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A Content Analysis of Displayed Alcohol References on a Social Networking Web Site

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Abstract

Purpose—Exposure to alcohol use in media is associated with adolescent alcohol use. Adolescents frequently display alcohol references on Internet media such as social networking websites (SNSs). The purpose of this study was to conduct a theoretically-based content analysis of older adolescents' displayed alcohol references on a SNS.

Methods—We evaluated 400 randomly selected public MySpace profiles of self-reported 17 to 20-year-olds from zip codes representing urban, suburban and rural communities in one Washington county. Content was evaluated for alcohol references suggesting: 1) explicit versus figurative alcohol use, 2) alcohol-related motivations, associations and consequences, including references that met CRAFFT problem drinking criteria. We compared profiles from four target zip codes for prevalence and frequency of alcohol display.

Results—Of 400 profiles, 225 profiles (56.3%) contained 341 references to alcohol. Profile owners who displayed alcohol references were mostly male (54.2%) and White (70.7%). The most frequent reference category was explicit use (49.3%), the most commonly displayed alcohol use motivation was peer pressure (4.7%). Few references met CRAFFT problem drinking criteria (3.2%). There were no differences in prevalence or frequency of alcohol display among the four sociodemographic communities.

Conclusions—Despite alcohol use being illegal and potentially stigmatizing in this population, explicit alcohol use is frequently referenced on adolescents' MySpace profiles across several sociodemographic communities. Motivations, associations and consequences regarding alcohol use referenced on MySpace appear consistent with previous studies of adolescent alcohol use. These references may be a potent source of influence on adolescents, particularly given that they are created and displayed by peers.

Keywords

Adolescent; Internet; Alcohol; Media; Social Networking Web Sites; Content Analysis

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INTRODUCTION

Adolescent alcohol use is common and is associated with grave consequences.[1–3] Underage drinking contributes to all 3 leading causes of death among people aged 12 to 20 years (unintentional injury, homicide and suicide).[4,5] While many individual and social factors play a role in adolescent alcohol use, recent research suggests associations between exposure to alcohol use in media and adolescent alcohol use. Studies of television media suggest that increased television exposure, as well as exposure to alcohol cues in television advertising and music videos, have been associated with increased likelihood of initiating alcohol use.[6–10] Exposure to alcohol use in while watching movies is common; one study found that 92% of a sample of contemporary movies featured alcohol use. [11] Exposure to alcohol use in movies has been linked to both initiation and escalation of alcohol use in the U.S. and abroad.[12,13]

The Internet represents an important new media venue that is popular among adolescents: over 90% of teens have Internet access and most report daily use.[14–16] Among these Internet users, an estimated 65% of adolescents and over 90% of college students report using social networking web sites (SNSs).[16–19] SNSs such as MySpace and Facebook allow users to create and share a personal Web profile that may contain images (e.g. photographs) and text (e.g. blogs). References to alcohol use are prevalent among adolescents' MySpace profiles, including descriptions of alcohol use experiences and personal photographs depicting alcohol use.[20,21]

In considering the potential influence of SNSs as a new media venue, there are several similarities to previously studied media such as television and movies. Just as with television and movies, adolescents have high levels of exposure to SNSs, with nearly half logging on to these sites at least once per day.[18] Further, exposure to alcohol references on SNSs is a common phenomenon, our previous study found that among 18-year-old MySpace users approximately 37% displayed alcohol use on their profile.[21] One important difference between SNSs and more traditional media is that SNS content is created and displayed by an adolescent's peers. As media models who are perceived to be similar are more likely to be imitated, SNSs are potentially an important source of influence on adolescent alcohol use.[22] In order to better understand the potential influence of SNSs on adolescent alcohol use, a first step is to examine the content of the alcohol displays in the context of a theoretical model.

Social learning theory (SLT) focuses on learning that occurs within a social context, including learning from observation, imitation and modeling.[23–27] In these social contexts, people learn by observing the behavior of others as well as the outcomes of those behaviors.[26] Applying this theory to media suggests that adolescents who observe media characters engaging in alcohol use without experiencing negative consequences may be more likely to adopt the behaviors portrayed. SLT further suggests that media messages that contain relevant motivations, desirable associations and positive consequences are more likely to promote adoption of the referenced behavior.[27,28] This theoretical framework may be a useful starting point in considering the impact of media exposure on adolescent alcohol use, particularly as a recent study suggests that adolescents may process exposure to movie portrayals of alcohol use similarly to other social influences.[29] As SNSs have potential to influence adolescents through media exposure as well as peer modeling, SLT may provide a framework to evaluate these references from a broader perspective.

