

Adolescent smokers' self-labels as indicators of motivation to quit

Linda Houser-Marko, PhD, Robin Mermelstein, PhD, Susan J. Curry, PhD & Oksana Pugach, MS

Institute for Health Research and Policy, University of Illinois at Chicago

Poster presented on behalf of the HYSO team at the Society of Behavioral Medicine 30th Annual Meeting in Montreal, Quebec, Can., April 22-25 2009

Background

- This study examines the baseline characteristics of youth who were in smoking cessation programs nationwide.
- The smoker identity or self-label is a categorical measure that is often used in smoking and cessation research with youth.
- Little is known about how self-descriptions of oneself as a "regular smoker" or "once in a while smoker" may relate to either behavioral characteristics or motivation to quit.
- We hypothesized that** youth who described themselves as "regular" smokers would smoke more and have less motivation to quit than youth who viewed themselves as "once in a while" smokers. We also thought that higher levels of nicotine dependence would be associated with less motivation to quit.
- This paper analyzes the Phase II baseline participant survey of the *Helping Young Smokers Quit (HYSO)* initiative. A complete description of Phase II of the HYSO project can be accessed on the HYSO website (www.HYSO.org).

Method

Participants

The initial sample was 878 adolescents who were in smoking cessation programs nationwide. 21 of the original participants had never smoked, and 88 considered themselves ex-smokers or did not respond to the self-label question.

For this study of smoker identity, we included the 769 participants who considered themselves to be current smokers (excluding nonsmokers and ex-smokers).

Procedure

Prior to the first program session, participants completed baseline surveys indicating their daily activities, smoking behavior, and desire to quit smoking. The paper and pencil questionnaire was administered by a study coordinator.

Demographics of Youth in Participating Cessation Programs nationwide

Age	16.82
Gender (% female)	50%
Race: White	73.0%
African American	6.0%
Latino/Hispanic	13.2%
Highest grade completed	
12 th	4.7%
11 th	26.2%
10 th	26.8%
9 th	21.8%
8 th or less	17.0%

Measures

(drawn from national surveys including National Youth Tobacco Survey, National Youth Smoking Cessation Survey, and Monitoring the Future)

Race & Gender & Age

Smoker Identity (categorical self-label)

Do you think of yourself as:

- a "once in a while smoker"
- a "regular smoker"

Current smoking

- Cigarettes per day (6 day calendar recall)
- Days smoked in last 30: 0 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 to 29 days, or all 30 days

Nicotine dependence: Nicotine Dependence Syndrome Scale – shortened

Ten dependence items rated on a scale often true (1) to never true (4). The scale was reverse coded so that higher scores reflect higher levels of dependence.

Perceived stress

The sum of four perceived stress items that were rated on a scale of never (1) to often (4).

Dependent Variable: Motivation to quit

"How motivated are you to quit smoking or stay quit?" on a scale of not at all motivated (0) to extremely motivated (10).

Analyses

We used descriptive statistics with t-tests to identify characteristics of youth in cessation programs and their smoker self-labels. In addition, a linear regression equation was used to model Motivation to quit smoking.

Comparisons by Self-Label for Youth in Cessation Programs

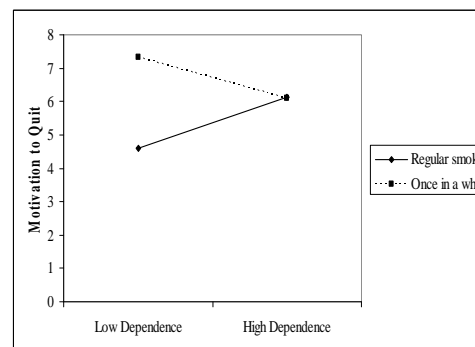
	Regular smoker (n=591)	Once in a while (n= 178)	Statistic
% Female	50.79%	50.00%	n.s.
Age	16.88	16.61	t = -2.07, p < .05
# Cigarettes per day	9.0	2.3	t = 13.59, p < .01
# Days smoked in past 30	27.3	12.6	t = 24.83, p < .01
Nicotine dependence	3.0	2.2	t = 15.67, p < .01
Perceived Stress	9.96	9.36	t = 2.76, p < .01

Regression predicting Motivation to quit At baseline for Youth starting a Cessation Program

Predictor	Parameter estimate (beta)	t-test
Gender	-0.159	-0.80, ns
Race	-0.128	-0.58, ns
Smoker identity	0.680	2.29, p < .05
Cigarettes per day (6 day recall)	-0.047	-2.72, p < .01
Age	0.225	3.39, p < .01
Perceived stress	0.072	1.85, p = .06
NDSS	0.072	0.38, ns
Interaction (Smoker * NDSS)	-0.691	-2.19, p < .05

A Linear regression model was used to model Motivation to Quit. For this procedure, variables were centered around the mean of each.
N = 769; **p < .01, *p < .05

Baseline Motivation to Quit For youth in cessation programs differs by Smoker Identity and Level of dependence



Summary of Results

Motivation to Quit among youth cessation program participants differs by Smoker Identity self-label and Level of dependence.

- Among occasional smokers, higher dependence is associated with less motivation to quit
- Among regular smokers, higher dependence is associated with greater motivation to quit
- This interaction is independent of amount smoked

Regular smokers differed from occasional smokers in that they:

- Smoked more Cigarettes per day
- Smoked more Days in last 30
- Had more Nicotine Dependence symptoms
- Had more Perceived stress

Discussion

We found that the self-label of Regular smokers and Occasional smokers did indeed reflect differences in reported current smoking (both quantity and frequency), nicotine dependence and stress.

The differences in Motivation to Quit by the combination of Smoker self-label and Nicotine Dependence should be tested more in the future, particularly for youth who are not enrolled in a cessation program.

- The smoker self-label could guide the tailoring of smoking cessation interventions such that there are:
 - Regular smokers who are highly addicted and moderately motivated to quit
 - Regular smokers who are less addicted and less motivated
 - Occasional smokers who are less addicted and highly motivated to quit
 - Occasional smokers who are more addicted and moderately motivated to quit

HYSO Co-Investigators:

Michael Berbaum, PhD
Brian Flay, DPhil
Richard Warnecke, PhD

Richard Campbell, PhD
Sherry Emery, PhD
Amy Sporer, MS

Funding provided by:

The Robert Wood Johnson Foundation, Centers for Disease Control and Prevention, and National Cancer Institute

You may obtain a complete description of HYSO, a copy of this poster, and other HYSO findings on our Web site at: www.HYSO.org