

### Supplementary Box. Drinking Keywords

Expressions for Drinking		Location	Event	Other Related Words
(have) fun	live	bar	club night	alcohol
a great night	lively	beach	college party	amped
active	messed up	charlotte	concert	cluster
arrived	not sober	club	cookout	drug
blackout	party (v.)	college	football	family
confused	plastered	ECU	get together	fight
crazy	prepared	pool	graduation	food
drink (n.)	promiscuous	UNCC	hoedown	frat
drunk	pumped	<b>Action</b>	kickback	friends
excited	ready		party	glast
faded	shitfaced	celebration	rager	hobos
flexing	showed up	dance	reunion	loud
fucked up	shwasted	drink (v.)	shindig	music
good time	slizzard	get fucked up	spring break	nightlife
got here	sloshed	go out	throw down	over-the-top
hammered	super happy	<b>Time</b>	vacation	pumped
happy	tipsy		wedding	rage
high	turned (turnt) up	weekend		sex
hype	turnup	summer		smoke
hyper	tweakin	night		sorority
IDK	twisted	New Year		teens
inebriated	wasted	birthday		tipsy
interesting	wild			too much
intoxicated	shmacked			underage

Abbreviations: (n.), noun; (v.), verb.

**Supplementary Table 1.** Text Classifiers' Performances

Algorithm	Kernel or Inference Algorithm	Classes	Precision	Recall	F1-score	Support
SVM	Linear	Yes	0.84	0.63	0.72	60
		No	0.85	0.95	0.90	167
		Maybe	0.62	0.54	0.58	39
		Average/Total	0.81	0.82	0.81	266
	Non-linear (Poly degree=1-4, RBF, and Sigmoid)	Yes	No predicted samples	No predicted samples	No predicted samples	60
		No	0.63	1.00	0.77	167
		Maybe	No predicted samples	No predicted samples	No predicted samples	39
		Average/total	0.39	0.63	0.48	266
LLDA	Gibbs	Yes	0.68	0.71	0.69	58
		No	0.70	0.88	0.78	133
		Maybe	0.67	0.35	0.46	75
		Average/total	0.69	0.69	0.67	266
	CVB0	Yes	0.64	0.60	0.62	60
		No	0.86	0.61	0.72	161
		Maybe	0.31	0.72	0.44	39
		Average/total	0.73	0.63	0.65	260

Abbreviations: CVB0, collapsed variational Bayes with a zero-order Taylor expansion approximation; LLDA, labeled Latent Dirichlet Allocation; Poly, polynomial; RBF, radial base function; SVM, Support Vector Machine.

**Supplementary Table 2.** Comparison Between Classification Models Performance

<b>Classification Model and Data Used</b>	<b>Classes</b>	<b>Precision</b>	<b>Recall</b>	<b>F1-score</b>	<b>Support</b>
Text using linear SVM on text + hints	Yes	0.84	0.63	0.72	60
	No	0.85	0.95	0.90	167
	Maybe	0.62	0.54	0.58	39
	Average/total	0.81	0.82	0.81	266
Text using linear SVM on text + hints + links	Yes	0.86	0.60	0.71	60
	No	0.84	0.96	0.89	167
	Maybe	0.64	0.54	0.58	39
	Average/total	0.81	0.82	0.81	266
Image	Yes	0.29	0.55	0.38	20
	No	0.70	0.48	0.57	48
	Maybe	No predicted samples	No predicted samples	No predicted samples	3
	Average/total	0.55	0.48	0.49	71
Video	Yes	0.83	0.93	0.88	27
	No	No predicted samples	No predicted samples	No predicted samples	4
	Maybe	No predicted samples	No predicted samples	No predicted samples	1
	Average/total	0.70	0.78	0.74	32
Combined models	Yes	0.78	0.65	0.71	60
	No	0.85	0.93	0.89	167
	Maybe	0.66	0.54	0.59	39
	Average/total	0.80	0.81	0.80	266

Abbreviation: SVM, Support Vector Machine.