

Appendix 1

Table A.1 Warning Statements

WARNING: Cigarettes are addictive.

WARNING: Tobacco smoke can harm your children.

WARNING: Cigarettes cause fatal lung disease.

WARNING: Cigarettes cause cancer.

WARNING: Cigarettes cause strokes and heart disease.

WARNING: Smoking during pregnancy can harm your baby.

WARNING: Smoking can kill you.

WARNING: Tobacco smoke causes fatal lung disease in nonsmokers.

WARNING: Quitting smoking now greatly reduces serious risks to your health.

Appendix 2

Figure A. 1 View of hypothetical pack of cigarettes – control version (statement only) for warning statement 1



Figure A.2 Front view of each image on hypothetical cigarette pack (treatment conditions)



Appendix 2 table 1. Reaction and Belief Scales to Warning Statement “Cigarettes Are Addictive”, by Sample

Explanatory Variable	Warning 1 - Cigarettes Are Addictive											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	6.952*** (0.000)	7.176*** (0.000)	4.684*** (0.000)	2.645*** (0.000)	2.445*** (0.000)	4.210*** (0.000)	1.464* (0.020)	0.233 (0.725)	0.146 (0.816)	1.301* (0.015)	1.024 (0.078)	-0.321 (0.589)
Age	0.023 (0.544)	0.061 (0.836)	0.128 (0.697)	0.033 (0.163)	-0.044 (0.848)	-0.254 (0.255)	0.012 (0.642)	-0.240 (0.300)	-0.105 (0.672)	-0.050* (0.036)	-0.035 (0.849)	0.031 (0.893)
Gender	0.313 (0.731)	0.366 (0.681)	2.850*** (0.001)	0.085 (0.867)	-0.694 (0.302)	0.869 (0.170)	-0.326 (0.599)	1.033 (0.136)	1.633* (0.011)	0.960 (0.084)	1.203* (0.047)	1.959*** (0.001)
Race/ethnicity												
Black/African American	-3.927* (0.028)	10.792*** (0.000)	-3.084 (0.328)	-1.323 (0.123)	2.306 (0.196)	-3.394 (0.186)	-1.865 (0.127)	2.602 (0.065)	1.145 (0.473)	1.314 (0.259)	2.312 (0.134)	2.411 (0.222)
Hispanic	0.490 (0.770)	0.974 (0.349)	-1.662 (0.228)	0.710 (0.407)	0.764 (0.365)	0.412 (0.649)	-0.164 (0.883)	-0.939 (0.281)	-0.850 (0.458)	0.779 (0.413)	-0.317 (0.678)	0.419 (0.697)
All other	-0.638 (0.777)	1.933 (0.295)	0.259 (0.845)	-1.109 (0.282)	-1.187 (0.211)	0.593 (0.476)	-1.963 (0.089)	0.798 (0.439)	1.304 (0.104)	-0.534 (0.556)	-0.751 (0.509)	0.879 (0.322)
College graduate or greater	1.174 (0.156)	0.805 (0.475)		-0.077 (0.889)	-0.046 (0.952)		0.169 (0.787)	0.890 (0.343)		0.038 (0.947)	0.534 (0.479)	
Income												
Between \$25,000 and \$49,999	1.515 (0.419)	-0.269 (0.780)		-0.692 (0.444)	0.276 (0.733)		0.542 (0.684)	-0.612 (0.470)		0.350 (0.748)	-0.546 (0.461)	
Between \$50,000 and \$74,999	0.271	-1.400		-0.095	-0.170		-1.595	-1.001		0.245	-0.901	

	(0.876)	(0.230)	(0.918)	(0.858)	(0.226)	(0.241)	(0.816)	(0.228)				
More than \$75,000	1.303 (0.456)	2.891* (0.038)	0.024 (0.977)	1.446 (0.142)	0.106 (0.934)	0.395 (0.725)	0.158 (0.879)	1.239 (0.220)				
Are you planning to stop smoking within the next 30 days?	2.049* (0.049)	2.165* (0.018)	0.210 (0.727)	1.188 (0.086)	2.027** (0.001)	0.344 (0.622)	0.319 (0.570)	1.421* (0.025)				
Smoked in the past 30 days		0.795 (0.555)		2.156* (0.015)		-1.854* (0.048)		-0.954 (0.282)				
Observations	214	203	203	214	203	204	214	203	204	214	203	204