The purpose of this study was to conduct a comprehensive analysis of how older adolescents' choose to display alcohol use on their SNS profiles. Our first question was

whether display of references to personal alcohol use could be easily interpreted by a research team, physician or even parent, in contrast to these references being presented in vague or “code” language by teens. Particularly given that underage alcohol use is an illegal and potentially stigmatizing behavior, we wanted to know whether references to personal alcohol use were explicit or figurative. Second, for references to alcohol use that provided additional information about the context, expectations or experiences regarding alcohol use, we applied SLT as a theoretical framework.[28] We were interested in displayed references to motivations, associations and consequences regarding alcohol use as described in the SLT. We hypothesized that more positive than negative aspects would be displayed. We were particularly interested in associations and consequences linked to problem drinking behaviors, and therefore potential morbidity and mortality, among adolescents.

METHODS

Study setting

This observational study applied content analysis to publicly available MySpace Web profiles between January 20 and December 20, 2008. This study was conducted using the Web site MySpace (www.MySpace.com). Because this study involved observation of publicly available information it received an IRB exemption from the University of Washington and the University of Wisconsin.

Subjects and search strategy

MySpace features a “browse” function to seek Web profiles that meet particular criteria. Search criteria can include particular age ranges, gender, or home zip code. Setting the criteria for a zip code yields a roster of up to 3000 Web profile links in non-alphabetical non-numerical order. The order in which search results are listed is in one of several formats provided by MySpace, including by newest profiles or by most recent login to profile.

A goal of this study was to include SNS profiles from several community types within one county in Washington state in order to inform a future intervention in this local county. To assess web profiles from several community types we selected two zip codes that fully contained an area defined by the US Census Bureau as rural or urban, and two zip codes that did not meet these criteria and were considered suburban.[30,31] Given the potential variation among suburban areas, we selected two suburban zip codes: one with median income above the US average and one with median income below the US average. From a list of eligible zip code regions that fit these inclusion criteria, we randomly selected one zip code to fit each of these four criteria. We selected that search results be listed by most recent login to the profile. For each of these four MySpace searches, we examined each profile in the order of the search results until the goal of 100 profiles that met inclusion criteria was reached for each search.

Further inclusion criteria required that all eligible profiles be publicly available personal Web profiles on MySpace.com that reported the profile owner’s age as between 17 and 20 years old. Last, to ensure that the profiles were actively maintained, we only included Web profiles that had been accessed by their owner within the last 30 days.

A total of 422 profiles were analyzed to obtain our target sample of 400 profiles, 94.7% of these profiles met inclusion criteria. Of the 22 excluded profiles, 18 were excluded due to “private” profile security setting. Profiles were also excluded due to unclear demographic information (3/22) or reporting an age other than 17 to 20 years (1/22). Figure 1 details our subject selection and content analysis process.

Data collection

All publicly viewable elements of the MySpace profile were investigated including text, photographs and downloaded icons (e.g. advertisements such as pictures of a specific beer brand). From each Web profile that met inclusion criteria we recorded age, gender and date of last login to profile. We collected data on ethnicity which is often available on MySpace profiles but displayed at the profile owner's discretion. We then evaluated each profile for evidence of references to alcohol use and a typed description of each reference to alcohol was created by author LRB which included verbatim text quotes and written descriptions of images.

Two authors (LRB and MM) conducted the initial evaluation to identify profiles with alcohol references. We defined text alcohol references to include any references to alcohol, including preferences, experiences or events involving alcohol. We defined image alcohol references to include photographs in which alcohol beverages were being held or ingested, or images featuring alcohol as the primary focus of the image (e.g. a downloaded icon of a specific beer brand). These definitions were based on images and keywords determined by previous studies conducting alcohol content analyses.[21,28,32] During the initial coding by LRB, MM recoded a 20% random profile sample to assess inter-rater reliability. Both unclear references during initial coding by LB and disagreement cases were discussed to reach consensus. Cohen's Kappa statistic was used to evaluate the extent to which there was agreement in the coding of the Web profiles prior to discussion. The Kappa value for the identification of references to alcohol use was 0.82.

Content Analysis

A review of content analyses regarding alcohol use and media informed our coding system. The unit of analysis was by single utterance or single image as a reference. A picture depicting alcohol use accompanied by a caption referencing that alcohol use was counted as a single reference. Each reference was coded into only one category.

