

Social Media and Tanning

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Research Objective



- We wanted to see the the correlation between social media use and tanning among college students.
- Hypothesis: a college student who uses social media more is more likely to tan more.
- Looking further into this research question we will look at factors of race, skin type, hours on social media, types of social media used and their knowledge of tanning exposure.

Background



- 2006 Study: Frequent Tanning Bed Use, Weight Concerns, and Other Health Risk Behaviors in Adolescent Females (United States)
- Tanning in a bed 10 or more times were more likely than non-tanning bed users to be concerned about their weight and to have dieted to lose weight
- In 2006 little research had been done to examine the association between tanning and other risky behaviors
- The association between tanning use and social media needs evaluation to fully grasp how social pressures influence self esteem and participating in unhealthy behaviors

Methods

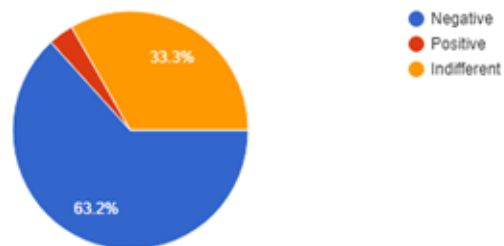
- Target population: college students ranging from age 18-25, in the UMass Amherst area
- A descriptive research method was used
- A survey was created and carried out on Google forms to collect our data
- Distributed surveys to our friends via text message, email, and/or facebook post
- Data outcome: 87 participants

Key Findings

- People reported spent 3-4 hours on their phone per day.
- Most were for social and non-social reason (social being sharing a post on fb, non-social being looking up the news)
- The amount of time spent of their phone per day and if they go tanning or not was not statistically significant.
- Body image and if they go tanning or not was statistically significant.
- Someone who goes tanning due to thinking it make them more attractive was statistically significant.
- Those who considered themselves avid social media user and saw themselves more attractive when tan was a negative association so not statistically significant.

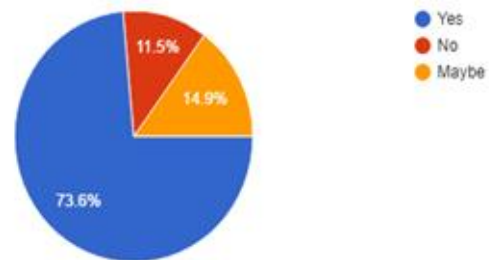
Do you think that social media has a negative or positive effect on how you view your body image?

87 responses



Has social media ever made you want to change your appearance?

87 responses

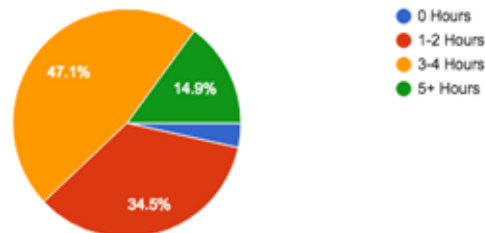


```
. tab sm_app smbimage
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sm_app: has social media made you want to change your appearance	smbimage: effect of social media on body image 0: negati 1: positi 2: indiff			Total
0: no	3	0	7	10
1: yes	50	2	12	64
2: maybe	2	1	10	13
Total	55	3	29	87

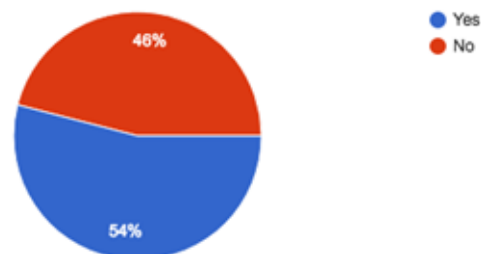
On average how many hours do you spend on social media in a day? (Ex: Facebook, Twitter, Instagram, Snapchat, VSCO, etc.)

87 responses



Have you ever gone, or do you currently, go tanning? (indoors or outdoors)

87 responses

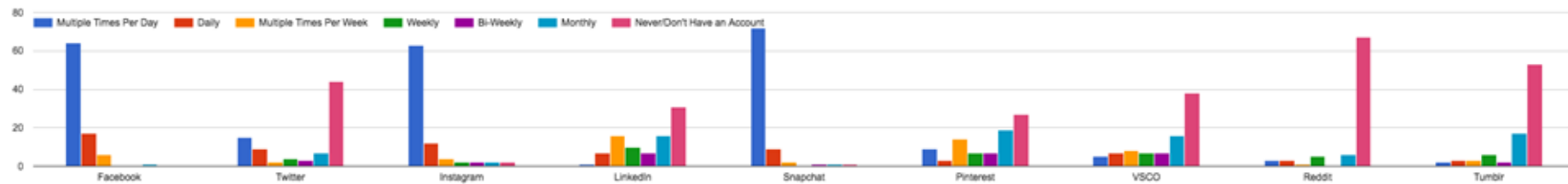


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. tab smpday tanever, chi2
```