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Appendix 2 table 2. Reaction and Belief Scales to Warning Statement “Tobacco Smoke Can Harm Your Children”, by Sample

Explanatory Variable	Warning 2 – Tobacco Smoke Can Harm Your Children											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	5.828*** (0.000)	4.848*** (0.000)	4.969*** (0.000)	1.945** (0.002)	2.920*** (0.000)	2.997*** (0.000)	0.132 (0.831)	0.497 (0.447)	-0.735 (0.214)	-0.666 (0.231)	-0.544 (0.381)	0.646 (0.249)
Age	-0.035 (0.312)	0.269 (0.361)	0.231 (0.479)	0.004 (0.885)	0.121 (0.521)	0.383 (0.126)	-0.014 (0.620)	-0.202 (0.304)	-0.230 (0.373)	-0.051* (0.030)	-0.074 (0.716)	0.163 (0.465)
Gender	1.596 (0.097)	0.550 (0.543)	1.563 (0.079)	1.041 (0.106)	0.078 (0.909)	1.327* (0.030)	1.286* (0.049)	2.520*** (0.000)	1.696* (0.010)	0.978 (0.091)	2.518*** (0.000)	0.666 (0.263)
Race/ethnicity												
Black/African American	-2.337 (0.250)	-2.175 (0.296)	1.597 (0.507)	-0.172 (0.882)	0.032 (0.989)	2.555 (0.072)	1.501 (0.378)	2.686 (0.137)	0.669 (0.636)	0.493 (0.653)	1.163 (0.626)	0.740 (0.559)
Hispanic	2.938 (0.078)	1.067 (0.373)	-1.187 (0.380)	1.000 (0.258)	0.583 (0.518)	-0.594 (0.552)	2.825** (0.004)	0.274 (0.744)	1.280 (0.175)	2.406* (0.018)	0.959 (0.203)	-0.346 (0.700)
All other	-2.627 (0.132)	4.498** (0.002)	-0.916 (0.428)	-0.836 (0.313)	1.422 (0.142)	-1.270 (0.112)	-0.129 (0.922)	0.820 (0.365)	-0.180 (0.829)	0.442 (0.726)	1.832* (0.045)	-1.303 (0.092)
College graduate or greater	0.722 (0.433)	-2.000 (0.073)		-0.067 (0.919)	-0.778 (0.304)		0.483 (0.450)	-0.435 (0.568)		0.442 (0.434)	-0.361 (0.635)	
Income												
Between \$25,000 and \$49,999	1.992 (0.245)	2.818* (0.018)		1.116 (0.357)	1.620 (0.064)		-0.225 (0.857)	0.483 (0.563)		-1.337 (0.264)	0.653 (0.435)	

Between \$50,000 and \$74,999	3.917*	0.498	1.267	1.126	-0.706	-0.175	-1.370	-0.222				
	(0.021)	(0.647)	(0.276)	(0.192)	(0.562)	(0.840)	(0.248)	(0.789)				
More than \$75,000	1.981	2.444	1.030	1.087	0.287	1.430	-0.255	0.933				
	(0.217)	(0.072)	(0.385)	(0.320)	(0.806)	(0.162)	(0.825)	(0.331)				
Are you planning to stop smoking within the next 30 days?	2.125*	3.713***	0.063	0.863	0.420	0.691	0.159	1.428*				
	(0.041)	(0.000)	(0.931)	(0.224)	(0.575)	(0.316)	(0.812)	(0.042)				
Smoked in the past 30 days		-1.350		0.825		-2.330**		-1.438*				
		(0.164)		(0.214)		(0.001)		(0.024)				
Observations	216	204	203	216	204	204	216	204	205	216	204	204

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Appendix 2 table 3. Reaction and Belief Scales to Warning Statement “Cigarettes Cause Fatal Lung Disease”, by Sample

