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DOL

10.1089/cyber.2016.0640

Publication date

2017

Document VersionFinal published version

Published in

Cyberpsychology, Behavior, and Social Networking

License

Article 25fa Dutch Copyright Act

Link to publication

Citation for published version (APA):

Hendriks, H., Gebhardt, W. A., & van den Putte, B. (2017). Alcohol-Related Posts from Young People on Social Networking Sites: Content and Motivations. *Cyberpsychology, Behavior, and Social Networking*, *20*(7), 428-435. https://doi.org/10.1089/cyber.2016.0640

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Cyberpsychology, Behavior, and Social Networking Volume 20, Number 7, 2017 © Mary Ann Liebert, Inc. DOI: 10.1089/cyber.2016.0640

Alcohol-Related Posts from Young People on Social Networking Sites: Content and Motivations

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Abstract

Many young people place alcohol-related posts on social networking sites (SNS) which can result in undesirable effects. Although several recent studies have investigated the occurrence of alcohol-related SNS use, it is neither clear (a) what type of alcohol posts are placed on SNS, (b) the motivations to place alcohol posts, nor (c) which young people are most likely to place alcohol posts. This study addressed these three goals. A large cross-sectional study among young participants (12–30 years; N=561) assessed the posting of different types of alcohol posts, the motivations to (not) post these posts, and potential differences in posting between subgroups (i.e., in terms of age, gender, and religion). Participants reported that they most often placed moderate, instead of more extreme, alcohol posts, in particular, when alcohol was present in the post "by chance". Furthermore, they indicated to post alcohol-related content mostly for entertainment reasons. Finally, we found differences in self-reported posting and motivations to post according to age, gender, and religion. These findings provide relevant implications for future interventions aiming to decrease alcohol posts, for example, by making participants aware of their posting behavior and by targeting specific at risk groups. Future research should explore the effectiveness of such intervention strategies and should investigate whether alcohol posts lead to an underestimation of alcohol-related risks.

Keywords: social networking sites, social media, motivations to post, alcohol posts, alcohol

any young people engage in excessive and frequent alcohol use, 1 increasing the odds of severe accidents and vandalism, brain damage, and alcohol addiction.^{2,3} Research has shown that interpersonal communication can strongly influence alcohol consumption, in line with classic communication theories such as the two-step flow theory and the diffusion of innovation theory.^{4,5} That is, communicating (versus not communicating) about alcohol and communicating positively about drinking have been related to an increase in alcohol behaviors. ⁶⁻⁸ Most previous research on interpersonal communication about alcohol has focused on offline, face-to-face, contexts. However, interpersonal interactions increasingly take place online, especially on social networking sites (SNS^{9,10}). Alcohol is a recurrent topic on SNS and there are indications that alcohol-related content could result in detrimental effects. 11 Currently, little is known about what alcohol content young people post on SNS and why they do this. The overall goal of our study is to provide insight into which alcohol-related content young people say

they post on SNS and which motives they have to place such content, thereby providing important information for future interventions.

Alcohol content on SNS

Several recent studies have shown that many young people use SNS to post alcohol-related content (with percentages varying between 36–96 percent^{12–14}). For example, in their study on alcohol and social media, Beullens and Schepers¹⁵ observed that 96 percent of college students placed alcohol-related posts (henceforth: alcohol posts). Moreover, Moreno et al. ^{13,16} found that alcohol posts were often positive about alcohol. Some indications exist linking such positive posts about alcohol to increased alcohol use and severe negative health consequences, ¹¹ thereby increasing the need for interventions aiming to decrease alcohol posts.

Although previous studies have studied the occurrence of alcohol posts, 10,17 the exact content of these alcohol posts

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has not often been investigated. A few recent studies on alcohol-related content have made a first step toward analyzing the content of alcohol posts, ¹⁵ in particular, by distinguishing between posts focused on "normal" alcohol use and those focused on "intoxication" ^{13,14,16} and by suggesting that "intoxication" posts are less prevalent, but more predictive of alcohol abuse. In the current study, we further extend these categories by also distinguishing between posts in which alcohol is really the focus of the image versus posts in which alcohol is present in the background by "chance". We expect that the occurrence and frequency of these various posts may differ, as well as the motivations to post them.

