

# EEG Mindfulness Index Report

=== Mindfulness Index (MI) Analysis Summary ===

File: UnicornRecorder\_12\_05\_2025\_12\_41\_310

Analysis Date: 2025-05-22 10:59:59

EDA file used: data/eda\_data\opensignals\_0007808C0700\_2025-04-30\_16-32-15\_V.txt

- Window Size: 3 seconds
- Window Overlap: 50.0%
- Frequency Bands: Theta (4, 7.99), Alpha (8, 12.99), Beta (13, 30)
- MI Weights: {'theta\_fz': 0.25, 'alpha\_po': 0.25, 'faa': 0.2, 'beta\_frontal': -0.15, 'eda\_norm': -0.4}
- State Thresholds: Focused  $\geq 0.5$ , Neutral  $\geq 0.37$ , Unfocused  $< 0.37$

File Information:

- Total Duration: 205.33 seconds (3.42 minutes)
- Analyzed Duration: 204.00 seconds
- EDA Data Available: Yes

Results Summary:

- Total Windows Analyzed: 135
- Average MI Score: 0.4852
- MI Score Range: 0.2500 to 0.9900

Behavioral States:

- Focused: 44 windows (32.6%)
- Neutral: 56 windows (41.5%)
- Unfocused: 35 windows (25.9%)

Output Files:

- JSON Data:  
results/mindfulness\_analysis\_20250522\_105937\UnicornRecorder\_12\_05\_2025\_12\_41\_310\_2025

0522\_105958\_mindfulness\_results.json

- CSV Data:  
results/mindfulness\_analysis\_20250522\_105937\UnicornRecorder\_12\_05\_2025\_12\_41\_310\_2025  
0522\_105958\_mindfulness\_data.csv

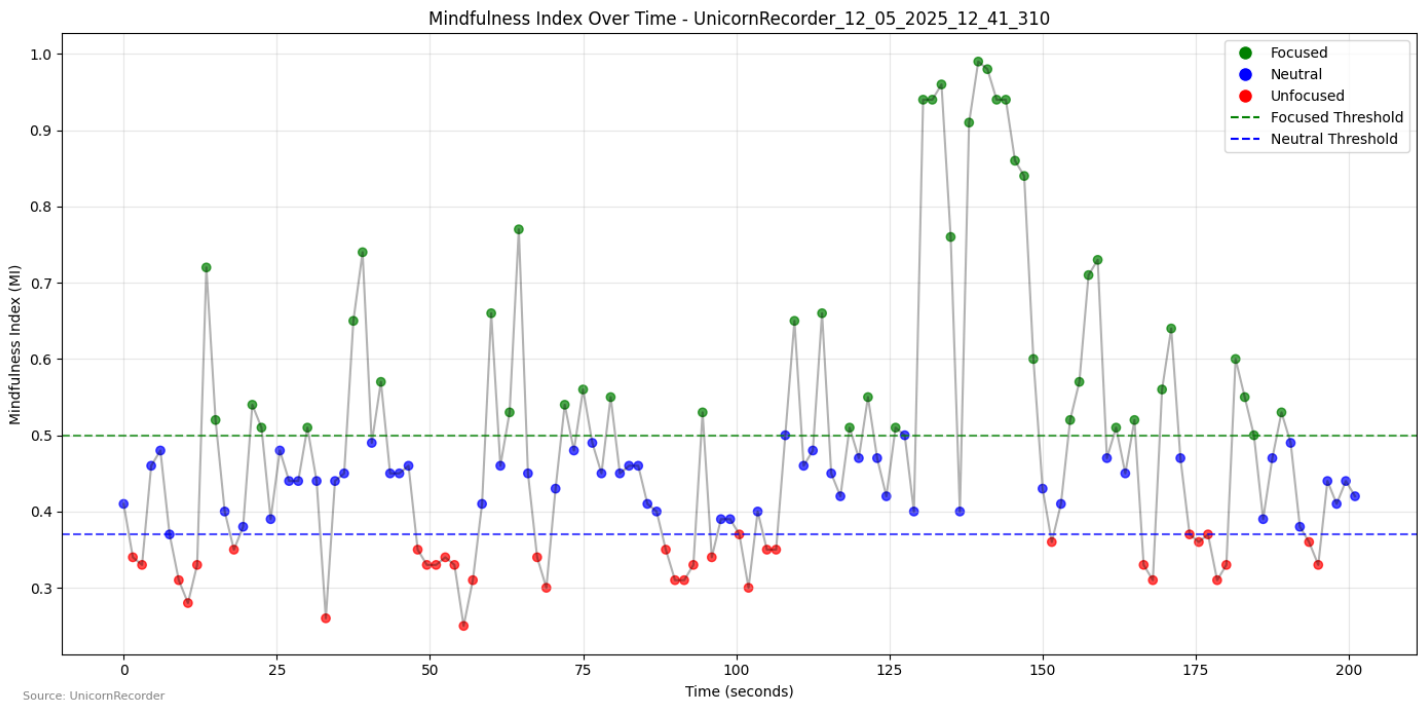
- Simplified MI Data:  
results/mindfulness\_analysis\_20250522\_105937\UnicornRecorder\_12\_05\_2025\_12\_41\_310\_2025  
0522\_105958\_mi\_only.csv

