

Tobacco Dependence in Youths

Les jeunes et la dépendance au tabac

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The DANDY Study

The Development and Assessment
of Nicotine Dependence in Youths

A longitudinal study of the natural
history of nicotine dependence

Objective

To determine how much one has to smoke to become dependent.

Design

- 679 12-year-old youths were followed over 3 years.
- Three interviews per year
- The Hooked on Nicotine Checklist was used to assess addiction

Autonomy over tobacco is lost when quitting requires an effort or produces discomfort.

The Hooked on Nicotine Checklist

- Have you ever tried to quit, but couldn't?
- Do you smoke now because it is really hard to quit?
- Have you ever felt like you were addicted to tobacco?
- Do you ever have strong cravings to smoke?
- Have you ever felt like you really needed a cigarette?
- Is it hard to keep from smoking in places where you are not supposed to, like school?

The Hooked on Nicotine Checklist

- When you tried to stop smoking...(or, when you haven't used tobacco for a while...)
 - did you find it hard to concentrate because you couldn't smoke?
 - did you feel more irritable because you couldn't smoke?
 - did you feel a strong need or urge to smoke?
 - did you feel nervous, restless or anxious because you couldn't smoke?

Results

- Among 332 subjects who had used tobacco, 40% reported symptoms

Results

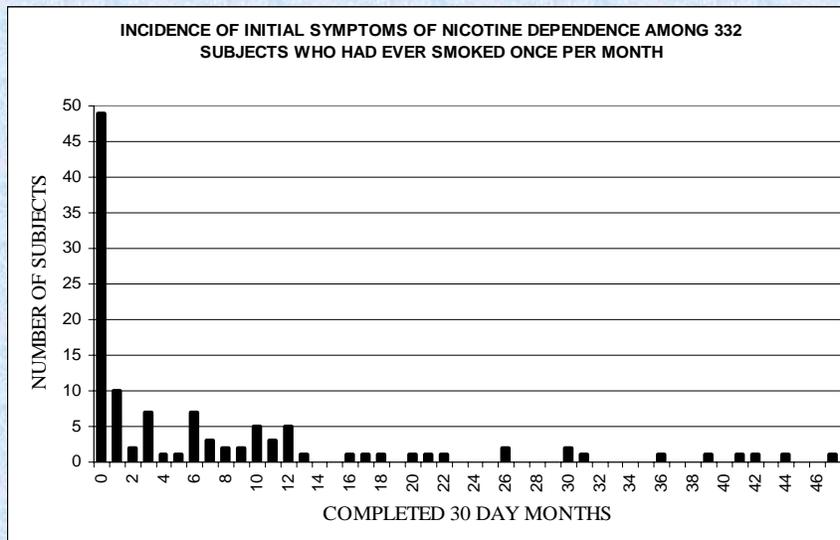
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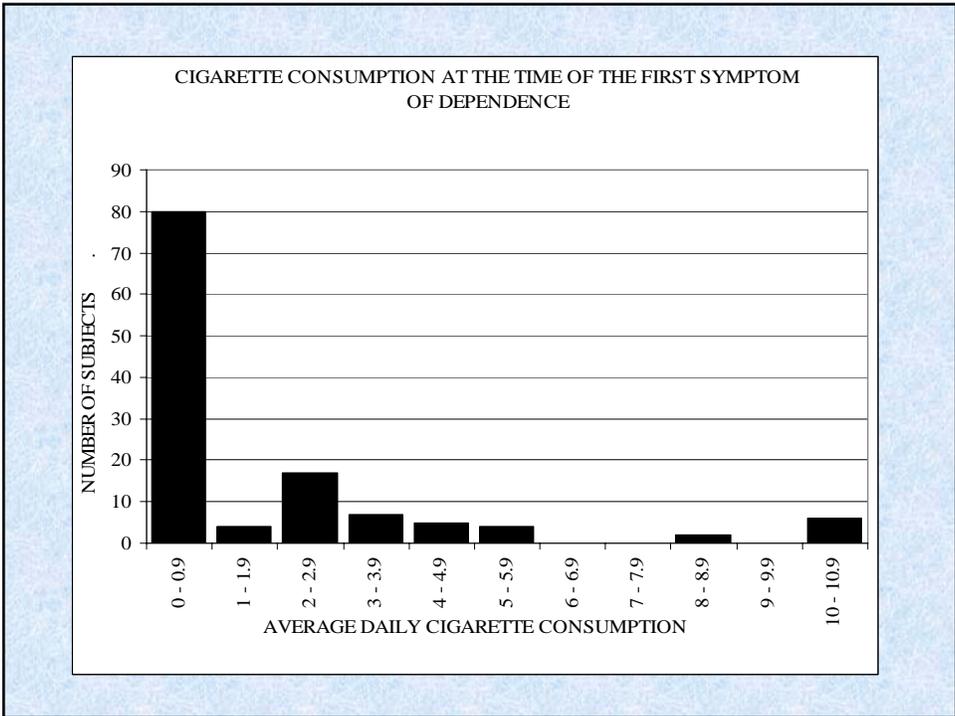
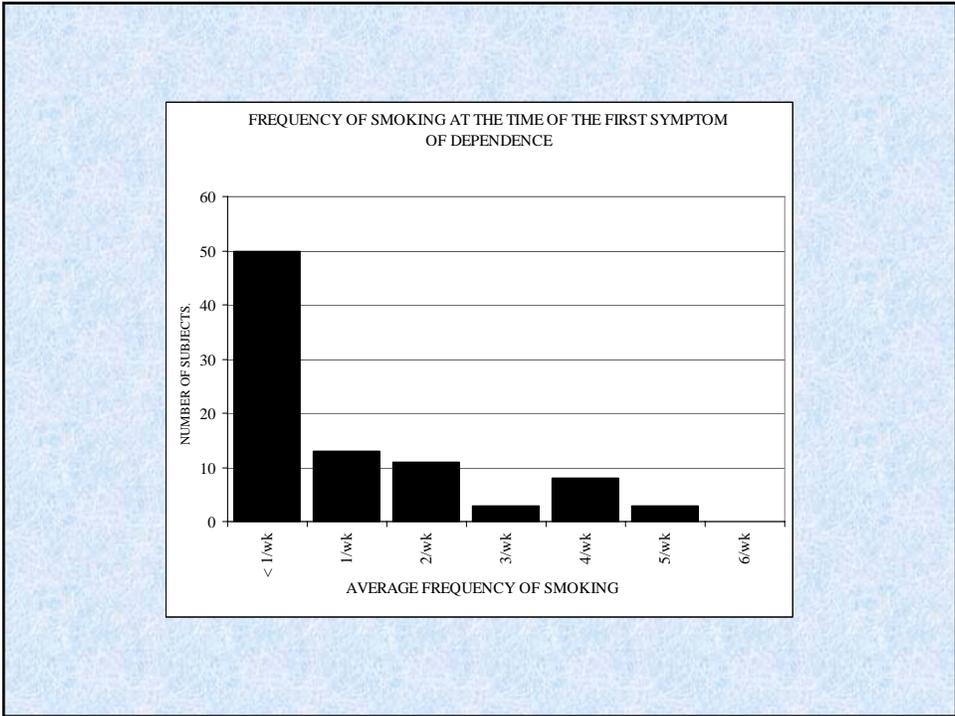
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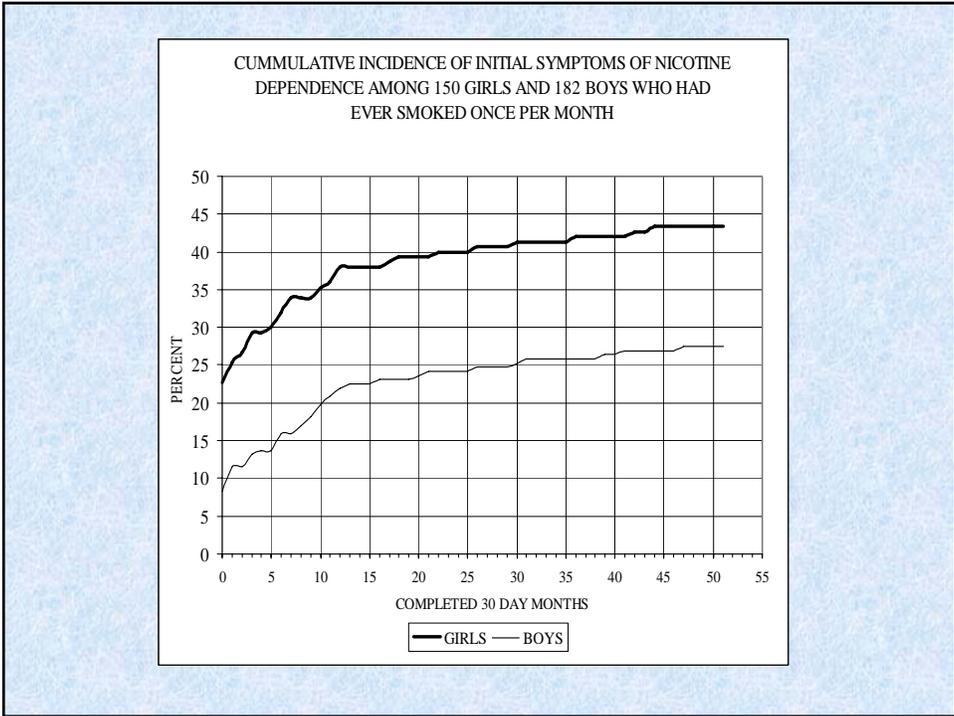
- Among 332 subjects who had used tobacco, 40% reported symptoms
- Symptoms surrounding the first use of tobacco were common
- Many novice smokers experience withdrawal symptoms while smoking only occasionally, although it may take days between cigarettes for symptoms to appear

