

**Peer Mentoring and Automated Text Messages for Smoking Cessation:
A Randomized Pilot Trial**

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Supp. Figure S1. Sample Mentor Profile Page

Your mentor

Name: [REDACTED]

Profile Picture:



Gender: female

Age: 48

Hometown: [REDACTED]

Profession: Healthcare

Those I love the most: Family

Hobbies: Scrapbooking, crafts, casino, geocaching

Fun fact about me: I'm a new mommy to a 12-week old puppy and It's been crazy!! We had a dog for 16 years and had to put her down 1 year ago, and we decided to start this all over again. YIKES!!!!

About me as a former smoker: I smoked a pack a day for approximately 15 years. After watching my dad receive treatment for lung cancer, I quit smoking. I never wanted my family to go through what I was going through watching my dad suffer from the effects of cigarette smoking.

Smokefree since: 01/01/2002

Years as a smoker: 16

Average cigarettes per day before quitting: 20

My main reason for quitting: My family & to stay healthier!

Methods used to quit smoking: Zyban

Reason for becoming a mentor: To help others realize.....that YES it's very difficult to quit and probably one of the hardest things you'll ever have to do, but you can do it!

Note: This is a screenshot of a profile created by one mentor (used here with permission). Participants in the mentor group were automatically redirected to their mentor's profile page immediately after completing the baseline survey. A link to the profile page was also sent to participants by email and by text message.

Supp. Table S1. Enhancements to SmokefreeTXT Text-Messaging Intervention

Enhancement	Description	SFTXT message (control)	Mentor group message
Informal messages	Made texts more conversational in tone	“Sleep is important when you quit smoking. Lack of sleep can cause mood problems, which could trigger you to smoke. Go to sleep early tonight.”	“Sleep is super important for quitting smoking. Lack of sleep can make you moody, a big smoking trigger. Get some sleep tonight. You will thank me.”
Conversation starters	Reworded texts to prompt a reply “	“Write down your top 3 [smoking triggers]...”	“What are your top 3 smoking triggers?”
Personalized messages	Personalized based on each mentor’s past experience with quitting	“Think of healthy ways to deal with stress.... Go to the gym, take a jog, or walk the dog.”	“Think of healthy ways to deal with stress.... For instance, I went for a walk, took a bubble bath, or went someplace I couldn’t smoke.”
Tailored messages	Tailored to each participant	Not applicable	Add, remove, edit texts
Spontaneous messages	Non-scripted messages	Not applicable	Send spontaneous texts at any time

Supp. Table S2. Mentor Engagement

	N	%
Screened	80	-
Met eligibility criteria and consented	62	-
Started training	47	-
Completed training	38	100%
Mentored at least 1 participant	36	95%
Sent any spontaneous messages	36	95%
Completed entire program	32	84%

Note: This table indicates the involvement of mentors during each stage of the program. The right column is a percent of those who completed the training.

Supp. Table S3. Predictors of Likelihood to Respond at Follow-Up

	Responders
Mentor group	-0.028 (0.067)
Male	-0.217** (0.086)
Age	-0.003 (0.006)
Income	
\$20,000 - \$39,999	-0.183** (0.086)
\$40,000 - \$74,999	0.054 (0.094)
\$75,000 or more	-0.093 (0.126)
Decline to answer	0.242* (0.128)
White	0.081 (0.082)
Send text messages daily	0.029 (0.086)
Cigarettes per day	-0.002 (0.002)
Number of years smoking	0.004 (0.005)
Days until quit date	-0.016 (0.010)
Number of past quit attempts	0.001 (0.006)
Smoke to relieve stress	0.147** (0.070)
Quit to improve health	-0.089 (0.066)
Minutes to first cig. of the day	
6 - 30	0.149* (0.077)
31 - 60	0.123 (0.110)
More than 60	0.293** (0.134)
Uses other nicotine products	-0.133 (0.119)
Importance of quitting	-0.041 (0.035)
Confidence in ability to quit	0.019

	(0.013)
Expected difficulty of quitting	0.018
	(0.020)
<hr/>	
Number of observations	195
<hr/>	

Note: This table reports the correlates of responding to the follow-up survey, expressed as average marginal effects calculated from logit models. The reference categories are < \$20,000 for income and 5 minutes or less for minutes to first cigarette. All models include robust standard errors. * p<0.10, ** p<0.05, *** p<0.01

Supp. Table S4. Effect of Study Group Assignment on 3-Month Smoking Abstinence
(Intent-to-Treat vs. Imputed)

	Average marginal effect (Standard error)					
	(1) Self-report (ITT)	(2) Self-report (ITT)	(3) Self-report (Imputed)	(4) Self-report (Imputed)	(5) Verified (ITT)	(6) Verified (ITT)
Mentor group	0.106*	0.127**	0.193**	0.215***	0.049	0.065**
	(0.054)	(0.058)	(0.079)	(0.075)	(0.032)	(0.030)
Male		-0.063		0.037		
		(0.067)		(0.107)		
Age		0.000		0.000		-0.000
		(0.005)		(0.007)		(0.002)
Income						
\$20,000 - \$39,999		-0.229***		-0.324***		-0.049
		(0.071)		(0.098)		(0.039)
\$40,000 - \$74,999		-0.035		-0.048		0.016
		(0.094)		(0.111)		(0.049)
\$75,000 or more		-0.209**		-0.302***		0.009
		(0.085)		(0.111)		(0.072)
Decline to answer		-0.034		-0.043		0.026
		(0.123)		(0.135)		(0.059)
White		-0.015		-0.034		-0.007
		(0.065)		(0.095)		(0.040)
Send text messages daily		-0.030		-0.105		-0.005
		(0.075)		(0.086)		(0.045)
Cigarettes per day		0.002		0.011***		0.002***
		(0.001)		(0.003)		(0.001)
Number of years smoking		0.002		-0.004		0.000
		(0.004)		(0.007)		(0.002)
Days until quit date		-0.004		0.001		-0.002
		(0.007)		(0.011)		(0.004)
Number of past quit attempts		-0.003		-0.012		0.000
		(0.005)		(0.008)		(0.004)
Smoke to relieve stress		-0.002		-0.054		0.001
		(0.055)		(0.081)		(0.030)
Quit to improve health		0.015		0.011		-0.009
		(0.057)		(0.077)		(0.039)
Minutes to first cig.						
6 - 30		0.045		-0.005		0.018
		(0.059)		(0.086)		(0.035)
31 - 60		0.064		0.037		0.050
		(0.101)		(0.121)		(0.059)
More than 60		0.101		0.240		0.198
		(0.151)		(0.166)		(0.144)
Importance of quitting		0.047		0.049		0.016
		(0.037)		(0.047)		(0.030)
Confidence in ability to quit		0.010		0.022		0.009
		(0.013)		(0.017)		(0.009)
Expected difficulty of quitting		0.009		0.036		-0.003

		(0.018)		(0.026)		(0.008)
Number of observations	200	195	200	200	200	195
Mean dependent variable	0.131	0.134	0.227	0.227	0.030	0.031

Note: This table reports the effect of the mentor intervention on 7-day point prevalence abstinence 3 months after the person's quit date, expressed as average marginal effects calculated from logit models. Columns 1, 3, and 5 are unadjusted. Columns 2, 4, and 6 are adjusted for all covariates listed in Table 2. Columns 1 and 2 are regressions of self-reported abstinence on an intent-to-treat basis. Columns 3 and 4 are regressions of self-reported abstinence in which the missing outcome and covariate data were multiply imputed with chained equations (100 iterations) with all covariates as predictors. Imputed variables are: abstinence ($N = 89$ imputed observations), years smoking ($N = 4$), quit attempts ($N = 1$), and quit confidence ($N = 1$). Columns 5 and 6 are regressions of biochemically verified abstinence on an intent-to-treat basis. The indicator for male was omitted from Column 4, because no men were verified to have abstained. All models include robust standard errors. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

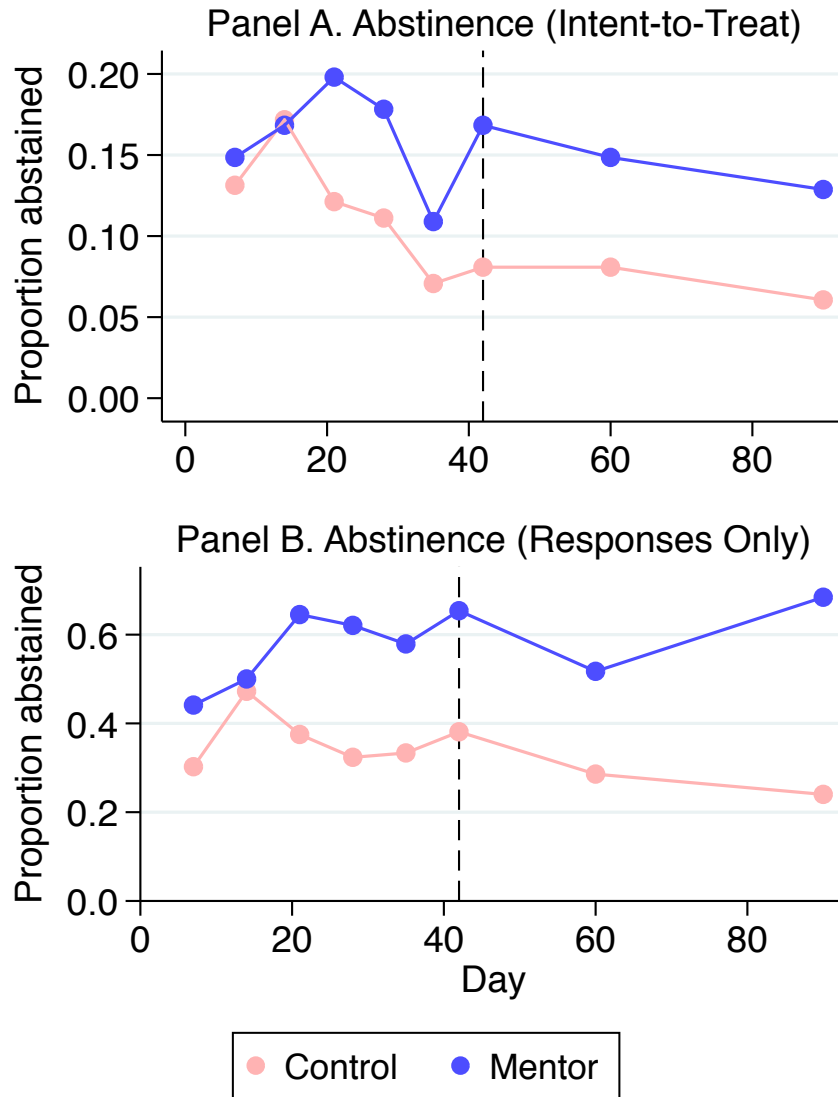
Supp. Table S5. Effect of Study Group Assignment on Cigarettes per Day 3 Months After Enrollment
(Complete Case Analysis vs. Imputed)

	Average marginal effect (Standard error)			
	(1) Complete Cases	(2) Complete Cases	(3) Imputed	(4) Imputed
Mentor group	-3.33*** (1.10)	-3.34*** (1.11)	-3.17** (1.22)	-3.34*** (1.22)
Male		-0.18 (1.56)		-0.37 (1.82)
Age		-0.05 (0.08)		-0.05 (0.11)
Income				
\$20,000 - \$39,999		3.70** (1.68)		3.62* (1.92)
\$40,000 - \$74,999		0.18 (1.70)		0.01 (1.65)
\$75,000 or more		2.99 (2.13)		3.02 (2.08)
Decline to answer		0.53 (1.72)		0.58 (1.85)
White		0.19 (1.48)		0.08 (1.71)
Send text messages daily		1.23 (1.08)		1.30 (1.28)
Cigarettes per day		0.02 (0.05)		0.02 (0.04)
Number of years smoking		0.04 (0.07)		0.04 (0.10)
Days until quit date		-0.01 (0.15)		-0.03 (0.17)
Number of past quit attempts		0.07 (0.11)		0.06 (0.13)
Smoke to relieve stress		0.62 (1.13)		0.61 (1.41)
Quit to improve health		1.02 (1.21)		1.20 (1.28)
Minutes to first cig. of the day				
6 - 30		-2.18* (1.30)		-2.19* (1.28)
31 - 60		0.21 (2.26)		0.22 (2.16)
More than 60		-3.01 (1.97)		-2.96 (2.33)

Importance of quitting		-1.50***		-1.47**
		(0.53)		(0.61)
Confidence in ability to quit		-0.26		-0.30
		(0.28)		(0.27)
Expected difficulty of quitting		-0.04		-0.05
		(0.31)		(0.43)
Constant	6.50***	21.75***	6.75***	21.75***
	(0.94)	(5.90)	(0.95)	(7.59)
Number of observations	95	94	200	200
Mean dependent variable	6.50	6.55	6.76	6.76

Note: This table reports the effect of the mentor intervention on average cigarettes per day 3 months after the person's quit date, estimated from OLS models. Columns 1 and 3 are unadjusted. Columns 2 and 4 are adjusted for all covariates listed in Table 2. Columns 1 and 2 are regressions of cigarettes per day among endline survey respondents. Columns 3 and 4 are regressions of cigarettes per day in which the missing outcome and covariate data were multiply imputed with chained equations (100 iterations) with all covariates as predictors. Imputed variables are: cigarettes per day at endline ($N = 105$ imputed observations), years smoking ($N = 4$), quit attempts ($N = 1$), and quit confidence ($N = 1$). All models include robust standard errors. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Supp. Figure S2. Self-Reported Abstinence by Study Group Over Time

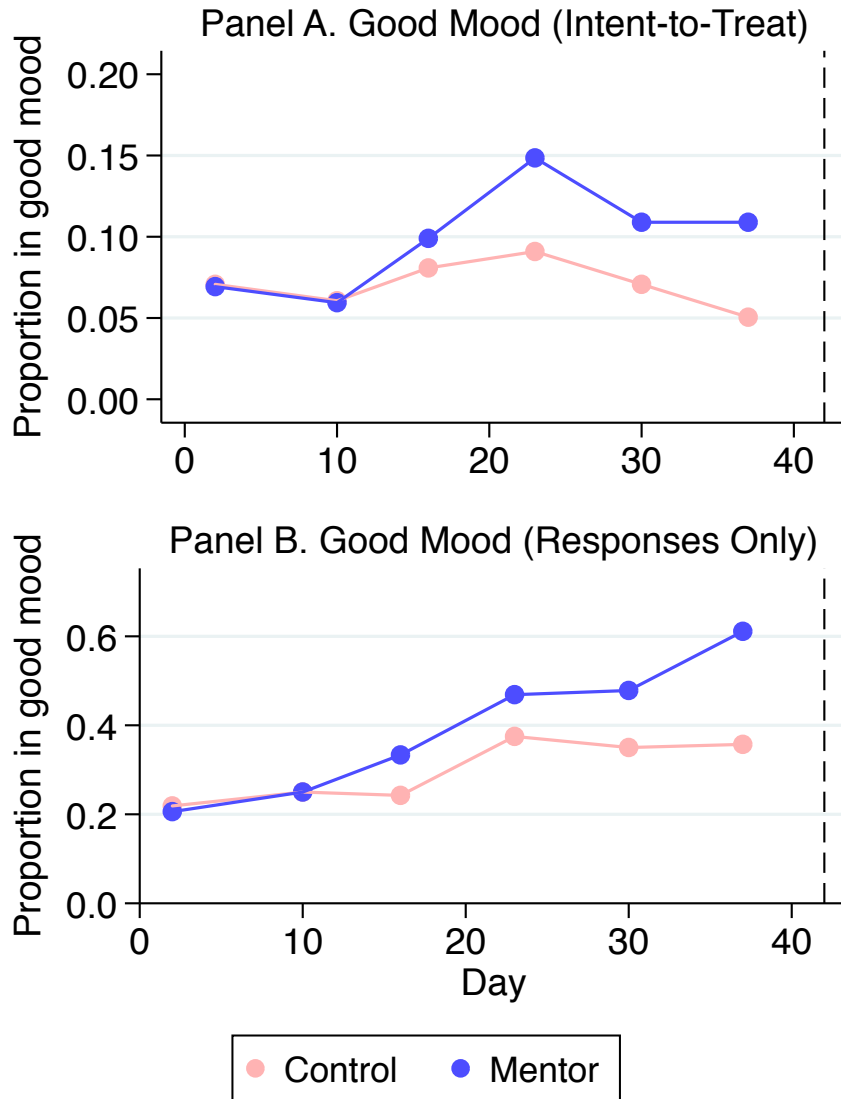


No. responses

Control	43	36	32	34	21	21	28	25
Mentor	34	34	31	29	19	26	29	19

Note: Participants received texts asking about smoking status at eight points in time: 7, 14, 21, 28, 35, 42, 60, and 90 days after the person's selected quit day. Panel A shows the proportion who reported being abstinent (intent-to-treat). Panel B shows the proportion abstinent among those who responded. Day 0 is the planned quit day. The dotted line denotes the end of the intervention.

Supp. Figure S3. Mood by Study Group Over Time

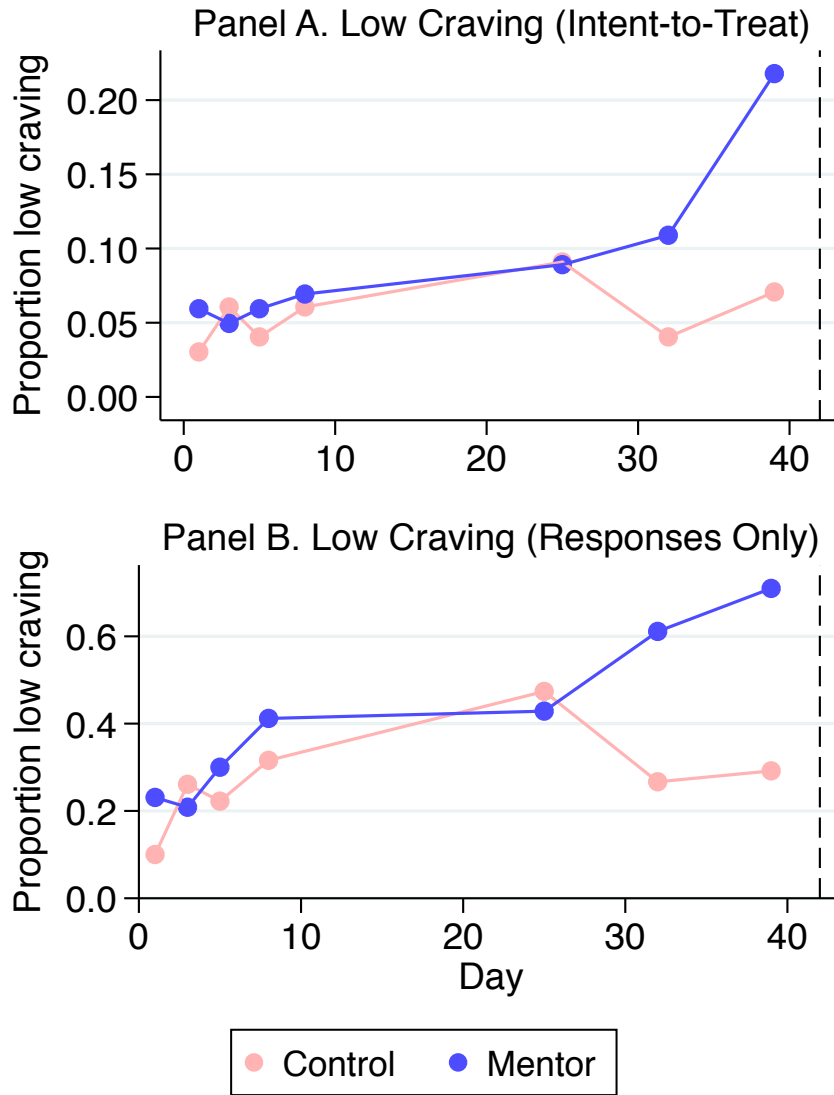


No. responses

Control	32	24	33	24	20	14
Mentor	34	24	30	32	23	18

Note: Participants received texts asking about their mood (good, ok, bad) at six points in time: 2, 10, 16, 23, 30, and 37 days after the person's selected quit day. Panel A shows the proportion who reported being in a good mood (intent-to-treat). Panel B shows the proportion in a good mood among those who responded. Day 0 is the planned quit day. The dotted line denotes the end of the intervention.

Supp. Figure S4. Cravings by Study Group Over Time



No. responses

Control	30	23	18	19	19	15	24
Mentor	26	24	20	17	21	18	31

Note: Participants received texts asking about cravings (high, medium, low) at six points in time: 1, 3, 5, 8, 25, 32, and 39 days after the person's quit day. Panel A shows the proportion who reported low craving (intent-to-treat). Panel B shows the proportion with low craving among those who responded. Day 0 is the planned quit day. The dotted line denotes the end of the intervention.