Explanatory Variable	Warning 3 – Cigarettes Cause Fatal Lung Disease											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	6.576*** (0.000)	5.167*** (0.000)	4.005*** (0.000)	3.533*** (0.000)	3.701*** (0.000)	6.063*** (0.000)	0.311 (0.626)	-0.662 (0.269)	-0.717 (0.224)	-0.833 (0.115)	-0.366 (0.504)	-0.278 (0.618)
Age	-0.044 (0.226)	0.234 (0.356)	0.248 (0.517)	0.044 (0.071)	0.313* (0.037)	-0.020 (0.927)	-0.027 (0.295)	0.071 (0.710)	-0.281 (0.242)	-0.053* (0.026)	-0.032 (0.859)	-0.174 (0.488)
Gender	2.060* (0.029)	-0.122 (0.890)	-0.396 (0.667)	1.075 (0.085)	0.280 (0.625)	-0.166 (0.766)	1.555* (0.015)	0.950 (0.140)	0.112 (0.852)	2.076*** (0.000)	0.554 (0.345)	1.434* (0.013)
Race/ethnicity												
Black/African American	-0.291 (0.894)	1.086 (0.723)	1.598 (0.388)	1.647 (0.272)	0.647 (0.714)	-1.384 (0.279)	-0.569 (0.707)	0.440 (0.813)	0.175 (0.902)	0.355 (0.793)	3.414 (0.063)	1.786 (0.115)
Hispanic	0.387 (0.772)	2.985* (0.016)	0.839 (0.610)	-0.865 (0.370)	0.745 (0.318)	0.342 (0.752)	-1.685 (0.139)	-0.975 (0.228)	2.241** (0.004)	0.249 (0.808)	0.431 (0.553)	2.273* (0.018)
All other	0.043 (0.978)	2.238 (0.104)	1.456 (0.309)	-0.085 (0.929)	1.266 (0.128)	-1.322 (0.150)	-1.020 (0.316)	0.595 (0.534)	1.627 (0.077)	0.877 (0.271)	0.753 (0.479)	1.282 (0.230)
College graduate or greater	-0.250 (0.809)	0.415 (0.695)		-0.212 (0.750)	0.226 (0.721)		-0.402 (0.569)	0.427 (0.550)		-0.547 (0.349)	-0.314 (0.631)	
Income												
Between \$25,000 and \$49,999	0.343 (0.818)	-0.476 (0.654)		0.543 (0.580)	0.507 (0.450)		0.717 (0.491)	-0.781 (0.254)		-0.067 (0.940)	-0.704 (0.292)	

Between \$50,000 and \$74,999	2.838 (0.054)	0.768 (0.542)	1.807 (0.069)	0.582 (0.487)	-0.328 (0.754)	-0.135 (0.885)	0.451 (0.588)	0.680 (0.385)				
More than \$75,000	2.384 (0.113)	0.208 (0.874)	0.475 (0.650)	1.046 (0.187)	0.562 (0.598)	-0.347 (0.733)	0.159 (0.863)	-0.012 (0.990)				
Are you planning to stop smoking within the next 30 days?	3.204** (0.009)	2.807** (0.002)	1.557* (0.018)	0.487 (0.419)	3.002*** (0.000)	-0.831 (0.182)	2.424*** (0.000)	-0.560 (0.356)				
Smoked in the past 30 days			-0.467 (0.646)		-0.254 (0.722)		-2.476** (0.003)		-1.549* (0.025)			
Observations	218	205	204	218	206	204	218	205	204	218	206	204

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Appendix 2 table 4. Reaction and Belief Scales to Warning Statement “Cigarettes Cause Cancer”, by Sample