- MI Plot:  
results/mindfulness\_analysis\_20250522\_105937\UnicornRecorder\_12\_05\_2025\_12\_41\_310\_2025  
0522\_105958\_mi\_timeseries.png

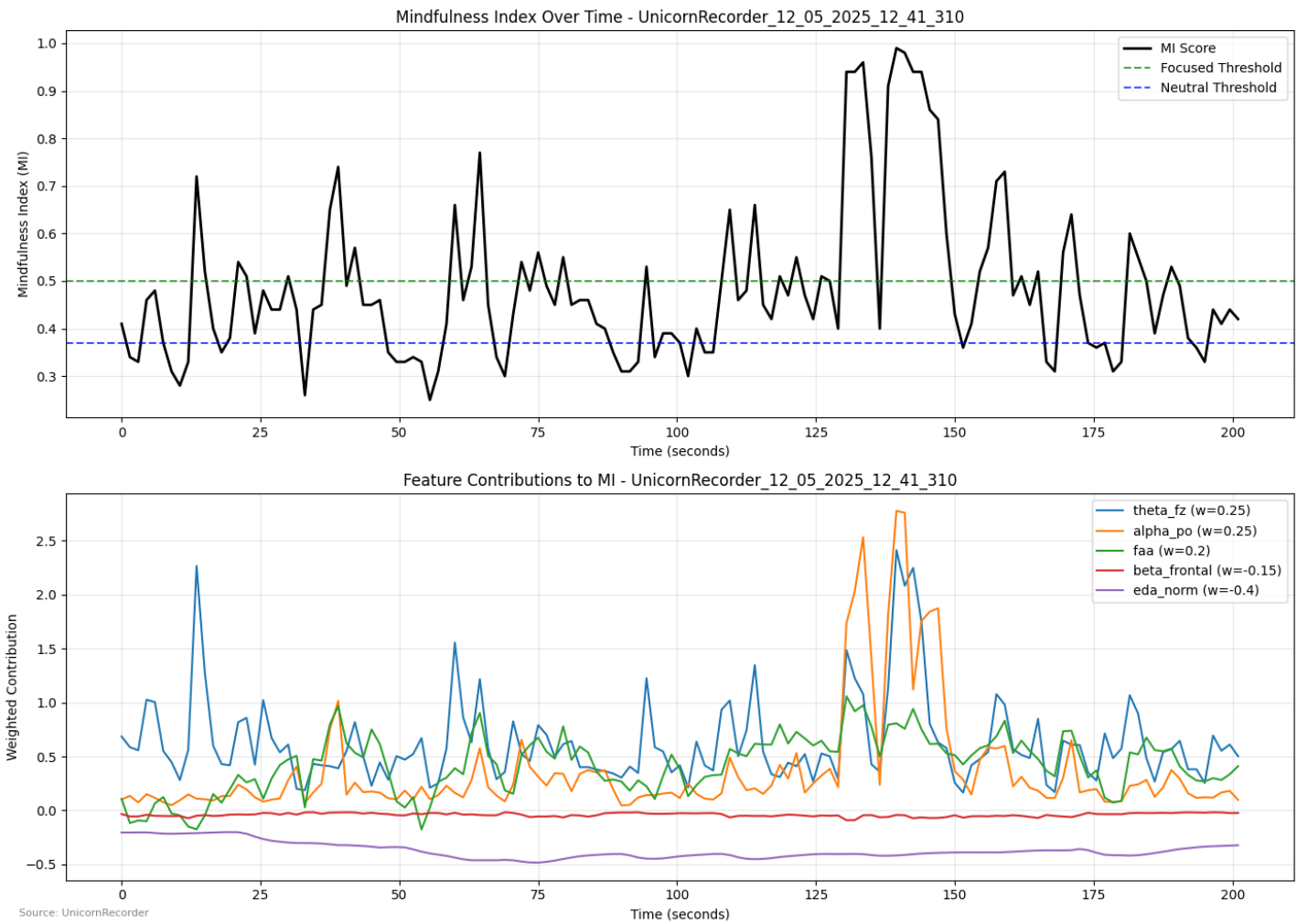
- Feature Plot:  
results/mindfulness\_analysis\_20250522\_105937\UnicornRecorder\_12\_05\_2025\_12\_41\_310\_2025  
0522\_105958\_feature\_contributions.png