Motivations to post

Besides studying the content of alcohol-related posts, it is also important to understand the motivations behind the posting of such content. However, to date no studies have investigated why young people post alcohol-related content. Therefore, as a starting point for our study, we turned to research on general motivations to use SNS. This research frequently draws from the uses and gratifications (U&G) theory, which focuses on the reasons why people use certain media. 18,19 People use SNS for a myriad of reasons. 20,21 Posting status updates and photos is often motivated by social reasons or entertainment reasons. ^{20,22} Furthermore, identity expression and information reasons are also important motivations to engage in social media. ^{20,21,23} In the present study, we apply this U&G approach to analyze alcohol-related posts, and we investigate whether young people place alcohol posts for social, entertainment, identification, and/or information reasons. Furthermore, we also investigate the motivations to not post alcohol content.

Who posts alcohol posts?

Evidence of group-based differences in posting of alcohol content is scarce and not conclusive. It appears that older adolescents place more alcohol posts than younger adolescents. ^{12,24} Furthermore, although some studies found that men post more alcohol posts than women, ¹⁶ other studies ^{15,24} have found no gender differences. Moreover, whether subgroups of young people differ in terms of types of alcohol posts, or in terms of the motivations to post such content, has not yet been examined. This is unfortunate, because such insight could provide suggestions who to specifically target in future interventions. In line with previous studies we investigate age and gender as important factors that may determine posting of alcohol content. In addition, we also investigate religion as a relevant factor. ²⁵

The present study

In short, the overall goal of this study is to provide insight into alcohol-related content on SNS. For this purpose, we address three research questions, to be addressed in a cross-sectional survey study:

RQ1: What type of alcohol posts, and how often, do young people post?

RQ2: Why do young people post, and why do some of them *not* post, alcohol posts?

RQ3: Do subgroups of young people in terms of age, gender, and religion differ in the occurrence of posting and in their motivations to do so?

Method

Participants and design

In this study, 724 young people participated. Participants were part of a large Dutch representative sample, recruited by panel company I&O Research (response rate of participants within the target group was \sim 20 percent). 163 participants were omitted from analyses, because (a) they gave nonanswers and/or failed two attention checks (n=65), (b) they were impossibly fast in answering the questionnaire (n=17), or (c) because they did not fall into the intended age group of 12–30 years (n=81). This resulted in 561 participants to be analyzed $(M_{\rm age}=21.78, SD_{\rm age}=3.77, {\rm range_{age}}=12–30 {\rm years}, 172 {\rm men}, 389 {\rm women}, 56 {\rm high} {\rm school}$ students, 505 college students).

Procedure

Participants were approached through e-mail. After providing informed consent (and informed consent of the parents, in case of underage participants), participants were requested to fill out the online questionnaire. After completing the questionnaire, participants were thanked and rewarded for their participation. Participants received five Euros as a reward. This study was approved by the university's ethics committee.

Measures

Demographics. We measured age, gender, and religion ("are you religious?" *no/yes*) to look at group differences in terms of posting and motivations.

Alcohol-related SNS use. Occurrence and frequency of posting alcohol posts on Facebook and/or Instagram were measured using four specific examples of types of alcohol posts. As argued in the introduction, we focused on four posts varying in the degree to which they showed moderate or excessive alcohol use (i.e., in line with ^{13,14,16}) and varying in the degree to which alcohol was the focus of the post or more visible in the background. We chose for specific examples, instead of general descriptions of the four types of alcohol posts, because our pilot studies showed that participants have varying ideas about what an alcohol post is. Therefore, we showed participants four examples of alcohol posts (see Table 1) and asked separately for each example whether they had posted such a post in the past (i.e., occurrence of posting; 0 = No, I have never posted such an alcohol post; 1 = Yes, I have posted such an alcohol post in the past). These four examples were based on two extensive think aloud pilot studies, 26 in which participants were shown multiple examples of alcohol posts. The four posts that were recognized as the "most typical alcohol posts", while varying in the degree of intoxication and focus on alcohol, were chosen for this study. If participants in the main study indicated to have posted such a post in the past, we further asked them how frequently they had posted such posts (i.e., frequency of posting; varying from (1) once a year or less to

