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Gender Differences in Indoor Tanning Habits and Location

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Comments
Jessica Feng participated in this study as a medical student as part of the Senior Scholars research program at the University of Massachusetts Medical School.

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To the Editor,

In 2013, 1.9 million US men reported tanning indoors.[1] Existing research largely target teen and young adult female tanners, and less is known about male tanning behavior. Using Survey Sampling International, we recruited a nationally representative sample of 773 adults who intend to use or used an indoor tanning bed. Participants reporting a lifetime history of tanning indoors (n=636; 33.5% male) were included.

The survey measured tanning frequency, tanning dependence, tanning location (salon, non-salon business, home), and influences on tanning location selection (1=strongly disagree, 5=strongly agree). Two or more affirmative responses on the 7-item Behavioral Addiction Indoor Tanning Screener (BAITS) confirmed tanning dependence.[2] Participants were also surveyed about smoking, weekly soda consumption, and binge drinking (5 or more alcoholic beverages within a couple of hours) in past month.

The University of Massachusetts Medical School institutional review board granted ethics approval. Bivariate comparisons were done using $\chi 2$ tests, independent samples t tests, and Wilcoxon rank sum tests, as appropriate using SAS/Stat Version 9.3 (SAS Institute Inc., Cary, NC).

No significant differences were found between men (mean [SD], 6.0 [16.9]) and women (mean [SD], 6.0 [22.7]) in past year indoor tanning visits (*P*=.58; See Table 1). However, men were significantly more likely to meet the BAITS tanning dependence threshold (49.3% vs 29.6%, *P*=.001). Men were more likely to tan in private residences (30.5% vs. 19.4%, *P*=.002). For factors influencing tanning location selection, men gave significantly higher ratings to the ability to get other services at the same time (3.7 vs.

3.3, *P*=.004), ability to tan with fewer rules (3.6 vs. 3.2, *P*<0.001), and ability to use a tan as a workout reward (3.6 vs. 3.3, *P*=.002). Women gave significantly higher ratings to cleanliness (4.3 vs. 4.1, *P*=.06) and cost (4.2 vs. 3.9, *P*=0.001).

Male tanners were more likely to smoke (59.2% vs 38.8%, *P*=.001), reported more binge drinking in the past month (mean [SD], 4.7 [6.9] vs. 2.2 (4.2), *P*<.0001) and had higher weekly soda consumption (mean [SD], 13.7 [27.0] vs. 8.1 [12.6], *P*<.0001). Male tanners were significantly more ethnically diverse than female tanners (*P*=0.002, See Table 1).

Results revealed that while men and women tan at a similar frequency, men were more likely to screen positively for tanning dependence. Men had higher rates of comorbid risk behaviors consistent with prior research identifying associations between tanning dependence and alcohol addiction.[3] Men had higher rates of tanning in private residences, where unsupervised tanning duration could facilitate dependence.

Tanning salon regulations may have less impact on reducing male tanning. Male tanners preference for settings that offer additional services may provide opportunities for targeted interventions.

Male tanners had a greater proportion of minorities than female tanners which is consistent with prior research.[4] Other studies have shown that sexual minority men have higher tanning rates than heterosexual men.[5] Studies that have explored largely white samples or did not assess sexual orientation may have painted an incomplete picture of male indoor tanning.

Future research is needed to better understand the characteristics and motivations of male indoor tanners.

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130

Table 1. Participant Characteristics by Gender				
	All (n=636)	**Men** (n=213)	**Women** (n=423)	***P* value**
Age, mean (SD)	36.2 (12.9)	36.9 (12.7)	35.9 (12.9)	.34
Ethnicity				.002
% White	76.4%	68.5%	80.4%	
% Hispanic	10.7%	12.7%	9.7%	
% Other	12.9%	18.8%	9.9%	
Education				.01
% High school or GED	13.3%	9.9%	15.1%	
% Some college	23.5%	19.8%	25.4%	
% Associate or Bachelor	46.5%	48.1%	45.7%	
% Graduate	16.7%	22.2%	13.9%	
Health Behaviors				
Smoker	45.6%	59.2%	38.8%	.001
Number of cans of soda consumed per week, mean (SD)	10.0 (18.9)	13.7 (27.0)	8.1 (12.6)	<.0001
Number of days in the past 30 with 5 or more alcoholic beverages consumed, mean (SD)	3.0 (5.4)	4.7 (6.9)	2.2 (4.2)	<.0001
Skin type				.36
%Always/usually burn	33.7%	33.8%	33.6%	
%Sometimes mild burn, tan uniformly	35.7%	38.5%	34.3%	
%Rarely or never burn	30.7%	27.7%	32.2%	

131
132

133

Table 2. Tanning Behavior by Gender			
	Men (n=213)	**Women** (n=423)	***P* value**
Frequency of indoor tanning in past year, mean (SD)	6.0 (16.9)	6.0 (22.7)	.58
Tanning Location Salon Only Non-Salon Business Home Tanner	 91 (42.7%) 57 (26.8%) 65 (30.5%)	 217 (51.3%) 124 (29.3%) 82 (19.4%)	.007
Tanning dependence/behavioral addiction	49.3%	29.6%	<.0001
Factors influencing tanning location choice, mean (SD)			
Ability to tan and get other services at the same time	3.7 (1.06)	3.3 (1.14)	.004
Ability to tan with less rules and regulations	3.6 (1.01)	3.2 (1.14)	<.0001
Ability to reward myself with a tan after I workout	3.6 (1.11)	3.3 (1.14)	.002
Cleanliness	4.1 (.97)	4.3 (.91)	.06
Cost	3.9 (.93)	4.2 (.90)	.001
Convenience	4.1 (.89)	4.2 (.86)	.06
Professionalism	3.9 (.93)	4.0 (.90)	.28

134
135

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