- State Plot:  
results/mindfulness\_analysis\_20250522\_105937\UnicornRecorder\_12\_05\_2025\_12\_41\_310\_2025  
0522\_105958\_behavioral\_states.png

# UnicornRecorder\_12\_05\_2025\_12\_41\_310\_20250522\_105958\_mi\_timeseries.png

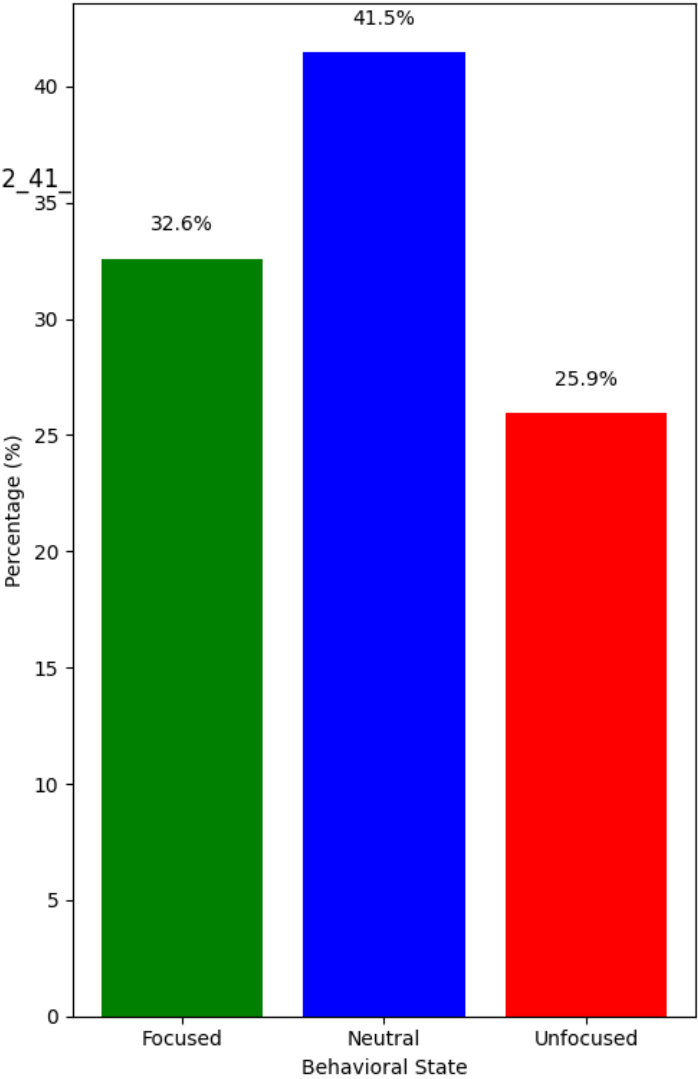
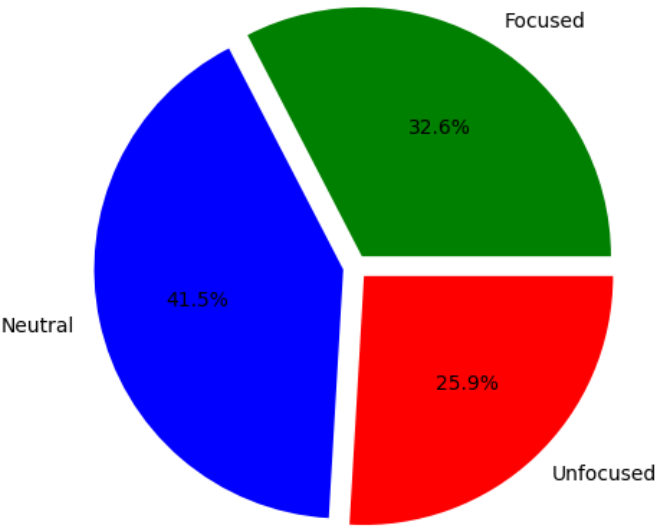