Explicit versus figurative references

Alcohol references that did not provide a specific context to which we could apply the SLT or CRAFFT were coded as either explicit or figurative. We defined explicit text alcohol use references as those in which the profile owner referenced alcohol use using the pronouns "I," "me," "mine," "we," or "our." We defined explicit intoxication references as those including a personal pronoun and referring to words such as "intoxicated," "wasted," or "drunk." Explicit image references included personal photographs depicting the profile owner drinking alcohol, identifying through the displayed personal photographs or by reading pictures' displayed captions. We took a conservative approach to coding images as alcohol references. To be counted as a reference, profile owners needed to be drinking or holding a drink that was clearly alcohol, such as a beer bottle. We did not count pictures of the profile owner with alcohol in the background, nor pictures of the profile owner holding a cup with ambiguous contents. Because of the subjective judgment involved in coding a personal photograph as representing alcohol "use" or "intoxication," we coded all personal photographs showing the profile owner engaging in alcohol use as "use."

Similar to previous work, we defined figurative references to be those that referenced alcohol use but not specific use by the profile owner.[28] Figurative text reference included references to alcohol such as quoting a song or a catch phrase from a beer advertisement. Figurative image references included downloaded icons of alcoholic beverages. As a goal of this study was to evaluate alcohol references chosen by adolescents to display on their SNS profiles, we made the decision to refrain from evaluating personal photographs as figurative references after our pilot work suggested that many personal photographs featured alcohol in

the background of a picture. One example was a family photograph from a vacation that featured other bystander adults in the background drinking alcohol. We were concerned that a high degree of subjectivity would be involved in determining whether these figurative alcohol references should represent alcohol references that adolescents had intended to display on their SNS profiles.

Social learning theory and CRAFFT criteria

For references that provided more information about the context in which alcohol use was taking place, we assessed these references using measures based on the SLT. These measures included motivations for, associations with and consequences of alcohol use using categories similar to previous work.[28] To determine associations and consequences linked to problem drinking behaviors we applied the CRAFFT problem drinking criteria, this criteria has been validated among adolescents.[33] If a reference displayed a motivation that was consistent with a CRAFFT criteria (i.e. drinking associated with driving), then this reference was coded in the CRAFFT category rather than a specific SLT category. For problem drinking criteria we focused on text references because of the possibility of ambiguity or jokes that may be present in a photograph (i.e. holding a beer bottle while sitting in a car may or may not represent drinking while driving).

We reviewed previous literature regarding motivations for alcohol use among adolescents, examples included drinking to enhance confidence, drinking for mood improvement and drinking for social acceptance or peer pressure.[34,35] We also included motivations described in previous studies, which included sex or financial reasons.[28] These were our a priori categories of interest. We also searched for statements that referenced drinking “because of” or “due to” other factors, and we included references in which the profile owner was trying to motivate others to drink alcohol. Motivations involving using alcohol to relax were considered as meeting the CRAFFT criteria.

To determine associations with drinking we reviewed previous literature that evaluated associations with alcohol use featured in music and applied these associations as our a priori variables of interest, such as dancing or partying.[28] We included behaviors that are commonly associated with alcohol use among teens, such as sexual activity.[34] These were our a priori variables of interest. The specific associations of drinking and driving, or drinking alone, were considered as meeting the CRAFFT criteria.

To determine consequences of drinking we sought any reference to an emotional, social or physical experience resulting from drinking. These were coded as positive or negative. The consequences of forgetting/blacking out, getting into trouble due to events while drinking, or having friends/family ask one to cut down on drinking were all considered as meeting CRAFFT criteria.

We recruited two coders with expertise in the field of adolescent alcohol use (LRB and MW). Coder training was performed using a small set of pilot data in order to establish consensus among coders regarding the categories. Following training, these two coders each independently analyzed all displayed alcohol references in our dataset. Coders evaluated the verbatim text quotes and typed descriptions, and referenced the original MySpace profiles if an image description was unclear. We used Cohen’s kappa statistic to calculate interrater agreement, the kappa statistic was 0.76. Following this calculation, interrater disagreements were resolved using a confirmatory coder (MM); this coder was blinded to the prior responses. The coding category in which disagreements were most common was in evaluating consequences of alcohol use.

