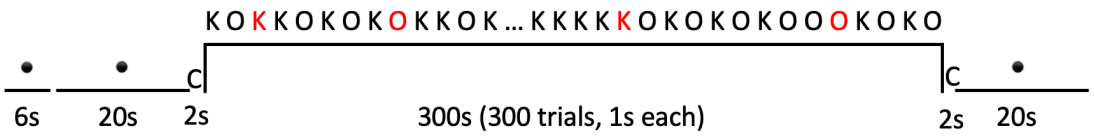
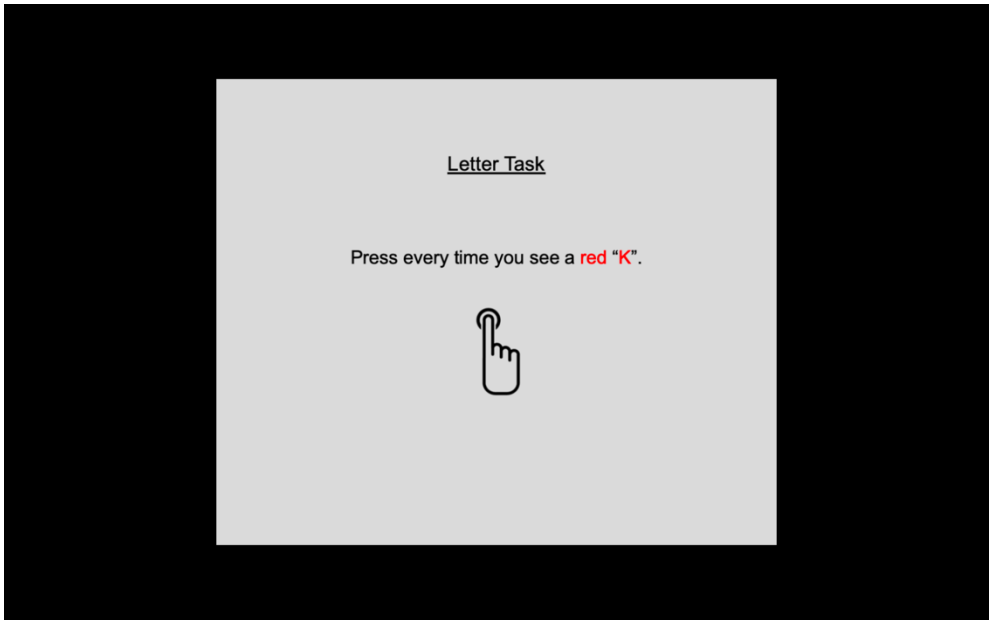
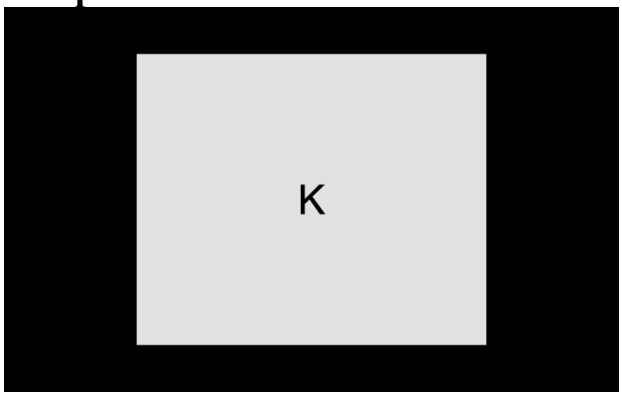
Task	VODDK (v211210)
Duration (s)	350 (plus 10s of reference scans for multi echo, as 'Stay very still' screen shown)
Volume #	350 (6 T1 stabilization, 342 usable, all 350 images saved)
TR (s)	1.00
Stimuli	Single letters presented: uppercase O or K, either black or red
Task requirements	Participants are required to press a button using the index finger of their right hand when they see a red K.
# of Runs	5 (counterbalanced)
Run creation	Optseq was used to generate 10 possible set orders and 1 was then randomly chosen for use. optseq2 --ntp 151 --tr 1 --nsearch 10000 --ev 1 1 15 --ev 2 1 15 --ev 3 1 15 --ev 4 1 15 --ev 5 1 15 --ev 6 1 15 --ev 7 1 15 --ev 8 1 15 --ev 9 1 15 --ev 10 1 15 --nkeep 10 --o RUN --psdwin 0 1 1 The order included 150 trials of 10 types. (1=K, 2=O, 3-6=K, 7-10=O) Trial types were rotated to create 10 150-trial sets. Each run was formed from concatenating 2 sets (1+10, 2+9, 3+8, 4+7, 5+6), yielding 5 runs of 300 trials each.
Possibility of more sets	with a different order (beyond counterbalanced sets)
Design	 **Each run:** 6s (• for T1 stabilization), 20s (•), 2s (1s "Begin", 1s •), 300s (300 trials, 1s each), 2s (1s "End", 1s •), 20s (•) **Each trial:** 0.15s (K or O), 0.85s (•) Non-target trials = K, O, O; Target trials = K 30 K (10% - target), 30 O (10%), 120 K, 120 O
Trial/Block/Run	Each run consists of 300 total trials: 30 K (10% - target), 30 O (10%), 120 K, and 120 O.
Trial timing	2s display. A letter (red or black) is presented for 0.15s on a gray background and then removed, followed by 1.85s of a black fixation dot. Participants press a button with their right index finger when they see a target (K).
Goal	Contrast of lures, actionable targets vs. non-targets: elicit activity within the salience network. Contrast of task-block vs. fixation: examine transient activity around transitions and elicit block effect.
Other Notes	This task was designed to include both visual oddball and no-go features.