UnicornRecorder\_12\_05\_2025\_12\_41\_310\_20250522\_105958\_feature\_contributions.png



Percentage of Time in Each State - UnicornRecorder\_12\_05\_2025\_12\_41\_310\_20250522\_105958\_behavioral\_states.png

Distribution of Behavioral States - UnicornRecorder\_12\_05\_2025\_12\_41\_310\_20250522\_105958\_behavioral\_states.png



Source: UnicornRecorder

## UnicornRecorder\_12\_05\_2025\_12\_41\_310\_20250522\_105958\_mindfulness\_data.csv

timestamp	mi_score	behavioral_state	theta_fz	alpha_po	faa	beta_frontal	eda_norm
0.0	0.41	Neutral	2.74	0.4	0.53	0.23	0.51
1.5	0.34	Unfocused	2.35	0.54	-0.59	0.38	0.51
3.0	0.33	Unfocused	2.23	0.3	-0.47	0.38	0.51
4.5	0.46	Neutral	4.11	0.6	-0.5	0.28	0.51
6.0	0.48	Neutral	4.02	0.47	0.33	0.34	0.52
7.5	0.37	Neutral	2.2	0.3	0.62	0.34	0.54
9.0	0.31	Unfocused	1.79	0.19	-0.14	0.36	0.54
10.5	0.28	Unfocused	1.12	0.38	-0.24	0.34	0.54
12.0	0.33	Unfocused	2.24	0.59	-0.75	0.49	0.53
13.5	0.72	Focused	9.07	0.43	-0.88	0.33	0.53
15.0	0.52	Focused	5.09	0.41	-0.23	0.3	0.52
16.5	0.4	Neutral	2.39	0.37	0.76	0.35	0.51
18.0	0.35	Unfocused	1.72	0.53	0.35	0.32	0.51
19.5	0.38	Neutral	1.67	0.53	0.99	0.26	0.5
21.0	0.54	Focused	3.27	0.95	1.65	0.25	0.51
22.5	0.51	Focused	3.43	0.78	1.3	0.26	0.54
24.0	0.39	Neutral	1.7	0.48	1.45	0.25	0.61
25.5	0.48	Neutral	4.09	0.32	0.54	0.16	0.66
27.0	0.44	Neutral	2.69	0.4	1.47	0.18	0.71
28.5	0.44	Neutral	2.15	0.45	2.1	0.26	0.73
30.0	0.51	Focused	2.44	1.12	2.37	0.16	0.75
31.5	0.44	Neutral	0.8	1.63	2.53	0.26	0.76
33.0	0.26	Unfocused	0.75	0.29	0.14	0.13	0.76
34.5	0.44	Neutral	1.73	0.66	2.37	0.12	0.76
36.0	0.45	Neutral	1.67	0.99	2.31	0.21	0.77
37.5	0.65	Focused	1.64	3.0	3.98	0.14	0.79
39.0	0.74	Focused	1.56	4.06	4.83	0.13	0.81
40.5	0.49	Neutral	2.21	0.58	3.1	0.12	0.81
42.0	0.57	Focused	3.27	1.03	2.68	0.13	0.82
43.5	0.45	Neutral	2.0	0.68	2.46	0.2	0.83
45.0	0.45	Neutral	0.91	0.7	3.75	0.15	0.84

