

Supplemental file 1

Table S1. IQOS unique ads characteristics and themes by regulatory periods, Israel, 12/2016-08/2020

Variables	Regulatory periods*				p-value <sup>†</sup>
	1 (n=7) N (%)	2 (n=77) N (%)	3 (n=29) N (%)	4 (n=17) N (%)	
<b>Ad characteristics:</b>					
<b>Setting</b>					<.001
<i>Indoors</i>	2 (28.6)	22 (28.6)	2 (6.9)	9 (52.9)	
<i>Outdoors</i>	1 (14.3)	6 (7.8)	8 (27.6)	5 (29.4)	
<i>Colored/ambiguous background</i>	4 (57.1)	49 (63.6)	19 (65.5)	3 (17.6)	
<b>Product presentation</b>					
<i>Packaging<sup>#</sup></i>	2 (28.6)	38 (53.5)	22 (100.0)	0 (0.0)	<.001
<i>Flavor/sub-brand indicated<sup>#</sup></i>	5 (71.4)	69 (97.2)	22 (100.0)	16 (100.0)	.04
<i>Product is lit<sup>‡</sup></i>	5 (83.3)	66 (95.7)	22 (100.0)	15 (88.2)	.14
<b>Information included within the ad:</b>					
<i>Age and user restrictions</i>	7 (100.0)	69 (89.6)	29 (100.0)	17 (100.0)	.19
<i>Retail accessibility</i>	1 (14.3)	33 (42.9)	23 (79.3)	16 (94.1)	<.001
<i>Additional details cue</i>	3 (42.9)	75 (97.4)	28 (96.6)	17 (100.0)	<.001
<i>Price promotion</i>	0 (0.0)	2 (2.6)	10 (34.5)	1 (5.9)	<.001
<i>Other promotions</i>	0 (0.0)	1 (1.3)	10 (3.4)	0 (0.0)	<.001
<b>Ad themes:</b>					
<b>Product features:</b>					
<i>Quality</i>	0 (0.0)	9 (11.7)	1 (3.4)	3 (17.6)	.36
<i>Popular product</i>	1 (14.3)	9 (11.7)	3 (10.3)	0 (0.0)	.51
<i>Stylish</i>	0 (0.0)	9 (11.7)	0 (0.0)	0 (0.0)	.13
<i>Easy to use</i>	0 (0.0)	9 (11.7)	0 (0.0)	0 (0.0)	.13
<i>Technology</i>	5 (71.4)	70 (90.9)	18 (62.1)	17 (100.0)	.12
<i>Innovation</i>	1 (14.3)	3 (3.9)	6 (20.7)	0 (0.0)	.02
<i>Reference to legislation/policy</i>	0 (0.0)	6 (7.8)	1 (3.4)	0 (0.0)	.74
<b>Social norms and related factors:</b>					
<i>Presence of everyday items</i>	3 (42.9)	22 (28.6)	3 (10.3)	6 (35.3)	.09
<i>Socializing with non-smokers</i>	2 (28.6)	7 (9.1)	3 (10.3)	0 (0.0)	.18
<i>Freedom/choice</i>	0 (0.0)	13 (16.9)	15 (51.7)	0 (0.0)	<.001
<i>High social status</i>	0 (0.0)	9 (11.7)	1 (3.4)	3 (17.6)	.36
<i>Special occasion/event</i>	0 (0.0)	3 (3.9)	10 (34.5)	0 (0.0)	<.001
<b>Comparative claims:</b>					
<i>Same/similar/better taste</i>	0 (0.0)	8 (10.4)	1 (3.4)	3 (17.6)	.36
<i>No or less smell/no bad smell</i>	7 (100.0)	27 (35.1)	4 (13.8)	9 (52.9)	<.001
<i>No ash</i>	7 (100.0)	14 (18.2)	9 (31.0)	14 (82.4)	<.001
<i>No combustion</i>	7 (100.0)	25 (32.5)	23 (79.3)	17 (100.0)	<.001
<i>No smoke</i>	1 (14.3)	28 (36.4)	23 (79.3)	12 (70.6)	<.001
<i>Alternative to smoking</i>	0 (0.0)	12 (15.6)	11 (37.9)	6 (35.3)	.02
<i>As satisfying</i>	0 (0.0)	12 (15.6)	7 (24.1)	13 (76.5)	<.001
<i>No or reduced harm/risk</i>	0 (0.0)	5 (6.5)	0 (0.0)	0 (0.0)	.48

N/A – Non-applicable. <sup>†</sup>Fischer's exact test. \*Five IQOS ads appeared in more than one regulatory period.