Table 1. Four Types of Alcohol Posts and Descriptions

Image Image	Image Im	Alcohol post 2. (alcohol focus) Alcohol post 2: A photo, video, or text in which an alcoholic drink is the focus of the post. Think about, for example, a photo in which a beer fills up most 2: A photo in which a beer fills up most 2: A photo in which a bear fills up most 2: A photo in which a bear fills up most 2: A photo in which a bear fills up most 2: A photo in which a bear fills up most 3: A photo in which a bear fills up most 3: A photo in which a bear fills up most 4: A photo in which a bear fills up most 4: A photo in which a bear fills up most 4: A photo in which a bear fills up most 5: A photo in which a bear fills up most 5: A photo in which a bear fills up most 5: A photo in which a bear fills up most 5: A photo in which a bear fills up most 5: A photo in which a bear fills up most 5: A photo in which a photo in which a bear fills up most 5: A photo in which a pho	Alcohol post 3 (drumken) Gefellamment Share Alcohol post 3: A photo or video in which you or others are very intoxicated or drumk. This photo is an example	Alcohol post 2 Alcohol post 4 (alcohol focus) 3 (drunken) 4 (drinking game) 5 (drunken) 5 (drunken) 6 (drinking game) 6 (drinking game) 6 (drinking game) 7 (drinking game) 7 (drinking game) 8 (drinking game) 9 (drinking game) 8 (drinking game) 9 (drinking game) 1 (drinking game) 2
	example, during a differ of party). This photo is an example of such a post.	of the image of a post which is clearly centered around a bottle of whisky. This photo is an example of such a post.	oi such a post.	cratterige), or a regular board—card game in which the goal is to drink (a lot of) alcohol. This photo is an example of such a post.

(12) 10 times a day or more). After this, we asked an openended question about the differences of these posts, "Do you find the earlier shown examples of alcohol posts to be different from one another? Please explain."

Alcohol-related SNS motivations

Motivations to post. When participants indicated to have posted one or more of these four alcohol posts, we asked them why they had done so. For reasons of questionnaire length and respondent fatigue, this was done in general and not separately for each type of post. We first offered the open-ended question "Can you explain why you post alcohol posts?" Next, we provided 24 reasons to which participants had to indicate whether they found this a reason to post alcohol posts (1=disagree completely to 7=agree completely). An example item is "I post alcohol posts, because people around me also post alcohol posts." To test these motivations, we conducted two extensive think aloud pilot studies²⁶ during which participants were asked to talk aloud while answering the motivation questions, thereby revealing which items were not understandable or not applicable. Items

reflected the four U&G dimensions that we, based on previous research, $^{20-23}$ expected to be most relevant for alcohol posts (social motives [α =0.92], entertainment motives [α =0.81], identification motives [α =0.85], and information motives [α =.054]). Three items did not fall into the U&G categories, but were measured because the pilot studies revealed them to be important (see Table 2).

Motivations not to post. The participants who had indicated to have never posted any alcohol posts in the past were asked why they did not post alcohol posts. Participants were provided with several reasons and had to indicate whether they found this a reason to not post alcohol posts $(1 = disagree\ completely\ to\ 7 = agree\ completely)$. An example item is "I do not post alcohol posts, because I want to come across as a serious and thoughtful person" (see Table 3).

Results

Occurrence and frequency of alcohol posts

To address RQ1, we first focused on the occurrence of posting of the four alcohol posts. A large majority of the