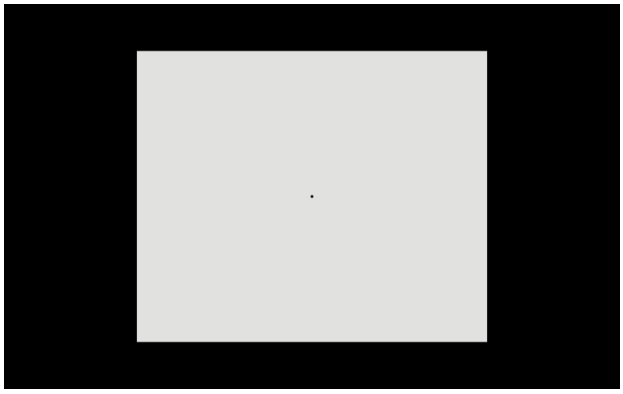
Instruction Screen:



Sample Trial:

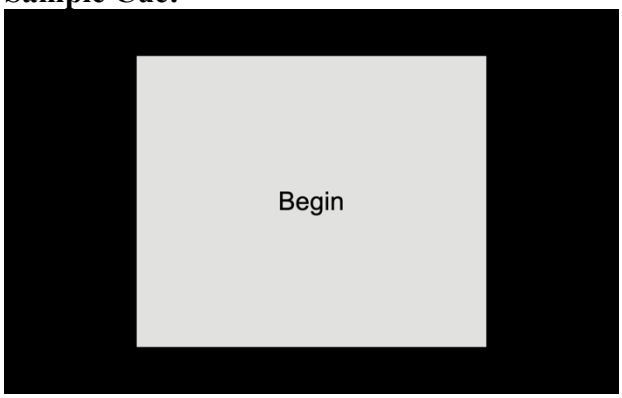


0.15 seconds

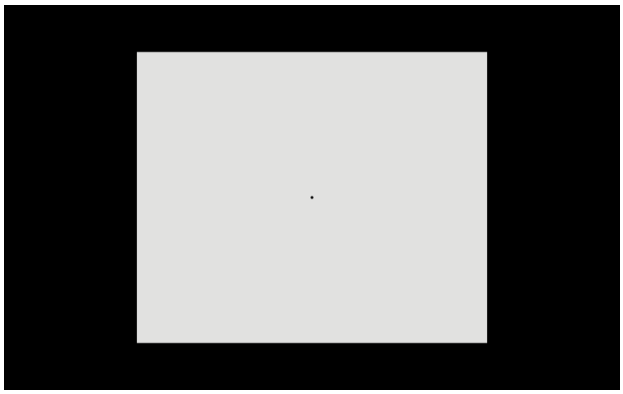


1.85 seconds

Sample Cue:

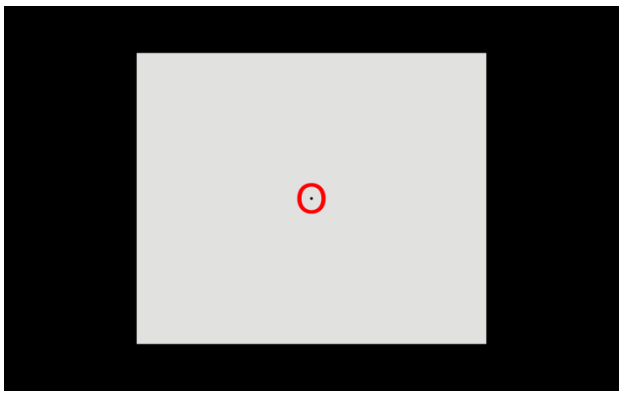


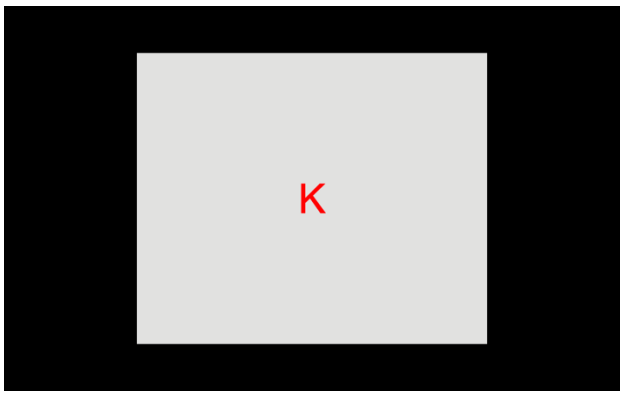
1 second

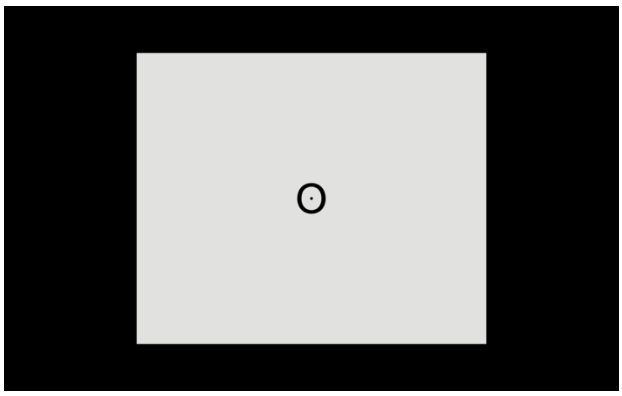


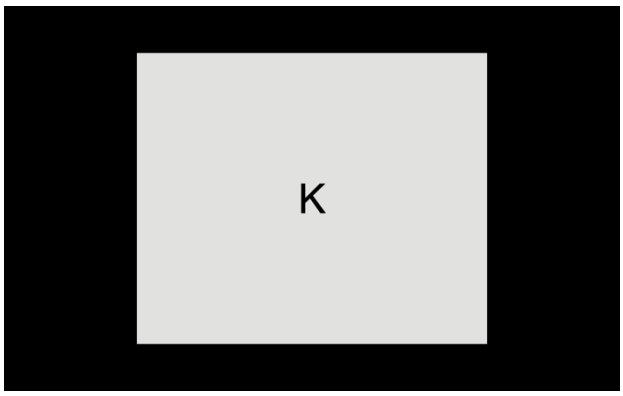
1 second

Sample Stimuli:









Stay Very Still Screen:

Detailed Orders Below:
Time_Start(s) indicates the start of a letter presentation, after removal of the 6s for T1 stabilization, starting at 0. TK = red K, TO = red O, K = black K, O = black O.

