

BACKGROUND

- E-cigarette use is increasing, particularly among young adults, while cigarette use has declined.
- Cigarettes remain a top cause of preventable death in the U.S.
- E-cigarette use has been associated with cigarette uptake, posing potential health risks.
- Rates of cigarette and e-cigarette use are even higher among military personnel, who have a long history of targeting by tobacco companies.
- Several studies have examined perceptions of harm, but few have assessed beliefs about these substances (e.g., e-cigarettes are cool, cigarettes are trashy) or if they differ between men and women, or among individuals of different racial and ethnic backgrounds.

OBJECTIVES

- Assess gender (male and female), ethnic (Hispanic and non-Hispanic), and racial (White and non-White) differences in potential positive (e.g., sexy, cool, clean) and negative (e.g., trashy, disgusting) attributes related to cigarettes and e-cigarettes, and their relationship to past 30-day tobacco use.

METHODS

- Participants were 3,374 young adult U.S. Air Force Airmen who completed a survey about their nicotine product use and beliefs about nicotine products
 - Mean age = 20.5 years
- 55.96% White, 19.18% Black, 4.40% Asian, 7.91% multiracial, 10.94% other racial backgrounds
- 33.84% women
- Kruskal Wallis tests were used to assess associations between variables and beliefs related to cigarette and e-cigarette use.
- Linear regressions were used to determine associations between positive outcomes (using a total score), demographic variables, and current use (smoked within the past 30 days).

DISCLAIMER: The views expressed in this talk are those of the authors and do not reflect the official policy or position of the Department of the Air Force, Department of Defense, or the U.S. Government. The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02_AFI 40-402.

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RESULTS AND CONCLUSIONS

Cigarette Users								
	Positive							
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
	Sexy	Cool	Clean	Smart	Healthy	Attractive	Trashy	Irresponsible
Overall	1.27 (0.72)	1.48 (0.88)	2.09 (1.04)	1.77 (0.98)	1.66 (0.91)	1.3 (0.73)	2.87 (1.41)	2.09 (1.04)
Gender								
Man	1.31(0.77)	1.57(0.94)	2.12(1.04)	1.79(0.98)	1.71(0.92)	1.34(0.77)	2.83(1.38)	2.12(1.04)
Woman	1.17(0.58)	1.30(0.72)	2.04(1.04)	1.70(0.96)	1.57(0.87)	1.21(0.63)	2.94(1.45)	2.09(1.04)
p-value	<.0001	<.0001	0.0716	0.0181	0.0001	<.0001	0.0407	
Race								
White	1.25 (0.69)	1.45 (0.85)	2.09 (1.03)	1.75 (0.96)	1.68 (0.91)	1.28 (0.7)	2.92 (1.42)	2.09 (1.04)
Black	1.26 (0.71)	1.5 (0.92)	2.05 (1.05)	1.84 (1.03)	1.61 (0.9)	1.28 (0.72)	2.81 (1.42)	2.09 (1.04)
Other	1.33 (0.81)	1.55 (0.96)	2.1 (1.06)	1.75 (0.99)	1.66 (0.92)	1.36 (0.82)	2.8 (1.37)	2.09 (1.04)
Multiracial	1.28 (0.7)	1.49 (0.9)	2.19 (1.05)	1.71 (0.95)	1.69 (0.88)	1.3 (0.74)	2.75 (1.39)	2.09 (1.04)
p-value	0.1945	0.111	0.3437	0.1677	0.3655	0.1949	0.0708	
Ethnicity								
Hispanic	1.27(0.71)	1.52(0.94)	2.11(1.04)	1.76(0.95)	1.70(0.92)	1.29(0.72)	2.79(1.39)	2.09(1.04)
Non-Hispanic	1.26(0.71)	1.46(0.86)	2.08(1.04)	1.76(0.98)	1.65(0.90)	1.29(0.72)	2.90(1.42)	2.09(1.04)
p-value	0.9669	0.1265	0.6001	0.9448	0.2621	0.9664	0.0982	
E-Cigarette Users								
	Positive							
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
	Sexy	Cool	Clean	Smart	Healthy	Attractive	Trashy	Irresponsible
Overall	1.46 (0.9)	1.63 (1)	2.57 (1.12)	1.92 (1.03)	2.03 (1.01)	1.48 (0.89)	2.28 (1.32)	1.92 (1.03)
Gender								
Man	1.55(0.96)	1.72(1.04)	2.64(1.13)	2.00(1.06)	2.15(1.02)	1.57(0.95)	2.23(1.29)	1.92(1.03)
Woman	1.28(0.73)	1.46(0.88)	2.44(1.07)	1.75(0.95)	1.81(0.95)	1.31(0.73)	2.38(1.36)	1.92(1.03)
p-value	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0069	
Race								
White	1.46 (0.89)	1.62 (1)	2.64 (1.11)	1.91 (1.03)	2.08 (1.02)	1.49 (0.89)	2.32 (1.32)	1.92 (1.03)
Black	1.46 (0.9)	1.66 (1.01)	2.41 (1.11)	1.96 (1.05)	1.95 (1)	1.49 (0.91)	2.21 (1.34)	1.92 (1.03)
Other	1.45 (0.95)	1.64 (1.01)	2.46 (1.15)	1.88 (1.03)	1.96 (1.03)	1.46 (0.89)	2.26 (1.3)	1.92 (1.03)
Multiracial	1.48 (0.9)	1.63 (0.97)	2.64 (1.08)	1.92 (0.99)	2.06 (0.97)	1.48 (0.89)	2.2 (1.25)	1.92 (1.03)
p-value	0.9824	0.8286	<.0001	0.632	0.0403	0.9638	0.2083	
Ethnicity								
Hispanic	1.47(0.92)	1.63(1.02)	2.51(1.13)	1.92(1.01)	1.99(1.00)	1.47(0.88)	2.28(1.29)	1.92(1.03)
Non-Hispanic	1.45(0.89)	1.63(0.99)	2.58(1.11)	1.91(1.04)	2.04(1.01)	1.48(0.89)	2.28(1.32)	1.92(1.03)
p-value	0.7613	0.9966	0.1114	0.9943	0.2371	0.6691	0.9783	

- White individuals were more likely to endorse negative attitudes towards cigarette towards e-cigarettes compared to non-White individuals (p 's<.001).
- Women were more likely to endorse negative attitudes towards cigarettes and e-cig men were more likely to endorse positive attitudes towards cigarettes and e-cigare
- Differences between Hispanic and non-Hispanic participants were non-significant
- Endorsement of either positive or negative e-cigarette or cigarette attitudes was a use of the corresponding product, controlling for race, age, gender, and ethnicity (
- Results indicate racial and gender differences in perceptions of cigarettes and e-c impact of attitudes (negative and positive) on actual use.