46.5	0.46	Neutral	1.78	0.66	3.07	0.21	0.86
48.0	0.35	Unfocused	1.14	0.45	1.78	0.23	0.85
49.5	0.33	Unfocused	2.01	0.41	0.42	0.3	0.85
51.0	0.33	Unfocused	1.88	0.74	0.13	0.31	0.86
52.5	0.34	Unfocused	2.09	0.4	0.61	0.19	0.9
54.0	0.33	Unfocused	2.68	0.88	-0.88	0.23	0.96
55.5	0.25	Unfocused	0.84	0.41	0.13	0.16	1.0
57.0	0.31	Unfocused	1.0	0.56	1.32	0.16	1.03
58.5	0.41	Neutral	2.3	0.92	1.52	0.25	1.06
60.0	0.66	Focused	6.22	0.65	1.95	0.15	1.1
61.5	0.46	Neutral	3.44	0.48	1.68	0.27	1.13
63.0	0.53	Focused	2.53	1.12	3.58	0.25	1.16
64.5	0.77	Focused	4.87	2.31	4.52	0.29	1.16
66.0	0.45	Neutral	2.29	0.86	2.53	0.31	1.16
67.5	0.34	Unfocused	1.16	0.55	2.14	0.3	1.16
69.0	0.3	Unfocused	1.42	0.33	0.93	0.12	1.15
70.5	0.43	Neutral	3.3	0.96	0.77	0.16	1.16
72.0	0.54	Focused	2.09	2.62	2.56	0.26	1.19
73.5	0.48	Neutral	1.83	1.62	3.03	0.42	1.21
75.0	0.56	Focused	3.16	1.25	3.37	0.38	1.21
76.5	0.49	Neutral	2.81	0.92	2.72	0.38	1.19
78.0	0.45	Neutral	1.98	1.38	2.4	0.35	1.16
79.5	0.55	Focused	2.45	1.36	3.89	0.44	1.13
81.0	0.45	Neutral	2.57	0.71	2.34	0.29	1.09
82.5	0.46	Neutral	1.6	1.35	2.96	0.32	1.06
84.0	0.46	Neutral	1.61	1.49	2.68	0.39	1.04
85.5	0.41	Neutral	1.51	1.41	1.8	0.31	1.03
87.0	0.4	Neutral	1.46	1.5	1.37	0.17	1.02
88.5	0.35	Unfocused	1.37	0.78	1.43	0.15	1.01
90.0	0.31	Unfocused	1.22	0.18	1.33	0.13	1.01
91.5	0.31	Unfocused	1.62	0.21	0.91	0.14	1.04
93.0	0.33	Unfocused	1.39	0.48	1.39	0.12	1.09
94.5	0.53	Focused	4.9	0.57	1.12	0.19	1.12

96.0	0.34	Unfocused	2.34	0.56	0.53	0.21	1.12
97.5	0.39	Neutral	2.18	0.63	1.61	0.21	1.11
99.0	0.39	Neutral	1.41	0.66	2.59	0.2	1.09
100.5	0.37	Unfocused	1.67	0.46	1.92	0.17	1.06
102.0	0.3	Unfocused	0.85	1.0	0.66	0.18	1.05
103.5	0.4	Neutral	2.55	0.61	1.17	0.19	1.03
105.0	0.35	Unfocused	1.66	0.44	1.55	0.17	1.02
106.5	0.35	Unfocused	1.48	0.4	1.63	0.17	1.01
108.0	0.5	Neutral	3.73	0.63	1.65	0.23	1.01
109.5	0.65	Focused	4.08	1.96	2.85	0.44	1.04
111.0	0.46	Neutral	2.01	1.24	2.64	0.34	1.09
112.5	0.48	Neutral	2.96	0.75	2.51	0.33	1.12
114.0	0.66	Focused	5.38	0.81	3.09	0.35	1.13
115.5	0.45	Neutral	2.18	0.61	3.06	0.34	1.12
117.0	0.42	Neutral	1.34	0.92	3.05	0.37	1.11
118.5	0.51	Focused	1.24	1.69	3.99	0.31	1.08
120.0	0.47	Neutral	1.77	1.18	3.1	0.26	1.06
121.5	0.55	Focused	1.64	2.12	3.64	0.29	1.05
123.0	0.47	Neutral	2.09	0.66	3.34	0.33	1.03
124.5	0.42	Neutral	1.08	0.99	3.01	0.37	1.02
126.0	0.51	Focused	2.11	1.29	3.23	0.32	1.01
127.5	0.5	Neutral	2.01	1.54	2.74	0.33	1.01
129.0	0.4	Neutral	1.16	0.86	2.71	0.32	1.01
130.5	0.94	Focused	5.94	6.95	5.29	0.6	1.01
132.0	0.94	Focused	4.9	8.13	4.6	0.6	1.01
133.5	0.96	Focused	4.32	10.14	4.87	0.31	1.01
135.0	0.76	Focused	1.71	5.61	3.88	0.29	1.04
136.5	0.4	Neutral	1.43	0.95	2.5	0.43	1.05
138.0	0.91	Focused	4.56	7.26	3.97	0.41	1.05
139.5	0.99	Focused	9.65	11.11	4.04	0.29	1.04
141.0	0.98	Focused	8.33	11.04	3.78	0.3	1.03
142.5	0.94	Focused	9.0	4.48	4.71	0.49	1.02
144.0	0.94	Focused	7.0	7.03	3.76	0.43	1.0