Explanatory Variable	Warning 4 – Cigarettes Cause Cancer											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	8.065*** (0.000)	8.613*** (0.000)	7.611*** (0.000)	3.537*** (0.000)	3.919*** (0.000)	6.517*** (0.000)	0.290 (0.612)	-0.788 (0.173)	0.114 (0.843)	-0.309 (0.580)	-0.677 (0.203)	0.467 (0.405)
Age	-0.057 (0.115)	0.110 (0.701)	0.064 (0.844)	-0.015 (0.560)	-0.201 (0.296)	-0.077 (0.732)	-0.051* (0.027)	-0.139 (0.453)	-0.008 (0.972)	-0.089*** (0.001)	0.051 (0.779)	0.216 (0.332)
Gender	1.241 (0.154)	-0.682 (0.452)	1.583 (0.066)	-0.824 (0.155)	1.202* (0.042)	-0.354 (0.527)	1.160 (0.060)	2.005*** (0.001)	1.298* (0.028)	1.027 (0.093)	1.368* (0.013)	0.414 (0.476)
Race/ethnicity												
Black/African American	-1.140 (0.466)	-1.503 (0.724)	2.939 (0.163)	-0.681 (0.495)	1.282 (0.519)	1.509 (0.218)	-1.337 (0.142)	0.856 (0.682)	1.287 (0.232)	0.518 (0.535)	-1.538 (0.382)	2.422* (0.042)
Hispanic	0.441 (0.821)	3.097* (0.020)	1.708 (0.249)	1.377 (0.215)	0.516 (0.535)	0.109 (0.905)	-0.236 (0.846)	-0.427 (0.615)	0.827 (0.247)	0.383 (0.741)	0.058 (0.938)	0.530 (0.541)
All other	-1.628 (0.312)	0.125 (0.915)	1.671 (0.197)	-1.879 (0.066)	0.615 (0.349)	-0.665 (0.521)	-0.525 (0.655)	0.932 (0.258)	-0.440 (0.722)	-1.045 (0.316)	1.710* (0.026)	0.057 (0.958)
College graduate or greater	-0.999 (0.256)	-0.533 (0.607)		0.164 (0.778)	0.104 (0.878)		0.600 (0.331)	-0.717 (0.296)		-0.011 (0.984)	-0.857 (0.189)	
Income												
Between \$25,000 and \$49,999	0.636 (0.716)	0.882 (0.434)		1.253 (0.253)	-0.852 (0.250)		-1.255 (0.289)	0.433 (0.570)		0.519 (0.602)	0.615 (0.361)	

Between \$50,000 and \$74,999	2.684 (0.130)	3.621** (0.006)	2.373* (0.034)	1.525 (0.094)	-0.582 (0.627)	2.079* (0.022)	0.745 (0.456)	1.521 (0.082)				
More than \$75,000	3.240 (0.060)	2.900* (0.025)	1.433 (0.169)	1.036 (0.220)	-1.374 (0.227)	1.416 (0.106)	-0.141 (0.878)	0.585 (0.488)				
Are you planning to stop smoking within the next 30 days?	2.815** (0.010)	1.888 (0.059)	0.303 (0.682)	0.232 (0.714)	1.881** (0.008)	0.031 (0.961)	1.500* (0.026)	0.865 (0.148)				
Smoked in the past 30 days		2.984* (0.016)		0.060 (0.933)		-0.494 (0.518)		-0.687 (0.351)				
Observations	217	203	205	218	203	205	218	203	205	218	203	205

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Appendix 2 table 5. Reaction and Belief Scales to Warning Statement “Cigarettes Cause Strokes and Heart Disease”, by Sample

Explanatory Variable	Warning 5 – Cigarettes Cause Strokes and Heart Disease											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	6.393*** (0.000)	6.270*** (0.000)	7.036*** (0.000)	2.343*** (0.000)	3.142*** (0.000)	5.444*** (0.000)	-0.022 (0.971)	0.667 (0.306)	0.480 (0.401)	-0.406 (0.443)	0.891 (0.141)	0.917 (0.101)
Age	-0.012 (0.694)	-0.114 (0.697)	0.453 (0.165)	-0.003 (0.913)	-0.122 (0.553)	0.310 (0.169)	0.002 (0.951)	0.347 (0.111)	0.186 (0.449)	-0.053* (0.016)	-0.135 (0.474)	0.320 (0.181)
Gender	1.801* (0.029)	0.467 (0.617)	2.120** (0.008)	0.030 (0.959)	0.048 (0.939)	0.243 (0.677)	1.115 (0.071)	-0.557 (0.411)	1.921** (0.002)	1.731** (0.002)	1.103 (0.082)	1.652** (0.006)
Race/ethnicity												
Black/African American	1.525 (0.415)	1.977 (0.533)	1.375 (0.329)	1.125 (0.398)	1.761 (0.305)	1.817 (0.146)	1.214 (0.337)	-2.573 (0.178)	-0.118 (0.927)	1.201 (0.348)	2.511 (0.187)	-0.414 (0.671)
Hispanic	-2.552 (0.080)	1.656 (0.242)	3.985** (0.010)	0.712 (0.484)	0.717 (0.455)	1.742* (0.027)	2.711* (0.023)	-1.217 (0.206)	0.808 (0.420)	3.077* (0.022)	-1.253 (0.162)	0.895 (0.426)
All other	2.920 (0.066)	0.081 (0.950)	-1.551 (0.168)	2.901 (0.051)	0.088 (0.910)	-0.134 (0.876)	0.940 (0.560)	-0.121 (0.910)	0.308 (0.702)	0.794 (0.598)	-0.054 (0.946)	-0.172 (0.836)
College graduate or greater	0.640 (0.469)	0.942 (0.412)		-0.010 (0.987)	0.346 (0.673)		-0.296 (0.630)	-0.626 (0.432)		0.032 (0.957)	0.379 (0.634)	
Income												
Between \$25,000 and \$49,999	3.382**	0.871		0.798	-0.234		-0.424	-0.507		1.260	-0.322	

	(0.007)	(0.447)	(0.352)	(0.770)	(0.702)	(0.551)	(0.194)	(0.678)				
Between \$50,000 and \$74,999	2.570*	-0.069	-0.716	0.896	-0.533	-1.901*	0.791	-1.419				
	(0.032)	(0.954)	(0.437)	(0.304)	(0.598)	(0.031)	(0.418)	(0.100)				
More than \$75,000	2.977*	2.227	0.341	1.528	-1.427	0.981	0.065	0.637				
	(0.013)	(0.210)	(0.725)	(0.145)	(0.174)	(0.342)	(0.946)	(0.547)				
Are you planning to stop smoking within the next 30 days?	5.628***	2.654*	0.153	0.456	0.999	1.586*	1.648*	1.796*				
	(0.000)	(0.016)	(0.830)	(0.538)	(0.188)	(0.020)	(0.011)	(0.015)				
Smoked in the past 30 days		-0.265		0.980		-3.590***		-2.241**				
		(0.802)		(0.148)		(0.000)		(0.001)				
Observations	215	203	204	215	203	204	215	203	204	215	202	204

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Appendix 2 table 6. Reaction and Belief Scales to Warning Statement “Smoking During Pregnancy Can Harm Your Baby”, by Sample

Explanatory Variable	Warning 6 – Smoking During Pregnancy Can Harm Your Baby											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	6.709*** (0.000)	6.605*** (0.000)	5.598*** (0.000)	2.359*** (0.000)	3.417*** (0.000)	5.565*** (0.000)	1.600** (0.007)	-0.491 (0.426)	-1.400* (0.032)	0.660 (0.201)	-0.372 (0.502)	-0.688 (0.227)
Age	-0.064* (0.024)	-0.236 (0.356)	0.468 (0.159)	0.010 (0.659)	0.055 (0.775)	0.092 (0.712)	-0.038 (0.109)	-0.128 (0.501)	0.282 (0.288)	-0.023 (0.293)	0.167 (0.344)	0.419 (0.078)
Gender	-0.037 (0.962)	0.802 (0.407)	1.680 (0.069)	0.694 (0.307)	-1.065 (0.078)	0.586 (0.317)	0.605 (0.325)	2.000** (0.002)	1.161 (0.059)	1.581** (0.004)	1.441* (0.016)	0.815 (0.153)
Race/ethnicity												
Black/African American	0.702 (0.398)	-2.290 (0.181)	-2.460 (0.072)	-0.252 (0.871)	3.200* (0.030)	-1.398 (0.277)	-0.184 (0.888)	2.858 (0.123)	-0.232 (0.797)	0.333 (0.709)	6.991*** (0.000)	1.191 (0.419)
Hispanic	-0.662 (0.675)	0.712 (0.623)	-1.207 (0.429)	1.798 (0.085)	0.048 (0.957)	-0.550 (0.584)	0.257 (0.814)	-1.461 (0.109)	-1.588 (0.177)	0.600 (0.598)	-1.545* (0.016)	-0.920 (0.362)
All other	1.976 (0.302)	0.898 (0.475)	-1.466 (0.235)	-0.150 (0.907)	0.932 (0.234)	-1.640* (0.033)	0.832 (0.443)	-1.673* (0.039)	-1.092 (0.135)	2.142** (0.005)	-0.143 (0.864)	-0.598 (0.399)
College graduate or greater	-1.108 (0.159)	-0.620 (0.542)		-0.665 (0.305)	-1.253 (0.078)		-0.905 (0.114)	-0.059 (0.935)		-0.614 (0.263)	-0.745 (0.259)	
Income												
Between \$25,000 and \$49,999	2.485	-0.001		-1.452	0.999		0.955	-0.536		2.273* (0.005)	-1.134 (0.864)	