Table 2. Motives to Place Alcohol Posts

Motives	M	SD	A reason (7–5); n (%)	Neutral (4); n (%)	Not a reason (3–1); n (%)
Entertainment dimension (scale)	4.94	1.09	200 (96.7)	10 (5.5)	27 (7.9)
To show that I was present at a (fun) event To share the "gezelligheid" of the moment (Dutch for "sociable/cosy")	5.40 5.39	1.37 1.46	300 (86.7) 297 (85.8)	19 (5.5) 25 (7.2)	27 (7.8) 34 (9.8)
Because the post is fun	5.35	1.31	286 (82.7)	34 (9.8)	26 (7.5)
To share a positive feeling with others	4.85	1.58	250 (72.3)	43 (12.4)	53 (15.3)
Because the post is positive	4.74	1.59	229 (66.2)	53 (15.3)	64 (18.5)
To entertain myself and others	3.88	1.72	164 (47.4)	66 (19.1)	116 (33.5)
Information dimension (scale)	3.10	1.14			
To show everything I am experiencing	4.38	1.73	208 (60.1)	50 (14.4)	88 (25.4)
To share personal information about myself	3.09	1.66	85 (24.6)	72 (20.8)	189 (54.6)
To share information about alcohol	1.83	1.29	20 (5.8)	20 (5.8)	306 (88.4)
Social dimension (scale)	2.55	1.19			
To show I am a social person	3.71	1.72	145 (41.9)	74 (21.4)	127 (36.7)
To stay socially connected with others	3.53	1.77	132 (38.1)	73 (21.1)	141 (40.8)
To get attention from others	2.42	1.55	48 (13.9)	44 (12.7)	254 (73.4)
To show I am hip/cool	2.27	1.47	37 (10.7)	45 (13.0)	264 (76.3)
To get more likes and comments from others	2.27	1.46	37 (10.7)	40 (11.6)	269 (77.7)
Because people around me also post alcohol posts	2.25	1.54	42 (12.1)	34 (9.8)	270 (78.0)
To show I am popular and have (a lot of) friends	2.23	1.47	35 (10.1)	45 (13.0)	266 (76.9)
To be/become popular	2.18	1.46	33 (9.5)	38 (10.9)	275 (79.5)
To fit in	2.13	1.42	34 (9.8)	32 (9.2)	280 (80.9)
Identification dimension (scale)	2.22	1.29			
To show I am a fan of alcohol	2.40	1.54	42 (12.1)	49 (14.2)	255 (73.7)
To show that drinking alcohol is a part of who I am	2.36	1.54	38 (11.0)	53 (15.3)	255 (73.7)
To show that I belong to the group of alcohol drinkers	1.90	1.31	25 (7.2)	17 (4.9)	304 (87.9)
Additional items					
Because the alcohol is in the image accidently, the post is not necessarily centered on alcohol	5.88	1.45	304 (87.9)	17 (4.9)	25 (7.2)
I do not intentionally post alcohol posts, I do this without consciously thinking about it	4.55	1.87	201 (58.1)	55 (15.9)	90 (26.0)
Because I like to make a little bit of a fool of someone (e.g., by posting drunken pictures)	2.11	1.56	40 (11.6)	23 (6.6)	283 (81.8)

Numbers and percentages are based on the participants who have placed alcohol posts (n = 346). SD, standard deviation.

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Table 3. Motives to Not Place Alcohol Posts

Motives	M	SD	A reason (7–5); n (%)	Neutral (4); n (%)	Not a reason (3–1); n (%)
Because I find this stupid	5.58	1.53	174 (80.9)	19 (8.8)	22 (10.2)
Because I (almost) drink no alcohol and do not come in contact with alcohol	5.27	2.05	152 (70.7)	15 (7.0)	48 (22.3)
Because alcohol drinking is not a part of who I am	5.08	1.88	137 (63.7)	30 (14.0)	48 (22.3)
Because I hardly post any posts whatsoever	5.01	1.85	143 (66.5)	29 (13.5)	43 (20.0)
Because I am scared that potential future employers could see this	4.93	1.80	145 (67.4)	30 (14.0)	40 (18.6)
Because I might regret this	4.73	1.74	135 (62.8)	39 (18.1)	41 (19.1)
Because I want to come across as a serious and thoughtful person	4.61	1.80	122 (56.7)	41 (19.1)	52 (24.2)
Because I am scared for how I will come across to others	3.61	1.86	76 (35.3)	42 (19.5)	97 (45.1)
Because people around me would not approve of this	3.38	1.79	67 (31.2)	50 (23.3)	108 (50.2)
Because I am scared that my parents could see this	2.70	1.63	33 (15.3)	37 (17.2)	145 (67.4)

Numbers and percentages are based on the participants who do not place any alcohol posts (n = 215).

respondents reported placing an alcohol post resembling Alcohol post one (i.e., henceforth "alcohol-in-background post") in the past (n=327, 58.3 percent). Placement of Alcohol post two (i.e., henceforth "alcohol-focus post") was also reported by quite many young people; however, to a lesser extent than the alcohol-in-background post (n=187, 33.3 percent). Only a small minority of respondents reported to have placed Alcohol post three (i.e., henceforth "arunken post," n=26, 4.6 percent) and four (i.e., henceforth "arunken game post," n=50, 8.9 percent). Concerning frequency, respondents indicated that they placed the alcohol-in-background post most frequently, at least once per 6 months by 35.3 percent (n=198), followed by the alcohol-focus post (16.2 percent, n=91), drinking-game post (2.7 percent, n=15), and drunken post (1.8 percent, n=10).

