

Supplementary Table 1
Study Characteristics

Citation	n	Percent Male	Mean Age	Mean Cigs/Day	Mean FTND	Mean Years Smoking	Hours Abstinent	Craving Measure	Cue Mode	Comparison
Attwood et al. (2008)	54	56%	22.0	11.0	4.0	6.0	12	QSU-10	I	BL
Bidwell et al. (2013)	47	38%	16.4	9.3	—	2.1	16	QSU-10	IV	N
Bidwell et al. (2013)	27	41%	16.2	9.5	—	1.9	0	QSU-10	IV	N
Brandon et al. (2011)	100	61%	43.3	24.6	5.8	25.1	12	SI	I	N
Burton & Tiffany (1997)	60	50%	30.7	26.3	—	5.9	0	QSU-10	IV	N
Carpenter et al. (2009)	78	60%	29.0	19.3	4.8	11.1	1	QSU-10	IV	N
Cepeda-Benito et al. (1996)	36	50%	33.5	27.9	—	21.8	0	QSU-10	SI	N
Cepeda-Benito et al. (1996)	40	50%	29.1	27.0	—	17.5	1	QSU-10	SI	N
Chiuccariello et al. (2013)	18	44%	37.4	18.2	6.2	21.6	1	QSU-10	I	N
Conklin & Tiffany (2001)	60	50%	35.0	28.9	—	22.5	0	QSU-10	SI	N
Conklin et al. (2013)	72	50%	34.4	20.2	5.3	19.0	6	QSU-4	I	N
Conklin et al. (2013)	72	50%	34.4	20.2	5.3	19.0	6	QSU-4	I	N
Conklin et al. (2015)	60	50%	36.9	19.7	5.7	10.2	0	QSU-4	I	N
Conklin et al. (2010)	72	50%	28.9	20.7	5.7	15.5	6	QSU-4	I	N

Conklin et al. (2008)	62	50%	34.4	20.0	6.1	19.5	6	QSU-4	I	N
Conklin et al. (2008)	16	—	30.1	21.1	4.6	14.1	6	QSU-4	I	N
Conklin et al. (2008)	62	50%	34.4	20.0	6.1	19.5	6	QSU-4	I	N
David et al. (2007)	8	0%	55.0	17.9	6.5	38.0	12	S-J	I	BL
David et al. (2007)	8	0%	55.0	17.9	6.5	38.0	0	S-J	I	BL
Dawkins et al. (2006)	145	43%	31.8	18.1	4.9	15.5	12	SI	IV	BL
Doran et al. (2007)	60	50%	30.8	19.1	5.4	18.1	0	QSU-10	IV	N
Elash et al. (1995)	36	50%	20.4	26.3	—	4.4	6	QSU-10	SI	N
Erblich & Bovbjerg (2004)	225	42%	38.9	20.1	6.0	19.4	0	CCQ	IV	BL
Erblich & Bovbjerg (2004)	225	42%	38.9	20.1	6.0	19.4	0	CCQ	SI	BL
Erblich et al. (2012)	153	52%	37.6	17.1	5.3	17.9	0	CCQ	IV	N
Erblich et al. (2012)	153	52%	37.6	17.1	5.3	17.9	0	CCQ	SI	N
Field & Duka (2004)	33	39%	21.5	14.4	—	5.4	—	QSU-10	IV	N
Gass & Tiffany (2017)	30	50%	36.8	18.9	—	20.0	1	CCQ	IV	N
Germeroth et al. (2015)	30	—	28.2	14.0	—	13.9	—	QSU-4	IV	N
Heishman et al. (2010)	30	50%	34.1	21.9	5.7	12.4	12	SI	SI	N