	(0.091)	(0.999)		(0.241)	(0.155)		(0.413)	(0.496)		(0.037)	(0.096)	
Between \$50,000 and \$74,999	2.795	-0.969		-1.599	0.014		0.807	1.029		0.865	-0.831	
	(0.056)	(0.561)		(0.191)	(0.989)		(0.485)	(0.243)		(0.431)	(0.341)	
More than \$75,000	3.387*	-1.952		-1.644	-0.158		-0.528	-0.757		-0.432	-1.231	
	(0.019)	(0.112)		(0.152)	(0.850)		(0.622)	(0.395)		(0.676)	(0.158)	
Are you planning to stop smoking within the next 30 days?	3.720***	2.887**		0.271	0.546		2.072**	0.799		1.782**	0.330	
	(0.000)	(0.005)		(0.721)	(0.415)		(0.004)	(0.262)		(0.004)	(0.593)	
Smoked in the past 30 days			0.521			1.034			-2.448**		-1.608*	
			(0.654)			(0.111)			(0.004)		(0.025)	
Observations	215	202	204	215	202	204	215	202	204	215	202	204

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Appendix 2 table 7. Reaction and Belief Scales to Warning Statement “Smoking Can Kill You”, by Sample

Explanatory Variable	Warning 7 – Smoking Can Kill You											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	7.698*** (0.000)	5.569*** (0.000)	5.549*** (0.000)	2.997*** (0.000)	3.313*** (0.000)	4.336*** (0.000)	0.798 (0.193)	0.307 (0.608)	1.190 (0.052)	0.259 (0.653)	-0.299 (0.610)	0.440 (0.450)
Age	-0.040 (0.257)	0.420 (0.162)	0.142 (0.673)	-0.013 (0.660)	0.042 (0.822)	0.121 (0.603)	-0.069** (0.008)	-0.035 (0.856)	0.188 (0.466)	-0.103*** (0.000)	0.148 (0.435)	0.329 (0.193)
Gender	2.727*** (0.001)	0.282 (0.769)	0.173 (0.846)	0.693 (0.271)	0.859 (0.161)	-0.419 (0.482)	0.612 (0.331)	1.137 (0.061)	2.092** (0.001)	0.616 (0.297)	1.153 (0.053)	1.116 (0.052)
Race/ethnicity												
Black/African American	0.461 (0.859)	-5.672 (0.077)	-0.742 (0.535)	1.219 (0.518)	2.904*** (0.001)	0.617 (0.541)	0.043 (0.977)	-4.646 (0.378)	2.446* (0.012)	2.638* (0.029)	5.052 (0.077)	2.646* (0.012)
Hispanic	0.345 (0.780)	-1.207 (0.301)	1.510 (0.260)	-0.802 (0.568)	-0.832 (0.265)	0.863 (0.348)	0.076 (0.953)	-0.672 (0.405)	-0.500 (0.576)	0.485 (0.720)	-0.282 (0.725)	0.708 (0.397)
All other	-0.197 (0.934)	-0.101 (0.937)	1.578 (0.256)	-0.090 (0.944)	-0.641 (0.451)	0.120 (0.891)	-2.665 (0.065)	0.508 (0.513)	-1.807 (0.073)	-1.919 (0.083)	0.784 (0.251)	0.241 (0.767)
College graduate or greater	-0.191 (0.825)	-2.053 (0.082)		0.905 (0.162)	-1.246 (0.089)		0.057 (0.929)	-0.190 (0.796)		0.618 (0.270)	-0.942 (0.216)	
Income												
Between \$25,000 and \$49,999	1.354 (0.370)	-0.443 (0.701)		1.725 (0.151)	0.463 (0.522)		1.330 (0.252)	-0.195 (0.786)		0.916 (0.425)	0.934 (0.212)	