145.5	0.86	Focused	3.21	7.37	3.08	0.47	0.99
147.0	0.84	Focused	2.52	7.5	3.09	0.47	0.98
148.5	0.6	Focused	2.31	3.05	2.65	0.41	0.98
150.0	0.43	Neutral	1.02	1.46	2.56	0.3	0.97
151.5	0.36	Unfocused	0.66	1.14	2.13	0.45	0.97
153.0	0.41	Neutral	1.67	0.59	2.55	0.37	0.97
154.5	0.52	Focused	1.91	1.87	2.88	0.35	0.97
156.0	0.57	Focused	2.17	2.33	3.02	0.37	0.97
157.5	0.71	Focused	4.31	2.3	3.43	0.34	0.98
159.0	0.73	Focused	3.92	2.39	4.16	0.35	0.97
160.5	0.47	Neutral	2.27	0.89	2.66	0.3	0.96
162.0	0.51	Focused	2.06	1.25	3.24	0.34	0.95
163.5	0.45	Neutral	1.94	0.84	2.76	0.41	0.94
165.0	0.52	Focused	3.4	0.73	2.38	0.47	0.93
166.5	0.33	Unfocused	0.95	0.46	1.83	0.28	0.93
168.0	0.31	Unfocused	0.68	0.46	1.58	0.34	0.93
169.5	0.56	Focused	2.59	1.21	3.67	0.38	0.93
171.0	0.64	Focused	2.44	2.61	3.69	0.41	0.92
172.5	0.47	Neutral	2.42	0.67	2.53	0.3	0.89
174.0	0.37	Unfocused	1.4	0.74	1.52	0.15	0.92
175.5	0.36	Unfocused	1.11	0.79	1.86	0.23	0.98
177.0	0.37	Unfocused	2.86	0.32	0.58	0.24	1.03
178.5	0.31	Unfocused	1.94	0.31	0.37	0.23	1.04
180.0	0.33	Unfocused	2.29	0.34	0.44	0.24	1.04
181.5	0.6	Focused	4.27	0.91	2.69	0.17	1.05
183.0	0.55	Focused	3.59	0.96	2.6	0.16	1.04
184.5	0.5	Focused	1.94	1.13	3.37	0.17	1.02
186.0	0.39	Neutral	1.07	0.5	2.8	0.16	0.99
187.5	0.47	Neutral	2.16	0.85	2.74	0.15	0.96
189.0	0.53	Focused	2.27	1.49	2.87	0.17	0.93
190.5	0.49	Neutral	2.58	1.18	2.04	0.14	0.9
192.0	0.38	Neutral	1.52	0.64	1.65	0.12	0.88
193.5	0.36	Unfocused	1.53	0.46	1.39	0.14	0.86

195.0	0.33	Unfocused	1.02	0.48	1.34	0.15	0.84
196.5	0.44	Neutral	2.78	0.47	1.49	0.12	0.83
198.0	0.41	Neutral	2.21	0.67	1.41	0.13	0.83
199.5	0.44	Neutral	2.44	0.72	1.68	0.17	0.82
201.0	0.42	Neutral	2.01	0.39	2.05	0.16	0.81