Trial_Num	Time_Start(s)	Trial_Order_Num	VODDK1	VODDK2	VODDK3	VODDK4	VODDK5
1	22	3	K	TO	TK	O	O
2	23	2	TO	TK	O	O	O
3	24	4	K	K	TO	TK	O
4	25	8	O	O	K	K	K
5	26	9	O	O	O	K	K
6	27	7	O	K	K	K	K
7	28	6	K	K	K	K	TO
8	29	7	O	K	K	K	K
9	30	5	K	K	K	TO	TK
10	31	5	K	K	K	TO	TK
11	32	10	O	O	O	O	K
12	33	7	O	K	K	K	K
13	34	1	TK	O	O	O	O
14	35	4	K	K	TO	TK	O
15	36	2	TO	TK	O	O	O
16	37	7	O	K	K	K	K
17	38	4	K	K	TO	TK	O
18	39	6	K	K	K	K	TO
19	40	1	TK	O	O	O	O
20	41	1	TK	O	O	O	O
21	42	5	K	K	K	TO	TK
22	43	2	TO	TK	O	O	O
23	44	6	K	K	K	K	TO
24	45	9	O	O	O	K	K
25	46	6	K	K	K	K	TO
26	47	6	K	K	K	K	TO
27	48	10	O	O	O	O	K
28	49	5	K	K	K	TO	TK
29	50	9	O	O	O	K	K
30	51	8	O	O	K	K	K
31	52	8	O	O	K	K	K
32	53	8	O	O	K	K	K
33	54	3	K	TO	TK	O	O
34	55	1	TK	O	O	O	O
35	56	1	TK	O	O	O	O
36	57	7	O	K	K	K	K
37	58	7	O	K	K	K	K
38	59	5	K	K	K	TO	TK
39	60	6	K	K	K	K	TO

40	61	8	O	O	K	K	K
41	62	3	K	TO	TK	O	O
42	63	3	K	TO	TK	O	O
43	64	2	TO	TK	O	O	O
44	65	2	TO	TK	O	O	O
45	66	8	O	O	K	K	K
46	67	10	O	O	O	O	K
47	68	2	TO	TK	O	O	O
48	69	10	O	O	O	O	K
49	70	3	K	TO	TK	O	O
50	71	4	K	K	TO	TK	O
51	72	9	O	O	O	K	K
52	73	5	K	K	K	TO	TK
53	74	4	K	K	TO	TK	O
54	75	4	K	K	TO	TK	O
55	76	10	O	O	O	O	K
56	77	9	O	O	O	K	K
57	78	2	TO	TK	O	O	O
58	79	8	O	O	K	K	K
59	80	10	O	O	O	O	K
60	81	5	K	K	K	TO	TK
61	82	7	O	K	K	K	K
62	83	1	TK	O	O	O	O
63	84	6	K	K	K	K	TO
64	85	7	O	K	K	K	K
65	86	8	O	O	K	K	K
66	87	3	K	TO	TK	O	O
67	88	5	K	K	K	TO	TK
68	89	7	O	K	K	K	K
69	90	1	TK	O	O	O	O
70	91	4	K	K	TO	TK	O
71	92	7	O	K	K	K	K
72	93	10	O	O	O	O	K
73	94	4	K	K	TO	TK	O
74	95	10	O	O	O	O	K
75	96	9	O	O	O	K	K
76	97	6	K	K	K	K	TO
77	98	8	O	O	K	K	K
78	99	8	O	O	K	K	K
79	100	6	K	K	K	K	TO

80	101	7	O	K	K	K	K
81	102	9	O	O	O	K	K
82	103	6	K	K	K	K	TO
83	104	6	K	K	K	K	TO
84	105	3	K	TO	TK	O	O
85	106	4	K	K	TO	TK	O
86	107	2	TO	TK	O	O	O
87	108	3	K	TO	TK	O	O
88	109	6	K	K	K	K	TO
89	110	9	O	O	O	K	K
90	111	2	TO	TK	O	O	O
91	112	1	TK	O	O	O	O
92	113	5	K	K	K	TO	TK
93	114	3	K	TO	TK	O	O
94	115	5	K	K	K	TO	TK
95	116	7	O	K	K	K	K
96	117	3	K	TO	TK	O	O
97	118	5	K	K	K	TO	TK
98	119	7	O	K	K	K	K
99	120	5	K	K	K	TO	TK
100	121	9	O	O	O	K	K
101	122	4	K	K	TO	TK	O
102	123	1	TK	O	O	O	O
103	124	2	TO	TK	O	O	O
104	125	6	K	K	K	K	TO
105	126	4	K	K	TO	TK	O
106	127	10	O	O	O	O	K
107	128	1	TK	O	O	O	O
108	129	3	K	TO	TK	O	O
109	130	9	O	O	O	K	K
110	131	1	TK	O	O	O	O
111	132	10	O	O	O	O	K
112	133	8	O	O	K	K	K
113	134	1	TK	O	O	O	O
114	135	3	K	TO	TK	O	O
115	136	4	K	K	TO	TK	O
116	137	2	TO	TK	O	O	O
117	138	4	K	K	TO	TK	O
118	139	3	K	TO	TK	O	O
119	140	4	K	K	TO	TK	O

