

Letters

RESEARCH LETTER

A Comparison of Tanning Habits Among Gym Tanners and Other Tanners

Physical activity has been associated with increased risk of malignant melanoma,¹ as has the use of tanning beds.² The presence of tanning beds in gyms is a concerning trend. Two of the largest American gym chains (Planet Fitness and Anytime Fitness) with total combined membership of more than 13 million people, offer indoor tanning. Nearly half of the gyms in Canada offer indoor tanning as well.³ Little is known about the characteristics of tanners who use gym tanning beds. The present study examined the proportion of indoor tanners who use gym tanning beds and tested whether they have riskier habits than other tanners. We also examined whether physical activity was related to the frequency of indoor tanning among tanners.

Methods | A nationally representative sample of 773 individuals who have ever tanned indoors or who intend to tan was recruited through Survey Sampling International. We used data from the 636 participants who had tanned indoors at least once. Participants were asked whether they had ever used a tanning bed or booth in a gym as well as if they tan primarily in a location other

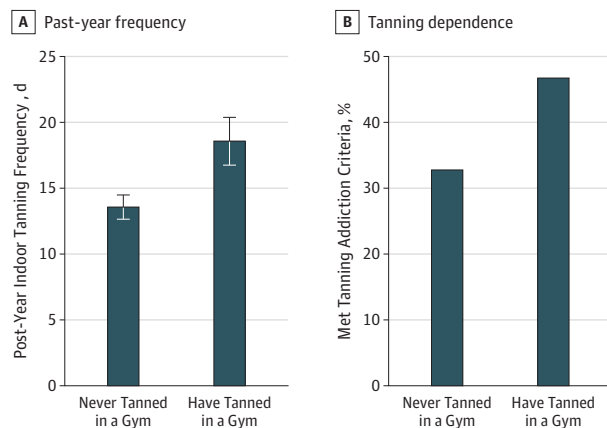
than a tanning salon and, if so, to indicate that location. We report the proportion of indoor tanners who have ever tanned in a gym and those who primarily tan in gyms. We then compared those who had tanned in gyms with those who had never tanned in a gym on demographics, physical activity, indoor tanning frequency in the past year, and criteria for tanning dependence. Finally, we examined the correlation between physical activity frequency and past year indoor tanning. Physical activity was measured via a single item asking, “how many of the past 7 days did you exercise or participate in sports activities for at least 20 minutes that made you sweat and breathe hard.”⁴ Tanning dependence was measured using the 7-item Behavioral Addiction Indoor Tanning Screener (BAITS), a screener developed to capture tanning behaviors that correspond to behavioral addictions, such as feelings of diminished control and strong urges to engage in indoor tanning.⁵ Participants who indicated 2 or more BAITS items were considered positive for tanning dependence.⁵ The institutional review board at the University of Massachusetts Medical School determined that this study was exempt from review. Bivariate comparisons were performed using χ^2 tests and 2-tailed, independent-samples *t* tests, as appropriate, with significance determined at $P < .05$. All analyses were performed in SPSS software, version 23 (SPSS Inc).

Table. Demographic Characteristics (N = 636)

Characteristic	Tanned in Gym, No. (%)		P Value
	Never (n = 482)	Ever (n = 154)	
Age, mean (SD)	37.11 (13.59)	33.40 (9.75)	<.001
Sex			
Women	322 (76.1)	101 (23.9)	.78
Men	160 (75.1)	53 (24.9)	
Race			
White	375 (77.8)	111 (72.1)	.34
Hispanic	49 (10.2)	19 (12.3)	
Other	58 (12.0)	24 (15.6)	
Education			
High school or GED	69 (14.4)	15 (9.9)	.32
Some college	116 (24.3)	32 (21.1)	
Associate/bachelor degree	217 (45.4)	76 (50.0)	
Postgraduate degree	76 (15.8)	29 (19.1)	
Income per year, \$			
<30 000	81 (16.8)	18 (11.7)	.41
30 000-59 999	154 (32.0)	48 (31.2)	
60 000-99 999	157 (32.6)	54 (35.1)	
100 000 or greater	90 (18.7)	34 (22.1)	
Indoor tanning frequency in past year, mean (SD)	13.56 (20.22)	18.57 (22.63)	.01
Days exercised in past 7 d, mean (SD)	2.73 (2.14)	3.85 (2.14)	<.001
Symptoms of tanning addiction			
Yes	158 (32.8)	72 (46.8)	.002

Abbreviation: GED, general education development.

Figure. Gym Tanning Status



Indoor tanning frequency (A) and dependence (B).

Results Findings revealed that 154 indoor tanners (24.2%) had tanned at least once in a gym and 44 of them (28.6%) reported tanning primarily at a gym. People who had tanned in a gym were younger than other tanners (mean [SD], 33.40 [9.75] vs 37.11 [13.59] years; $P < .001$) and more physically active (3.85 [2.14] vs 2.73 [2.14] days/wk; $P < .001$), but did not differ by sex (Table). People who have tanned in a gym reported significantly more tanning visits in the past year (18.57 [22.63] vs 13.56 [20.22] visits; $P = .01$) and were more likely to be at risk for tanning dependence than other tanners (72 [46.8%] vs 158 [32.8%]; $P = .002$) (Figure). Physical activity was associated with higher frequency of tanning ($r = 0.12$; $P = .003$).

Discussion Approximately 25% of tanners have tanned in gyms and they tan 67% more often than other tanners. Nearly half of gym tanners were at risk for tanning dependence. Gym tanners were more physically active than other tanners. Among all tanners, greater physical activity was associated with more tanning visits. The presence of tanning beds in gyms could reinforce the misconception that tanning is healthy. Gym owners' awareness of the risks of tanning beds should be explored as well as their reasons for including tanning in their businesses. Skin cancer prevention efforts targeting gyms and active adults in general are needed.

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