smpday: how often do you use social media per day	tanever: have you ever gone, or currently go, tanning		Total
	0: no	1: yes	
0: 0 hours	3	0	3
1: 1-2 hours	12	18	30
2: 3-4 hours	16	25	41
3: 5+ hours	9	4	13
Total	40	47	87

Pearson chi2(3) = 7.5846 Pr = 0.055

How often do you check the following social media platforms:

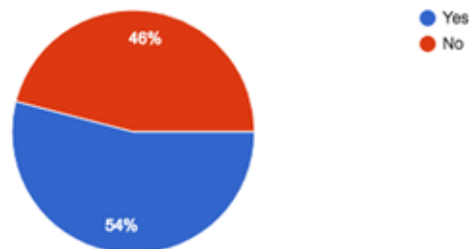


How often do you check the following social media platforms:



Have you ever gone, or do you currently, go tanning? (indoors or outdoors)

87 responses



```
. tab howoften_pin tanever, chi2
```

howoften_pin: how often do you use pinterest	tanever: have you ever gone, or currently go, tanning		Total
	0: no	1: yes	
0: multiple times per day	3	6	9
1: daily	2	1	3
2: multiple times per week	0	14	14
3: weekly	2	5	7
4: bi-weekly	2	5	7
5: monthly	9	9	18
6: never/don't have a	21	7	28
55: inconsistent	1	0	1
Total	40	47	87