The fact that the alcohol-in-background post (and to a lesser extent the alcohol-focus post) appeared to be placed by more participants and more frequently than the drinkinggame post and drunken post also became apparent by looking at participants' responses to the open-ended question about the differences between the posts. Common responses indicated that the alcohol-in-background post and alcohol-focus post were acceptable and the drunken post (especially) and the drinking-game post were not. For example, one respondent said "I do not mind posting the posts with alcohol in the background, or more in the center of the post. However, the drinking game or the post with a binge drinker on the ground is more absurd than normal." Another participant stated "I think that the post with two individuals toasting is acceptable. The photo with multiple people at the table is also okay, but the drinking game and the photo with drunk people are really unacceptable."

Motivations to (not) post alcohol posts

To investigate RQ2, we focused on motivations. The most relevant motivation dimension for posting alcohol posts was the entertainment motivation (M=4.94, SD=1.09). The most relevant entertainment items indicated that young people mostly posted alcohol posts because they found these posts fun (82.7–86.7 percent). In addition, they indicated that

through posting they wanted to share "gezellige" (Dutch for "sociable"/"cozy") moments (85.8 percent). The other motivation dimensions, information motives (M = 3.10, SD =1.14), social motives (M=2.55, SD=1.19), and identification motives (M=2.22, SD=1.29), were listed less often as reasons to post alcohol posts. The individual items reflecting these dimensions indicated that wanting to be/become popular (9.5 percent), appearing to belong to the group of alcohol drinkers (7.2 percent), or giving information about alcohol (5.8 percent) were not main reasons to post alcohol posts. Thus, participants appear to mainly post alcohol posts because they find them entertaining. Of additional note, a striking percentage (87.9 percent) of participants indicated that their alcohol posts were not necessarily focused on the alcohol, but that alcohol was more or less accidently present in the image, see Table 2.

That entertainment motives were especially important reasons to post alcohol posts was also strongly suggested by the answers to the open-ended motivation question. Many participants made remarks such as "...Because the photos are funny" and "To show it is a fun evening." Many participants also remarked that the alcohol was not the focus of the picture by stating that "It was a nice moment where there happened to be alcohol. I share it for the moment, not the alcohol," and "This is not consciously done, but more unconsciously."

Furthermore, we also investigated the motivations not to post alcohol posts. The participants who answered these questions indicated that they have never posted any alcohol posts in the past (n=215). The most important reason to not place alcohol posts was that people thought placing alcohol posts was "stupid" (80.9 percent). Furthermore, these participants indicated that they (almost) drank no alcohol (70.7 percent), that they did not want to scare off future employers (67.4 percent), that alcohol was not part of who they are (63.7 percent), and that they wanted to come across as a serious person (56.7 percent). Interestingly, few participants indicated that being scared that parents may see the alcohol post was a reason for them to not post an alcohol post (15.3 percent), see Table 3.

Answers to an open-ended question revealed that although some participants argued that all four alcohol posts are stupid and that "you just should not posts about alcohol" and "all four alcohol posts are not done," most participants argued that some alcohol posts are more stupid than others. Especially the drunken posts and drinking-game posts were often described as "stupid," "dumb," and "not smart" because these can pose problems for them when other people see these posts. Drunken posts were also often described as "disrespectful" and "shameful," and it was mentioned that these posts showed that people "crossed a line," which participants considered "really inappropriate," "antisocial," and "really not done."

Group differences in occurrence and motivations

To explore RQ3 on group differences in terms of age, gender, and religion, we calculated chi-square values (for occurrence of posting) and conducted analysis of variances (for motivations).

Occurrence. As can be seen in Table 4, young adolescents between 12 and 18 hardly reported posting alcohol posts. Young people between 18 and 25 and between 25 and 30 both reported posting alcohol posts more often, especially the alcohol-in-background post and the alcohol-focus post. The oldest age group stated most often to place the drinkinggame post. Although no significant differences were visible between men and women regarding the alcohol-in-background post and the alcohol-focus post, gender differences did exist regarding the drunken and drinking-game posts; that is, men reported to post these alcohol posts more often than women did. Furthermore, people who were religious stated to post fewer alcohol posts than people who were not religious (with the exception of the drunken post, for which no differences were found).

