

Appendices

Appendix 1: Bivariate associations among the socio-demographic variables

Appendix Table 1: Association between age and gender.

			Gender			Total
			Wahine/female	Tane/male	All others	
Age	14–17	Count	927	792	101	1,820
		% within age	50.9%	43.5%	5.5%	100.0%
	18–20	Count	889	458	94	1,441
		% within age	61.7%	31.8%	6.5%	100.0%
Total		Count	1,816	1,250	195	3,261
		% within age	55.7%	38.3%	6.0%	100.0%

Chi-square (2, N=3,261) = 46.88, $p < .001$, Cramers V=.12

Appendix Table 2: Association between age and ethnicity.

			Ethnicity				Total
			Māori	Pākehā	Pasifika	Other	
Age	14–17	Count	487	835	129	408	1,859
		% within age	26.2%	44.9%	6.9%	21.9%	100.0%
	18–20	Count	364	716	85	296	1,461
		% within age	24.9%	49.0%	5.8%	20.3%	100.0%
Total		Count	851	1,551	214	704	3,320
		% within age d	25.6%	46.7%	6.4%	21.2%	100.0%

Chi-square (3, N=3,320) = 6.15, $p = .11$, Cramers V=.04

Appendix Table 3: Association between age and SES.

			SES			Total
			Low	Middle	High	
Age	14–17	Count	301	613	558	1,472
		% within age	20.4%	41.6%	37.9%	100.0%
	18–20	Count	353	541	367	1,261
		% within age	28.0%	42.9%	29.1%	100.0%
Total		Count	654	1,154	925	2,733
		% within age	23.9%	42.2%	33.8%	100.0%

Chi-square (2, N=2,733) = 31.97, $p < .001$, Cramers V=.11

Appendix Table 4: Association between gender and ethnicity.

			Ethnicity				Total
			Māori	Pākehā	Pasifika	Other	
Gender	Wahine/female	Count	486	835	114	353	1,788
		% within gender	27.2%	46.7%	6.4%	19.7%	100.0%
	Tane/male	Count	302	560	84	281	1,227
		% within gender	24.6%	45.6%	6.8%	22.9%	100.0%
	All others	Count	40	103	7	41	191
		% within gender	20.9%	53.9%	3.7%	21.5%	100.0%
Total		Count	828	1,498	205	675	3,206
		% within gender	25.8%	46.7%	6.4%	21.1%	100.0%

Chi-square (6, N=3,206) = 12.25, p=.06, Cramers V=.04

Appendix Table 5: Association between gender and SES.

			SES			Total
			Low	Middle	High	
Gender	Wahine/female	Count	377	647	458	1,482
		% within gender	25.4%	43.7%	30.9%	100.0%
	Tane/male	Count	205	411	385	1,001
		% within gender	20.5%	41.1%	38.5%	100.0%
	All others	Count	45	62	58	165
		% within gender	27.3%	37.6%	35.2%	100.0%
Total		Count	627	1,120	901	2,648
		% within gender	23.7%	42.3%	34.0%	100.0%

Chi-square (4, N =2,648) = 19.14, p=.001, Cramers V=.06

Appendix Table 6: Association between ethnicity and SES.

			SES			Total
			Low	Middle	High	
Ethnicity	Māori	Count	234	263	139	636
		% within ethnicity	36.8%	41.4%	21.9%	100.0%
	Pākehā	Count	253	541	544	1,338
		% within ethnicity	18.9%	40.4%	40.7%	100.0%

Appendix Table 6 (continued): Association between ethnicity and SES.

Ethnicity	Pasifika	Count	43	72	38	153
		% within ethnicity	28.1%	47.1%	24.8%	100.0%
	Other	Count	115	265	202	582
		% within ethnicity	19.8%	45.5%	34.7%	100.0%
Total		Count	645	1,141	923	2,709
		% within ethnicity	23.8%	42.1%	34.1%	100.0%

Chi-square (6, N=2,709) = 115.99, p<.001, Cramers V=.15

Appendix 2: Bivariate associations among the vaping variables (behaviour, marketing exposure and engagement marketing)

Appendix Table 7: Association between vaping behaviour and advert exposure.

			Seen advert		Total
			No	Yes	
Ever vaped	No	Count	626	417	1,043
		% within ever vaped	60.0%	40.0%	100.0%
	Yes	Count	447	638	1,085
		% within ever vaped	41.2%	58.8%	100.0%
Total		Count	1,073	1,055	2,128
		% within ever vaped	50.4%	49.6%	100.0%

Chi-square (1, N=2,128) = 75.36, p<.001, Cramers V=.19

Appendix Table 8: Association between vaping behaviour and advert engagement.

			Engaged with advert		Total
			No	Yes	
Ever vaped	No	Count	952	60	1,012
		% within ever vaped	94.1%	5.9%	100.0%
	Yes	Count	580	470	1,050
		% within ever vaped	55.2%	44.8%	100.0%
Total		Count	1,532	530	2,062
		% within ever vaped	74.3%	25.7%	100.0%

Chi-square (1, N=2,062) = 406.94, p<.001, Cramers V=.44

Appendix Table 9: Association between advert exposure and engagement.

			Engaged with advert		Total
			No	Yes	
Seen advert	No	Count	905	151	1,056
		% within advert seen	85.7%	14.3%	100.0%
	Yes	Count	639	406	1,045
		% within advert seen	61.1%	38.9%	100.0%
Total		Count	1,544	557	2,101
		% within advert seen	73.5%	26.5%	100.0%

Chi-square (1, N=2,101) = 162.52, p<.001, Cramers V=.28

Appendix 3: Bivariate associations between socio-demographic and vaping variables

Appendix Table 10: Chi-squared analyses of associations between socio-demographic variables (age, gender, ethnicity and SES) with vaping behaviour.

Socio-demographic variable	Subgroup	Ever vaped						df (N)	Chi-square	p-value	Cramer's V
		No		Yes		Total					
		Count	%	Count	%	Count	%				
Age	14–17	721	58.1	519	48.9	1,240	100				
	18–20	354	37.5	591	62.5	945	100				
	All ages	1,075	49.2	1,110	50.8	2,185	100				
								1 (2,185)	91.81	<.001	.21
Gender	Wahine/female	524	44.4	655	55.6	1,179	100				
	Tane/male	432	55.2	350	44.8	782	100				
	Other genders	72	49.0	75	51.0	147	100				
	All genders	1,028	48.8	1,080	51.2	2,108	100				
								2 (2,108)	21.95	<.001	.10
Ethnicity	Māori	181	34.5	343	65.5	524	100				
	Pākehā	529	50.0	529	50.0	1,058	100				
	Pasifika	59	50.9	57	49.1	116	100				
	Other	292	62.5	175	37.5	467	100				
	All ethnicities	1,061	49.0	1,104	51.0	2,165					
								3 (2,165)	78.61	<.001	.19

Appendix Table 10 (continued): Chi-squared analyses of associations between socio-demographic variables (age, gender, ethnicity and SES) with vaping behaviour.

SES	Low	172	39.3	266	60.7	438	100				
	Middle	417	51.0	401	49.0	818	100				
	High	355	52.4	322	47.6	677	100				
	All SES	944	48.8	989	51.2	1,933					
									2 (1,933)	21.06	<.001

Appendix Table 11: Chi-squared analyses of associations between socio-demographic variables (age, gender, ethnicity and SES) with vape advert exposure.

Socio-demographic variable	Subgroup	Seen vape advert						df (N)	Chi-square	p-value	Cramer's V
		No		Yes		Total					
		Count	%	Count	%	Count	%				
Age	14–17	592	46.8	672	53.2	1,264	100				
	18–20	513	53.4	447	46.6	960	100				
	All ages	1,105	49.7	1,119	50.3	2,224	100				
									1 (2,224)	9.51	.002
Gender	Wahine/female	587	48.4	625	51.6	1,212	100				
	Tane/male	400	50.7	389	49.3	789	100				
	Other genders	74	50.3	73	49.7	147	100				
	All genders	1,061	49.4	1,087	50.6	2,148	100				
									2 (2,148)	1.04	.60

Appendix Table 11 (continued): Chi-squared analyses of associations between socio-demographic variables (age, gender, ethnicity and SES) with vape advert exposure.

Ethnicity	Māori	221	41.5	311	58.5	532	100				
	Pākehā	567	52.7	508	47.3	1,075	100				
	Pasifika	46	37.4	77	62.6	123	100				
	Other	257	54.3	216	45.7	473	100				
	All ethnicities	1,091	49.5	1,112	50.5	2,203	100				
								3 (2,203)	29.63	< .001	.12
SES	Low	193	43.1	255	56.9	448	100				
	Middle	431	51.4	407	48.6	838	100				
	High	371	53.5	323	46.5	694	100				
	All SES	995	50.3	985	49.7	1,980	100				
									2 (980)	12.54	.002

Appendix 12: Chi-squared analyses of associations between socio-demographic variables (age, gender, ethnicity and SES) with vape advert engagement.

Socio-demographic variable	Subgroup	Engaged with vape advert						df (N)	Chi-square	p-value	Cramer's V
		No		Yes		Total					
		Count	%	Count	%	Count	%				
Age	14–17	919	75.8	293	24.2	1,212	100				
	18–20	666	71.2	270	28.8	936	100				
	All ages	1,585	73.8	563	26.2	2,148	100				
									1 (2,148)	5.96	.02

Appendix 12 (continued): Chi-squared analyses of associations between socio-demographic variables (age, gender, ethnicity and SES) with vape advert engagement.

Gender	Wahine/female	829	71.5	330	28.5	1,159	100				
	Tane/male	595	77.4	174	22.6	769	100				
	Other genders	106	73.1	39	26.9	145	100				
	All genders	1,530	73.8	543	26.2	2,073	100				
									2 (2,073)	8.21	.02
Ethnicity	Māori	313	61.3	198	38.7	511	100				
	Pākehā	805	77.3	237	22.7	1,042	100				
	Pasifika	77	64.7	42	35.3	119	100				
	Other	375	82.1	82	17.9	457	100				
	All ethnicities	1,570	73.7	559	26.3	2,129	100				
									3 (2,129)	69.15	<.001
SES	Low	281	65.5	148	34.5	429	100				
	Middle	605	74.6	206	25.4	811	100				
	High	538	79.9	135	20.1	673	100				
	All SES	1,424	74.4	489	25.6	1,913	100				
									2 (1,913)	28.73	<.001