120	141	9	O	O	O	K	K
121	142	2	TO	TK	O	O	O
122	143	3	K	TO	TK	O	O
123	144	1	TK	O	O	O	O
124	145	9	O	O	O	K	K
125	146	10	O	O	O	O	K
126	147	2	TO	TK	O	O	O
127	148	10	O	O	O	O	K
128	149	10	O	O	O	O	K
129	150	3	K	TO	TK	O	O
130	151	8	O	O	K	K	K
131	152	5	K	K	K	TO	TK
132	153	5	K	K	K	TO	TK
133	154	6	K	K	K	K	TO
134	155	1	TK	O	O	O	O
135	156	8	O	O	K	K	K
136	157	9	O	O	O	K	K
137	158	8	O	O	K	K	K
138	159	5	K	K	K	TO	TK
139	160	7	O	K	K	K	K
140	161	2	TO	TK	O	O	O
141	162	8	O	O	K	K	K
142	163	4	K	K	TO	TK	O
143	164	10	O	O	O	O	K
144	165	2	TO	TK	O	O	O
145	166	9	O	O	O	K	K
146	167	7	O	K	K	K	K
147	168	9	O	O	O	K	K
148	169	10	O	O	O	O	K
149	170	1	TK	O	O	O	O
150	171	6	K	K	K	K	TO
151	172	3	K	K	K	O	O
152	173	2	K	K	K	K	O
153	174	4	K	K	O	O	O
154	175	8	O	O	TK	TO	K
155	176	9	O	TK	TO	K	K
156	177	7	O	O	O	TK	TO
157	178	6	O	O	O	O	TK
158	179	7	O	O	O	TK	TO
159	180	5	K	O	O	O	O

160	181	5	K	O	O	O	O
161	182	10	TK	TO	K	K	K
162	183	7	O	O	O	TK	TO
163	184	1	TO	K	K	K	K
164	185	4	K	K	O	O	O
165	186	2	K	K	K	K	O
166	187	7	O	O	O	TK	TO
167	188	4	K	K	O	O	O
168	189	6	O	O	O	O	TK
169	190	1	TO	K	K	K	K
170	191	1	TO	K	K	K	K
171	192	5	K	O	O	O	O
172	193	2	K	K	K	K	O
173	194	6	O	O	O	O	TK
174	195	9	O	TK	TO	K	K
175	196	6	O	O	O	O	TK
176	197	6	O	O	O	O	TK
177	198	10	TK	TO	K	K	K
178	199	5	K	O	O	O	O
179	200	9	O	TK	TO	K	K
180	201	8	O	O	TK	TO	K
181	202	8	O	O	TK	TO	K
182	203	8	O	O	TK	TO	K
183	204	3	K	K	K	O	O
184	205	1	TO	K	K	K	K
185	206	1	TO	K	K	K	K
186	207	7	O	O	O	TK	TO
187	208	7	O	O	O	TK	TO
188	209	5	K	O	O	O	O
189	210	6	O	O	O	O	TK
190	211	8	O	O	TK	TO	K
191	212	3	K	K	K	O	O
192	213	3	K	K	K	O	O
193	214	2	K	K	K	K	O
194	215	2	K	K	K	K	O
195	216	8	O	O	TK	TO	K
196	217	10	TK	TO	K	K	K
197	218	2	K	K	K	K	O
198	219	10	TK	TO	K	K	K
199	220	3	K	K	K	O	O

