# Comparing Smoking Prevalence, Quit Attempts, and Harm Perceptions Among Younger and Older Smokers

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#### Introduction

Older smokers (65 years+) carry the greatest tobaccorelated disease burden of all adults and incur about 12 times more healthcare expenses compared to younger smokers. 1, 2, 3, 4

National level data in the United States indicate that smoking prevalence has declined substantially for all age groups except older smokers between 2005 to 2014.<sup>4</sup>

 Including a decline of 31.6% in smoking for young adults (18-24) compared to a 0.8% for older adults.

Meanwhile, the older adult population is projected to nearly double by the year 2050. Thus, if smoking prevalence remains the same, then the absolute number of older smokers will increase as the population increases.

Unfortunately, key questions remain in how older smokers differ from younger cohorts in their smoking behavior, cessation, and beliefs.

The aim of this study was to compare smoking behaviors between younger (18-34 years) and older(65 years and over)

## Methods

#### Data

-Prevalence, use patterns, and perceptions data for adult smokers were taken from the New York State Adult Tobacco Survey (ATS)

#### Variables

-Smoker' was defined as having smoked 100 lifetime cigarettes and now smoking 'some days' or 'everyday' -Younger smokers were defined as smokers aged 18–34 -Older smokers were defined as smokers aged 65+

### Analyses

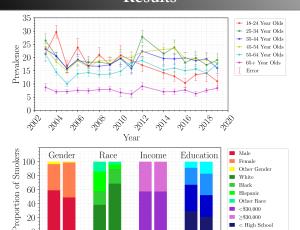
-Rao-Scott chi-square tests were used to test the null hypothesis that there is no association between age (younger or older) and a range of tobacco-related outcomes: smoking prevalence, smoking intensity, quit attempt rate and methods used to quit, and perceptions of stop-smoking products, nicotine, and vaping.

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BAK was previously employed (2014-2018) by PinneyAssociates where she provided consulting advice on non-combustible tobacco products to the tobacco company Reynolds American Inc. BAK has not had any support or affiliation with industry since that time.

In 2020, Floe Foxon became a consultant to PinneyAssociates. Within the last few years, PinneyAssociates has consulted for British American Tobacco and Reynolds American Inc, and now provides consulting services on tobacco harm reduction on an exclusive basis to Juul Labs, Inc.

## Results



Older

Demographic

High School

Some College
College Graduate +

		Younger Smokers (N=134) %	Elderly Current Smokers (N=123) %	p-value <sup>1</sup>
Current Smoking Prevalence		15.9	8.4	<0.0001 <sup>2</sup>
Number of Cigarettes Smoked per Day: Mean (SD)		13.1 (11.8)	12.8 (8.9)	0.84913
Past Year Quit Attempt Rate		55.2	57.5	0.77972
Quit Method: Gave up cigarettes all at once		14.9	28.2	0.10412
Quit Method: Gradually cut back		64.6	58.0	0.4181 <sup>2</sup>
Quit Method: Nicotine only medications		20.9	37.8	0.0570 <sup>2</sup>
Quit Method: Prescription only medications		8.0	18.7	0.11572
Quit Method: Switch to E-Cigarettes		13.4	1.2	<0.0001 <sup>2</sup>
Quit Method: clinic, class, group, counse		7.4	20.8	0.04022
How Much Do You Want to Quit Smoking?	Not at all	18.1	20.2	0.95962
	A little	16.0	17.4	
	Somewhat	31.6	27.6	
	A lot	34.3	34.9	
How Likely Would You Be To Succeed If You Quit In The Next 12 Months?	Very likely	25.0	24.3	0.20932
	Somewhat likely	45.9	42.8	
	Somewhat unlikely	14.2	26.4	
	Very unlikely	14.9	6.5	
Stop-Smoking Products with Nicotine (like Patches and Gum) are Just as Harmful as Cigarettes	Strongly Agree	3.5	0.4	0.08162
	Agree	46.2	43.6	
	Disagree	22.9	44.6	
	Strongly Disagree	27.4	11.4	
Stop-Smoking Products with Nicotine	Strongly Agree	6.3	13.8	0.6800 <sup>2</sup>
(like Patches and Gum) are Less Harmful than Cigarettes	Agree	54.1	45.5	
	Disagree	28.9	31.2	
	Strongly Disagree	10.7	9.5	
	Strongly Agree	36.7	27.3	0.09762
Nicotine is a Cause of Cancer	Agree	50.5	51.6	0.0370
	Disagree	4.3	15.4	
	Strongly Disagree	8.5	5.7	
	Strongly Agree	32.1	23.6	0.1811 <sup>2</sup>
Vaping nicotine is just as harmful as smoking cigarettes	Agree	49.2	57.5	0.1011
	Disagree	6.6	16.3	
	Strongly Disagree	12.2	2.6	
	Strongly Agree	17.3	0.8	0.1284 <sup>2</sup>
Vaping nicotine is less harmful than smoking cigarettes	Strongly Agree	17.5	0.0	0.12842
	Agree	35.6	46.0	
	Disagree	27.3	36.3	
	Strongly Disagree	19.8	17.0	
Vaping provides the help I need to quit smoking	Strongly Agree	14.4	0.4	0.01082
	Agree	35.6	10.2	
	Disagree	29.8	45.1	
		20.3	44.3	

#### <sup>1</sup> Bold font indicates statistical significance (alpha = 0.05) <sup>2</sup> Rao-Scott Chi-Square Test <sup>3</sup> T-test

# Discussion

Smoking prevalence has remained the same for aging smokers in New York, and nationally<sup>4</sup>, over the last 15 years, while rates for younger smokers have fallen by at least 8%.

While past year quit attempt rates were similar between age groups (~55—58%), older smokers relied more on behavioral treatments for cessation (21% vs 7%), while younger smokers were significantly more likely to try switching to e-cigarettes (13.4% vs 1.2%).

The majority of younger and older smokers inaccurately believed that nicotine causes cancer (87% younger and 79% older) and is just as dangerous as smoking (50% and 44%), even in patches and gum.

When abstinence is not feasible or desired by an older smoker, then a harm reduction approach might be most appropriate by respecting an older smoker's autonomy and giving the patient a role in deciding how to best reduce their harms from tobaccouse.

## Future Research

National level data confirm findings in the present study that suggest older smokers are not quitting smoking at the same rates as younger cohorts. <sup>4,5,6</sup> Similar age-related findings have been observed in the United Kingdom and parts of Europe. <sup>7,8,9</sup>

Future research that addresses the needs of older smokers included reasons for unchanging prevalence rates is urgently needed.

#### Efforts could include:

- Inclusion of aging smokers 65 years and older in tobacco and nicotine research studies.<sup>2</sup>
- Tailored health education that targets older smokers and corrects misinformation on the relative harms of nicotine and smoked tobacco.<sup>10</sup>
- Increased access to non-combustible tobacco products including NRT and e-cigarettes.
- Tobacco control policy initiatives that factor in the unique needs and health issues associated with being an

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