<sup>#</sup>Proportion is calculated from ads that presented HEETS in regulatory period 1 (N=7), 2 (N=71), 3 (N=22) and 4 (N=16).

<sup>‡</sup>Proportion is calculated from ads that presented the IQOS device in regulatory periods 1 (N=6), 2 (N=69), 3 (N=22) and 4 (N=17).

**Table S2. PMI cigarette unique ad characteristics and themes by regulatory period, Israel, 12/2016-08/2020**

Variables	Regulatory periods*			p-value <sup>†</sup>
	2 (n=49) N (%)	3 (n=20) N (%)	4 (n=4) N (%)	
<b>Ad characteristics:</b>				
<b>Setting</b>				.05
<i>Indoors</i>	0 (0.0)	0 (0.0)	1 (25.0)	
<i>Outdoors</i>	6 (12.2)	5 (25.0)	0 (0.0)	
<i>Colored/ambiguous background</i>	43 (87.8)	15 (75.0)	3 (75.0)	
<b>Product presentation</b>				
<i>Packaging<sup>#</sup></i>	49 (100.0)	18 (94.7)	3 (75.0)	.32
<i>Flavor/sub-brand indicated<sup>#</sup></i>	48 (98.0)	19 (100.0)	4 (100.0)	1.00
<b>Information included within the ad:</b>				
<i>Age and user restrictions</i>	10 (20.4)	1 (5.0)	1 (25.0)	.26
<i>Additional details cue</i>	21 (42.9)	2 (10.0)	1 (25.0)	.02
<i>Price promotion</i>	28 (57.1)	9 (45.0)	0 (0.0)	.07
<i>Other promotions</i>	6 (12.2)	0 (0.0)	0 (0.0)	.23
<b>Ad themes:</b>				
<b>Product features:</b>				
<i>Quality</i>	25 (51.0)	11 (55.0)	1 (25.0)	.63
<i>Popular product</i>	3 (6.1)	4 (20.0)	0 (0.0)	.27
<i>Stylish</i>	4 (8.2)	1 (5.0)	0 (0.0)	1.00
<i>Technology</i>	20 (40.8)	0 (0.0)	0 (0.0)	.001
<i>Innovation</i>	1 (2.0)	1 (5.0)	0 (0.0)	.553
<b>Reference to legislation/policy</b>	0 (0.0)	5 (25.0)	3 (75.0)	<.001
<b>Social norms and related factors:</b>				
<i>Presence of everyday items</i>	1 (2.0)	1 (5.0)	2 (50.0)	.02
<i>Freedom/choice</i>	15 (30.6)	1 (5.0)	3 (75.0)	.005
<i>High social status</i>	6 (12.2)	5 (25.0)	1 (25.0)	.31
<i>Special occasion/event</i>	8 (16.3)	0 (0.0)	0 (0.0)	.17
<b>Comparative claims:</b>				
<i>Same/similar/better taste</i>	9 (18.4)	9 (45.0)	4 (100.0)	<.001
<i>No or less smell/no bad smell</i>	23 (46.9)	3 (15.0)	0 (0.0)	.01

PMI – Phillip Morris International. N/A – Non-applicable. <sup>†</sup>Fischer's exact test. \*Two cigarette ads appeared in more than one regulatory period.

<sup>#</sup>Proportion is calculated from ads that presented cigarettes in regulatory periods 2 (N=49), 3 (N=19) and 4 (N=4).