Motivations. For clarity and brevity reasons, we focused on the motivation dimensions. Several dimensions differed significantly across age groups. Social motivations, information motives, and identification motives all became more relevant when age increased; however, this was not the case with entertainment motives. Furthermore, motivation dimensions differed significantly between men and women. That is, men

mentioned all motivations to post more often than women. No significant differences were visible in motivations between religious and nonreligious people (see Table 5).

Discussion

The overall goal of this study is to provide insight into the alcohol-related content that young people say they post on SNS by examining *what* type of alcohol posts young people say to post on SNS, *why* young people do and do not post such alcohol posts, and whether certain *subgroups* differ in the posting of alcohol-related content. Three main findings reveal that (1) young people indicate that they most often post moderate, instead of more extreme, alcohol posts, especially posts where alcohol is present in the image by chance. Furthermore, (2) young people post alcohol content mostly for entertainment reasons. Finally, (3) some important differences exist according to age, gender, and religion.

The first finding that 33–58 percent of participants report to place relatively "moderate" posts (i.e., the alcohol-inbackground posts and the alcohol-focus posts), whereas only 6-9 percent report to post drunken photos or posts about drinking games, is in line with Moreno et al. 13,16 who also showed that only a small proportion of their participants (3.2) percent) placed posts reflecting problematic alcohol use. However, this small proportion is not in line with the percentage of young people who actually engage in binge drinking in real life (i.e., which has been as high as 43 percent²⁷). Possibly, the "darker" side of drinking (i.e., getting drunk) is less appropriate to show on SNS. An undesirable consequence of this may be that young people only post about the positive side of drinking and do not post about possible negative consequences. Potentially, this overly positive representation of alcohol on SNS may lead to an underestimation of the risks involved with alcohol abuse. Future research needs to address this issue.

Importantly, we find that young people claim to post alcohol posts in which alcohol is present by chance and that they do not consciously choose to place alcohol posts. This has important implications for future interventions, given the fact that different strategies apply when changing conscious versus unconscious behaviors.²⁸ Alternatively, it may be

Table 4. Differences in Occurrence of Posting According to Age, Gender, and Religion

Factor	Alcohol post 1; No: yes, n (%)	Alcohol post 2; No: yes, n (%)	Alcohol post 3; No: yes, n (%)	Alcohol post 4; No: yes, n (%)	Subgroup, n
Age, years					
12–18	1 (2.1)	0 (0)	0 (0)	0 (0)	48
18-25	237 (62.2)	128 (33.6)	17 (4.5)	29 (7.6)	381
25-30	89 (67.4)	59 (44.7)	9 (6.8)	21 (15.9)	132
Chi ²	p = 0.000 ***	p = 0.000 ***	p = 0.151	p = 0.001****	
Gender					
Men	100 (58.1)	60 (34.9)	13 (7.6)	22 (12.8)	172
Women	227 (58.4)	127 (32.6)	13 (3.3)	28 (7.2)	389
Chi ²	p = 0.962	p = 0.604	p = 0.029*	p = 0.032*	
Religion					
Religious	78 (49.7)	42 (26.8)	5 (3.2)	8 (5.1)	157
Not religious	249 (61.6)	145 (35.9)	21 (5.2)	42 (10.4)	404
Chi ²	p = 0.010**	p = 0.039 *	p = 0.309	p = 0.048*	

Numbers and percentages are based on the number of participants within that group. $*p \le 0.05$, $**p \le 0.01$, $***p \le 0.001$. Alcohol post $1 = alcohol-in-background\ post$, Alcohol post $2 = alcohol-focus\ post$, Alcohol post $3 = drunken\ post$, and Alcohol post $4 = drinking-game\ post$.

