

Adolescent OTC Drug Use

Teen Marketing and Psychology Research

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December 2007

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- A. My background
 - B. Psychology and adolescent drug use
 - C. Marketing and adolescent drug use
 - D. Industry self-regulation of drug marketing
 - E. Public service announcements
- **Conclusions regarding adolescents & OTC drugs**
 - **Unanswered research questions**

A. My Background

1. Professor of Marketing, School of Business
2. Five grants from CA Tobacco-related Disease Research Program (tobacco use prevention)
3. Behavioral change expert panel for ONDCP National Youth Anti-drug Advertising Campaign

B. Psychology and Adolescent Drug Use

1. How prevalent is adolescent drug use and abuse?
2. Why adolescents use and abuse drugs?
3. Which adolescents use and abuse drugs?



1a. Adolescents' illicit drug abuse (Monitoring the Future 2006)

- Any illicit drug in past year
 - 15% in 8th grade
 - 29% in 10th grade
 - 37% in 12th grade
- Use of marijuana in past year
 - 12% in 8th grade
 - 25% in 10th grade
 - 32% in 12th grade

1b. Adolescents' drug abuse (Monitoring the Future 2006)

- Any alcohol in past year
 - 34% in 8th grade (drunk 14%)
 - 56% in 10th grade (drunk 35%)
 - 67% in 12th grade (drunk 48%)
- Any cigarette in past month
 - 9% in 8th grade
 - 15% in 10th grade
 - 22% in 12th grade

1c. Adolescents' OTC, Rx drug abuse (Monitoring the Future 2006)

- Use of cough/cold OTC to get high in past year
 - 4% in 8th grade
 - 5% in 10th grade
 - 7% in 12th grade
- Use of steroids in past year
 - 1% in 8th grade
 - 1% in 10th grade
 - 2% in 12th grade

2. Why adolescents use, abuse drugs? (Pechmann et al. JPPM 2005)

- Feel self-conscious and insecure
- Experience intense negative moods (sad, angry)
- Are prone to risky, impulsive behaviors
- Report peer pressure; everyone uses drugs
- Say marketing plays little or no role
- Considerable co-morbidity (use of 2+ drugs)

3. Which adolescents use, abuse drugs?

(Pechmann et al. AJPB 2006)

- Adolescents with conduct disorder
- Adolescents who are sensation seekers
- Demographics often not predictive of use
- Socio-economic status predictive for adults

Conclusions regarding adolescents and OTC drugs

- Adolescents' abuse of OTC, Rx drugs seems relatively low but do we have adequate statistics?
- Reasons for abuse may be similar across drugs
- Abuser groups may be similar across drugs

Unanswered research questions

- What is different about OTC drug abuse or misuse, as compared to illicit drugs?
 - Different reasons for abuse? For misuse?
 - Different groups who abuse? Who misuse?

C. Marketing and Adolescent Drug Use

1. Use of media
2. Use of role models
3. Use of messages
4. Impact on drug use



1. Marketers' use of media to reach adolescents (King et al. JAMA 1998)

- Marketers readily target adolescents with youth-focused media. For example, with cigarettes:
 - 32% odds of finding “youth brand” ad in magazine with 4% youth readership.
 - 92% odds of finding “youth brand” ad in magazine with 34% youth readership.
- Media selection is quantitative, research-based

2. Marketers' use of adolescent role models (Cohen JPPM 2000)

- Marketers use young and edgy role models that appeal to adolescents
- E.g., Joe Camel was chosen to appeal to a group defined as 14-18 year old underachievers with insecure futures who were focused on short-term social rewards
- Smoking Camels made you belong to this group

3. Marketers' use of messages for adolescents (Cohen JPPM 2000)

- Marketers try to persuade adolescents that using their products will lead to peer acceptance
- E.g., The Joe Camel ad message was that Camel smokers are “masculine and individualistic,” “admired/respected by friends,” “younger/more contemporary,” and “more fun/exciting”

4. Impact of marketing on drug use (Pollay et al. 1996)

- Adolescents are more sensitive to cigarette brand advertising than adults.
 - The impact of ad expenditures on brand market share is 3X larger for adolescents.
- Cigarette advertising directly increases primary demand. It does NOT have an indirect effect by increasing adult smoking behavior which is then imitated by adolescents.