# UnicornRecorder\_12\_05\_2025\_12\_41\_310\_20250522\_105958\_mi\_only.csv

timestamp	mi_score	behavioral_state
0.0	0.41	Neutral
1.5	0.34	Unfocused
3.0	0.33	Unfocused
4.5	0.46	Neutral
6.0	0.48	Neutral
7.5	0.37	Neutral
9.0	0.31	Unfocused
10.5	0.28	Unfocused
12.0	0.33	Unfocused
13.5	0.72	Focused
15.0	0.52	Focused
16.5	0.4	Neutral
18.0	0.35	Unfocused
19.5	0.38	Neutral
21.0	0.54	Focused
22.5	0.51	Focused
24.0	0.39	Neutral
25.5	0.48	Neutral
27.0	0.44	Neutral
28.5	0.44	Neutral
30.0	0.51	Focused
31.5	0.44	Neutral
33.0	0.26	Unfocused
34.5	0.44	Neutral
36.0	0.45	Neutral
37.5	0.65	Focused
39.0	0.74	Focused
40.5	0.49	Neutral
42.0	0.57	Focused
43.5	0.45	Neutral
45.0	0.45	Neutral

46.5	0.46	Neutral
48.0	0.35	Unfocused
49.5	0.33	Unfocused
51.0	0.33	Unfocused
52.5	0.34	Unfocused
54.0	0.33	Unfocused
55.5	0.25	Unfocused
57.0	0.31	Unfocused
58.5	0.41	Neutral
60.0	0.66	Focused
61.5	0.46	Neutral
63.0	0.53	Focused
64.5	0.77	Focused
66.0	0.45	Neutral
67.5	0.34	Unfocused
69.0	0.3	Unfocused
70.5	0.43	Neutral
72.0	0.54	Focused
73.5	0.48	Neutral
75.0	0.56	Focused
76.5	0.49	Neutral
78.0	0.45	Neutral
79.5	0.55	Focused
81.0	0.45	Neutral
82.5	0.46	Neutral
84.0	0.46	Neutral
85.5	0.41	Neutral
87.0	0.4	Neutral
88.5	0.35	Unfocused
90.0	0.31	Unfocused
91.5	0.31	Unfocused
93.0	0.33	Unfocused
94.5	0.53	Focused

96.0	0.34	Unfocused
97.5	0.39	Neutral
99.0	0.39	Neutral
100.5	0.37	Unfocused
102.0	0.3	Unfocused
103.5	0.4	Neutral
105.0	0.35	Unfocused
106.5	0.35	Unfocused
108.0	0.5	Neutral
109.5	0.65	Focused
111.0	0.46	Neutral
112.5	0.48	Neutral
114.0	0.66	Focused
115.5	0.45	Neutral
117.0	0.42	Neutral
118.5	0.51	Focused
120.0	0.47	Neutral
121.5	0.55	Focused
123.0	0.47	Neutral
124.5	0.42	Neutral
126.0	0.51	Focused
127.5	0.5	Neutral
129.0	0.4	Neutral
130.5	0.94	Focused
132.0	0.94	Focused
133.5	0.96	Focused
135.0	0.76	Focused
136.5	0.4	Neutral
138.0	0.91	Focused
139.5	0.99	Focused
141.0	0.98	Focused
142.5	0.94	Focused
144.0	0.94	Focused

145.5	0.86	Focused
147.0	0.84	Focused
148.5	0.6	Focused
150.0	0.43	Neutral
151.5	0.36	Unfocused
153.0	0.41	Neutral
154.5	0.52	Focused
156.0	0.57	Focused
157.5	0.71	Focused
159.0	0.73	Focused
160.5	0.47	Neutral
162.0	0.51	Focused
163.5	0.45	Neutral
165.0	0.52	Focused
166.5	0.33	Unfocused
168.0	0.31	Unfocused
169.5	0.56	Focused
171.0	0.64	Focused
172.5	0.47	Neutral
174.0	0.37	Unfocused
175.5	0.36	Unfocused
177.0	0.37	Unfocused
178.5	0.31	Unfocused
180.0	0.33	Unfocused
181.5	0.6	Focused
183.0	0.55	Focused
184.5	0.5	Focused
186.0	0.39	Neutral
187.5	0.47	Neutral
189.0	0.53	Focused
190.5	0.49	Neutral
192.0	0.38	Neutral
193.5	0.36	Unfocused

195.0	0.33	Unfocused
196.5	0.44	Neutral
198.0	0.41	Neutral
199.5	0.44	Neutral
201.0	0.42	Neutral