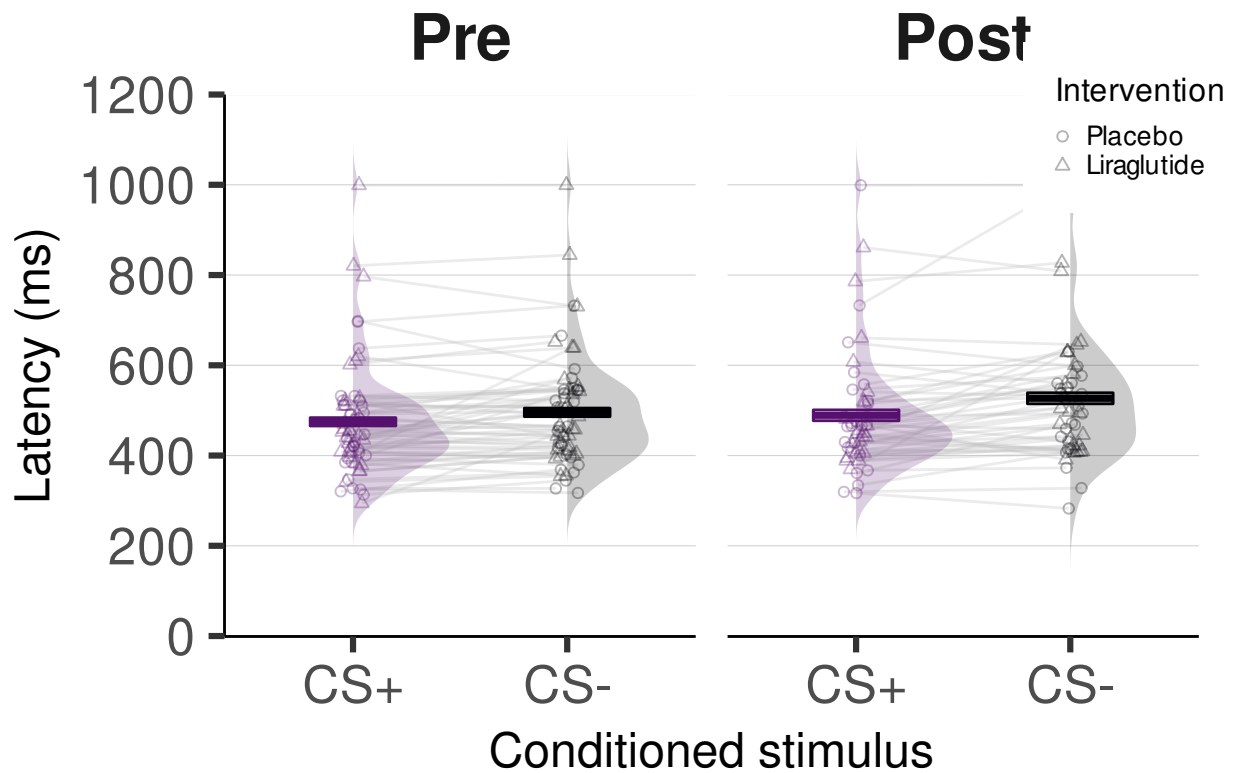
Predictors	Estimates	std. Error	CI
spline [1]	0.55	0.22	0.12 – 0.97
intervention [1]	0.15	0.79	-1.40 – 1.69
session [1]	-0.47	0.34	-1.14 – 0.21
age	-0.44	0.76	-1.93 – 1.05
gender [1]	0.74	0.79	-0.82 – 2.30
BMI_t1	-0.95	0.77	-2.45 – 0.55
thirsty	1.27	0.58	0.13 – 2.40
hungry	-0.78	0.63	-2.02 – 0.45
spline [1] * intervention[1]	0.00	0.17	-0.34 – 0.34
spline [1] * session [1]	-0.19	0.17	-0.52 – 0.13
intervention [1] *session [1]	-0.31	0.35	-0.99 – 0.37
(spline [1] *intervention [1]) *session [1]	0.14	0.17	-0.19 – 0.46

ICC	0.82
N id	63
N trial	24
Observations	2640
Marginal R2 / Conditional R2	0.056 / 0.827

Effect	df	Chisq	p.value	BF10
condition	1	17.19 ***	<.001	3.496
intervention	1	1.65	.199	0.410
session	1	0.87	.351	0.847
age	1	6.54 *	.011	1.171
gender	1	0.33	.566	0.501
BMI_t1	1	1.31	.253	0.479
thirsty	1	5.18 *	.023	1.094
hungry	1	3.06 +	.080	2.380
condition:intervention	1	0.22	.637	0.166
condition:session	1	2.12	.145	0.282
intervention:session	1	1.90	.168	3.467
condition:intervention:session	1	0.62	.432	0.217

[1] "Condition: Overall lower latency for CS+"