Between \$50,000 and \$74,999	0.913 (0.547)	1.901 (0.230)		0.695 (0.554)	0.758 (0.465)		1.491 (0.165)	-1.206 (0.214)	0.383 (0.721)	-0.553 (0.543)
More than \$75,000	1.373 (0.364)	-0.251 (0.864)		1.265 (0.288)	0.053 (0.954)		1.013 (0.352)	-0.855 (0.297)	-0.021 (0.983)	-0.563 (0.478)
Are you planning to stop smoking within the next 30 days?	2.437* (0.015)	3.682*** (0.000)		1.124 (0.127)	0.673 (0.320)		1.518* (0.031)	1.550* (0.021)	0.624 (0.398)	0.771 (0.227)
Smoked in the past 30 days			-1.337 (0.221)			-0.747 (0.349)		-3.243*** (0.000)		-2.318*** (0.000)
Observations	215	204	204	215	204	204	216	204	204	204

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Appendix 2 table 8. Reaction and Belief Scales to Warning Statement “Tobacco Smoke Causes Fatal Lung Disease in Nonsmokers”, by Sample

Explanatory Variable	Warning 8 – Tobacco Smoke Causes Fatal Lung Disease in Nonsmokers											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	4.701*** (0.000)	5.438*** (0.000)	5.128*** (0.000)	1.436* (0.011)	2.537*** (0.000)	3.891*** (0.000)	0.286 (0.629)	1.292* (0.037)	0.453 (0.467)	0.912 (0.097)	0.184 (0.742)	0.770 (0.209)
Age	-0.086* (0.017)	-0.335 (0.251)	0.189 (0.602)	0.014 (0.517)	0.097 (0.608)	0.041 (0.890)	-0.054* (0.019)	-0.080 (0.697)	-0.213 (0.414)	-0.091*** (0.000)	-0.025 (0.893)	0.011 (0.966)
Gender	1.005 (0.280)	1.719 (0.064)	2.211* (0.022)	0.500 (0.413)	0.684 (0.263)	0.734 (0.271)	-0.383 (0.500)	1.448* (0.021)	1.131 (0.059)	0.796 (0.162)	1.106 (0.055)	1.090 (0.076)
Race/ethnicity												
Black/African American	-0.433 (0.823)	3.669 (0.208)	-2.801 (0.081)	0.633 (0.649)	2.803 (0.165)	1.370 (0.311)	1.035 (0.463)	1.361 (0.312)	-0.413 (0.778)	1.050 (0.281)	0.630 (0.669)	0.744 (0.562)
Hispanic	2.267 (0.305)	1.479 (0.240)	1.621 (0.245)	0.563 (0.594)	3.232*** (0.000)	0.394 (0.668)	1.299 (0.247)	0.316 (0.732)	-0.048 (0.956)	1.871 (0.071)	0.139 (0.867)	0.993 (0.208)
All other	0.558 (0.756)	2.504 (0.058)	1.204 (0.528)	-0.037 (0.978)	-0.900 (0.285)	0.687 (0.495)	-0.270 (0.868)	-0.404 (0.644)	-0.996 (0.419)	0.641 (0.362)	-0.429 (0.563)	-0.689 (0.561)
College graduate or greater	-0.782 (0.383)	1.663 (0.146)		-1.329* (0.017)	-0.105 (0.869)		-0.593 (0.327)	1.009 (0.194)		-0.822 (0.181)	0.743 (0.285)	
Income												
Between \$25,000 and \$49,999	0.323	0.174		-3.088***	-1.183		0.581	-0.811		-1.123	-0.157	

	(0.838)	(0.885)	(0.001)	(0.110)	(0.641)	(0.286)	(0.284)	(0.819)				
Between \$50,000 and \$74,999	1.289 (0.390)	0.999 (0.468)	-2.829** (0.003)	-0.835 (0.409)	-0.072 (0.953)	-0.635 (0.520)	-0.844 (0.429)	-0.694 (0.420)				
More than \$75,000	1.685 (0.247)	-0.405 (0.763)	-2.527** (0.004)	-0.205 (0.801)	-0.393 (0.738)	-1.124 (0.177)	-1.098 (0.329)	-1.587 (0.060)				
Are you planning to stop smoking within the next 30 days?	2.898** (0.006)	3.105** (0.005)	1.444* (0.018)	0.928 (0.165)	1.911* (0.010)	0.333 (0.610)	1.574* (0.012)	0.733 (0.204)				
Smoked in the past 30 days		0.892 (0.489)		0.362 (0.654)		-0.762 (0.405)		-0.384 (0.644)				
Observations	217	207	205	217	207	206	217	207	206	217	207	206

