



Asking Questions About Nicotine



By: Huiwen Chen









Nicotine is the primary psychoactive component in tobacco

 Tobacco plant (Nicotiana) was grown in North & South America.

- O Typical cigarette: 1-2mg nicotine
- O Chew, snuff ranges from 4-14mg

About

Nicotine





History of Nicotine Use

- Fossilized tobacco leaves have been found in Peru that are 2.5 million years old!
- Indigenous peoples in Americas smoked tobacco in religious ceremonies
- European explorers brought it back to Europe & use spread quickly by 16th century.
- 1st tobacco crop in Jamestown, VA in
 1612



- Early 1800s nicotine isolated as key ingredient
- 1938 study reported smoking reduced life expectancy
- 1988 U.S. Surgeon General nicotine is physically addictive
- By 1990s, health effects well-characterized



Other forms of administration

Hookah — water pipe



Snuff





Dissolvable strips or sticks



e-cigarette







Highest rate of initiation is among those <18 yrs. (3 fold higher than >18)
Why?

Biological factors:

 Animal research shows adolescent rats more sensitive to reinforcing effects of nicotine than older rats.

Initiation of smoking in adolescents

Psychological factors:

 Increased novelty seeking associated with receptivity to tobacco advertising



Continuation of smoking

Once initiated, most people keep smoking.

- 90% of 1st year college students who reported daily smoking were still smoking 4 years later.
- 50% of college students who reported occasional smoking were still smoking four years later.



Example Research Question

Are there ethnicity-based differences in the rates and patterns of nicotine usage?

Useful Dataset







Office on Smoking and Health $\qquad + \qquad \qquad ({\sf OSH})$

Quit Smoking

Basic Information

Commercial Tobacco and Health + Equity

Secondhand Smoke

Surgeon General's Reports on Smoking and Tobacco Use

Data and Statistics

Fast Facts and Fact Sheets

Smoking and Cigarettes

Diseases and Death

Health Effects of Cigarette Smoking

Tobacco-Related Mortality

Cigarette Smoking in the U.S.

What to Look at







Steps

Centers for Disease Control and Prevention

Smoking & Tobacco Use

Surgeon General's Reports on Smoking and Tobacco Use

Data and Statistics

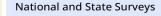
Fast Facts and Fact Sheets

Surveys

National and international survey results, as well as survey guides and manuals.

On This Page

Historical NYTS Data and Documentation



National Youth Tobacco Survey (NYTS)

National Adult Tobacco Survey (NATS) [archived]

Youth Tobacco Survey (YTS) [archived]

National Health Interview Survey (NHIS)

Behavior Risk Factor Surveillance System (BRFSS)

Youth Risk Behavior Surveillance System (YRBSS)

National Health and Nutrition Examination Survey (NHANES)

Monitoring the Future Surveys (MTF) ☑

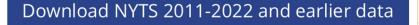
National Survey on Drug Use and Health (NSDUH)

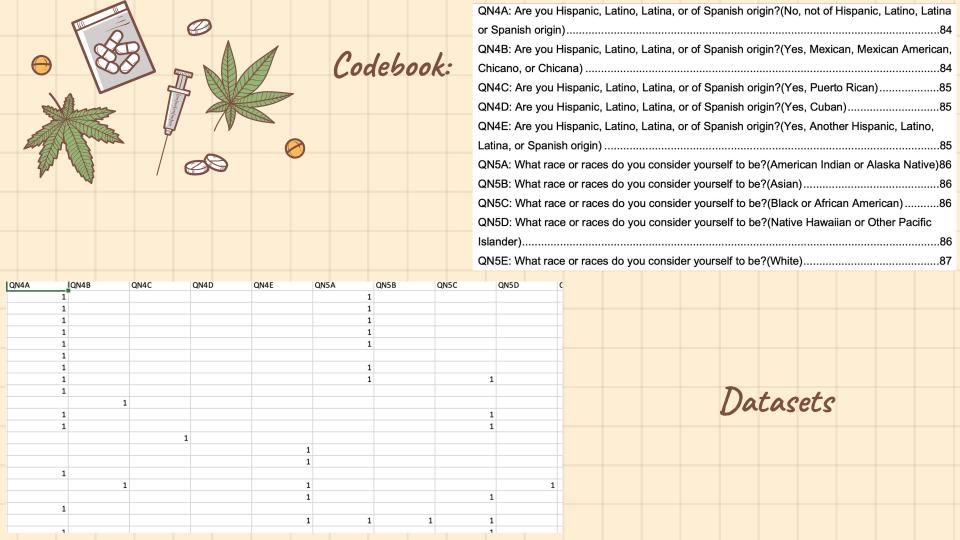
Current Population Survey (CPS)











Example Research Question

How do young people perceive the relative addictiveness of various nicotine products?

<u>Useful Dataset</u>





Click Here

Follow the same steps and download useful datasets & codebooks

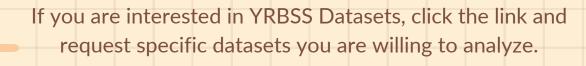
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Historical NYTS Data and Documentation

	QN117	QN118	QN119
	5	4	5
Codebook:	2	1	2
	3	4	3
	5	3	3
QN117: Do you believe that e-cigarettes are (LESS ADDICTIVE, EQUALLY ADDICTIVE, or			
	5	3	5
MORE ADDICTIVE) than cigarettes?311	3	3	5
QN118: How much do you think people harm themselves when they smoke tobacco in a	5	4	5
hookah or waterpipe some days but not every day?312	5	4	5
QN119: Do you believe that smoking tobacco in a hookah or waterpipe is (LESS ADDICTIVE,	1	4	3
	5	4	4
EQUALLY ADDICTIVE, or MORE ADDICTIVE) than cigarettes?312	1	2	1
	2	4	2
	5	4	5
	3	4	3
	3	3	2
	2	4	
	3	3	2
	1	3	5
Datasets:	3	4	3
	5	2	1
	3	3	1
	3	3	5
	5	4	5
	2	4	4

Additional Datasets

Youth Risk Behavior Surveillance System (YRBSS)





If you are interested in International Data...





Click Here

International Surveys (Global Tobacco Control)

Global Youth Tobacco Survey (GYTS) Global Adult Tobacco Survey (GATS)

Global School Personnel Survey (GSPS) Global Health Professions Student Survey (GHPSS)

Survey Resources















Find interesting datasets for your research:

Population (Survey)		WHO Region:		
Select One	▼	Select one	▼	
Country or Location:		Survey Site:		

Other factors that may affect youth tobacco use include:

Here are other topics to research on:

Factors

- socioeconomic status
- support or involvement from parents
- accessibility, availability, and price of tobacco products
- school performance
- self-image or self-esteem
- tobacco product advertising



Additional Resources

SAMHSA National Helpline: 1-800-662-4357

Confidential free help, from public health agencies, to find substance use treatment and information.