Pearson chi2(7) = 25.5067 Pr = 0.001

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. tabodds tanever howoften_pin, or
```

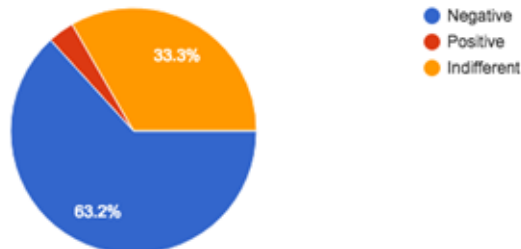
howoften_pin	Odds Ratio	chi2	P>chi2	[95% Conf. Interval]	
0: mult~y	1.000000	.	.	.	.
1: daily	0.250000	0.94	0.3315	0.012106	5.162549
2: mult~k	.	5.13	0.0235	.	.
3: weekly	1.250000	0.04	0.8435	0.135716	11.512980
4: bi-w~y	1.250000	0.04	0.8435	0.135716	11.512980
5: mont~y	0.500000	0.65	0.4201	0.089622	2.789479
6: neve~t	0.166667	5.05	0.0247	0.028088	0.988956
55: inc~t	0.000000	1.50	0.2207	.	.

Test of homogeneity (equal odds): chi2(7) = 25.21
Pr>chi2 = 0.0007

Score test for trend of odds: chi2(1) = 5.09
Pr>chi2 = 0.0241

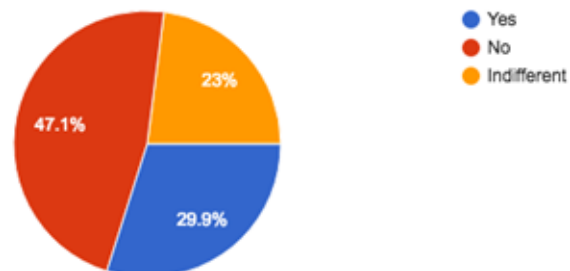
Do you think that social media has a negative or positive effect on how you view your body image?

87 responses



Do you like the idea of tanning?

87 responses



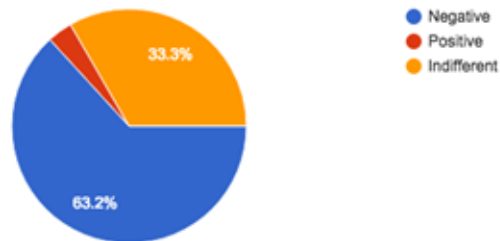
```
. tab smbimage tan_idea, chi2
```

smbimage: effect of social media on body image	tan_idea: do you like the idea of tanning			Total
	0: no	1: yes	2: indiff	
0: negative	23	22	10	55
1: positive	1	0	2	3
2: indifferent	17	4	8	29
Total	41	26	20	87

Pearson chi2(4) = 9.8644 Pr = 0.043

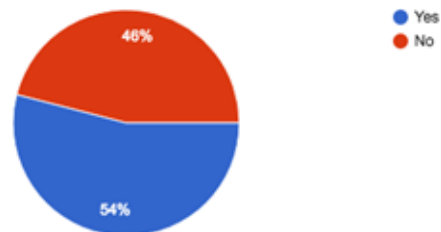
Do you think that social media has a negative or positive effect on how you view your body image?

87 responses



Have you ever gone, or do you currently, go tanning? (indoors or outdoors)

87 responses



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. tabodds tanever smbimage, or
```

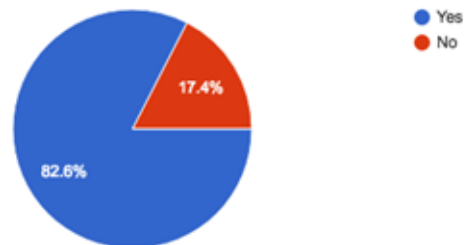
smbimage	Odds Ratio	chi2	P>chi2	[95% Conf. Interval]	
0: nega~e	1.000000	.	.	.	.
1: posi~e	0.243243	1.43	0.2325	0.019593	3.019785
2: indi~t	0.218919	9.95	0.0016	0.077572	0.617821

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Test of homogeneity (equal odds): chi2(2) = 10.45
Pr>chi2 = 0.0054
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Score test for trend of odds: chi2(1) = 10.17
Pr>chi2 = 0.0014
```

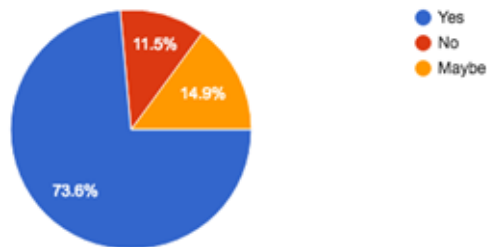
Do you consider yourself an avid social media user?

86 responses



Has social media ever made you want to change your appearance?

87 responses



```
. tabodds socmed_user sm_app, or
```

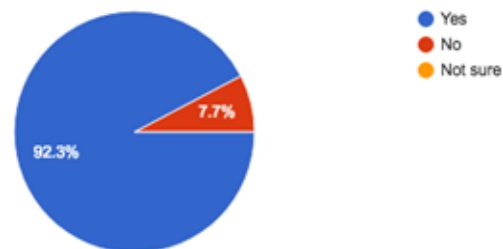
sm_app	Odds Ratio	chi2	P>chi2	[95% Conf. Interval]	
0: no	1.000000	.	.	.	.
1: yes	6.111111	7.18	0.0074	1.347346	27.717955
2: maybe	5.500000	3.06	0.0803	0.640670	47.216168