Conclusions regarding adolescents and OTC drugs

- Marketers likely target some OTC drug ads at adolescents, and they have tools and expertise
- Marketers likely use youth-oriented media and role models, and peer acceptance messages
- Adolescents are likely responsive to OTC ads, encouraging marketers to continue to target them

Unanswered research questions

- What may be different about OTC ad campaigns for adolescents, as compared to tobacco or alcohol?
 - Different messages?
 - Different effects?

Novel OTC ad effects among adults

Bolton, Cohen & Bloom (JCR 2006)

OTC remedy ads (e.g., for nicotine patch) undermined risk perceptions & perpetuated risky behaviors among adults engaged in those behaviors (e.g., smoking).

Shiv, Carmon & Ariely (JMR 2005)

An OTC ad for a high priced high energy drink caused adults to feel they had more energy and they solved more puzzles. High price alone had a weaker but significant effect.

D. Industry Self Regulation of Drug Marketing

1. Use of media
2. Use of role models, messages
3. Impact on drug use



1. Industry regulation on media to reach adolescents

Tobacco / Philip Morris*

- Won't use magazines read by 2+ million youths*
- Won't use magazines read by 15%+ youths under 18 years (<18 yrs. = 26% of population)

Beer Institute Advertising & Marketing Code

- Won't use media reached by 30%+ youths under 21 years (<21 yrs. = 30% of population)

2a. Industry regulation on adolescent models and messages: Tobacco

Cigarette Advertising & Promotion Code

Cigarette ads should not suggest that smoking is essential to social prominence, distinction, success, or sexual attraction.

Master Settlement Agreement: No cartoons

FDA Proposal (Nullified): No images, text only

2b. Industry regulation on adolescent models and messages: Alcohol

Beer Institute Advertising & Marketing Code

Bans depictions of excessive drinking, intoxication, drunk driving, illegal activity, indecency, or sexual passion or promiscuity related to beer consumption.

Bans representing that beer consumption is essential for success or status.

3. Impact of industry self regulation on drug use

- Compliance with regulations is unknown
- Effects of regulations are unknown

Conclusions regarding adolescents and OTC drugs

- The OTC industry can adopt voluntary marketing regulations, if specific problems are identified
- The effects of voluntary regulations are unknown
 - This is an unanswered research question

E. Public Service Announcements

1. Messages used
2. Impact on drug use
3. Messages with inadvertent adverse effects



1. Messages used in Public Service Announcements (Pechmann et al. 2003)

- Health risk severity
- Social risk severity
- Behavioral efficacy
- Social norms
- Anti-industry (tobacco)

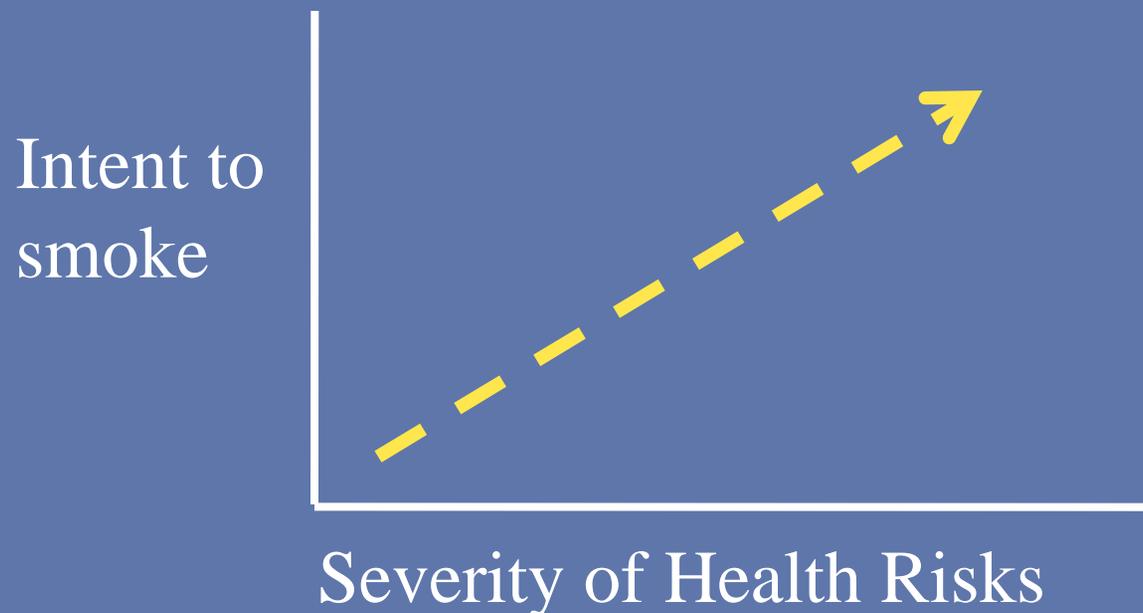
2. Impact of public service announcements on drug use

(Pechmann & Shih 1999; Pechmann & Knight 2002;
Pechmann et al. 2003; Zhao & Pechmann 2007)

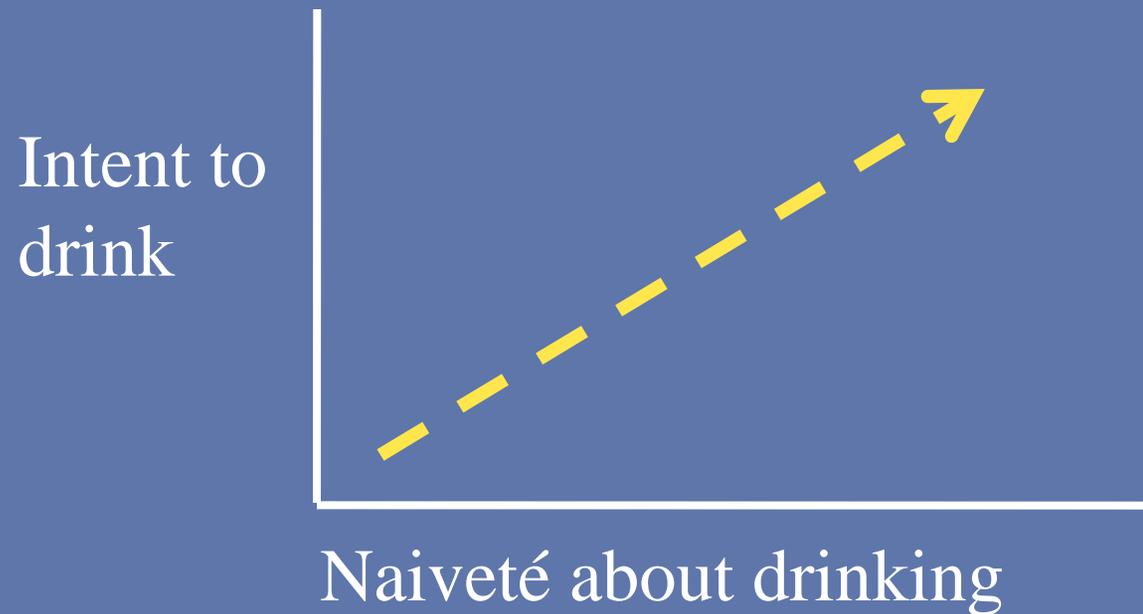
- For adolescent smoking prevention, social messages seem to be most effective
- Both positive and negative social messages are needed, because there are 2 adolescent groups
 - Smoke and be rejected
 - Don't smoke and be accepted

3a. “Smoking kills you” messages can increase smoking (Pechmann et al. 2003)

Among adolescents who view themselves as invulnerable to health risks:



3b. “Most students have 5 or fewer drinks” messages can increase drinking
(Wechsler et al. 2003)



3c. Other messages with inadvertent adverse effects (Pechmann and Slater 2005)

No risks to drug use

Anti-marijuana ad tagline: “Marijuana can make nothing happen to you too.”

Benefits to drug use

Critic of anti-drug ad: “The woman looks like Winona Ryder, she’s wearing a tight tank top, and there are no visible track marks.”

Conclusions regarding adolescents and OTC drugs

Public service announcements, by the government or the OTC industry, can be effective at informing adolescents about OTC abuse or misuse.

However, some public service announcements do more harm than good. So they must be carefully crafted and pretested.

Unanswered research questions

- Should there be public service announcements regarding OTC drugs and adolescents?
- Which ones? Who should pay for them?
- How effective would they be?

Your Questions and Comments Regarding this Presentation?

- You can reach me at cpechman@uci.edu
- You can get copies of my research articles at www.antismokingads.org