Results

- The median frequency of use at the onset of symptoms was 2 cigarettes, one day per week







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 - **29** times more likely to have failed at a quit attempt
 - **44** times more likely to still be smoking at the end of follow up
 - **58** times more likely to be daily smokers by the end of follow up

The “NDIT” Study

The Natural History of Nicotine
Dependence (O’Loughlin et al.)

A longitudinal study

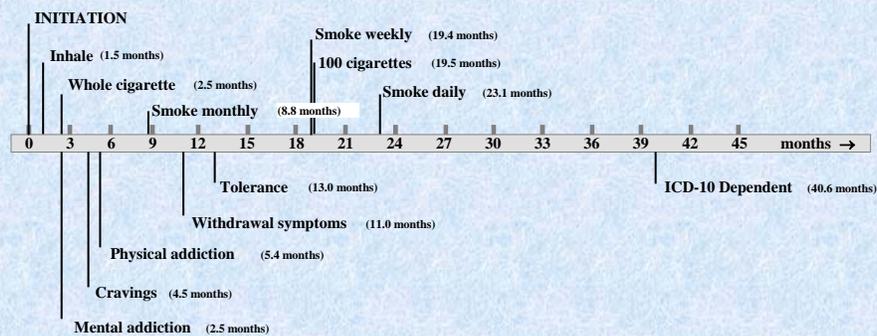
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- 331 new smokers were followed for 31 months after initiation

Timeline of Smoking Initiation



DANDY II

- Objective: to identify factors that cause dependence to develop more quickly in some youths than others

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- > 1200 11-year-olds
- 10 interviews over 4 years, from 6th to 9th grades

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- Girls were 3 times as likely as boys to develop ICD-10 dependence
- Girls were ~ 4 times more likely than boys to develop dependence quickly

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 - Distractibility
 - Availability of tobacco
 - Parental, peer & sibling smoking

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 - Anxiety
 - Depression
 - Negative self-esteem

- Many personality and social factors increase or decrease the likelihood of experimentation, but do not influence the development of dependence once smoking has started

The Stepwise
Progression
Model

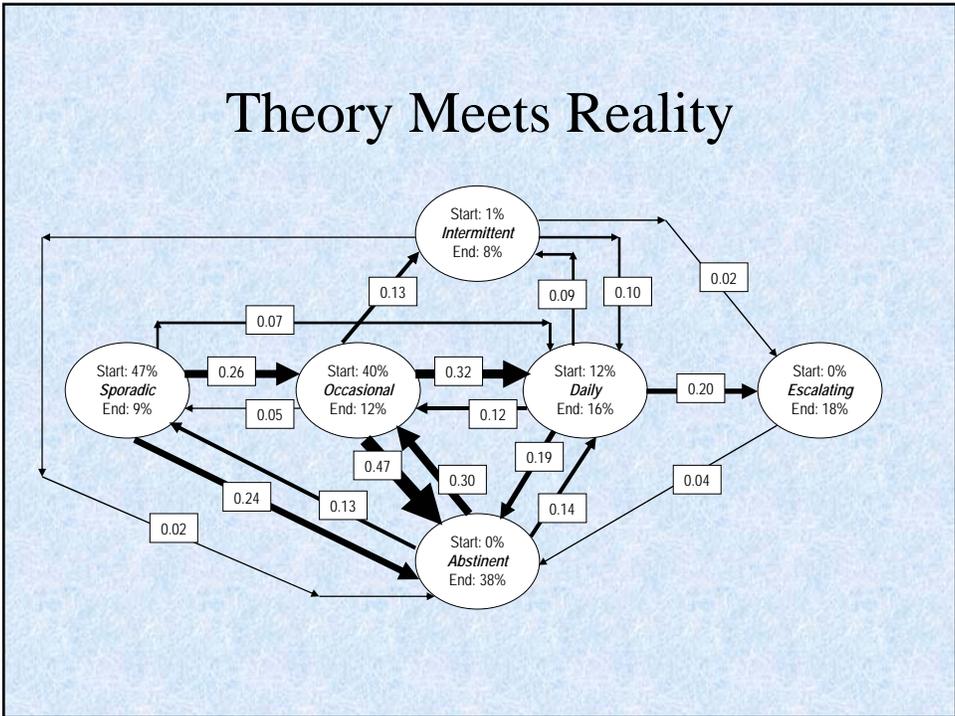
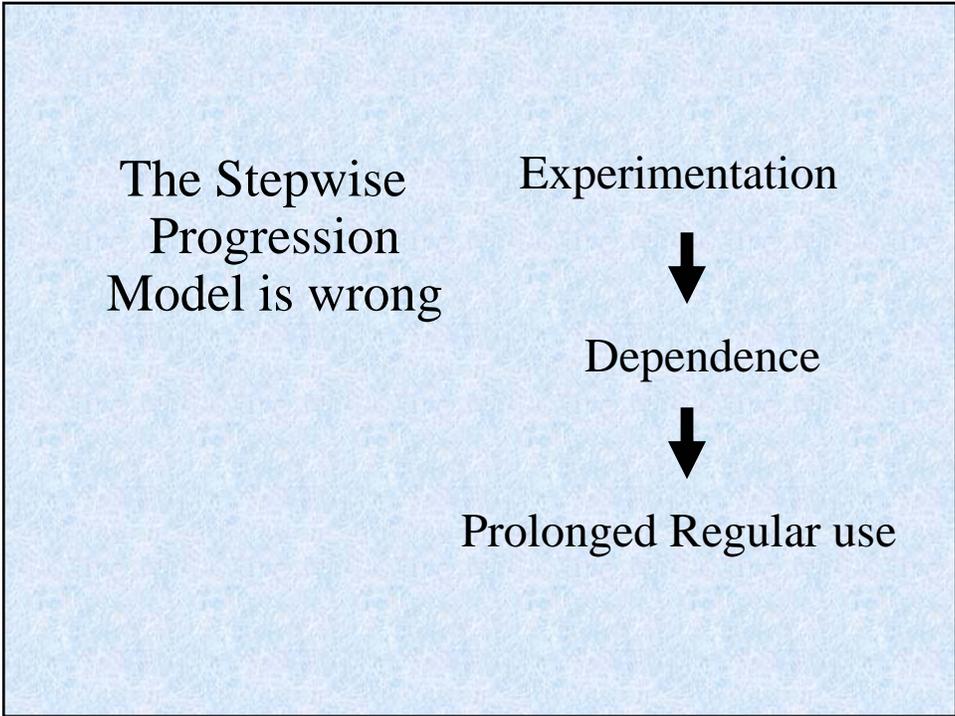
Experimentation

