

Smoking mind over smoking matter

July 13 2010

Nicotine patches and gum are common -- and often ineffective -- ways of fighting cigarette cravings, as most smokers have discovered. Now a new study from Tel Aviv University shows why they're ineffective, and may provide the basis for more successful psychologically-based smoking cessation programs.

In the new study published in the *Journal of Abnormal Psychology*, Dr. Reuven Dar of Tel Aviv University's Department of Psychology found that the intensity of cravings for cigarettes had more to do with the psychosocial element of smoking than with the [physiological effects of nicotine](#) as an addictive chemical.

"These findings might not be popular with advocates of the [nicotine addiction](#) theory, because they undermine the physiological role of nicotine and emphasize mind over matter when it comes to smoking," Dr. Dar says. He hopes this research will help clinicians and health authorities develop more successful [smoking cessation](#) programs than those utilizing expensive [nicotine patches](#) or gum.

Up in the air

Dr. Dar and his colleagues' conclusions are based on two landmark studies. In the most recent study, he and his colleagues monitored the smoking behavior and craving levels of in-flight attendants, both women and men, who worked at the Israeli airline El Al. Each participant was monitored during two flights — a long flight of 10 to 13 hours in duration, from Tel Aviv to New York, for example; and a two-hop

shorter trip from Israel to Europe and back, each leg lasting three to five hours. Using a questionnaire, he sampled craving levels of the attendants throughout the duration of their flights.

Dr. Dar and his colleagues found that the duration of the flight had no significant impact on craving levels, which were similar for short and long flights. Moreover, craving levels at the end of each short flight were much higher than those at the end of the long flight, demonstrating that cravings increased in anticipation of the flight landing, whatever the flight's total duration. He concluded that the craving effect is produced by psychological cues rather than by the physiological effects of nicotine deprivation.

No smoking on the Sabbath

In an earlier 2005 study, Dr. Dar examined [smokers](#) who were religious Jews, forbidden by their religion to smoke on the Sabbath. He asked them about their smoking cravings on three separate days: the Sabbath, a regular weekday, and a weekday on which they'd been asked to abstain. Participants were interviewed at the end of each day about their craving levels during that day.

What Dr. Dar found is that cravings were very low on the morning of the Sabbath, when the smoker knew he would not be able to smoke for at least 10 hours. Craving levels gradually increased at the end of the Sabbath, when participants anticipated the first post-Sabbath cigarette. Craving levels on the weekday on which these people smoked as much as they wanted were just as high as on the day they abstained, showing that craving has little to do with nicotine deprivation.

Dr. Dar's studies conclude that nicotine is not addictive as physiological addictions are usually defined. While nicotine does have a physiological role in increasing cognitive abilities such as attention and memory, it's

not an addictive substance like heroin, which creates true systemic and biologically-based withdrawal symptoms in the body of the user, he says.

Dr. Dar believes that people who smoke do so for short-term benefits like oral gratification, sensory pleasure and social camaraderie. Once the habit is established, people continue to smoke in response to cues and in situations that become associated with smoking. Dr. Dar believes that understanding smoking as a habit, not an addiction, will facilitate treatment. Smoking cessation techniques should emphasize the psychological and behavioral aspects of the habit and not the biological aspects, he suggests.

Provided by Tel Aviv University

Citation: Smoking mind over smoking matter (2010, July 13) retrieved 26 April 2024 from <https://medicalxpress.com/news/2010-07-mind.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.