Are Smokers More Impulsive People? UNH Research Says 'Yes'

By <u>Sharon Keeler</u> UNH News Bureau

DURHAM, N.H. -- Do you ever wonder why people engage in bad behavior when they know the long-term risks? Why, for example, do people choose to smoke when there is overwhelming scientific evidence that cigarettes are bad for their health?

New evidence from a University of New Hampshire study adds to a growing body of evidence that suggests personality may play a significant role in why people choose to engage in costly behavior. In terms of smoking, those who choose the vice appear to be more impulsive people.

"Previous studies have shown that people who are impulsive are more likely to experiment with drugs and become regular users," says Suzanne Mitchell, UNH assistant professor of psychology and the study's author. "We wanted to find out if impulsivity might also correlate with one becoming a regular smoker. Our study indicates that it does."

Impulsivity, Mitchell explains, is equated with preferences for immediate gratification, risky activities and novel sensations, as well as an inability to persist at a task and shorter reaction times. Individuals who choose to smoke cigarettes, she says, are essentially choosing the immediate reinforcing effects of cigarettes over a healthier future life.

Mitchell studies how people balance the "cost" and "benefit" of things in their daily actions, and how this influences their behavior. Her most recent study, published in the journal "Psychopharmacology," compares 20 people who smoked at least 15 cigarettes a day with 20 people who never smoked. All participants completed personality questionnaires and behavioral choice tasks.

The personality questionnaires gauged such things as susceptibility to boredom, desire to engage in risky activities -- such as those involving speed or danger -- and ability to stay focused on current tasks.

The behavioral choice tasks examined preference for smaller, immediate versus larger, more delayed monetary rewards. They also

looked at preference for smaller monetary awards that were easily obtained, versus larger rewards that could only be obtained by performing some laborious activity.

Twenty-six out of 28 scales from the personality questionnaires showed a difference in score between smokers and never-smokers. Smokers showed a relatively strong preference for smaller, immediate rather than larger, more delayed rewards, and exhibited shorter response times in all three tasks compared with those who never smoked.

While the differences in impulsivity between smokers and those who never smoke were apparent in this study, Mitchell says it is not clear whether the higher scores on impulsivity measures reflect the direct effects of nicotine, or some intrinsic difference between smokers and never-smokers.

"Psychopharmacologists are interested in whether impulsive people are more likely to use drugs, and whether one effect of drugs is to increase a person's level of impulsivity," she says. "One question raised by these differences is whether the differences predated the smokers starting to smoke. If the answer is yes, personality questionnaire data may be useful to identify people who are likely to begin smoking and who might benefit from interventions aimed at discouraging smoking."

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