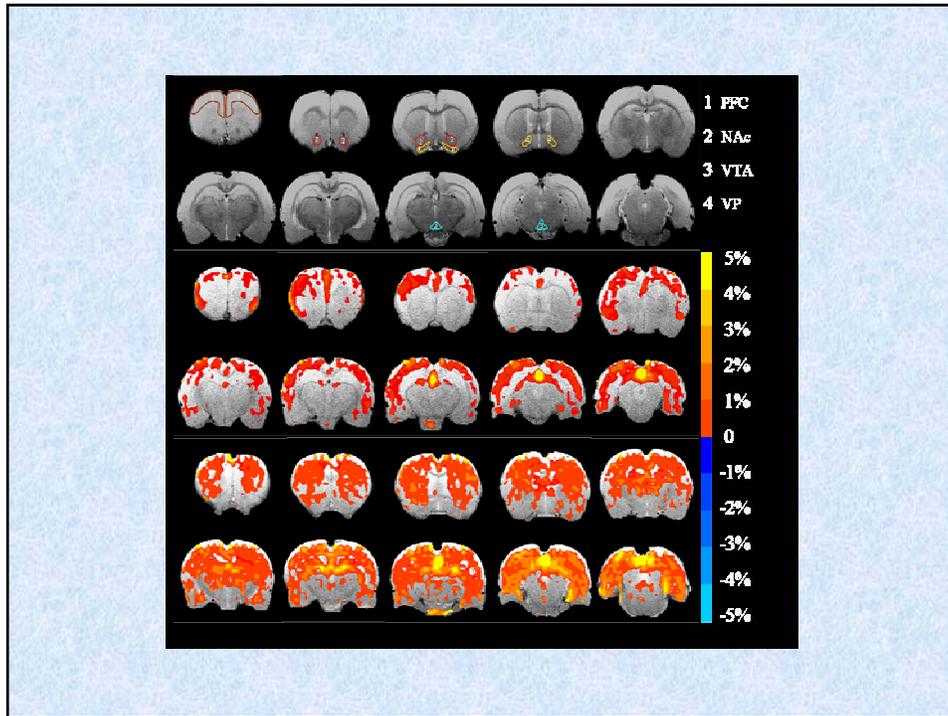


Prolonged Regular use



Dependence





Clinical Relevance

- Youths who smoke less than one cigarette per month might need help with quitting.
- Youths who believe they can quit at anytime are most likely to progress to regular smoking.
- Stimulate earlier cessation efforts by using the HONC to help youths realize they are addicted