



Internet-Based Smoking Education for College Students

Grant Number: R44CA84933-03

Abbreviated Abstract

This application proposed the development of an interactive, Internet-based, multimedia program called MyStudentBody-Tobacco. The program is designed to be offered through colleges and universities to help students understand, reduce, and stop the use of tobacco. The evaluation of the MSB-T site consisted of a randomized controlled field trial, in which college students who have used tobacco in the past 30 days were randomly assigned to receive one of four conditions: 1) the MSB-T Website and given instructions on what sections to visit each Web session, 2) the MSB-T Website, with no instructions on what to read, 3) a control Website containing smoking cessation information from NIH brochures, or 4) a no-treatment control condition. Data was collected at four time points: before intervention, and 1, 3, and 6 months post-intervention. Results for primary outcome of number of cigarettes smoked last week were mixed, depending on the baseline level of smoking. For low smoking students (<10 cig/week), the unguided MSB-T and the control Website students did not increase their smoking, whereas the no treatment control students and the guided MSB-T students increased their smoking. For students who smoked more regularly (>40 cig/week), the unguided MSB-T condition performed the best, although the no treatment control group performed next best.

Primary Investigator

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Emil Chiauzzi, Ph.D., has 20 years of clinical, research, and training experience in the addictions and psychiatric fields. He is currently Vice President of Product Development at Inflexxion in Newton, MA. He has served as Principal Investigator on numerous federal grants with various branches of the National Institutes of Health, and has completed interactive programs for teen smoking cessation (NCI), HIV prevention for substance abuse clients (NIAAA), brief alcohol intervention for primary care offices (NIAAA), relapse prevention for alcoholic clients (NIAAA); and three college programs - My Student Body: Alcohol (NIAAA), My Student Body: Tobacco (NCI), and My Student Body: Stress (NIMH). Dr. Chiauzzi authors content for these projects, including multimedia scripts and manuals for providers and participants. Dr. Chiauzzi is the author of Preventing Relapse in the Addictions (Allyn & Bacon) and is the primary author on Time Effective Treatment (Hazelden).

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Research Team & Affiliations

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Total Budget

\$803,773

Research Objectives

Aim 1: To develop a Website for college students called My Student Body Tobacco (MSB-T) that educates about the risks of tobacco use.

Aim 2: Conduct a field trial of the MSB-Tobacco Website to test its efficacy in a population of college students.

Theory/Hypothesis

Compared to students in the control group, students exposed to MyStudentBody: Tobacco will demonstrate:

- 1) greater knowledge about tobacco use and personal risk behaviors
- 2) greater self-efficacy in reducing, or abstaining from, tobacco
- 3) significantly less self-reported tobacco use

The effect of MyStudentBody: Tobacco for promoting movement along the stage of change continuum will be assessed as a secondary hypothesis.

Experimental Design

The study was structured as a 3x2 factorial design. The first factor, Intervention, had three levels: (1) Experimental 1 (structured experience with MyStudentBody: Tobacco); (2) Experimental 2 (open experience with MyStudentBody: Tobacco), and (3) Control (standard text-based tobacco education Website). Gender was included as a factor based on empirical literature that suggests gender differences in risk factors and patterns of tobacco use. Potential student subjects were recruited through announcements in college newspapers, advertising, and flyers placed in public places on campus. Students were randomly assigned, within college, to the Experimental or Control groups. Ss in the Experimental Group 1 participated in four guided sessions with MyStudentBody: Tobacco. Ss in Experimental Group 2 participated in four open-ended sessions with MyStudentBody: Tobacco. Ss in the Control Group visited a separate Website created by Inflexxion that presented standard text information about tobacco, also for four sessions.

Final Sample Size & Study Demographics

238 college students who have used tobacco in the past 30 days, aged 18-24. 53% male; 20% minority; 56% live in on-campus housing.



Data Collection Methods

Participants completed paper and pencil questionnaires at baseline, post-intervention, and 90-day follow-up.

Outcome Measures

Primary outcome: number of cigarettes smoked last week.

Secondary outcomes: Attitudes Towards Smoking, Self Efficacy not to Smoke, Hooked on Nicotine Checklist, Stage of Change, and Tobacco Knowledge.

Evaluation Methods

The evaluation of the MSB-T site consisted of a randomized controlled field trial, in which college students who have used tobacco in the past 30 days were randomly assigned to one of the four conditions. An intent-to-treat design was used so that all Ss were followed and evaluated, regardless of whether they completed the study. Data was collected at four time points: before intervention, and 1, 3, and 6 months post-intervention. Linear mixed models were used for analysis, which allows the use of cases with incomplete follow up, and analysis of random factors.

Research Results

Results for primary outcome of number of cigarettes smoked last week were mixed, depending on the baseline level of smoking. For low smoking students (<10 cig/week), the unguided MSB-T and the control Website students did not increase their smoking, whereas the no treatment control students and the guided MSB-T students increased their smoking. For students who smoked more regularly (>40 cig/week), the unguided MSB-T condition performed the best, although the no treatment control group performed next best.

Students in the unguided MSB-T condition also increased their self-efficacy not to smoke and their recognition of the adverse effects of smoking. For the outcomes: hooked on nicotine, stage of change, and tobacco knowledge, there was no significant difference between the treatment conditions over time.

Barriers & Solutions

Product(s) Developed from This Research

MyStudentBody: Tobacco