Latency by condition

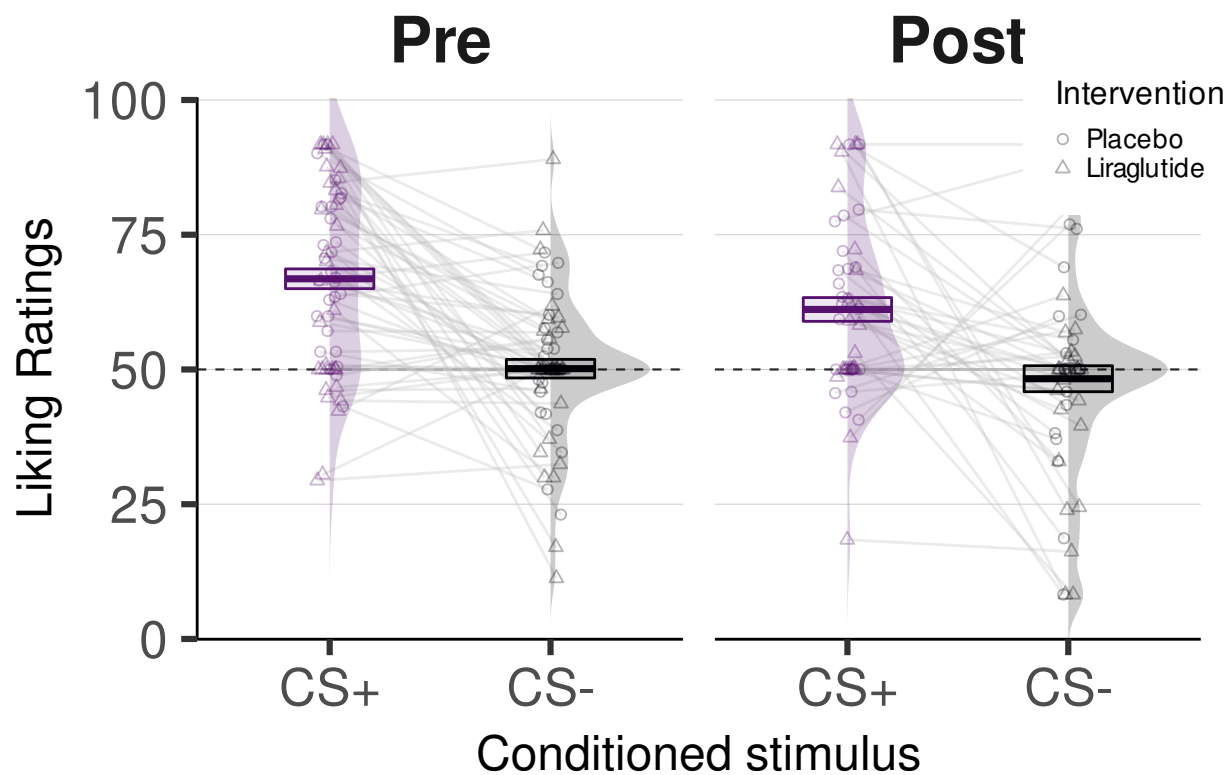


Analysis: Pleasantness Ratings (Pavlovian Cue)

Ratings = how pleasant is the clue (0-100, no repetitions) & condition = CS+ or CS-

	Effect	df	MSE	F	p.value	PES
10	condition	1, 42	472.61	15.30 ***	<.001	0.267
1	intervention	1, 42	302.52	2.59	.115	0.058
5	session	1, 42	166.86	4.14 *	.048	0.090
2	age	1, 42	302.52	0.00	.986	0.000
3	gender	1, 42	302.52	1.29	.263	0.030
4	BMI_t1	1, 42	302.52	0.00	.951	0.000
5.1	session	1, 42	166.86	4.14 *	.048	0.090
11	intervention:condition	1, 42	472.61	0.08	.783	0.002
15	session:condition	1, 42	112.88	0.76	.388	0.018
6	intervention:session	1, 42	166.86	0.11	.742	0.003
16	intervention:session:condition	1, 42	112.88	2.03	.161	0.046

Pleasantness Ratings by condition (Pavlovian Cue)



Instrumental Conditioning Task (Analysis)

grips = number of times participant exceeded the force threshold to acquire the reward (Milkshake) spline = first 5 trials (0), last 20 trials (1)

Table 6: Grips

Predictors	Estimates	std. Error	CI
spline [1]	0.55	0.22	0.12 – 0.97
intervention [1]	0.15	0.79	-1.40 – 1.69
session [1]	-0.47	0.34	-1.14 – 0.21
age	-0.44	0.76	-1.93 – 1.05
gender [1]	0.74	0.79	-0.82 – 2.30
BMI_t1	-0.95	0.77	-2.45 – 0.55
thirsty	1.27	0.58	0.13 – 2.40
hungry	-0.78	0.63	-2.02 – 0.45
spline [1] * intervention[1]	0.00	0.17	-0.34 – 0.34
spline [1] * session [1]	-0.19	0.17	-0.52 – 0.13
intervention [1] *session [1]	-0.31	0.35	-0.99 – 0.37
(spline [1] *intervention [1]) *session [1]	0.14	0.17	-0.19 – 0.46

ICC	0.82
N id	63
N trial	24
Observations	2640
Marginal R2 / Conditional R2	0.056 / 0.827

Effect	df	Chisq	p.value	BF10
spline	1	6.10 *	.014	1.516
intervention	1	0.03	.855	0.335
session	1	1.81	.179	1.662
age	1	0.31	.576	0.589
gender	1	0.84	.360	0.425
BMI_t1	1	1.47	.225	0.561
thirsty	1	4.42 *	.035	19.501
hungry	1	1.37	.241	2.668
spline:intervention	1	0.00	.985	0.190
spline:session	1	1.37	.243	0.238
intervention:session	1	0.78	.377	0.280
spline:intervention:session	1	0.65	.419	0.270