Hutchison et al. (1999)	26	54%	32	20.6	—	13.8	12	CCQ	SI	BL
Hutchison et al. (1999)	26	54%	32	20.6	—	13.8	0	CCQ	SI	N
Juliano et al. (1998)	132	65%	33.1	27.3	—	16.8	3	SI	IV	N
Kang et al. (2013)	13	100%	24.8	17.5	5.6	5.7	36	SI	I	N
LaRowe et al. (2007)	19	100%	30.1	19.4	—	11.7	1	QSU-10	IV	N
Li et al. (2017)	11	40%	39.7	17.3	5.2	22.8	2	QSU-10	I	N
Littel & Franken (2011)	27	33%	23.3	15.1	3.8	7.1	1	QSU-10	I	BL
Littel & Franken (2011)	22	46%	21.0	2.31	0.2	5.1	1	QSU-10	I	BL
Littel & Franken (2011)	28	40%	21.7	14.2	3.4	5.7	1	QSU-10	I	BL
Litvin & Brandon (2010)	175	52%	39.3	22.3	5.6	21.3	0.5	SI	IV	N
Lochbuehler et al. (2009)	65	34%	22.7	9.6	—	8.9	6	QSU-4	V	N
Lochbuehler et al. (2009)	31	39%	24.0	9.6	—	9.3	6	QSU-4	I	N
Lopez et al. (2008)	62	0%	20.0	15.7	3.3	4.6	0	SI	I	N
Maude-Griffin et al. (1996)	100	51%	22.6	24.5	—	6.3	0	QSU-10	SI	N
McClernon et al. (2009)	17	39%	28.6	17.8	4.4	11.6	—	SI	I	N
Miranda et al. (2008)	20	85%	50.4	24.0	5.2	23.0	—	SI	IV	N

Morissette et al. (2012)	96	60%	39.4	19.1	3.9	13.6	5	QSU-10	SI	BL
Paris et al. (2011)	23	63%	33.1	18.6	—	17.4	0	SI	VR	N
Rohsenow et al. (2007)	134	54%	47.1	27.3	6.5	30.3	10	QSU-10	IV	N
Sayette & Hufford (1994)	40	30%	21.1	15.8	—	4.7	12	SI	IV	N
Sayette & Hufford (1994)	40	30%	21.1	15.8	—	4.7	0	SI	IV	N
Sayette & Hufford (1994)	31	55%	21.5	17.2	—	6	12	SI	IV	N
Sayette & Hufford (1994)	31	55%	21.5	17.2	—	6	0	SI	IV	N
Sayette & Parrott (1999)	58	52%	22.7	18.4	—	5.6	6	SI	IV	BL
Sayette et al. (2001)	34	56%	25.2	24.9	—	9.4	7	SI	IV	N
Sayette et al. (2001)	33	—	25.4	24.8	—	8.3	0	SI	IV	N
Shiffman et al. (2013)	201	57%	41.0	16.0	—	26.0	0.5	QSU-F1	I	N
Singleton et al. (2003)	48	50%	33.5	22.9	6.0	14.5	0	SI	SI	N
Smolka et al. (2006)	10	100%	32.0	16.0	3.0	10.0	0	SI	I	N
Stevenson et al. (2017)	22	59%	38.0	11.8	4.0	18.1	6	QSU-4	I	N
Thompson-Lake et al. (2014)	36	61%	—	18.3	6.0	23.6	26.9	QSU-10	VR	N
Tiffany & Drobos (1990)	60	62%	20.5	15.89	—	3.5	0	SI	SI	N

Tong et al. (2007)	20	50%	37.7	17.5	4.7	18.5	0	SI	V	N
Traylor et al. (2008)	20	60%	20.9	13.4	—	6.0	—	QSU-10	VR	N
Watson et al. (2010)	90	59%	30.0	19.3	4.9	11.3	0	QSU-10	IV	N
Weinberger et al. (2012)	52	58%	44.8	7.4	6.2	28.4	0	SI	IV	N
Wesbrook et al. (2011)	54	69%	45.0	17.6	5.0	25.8	12	SI	I	N
Yalachkov et al. (2013)	10	60%	31.0	14.8	3.8	12.6	0.5	SI	IV	N

Note. FTND = Fagerstrom Test for Nicotine Dependence; — = not reported; CCQ = cigarette craving questionnaire; QSU = Questionnaire on Smoking Urges; SI = single item; S-J = Shiffman-Jarvik Craving Scale; I = images; IV = *in vivo*; SI = scripted imagery; V = video; VR = virtual reality; BL = baseline; N = neutral.