```
Test of homogeneity (equal odds): chi2(2) = 7.45
Pr>chi2 = 0.0241
```

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Score test for trend of odds: chi2(1) = 3.63
Pr>chi2 = 0.0568
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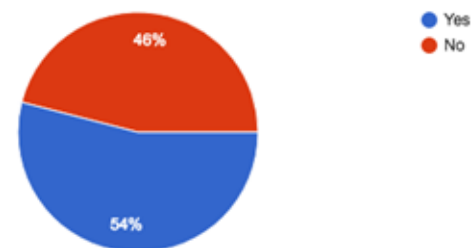
Do you consider yourself more attractive when you are tan?

13 responses



Have you ever gone, or do you currently, go tanning? (indoors or outdoors)

87 responses



. cs att_tan tanever

	tanever: have you ever gone, or currently go, tanning			
	Exposed	Unexposed	Total	
Cases	11	1	12	
Noncases	0	1	1	
Total	11	2	13	
Risk	1	.5	.9230769	
	Point estimate		[95% Conf. Interval]	
Risk difference	.5		-.1929519	1.192952
Risk ratio	2		.5001953	7.996876
Attr. frac. ex.	.5		-.9992191	.8749512
Attr. frac. pop	.4583333			

chi2(1) = 5.96 Pr>chi2 = 0.0146

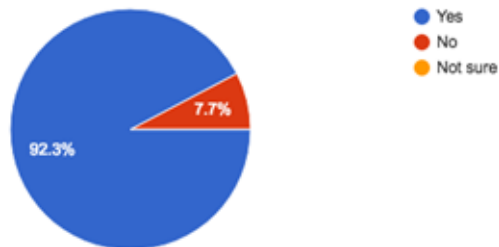
Do you consider yourself an avid social media user?

86 responses



Do you consider yourself more attractive when you are tan?

13 responses



```
. cs socmed_user att_tan
```

	att_tan: do you consider yourself more attractive after tanning		
	Exposed	Unexposed	Total
Cases	11	1	12
Noncases	1	0	1
Total	12	1	13
Risk	.9166667		.9230769
	Point estimate		[95% Conf. Interval]
Risk difference	-.0833333		-.2397102 .0730436
Risk ratio	.9166667		.772901 1.087174
Prev. frac. ex.	.0833333		-.0871739 .227099
Prev. frac. pop	.0769231		

chi2(1) = 0.09 Pr>chi2 = 0.7638

Limitations

- Question Errors: working status question, race identification question
- Recall Bias: hard for some to remember their history of tanning
- Selection Bias: respondents were people that we knew that go to UMass. Our group members are all female and sent the survey out to mostly female participants
- Different cultural standards of beauty around the world, this study does not account for these factors

Conclusion

- We can conclude social media in its integrity does not affect tanning
- However our data suggests there is an association between social media and self image, including avid social media users wanting to change their appearance after using social media

Sources

Picture 1:

https://www.google.com/search?q=tanning&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiphf63wOPaAhUFvIkKHxkPBkAQ_AUICygC#imgsrc=iGHqH6sYpb1t2M:

Picture 2:

https://www.google.com/search?q=social+media&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiXjszOwOPaAhXFxFkKHSh0BT8Q_AUICygC#imgsrc=N6HU9HqyEZyJeM:

Picture 3:

https://www.google.com/search?q=social+media+and+body+image&source=lnms&tbm=isch&sa=X&ved=0ahUKEwinu_KTwOPaAhUszIkKHSRvCvkQ_AUICygC&biw=970&bih=594#imgsrc=DmFh6ksZEXA0yM: