Presentation Title: Developing a Text Message Intervention for Smoking Cessation With Peer-to-Peer Support, Beth C. Bock, PhD, Brown University, poster session 1234, Wednesday, July 31, 1 to 1:50 p.m. HST, Convention Center, Kamehameha Exhibit Hall, Level 1

Abstract: Rationale & Methods: There is growing interest in behavioral interventions that can be delivered through mobile platforms. Based on feedback from focus groups of current smokers, we developed an intervention that included one individual counseling session followed by an 8-week, individually tailored smoking cessation program delivered through daily SMS text messages. The program included social networking with other participants for peer support and text messages tailored to the user's quit experience.

In a randomized trial we compared this program (Text-2-Quit: TXT) to a control condition consisting of the same initial counseling session followed by 8 weeks of daily non-smoking-related motivational texts (MOJO). Both in person and online recruitment methods were used. The primary outcome was 7-day point prevalence abstinence (7PPA, cotinine verified) at 8 weeks (end of treatment), and 6 months.

Participants: Adults smoking >3 cigarettes/day who used text messaging were eligible. Individuals (191) were screened for eligibility online (66%) or by phone (34%). Of those screened, 39% did not complete the online enrollment after screening, 12% did not wish to come to the in-person visit for orientation, 8% were declined to participate and 9% were ineligible. Enrolled participants (N=58) averaged 30.7 years of age (SD=9.0; range: 18-52), were mostly female (57%), and reported ethnicity as 66% non-Hispanic white, 19% Black, 7% bi/multi-racial, and 19% Hispanic. Most had completed 12 (21%), 14 (36%), or 16 (24%) years of education. The sample was almost evenly split between those who worked part time (<35 hrs/week), full time (35+ hrs/week), or were unemployed. Participants smoked an average of 16.3 cigarettes/day (SD=8.4; range 4-40).

Results: A 2 (treatment group) X 3 (time point) GEE repeated measures analysis examined the effects of the TXT intervention vs. MOJO for differences in 7PPA. Results showed a significant main effect for treatment group ($p = .02$) with higher odds of abstinence for the TXT group compared to the MOJO group (OR = 4.52, 95% CI = 1.24, 16.53).

For 7PPA at the 8 week (end of treatment) assessment 23.3% of TXT and 10.0% of MOJO groups achieved abstinence (OR = 2.54). At 3-months follow up, 7PPA were 20.0% vs. 4.3% (TXT vs. MOJO; OR = 4.60). At the 6-month follow up 16.7% of TXT and 3.6% of MOJO group were abstinent (OR = 4.41).

These results indicate that mobile technology has significant potential for aiding smoking cessation using methods that are already integrated into people's everyday lives. Participants' positive responses to the program's social networking and tailored messaging capabilities suggest that these features warrant further study as tools for motivating and supporting smoking cessation.