

Appendix.

Methods

Recruitment:

The advertisement used for recruitment was primarily online and worded as follows, “Regular and social smoking volunteers [Healthy male and female young adults] are wanted to participate in a paid research study examining the mood response and behaviors in young adults with a wide range of smoking and drinking habits while they engage in common tasks (i.e. eating, drinking, smoking, talking, etc.) and social interaction.”

Measures:

The main study measures [VAS desire to smoke a regular and desire to smoke an e-cigarette, the Brief Questionnaire of Smoking Urges (BQSU; Tiffany & Drobes, 1991; Cox et al 1998)] were administered within a set of surveys and scales to reduce expectancy for the real purpose of the study to ascertain smoking desire and urge. Thus other VAS items were included such as mood adjective ratings (happy, frustrated, etc.) and desire for other consumable products or activities such as desire to eat salty foods; drink soda; or engage in conversation.

The BQSU includes 10 items (listed below) each scored on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). The total score is calculated as the sum of the individual scores on each item.

BQSU items:

- 1). I have a desire for a cigarette right now
- 2). Nothing would be better than smoking a cigarette right now
- 3). If it were possible, I would probably smoke now
- 4). I could control things better right now if I could smoke
- 5). All I want right now is a cigarette
- 6). I have an urge for a cigarette
- 7). A cigarette would taste good right now
- 8). I would do almost anything for a cigarette now
- 9). Smoking would make me feel less depressed
- 10). I am going to smoke as soon as possible

Results:

Table 1a: VAS Desire for Regular Cigarette ANOVA table

	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>p</u>
FTNDTOT	3267	1	3267	2.3635	0.129736
Cue Type	13.3	1	13.3	0.0096	0.922131
Time	1344	3	448	3.9227	0.009686
Time * FTND Total	142.8	3	47.6	0.4166	0.741274
Time * Cue Type	8.5	3	2.8	0.0248	0.994686

Table 1b: VAS Desire for E-Cigarette ANOVA table

	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>p</u>
FTNDTOT	1367.7	1	1367.7	0.50699	0.47935
Cue Type	29626	1	29626.02	10.98191	0.001603
Time	2258.1	3	752.71	3.06916	0.029368
Time * FTND Total	293.1	3	97.7	0.39839	0.75433
Time * Cue Type	3488.6	3	1162.86	4.74156	0.003338

Table 1c: BQSU ANOVA table

	<u>SS</u>	<u>DF</u>	<u>MS</u>	<u>F</u>	<u>p</u>
FTNDTOT	3733.62	1	3733.62	7.7684	0.007211
Cue Type	106.1	1	106.1	0.2208	0.64025
Time	252.68	3	84.23	3.1018	0.028152
Time * FTND Total	33.8	3	11.27	0.4149	0.742533
Time * Cue Type	71.29	3	23.76	0.8752	0.455189

Table 2: VAS and BQSU Data by group and time point (mean, SEM)

Regular Cigarette Exposed Group (n=30)			
	<u>VAS-Reg Cig</u>	<u>VAS-E Cig</u>	<u>BQSU</u>
Base (0 min)	74.37(3.8)	22.05 (5.0)	45.37 (2.0)
Control Cue (15 min)	73.37 (4.4)	20.18 (4.8)	43.80 (1.9)
Active Cue 35 min)	82.49 (3.8)	20.59 (5.1)	50.27 (1.8)
Final (50 min)	84.39 (3.7)	22.85 (5.7)	50.10 (1.8)
E-cigarette Exposed Group (n=30)			
	<u>VAS-Reg Cig</u>	<u>VAS-ECIG</u>	<u>BQSU</u>
Base (0 min)	71.33 (4.3)	32.084(4.8)	42.90 (2.2)
Control Cue (15 min)	71.90 (3.8)	37.52 (5.6)	41.63 (2.5)
Active Cue (35 min)	80.06 (3.3)	50.61 (5.7)	45.41 (2.7)
Final (50 min)	81.61 (3.3)	52.92 (5.9)	45.80 (2.9)