200	221	4	K	K	O	O	O
201	222	9	O	TK	TO	K	K
202	223	5	K	O	O	O	O
203	224	4	K	K	O	O	O
204	225	4	K	K	O	O	O
205	226	10	TK	TO	K	K	K
206	227	9	O	TK	TO	K	K
207	228	2	K	K	K	K	O
208	229	8	O	O	TK	TO	K
209	230	10	TK	TO	K	K	K
210	231	5	K	O	O	O	O
211	232	7	O	O	O	TK	TO
212	233	1	TO	K	K	K	K
213	234	6	O	O	O	O	TK
214	235	7	O	O	O	TK	TO
215	236	8	O	O	TK	TO	K
216	237	3	K	K	K	O	O
217	238	5	K	O	O	O	O
218	239	7	O	O	O	TK	TO
219	240	1	TO	K	K	K	K
220	241	4	K	K	O	O	O
221	242	7	O	O	O	TK	TO
222	243	10	TK	TO	K	K	K
223	244	4	K	K	O	O	O
224	245	10	TK	TO	K	K	K
225	246	9	O	TK	TO	K	K
226	247	6	O	O	O	O	TK
227	248	8	O	O	TK	TO	K
228	249	8	O	O	TK	TO	K
229	250	6	O	O	O	O	TK
230	251	7	O	O	O	TK	TO
231	252	9	O	TK	TO	K	K
232	253	6	O	O	O	O	TK
233	254	6	O	O	O	O	TK
234	255	3	K	K	K	O	O
235	256	4	K	K	O	O	O
236	257	2	K	K	K	K	O
237	258	3	K	K	K	O	O
238	259	6	O	O	O	O	TK
239	260	9	O	TK	TO	K	K

240	261	2	K	K	K	K	O
241	262	1	TO	K	K	K	K
242	263	5	K	O	O	O	O
243	264	3	K	K	K	O	O
244	265	5	K	O	O	O	O
245	266	7	O	O	O	TK	TO
246	267	3	K	K	K	O	O
247	268	5	K	O	O	O	O
248	269	7	O	O	O	TK	TO
249	270	5	K	O	O	O	O
250	271	9	O	TK	TO	K	K
251	272	4	K	K	O	O	O
252	273	1	TO	K	K	K	K
253	274	2	K	K	K	K	O
254	275	6	O	O	O	O	TK
255	276	4	K	K	O	O	O
256	277	10	TK	TO	K	K	K
257	278	1	TO	K	K	K	K
258	279	3	K	K	K	O	O
259	280	9	O	TK	TO	K	K
260	281	1	TO	K	K	K	K
261	282	10	TK	TO	K	K	K
262	283	8	O	O	TK	TO	K
263	284	1	TO	K	K	K	K
264	285	3	K	K	K	O	O
265	286	4	K	K	O	O	O
266	287	2	K	K	K	K	O
267	288	4	K	K	O	O	O
268	289	3	K	K	K	O	O
269	290	4	K	K	O	O	O
270	291	9	O	TK	TO	K	K
271	292	2	K	K	K	K	O
272	293	3	K	K	K	O	O
273	294	1	TO	K	K	K	K
274	295	9	O	TK	TO	K	K
275	296	10	TK	TO	K	K	K
276	297	2	K	K	K	K	O
277	298	10	TK	TO	K	K	K
278	299	10	TK	TO	K	K	K
279	300	3	K	K	K	O	O

280	301	8	O	O	TK	TO	K
281	302	5	K	O	O	O	O
282	303	5	K	O	O	O	O
283	304	6	O	O	O	O	TK
284	305	1	TO	K	K	K	K
285	306	8	O	O	TK	TO	K
286	307	9	O	TK	TO	K	K
287	308	8	O	O	TK	TO	K
288	309	5	K	O	O	O	O
289	310	7	O	O	O	TK	TO
290	311	2	K	K	K	K	O
291	312	8	O	O	TK	TO	K
292	313	4	K	K	O	O	O
293	314	10	TK	TO	K	K	K
294	315	2	K	K	K	K	O
295	316	9	O	TK	TO	K	K
296	317	7	O	O	O	TK	TO
297	318	9	O	TK	TO	K	K
298	319	10	TK	TO	K	K	K
299	320	1	TO	K	K	K	K
300	321	6	O	O	O	O	TK