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Table 5. Differences in Motivations of Posting According to Age, Gender, and Religion

	Entertainment		Inform	Information		Social		Identification	
Factor	M	SD	M	SD	\overline{M}	SD	M	SD	Subgr n
Age ^{a,} years									
18–25	4.89	1.09	2.94	1.08	2.45	1.14	2.06	1.20	251
25-30	5.04	1.07	3.52	1.18	2.85	1.30	2.66	1.41	94
ANOVA		3)=1.33, 0.249	F(1, 343) = 18.44, p = 0.000***		F(1, 343) = 7.76, p = 0.006**		F(1, 343) = 15.28, p = 0.000***		
Gender									
Men	5.17	0.83	3.30	1.23	2.92	1.24	2.76	1.49	104
Women	4.84	1.17	3.02	1.09	2.39	1.14	1.99	1.12	242
ANOVA		4)=6.92, 009**	F(1, 344) = 4.66, p = 0.032*		F(1, 344) = 14.95, p = 0.000***		F(1, 344) = 27.93, p = 0.000***		
Religion									
Religious	4.78	1.08	3.02	1.24	2.71	1.30	2.31	1.37	84
Not religious	4.98	1.09	3.13	1.10	2.50	1.16	2.19	1.26	262
ANOVĂ	Λ	IS	Λ	VS.	Λ	VS	Λ	VS	NS

^aThe means for the age group 12–18 years are not displayed, because this represented only one participant (n=1). *= $p \le 0.05$, **= $p \le 0.01$, ***= $p \le 0.01$. ANOVA, analysis of variance.

worthwhile to change this unconscious behavior into a more conscious process; for example, by encouraging young people to be more aware of what they post online. Future efforts should investigate such intervention strategies.

The second finding that young people appear to post alcohol posts especially for entertainment reasons provides important new insights into why young people post such content, thereby providing suggestions on how to decrease alcohol posts. Given the fact that young people indicate to post alcohol-related content to entertain others, it may be worthwhile to counter the conviction that other people find such posts amusing. Alternatively, the finding that some people do not post alcohol posts because they are afraid of what future employers might think could be incorporated in interventions by reminding people of their future work plans while posting.

That entertainment motives are important for alcohol posts is in line with several studies showing the relevance of entertainment motives for SNS use in general.^{20,22} However, much research also stresses the relevance of social motives for general SNS use.²⁹ Moreover, some studies on perceptions about alcohol posts suggest that people think that others place alcohol posts to be cool or popular¹⁶ or for relationship maintenance. 30 In contrast, these social reasons are not listed as important motivations in our study. An explanation may be that young people find it hard to recognize their need to belong with others, 31 or that they react against this influence, and therefore report less social influence than is likely to exist. Looking at social influence in our study in a more subtle way, by examining the responses to the open-ended questions, we find that social words (e.g., "sharing a nice moment") are often used when participants list their reasons to post. Perhaps future research should address motivations both by structured questionnaires and in-depth interviews.

Thus, many young people report to post alcohol posts and find this entertaining. However, some participants indicate to never post any alcohol posts because they think this is "stupid." This especially holds for the drunken posts and drinking-game posts because they find such posts disrespectful,

but also because they fear that such posts could get themselves into problems. Future research should shed further light on these negative perceptions of some alcohol posts, and if replicated, it might be advisable to develop intervention strategies that encourage these negative perceptions in more young people in future interventions.

The third finding that the reported occurrence of posting and motivations to post differ across certain subgroups provides important information regarding the context in which alcohol posts occur. That is, men, people older than 18 years, and nonreligious people state more often to post alcohol-related content than women, people younger than 18 years, and religious people. This has important implications for who to target with interventions. Considering motivations, we found significant differences between men versus women and people younger versus older than 25 years regarding the motivations to post alcohol content. This is in line with research by Park³² who showed that some general motivations to use SNS differed between different age groups. Future research should aim to understand the mechanisms explaining these differences.

Conclusions

This study reveals several important new findings about alcohol posts by young people on SNS. We find that especially placement of moderate, instead of more extreme, alcohol posts is reported most often and that young people post alcohol content mostly for entertainment reasons. Results also yielded differences across age, gender, and religion in the posting of alcohol posts. These findings hold relevant implications for future interventions aiming to decrease alcohol posts, for example, by making participants aware of their posting behavior and by targeting specific at risk groups.

Acknowledgments

Data collection was facilitated by Leiden University. This work was supported by a Veni grant (451-15-022) from the

Netherlands Organization for Scientific Research awarded to HH.

Author Disclosure Statement

No competing financial interests exist.

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