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Appendix 2 table 9. Reaction and Belief Scales to Warning Statement “Quitting Smoking Now Greatly Reduces Serious Risk to Your Health”, by Sample

Explanatory Variable	Warning 9 – Quitting Smoking Now Greatly Reduces Serious Risk to Your Health											
	Emotional reaction scale			Cognitive reaction scale			Beliefs about health risks to regular smokers scale			Beliefs about health risks from regular SHS exposure scale		
	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth	Adult	Young Adult	Youth
Graphic warning vs. text only	1.502*	1.748*	0.174	1.263*	1.656*	2.209***	0.412	1.008	-0.534	0.136	0.387	-0.118
	(0.035)	(0.034)	(0.820)	(0.038)	(0.013)	(0.000)	(0.485)	(0.096)	(0.371)	(0.794)	(0.528)	(0.835)
Age	-0.043	-0.328	-0.163	-0.010	0.155	0.156	-0.021	-0.065	-0.179	-0.022	0.002	-0.266
	(0.179)	(0.132)	(0.616)	(0.723)	(0.389)	(0.477)	(0.417)	(0.702)	(0.463)	(0.308)	(0.989)	(0.263)
Gender	-0.961	-0.125	2.119*	0.643	0.935	-0.361	0.917	0.314	1.108	1.160*	0.307	0.984
	(0.204)	(0.879)	(0.010)	(0.308)	(0.134)	(0.522)	(0.159)	(0.612)	(0.060)	(0.034)	(0.617)	(0.085)
Race/ethnicity												
Black/African American	-1.118	4.169***	0.535	0.562	3.355	0.809	0.258	-0.395	0.699	1.085	0.209	0.101
	(0.360)	(0.000)	(0.713)	(0.611)	(0.179)	(0.400)	(0.810)	(0.863)	(0.595)	(0.201)	(0.920)	(0.923)
Hispanic	0.604	-0.032	-1.873*	-1.119	2.391**	-0.460	0.024	-0.213	1.498	0.223	-0.972	1.279
	(0.608)	(0.975)	(0.025)	(0.223)	(0.003)	(0.567)	(0.980)	(0.783)	(0.099)	(0.817)	(0.178)	(0.202)
All other	1.584	1.484	0.331	1.095	-0.423	-0.884	0.157	-0.210	1.501	2.161	0.654	2.349**
	(0.365)	(0.202)	(0.800)	(0.310)	(0.643)	(0.321)	(0.917)	(0.830)	(0.087)	(0.091)	(0.490)	(0.006)
College graduate or greater	0.742	0.489		-0.105	-0.935		-0.741	0.163		-0.104	0.419	
	(0.336)	(0.588)		(0.870)	(0.197)		(0.220)	(0.808)		(0.852)	(0.547)	
Income												
Between \$25,000 and \$49,999	0.242	-0.582		-0.899	1.284		-0.565	0.772		0.754	0.594	

	(0.823)	(0.589)	(0.359)	(0.140)	(0.588)	(0.292)	(0.405)	(0.429)				
Between \$50,000 and \$74,999	0.553 (0.576)	-0.252 (0.813)	-1.354 (0.174)	1.282 (0.196)	-0.191 (0.850)	-0.270 (0.777)	0.485 (0.603)	-0.201 (0.821)				
More than \$75,000	0.051 (0.956)	-1.236 (0.241)	-0.097 (0.921)	-0.098 (0.898)	0.156 (0.875)	-1.257 (0.123)	-0.755 (0.419)	-0.995 (0.233)				
Are you planning to stop smoking within the next 30 days?	1.449* (0.034)	3.340*** (0.000)	0.952 (0.125)	-0.441 (0.542)	0.634 (0.344)	0.007 (0.991)	1.560** (0.007)	-0.133 (0.836)				
Smoked in the past 30 days		0.650 (0.486)		0.716 (0.251)		-2.993*** (0.000)		-1.749* (0.011)				
Observations	215	202	204	215	202	205	215	202	205	215	202	205

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001