Analysis

All statistical analyses were conducted using STATA version 9.0 (Statacorp, College Station, TX). Our sample size was determined based on our previous study investigating alcohol reference display among 18-year-olds on MySpace, based on that prevalence of alcohol display (37%) we determined that a sample size of 400 would be adequate for planned analyses.[21] To investigate whether there were differences in between profile owners who displayed and did not display alcohol we used the Chi square test. To investigate whether there were differences in mean number of displayed references among our four target zip codes we used Poisson regression given that we did not expect a normal distribution of references to alcohol.

RESULTS

Descriptive statistics

Of 400 evaluated profiles, 225 profiles contained references to alcohol and were included in all analyses (56.3%). Of these 225 profiles, most profile owners were male (54.2%) and white (70.7%). The mean numbers of alcohol references per profile was 2.7 (SD 1.7). Profile owners who displayed alcohol tended to be older than those who did not display alcohol. There were no significant differences in mean or frequency of alcohol display between our four zip codes. Table 1 describes our subject population.

A total of 341 references to alcohol were present on these 225 MySpace profiles; of these references 213 (62.5%) were text and 128 (37.5%) were images. Table 2 includes examples of categories and references. Of 128 image references, 110 (85.9%) were personal photographs and 18 (14.1%) were downloaded icons.

Explicit and figurative references

The most common category of alcohol reference was explicit use, representing 49.3% of all displayed alcohol references. These references included statements regarding alcohol use without any specific context that could be coded as a motivation, association or consequence. References to explicit intoxication made up 17% of all references. “Figurative” references were those that mentioned alcohol without specific statements of use by the profile owner, 11.4% of references were categorized as such.

Of the 128 image references, the majority (93.6%) were personal photographs of the profile owner engaging in alcohol use. Of the 18 downloaded icon images, half were pictures of specific alcohol brands.

SLT and CRAFFT

Few references to alcohol use provided context and were coded into SLT categories. The main displayed motivation for alcohol use was peer pressure (4.7%). The most commonly displayed association with alcohol use was dancing/partying (22%). The most commonly displayed consequence of alcohol use was negative physical consequences such as hangovers (2.1%).

A small proportion (3.2%) of our references met criteria for problem alcohol use. Among the problem drinking references, approximately half referenced blacking out or forgetting events while intoxicated. Table 3 provides the CRAFFT criteria and all 11 references that met those criteria.

DISCUSSION

Our results indicate a high prevalence of displayed alcohol references on older adolescents' publicly available MySpace profiles. Though profile owners who displayed alcohol use tended to be older than profile owners who did not display alcohol use, all profile owners self-reported an age under 21 in our study. Despite underage alcohol use being illegal, the most frequent category of references were statements and images describing explicit personal alcohol use or intoxication. These references are likely to be easily interpretable by a physician or parent viewing an adolescents' profile. These explicit references may also be taken at face value by adolescents and contribute to normalization of alcohol use. One recent study found that adolescents commonly interpret displayed SNS alcohol references as representations of actual alcohol use.[36] Even if we do not believe these displayed references, adolescents often accept them as truth.

Previous studies of media effects describe the impact of media messages on adolescents in the role of passive consumers, such as when adolescents watch television and absorb the messages they view.[6,11,37,38] New media such as SNSs challenge these models as they provide adolescents an opportunity to engage in both the creation and consumption of media messages. Therefore, SNS alcohol references may be particularly potent influences on adolescents given that SNS content is created and displayed by adolescent peers.[22]

In investigating application of the SLT to alcohol displays on SNSs, we found few references that represented motivations, associations or consequences regarding alcohol use. Of these small numbers, there was similarity to the motivations, associations and consequences noted both in adolescent self-report, and in media popular among adolescents. [28,39] These findings support some synergy between media representations and adolescent attitudes towards alcohol use. However, SLT was only applicable to a small fraction of the analyzed SNS references in this study. This could be because the majority of adolescents' alcohol disclosures are without sufficient context to apply a theoretic model, or that SLT is not an optimal model to apply to SNS disclosures.

Few references met the CRAFFT clinical criteria for problem alcohol use; however, we were surprised to find references that so clearly met CRAFFT clinical criteria. Therefore, it is worth considering whether these references represent a help-seeking gesture by the profile owner, or even if not, whether efforts to reach out to these adolescents are warranted. Given the popularity and accessibility of SNSs, it is possible that an intervention message could be delivered online by a health care provider, teacher, parent or even a peer.

There are several limitations to our study which warrant mention. First, the validity of information displayed on MySpace Web sites is unknown, age is not verified during the MySpace registration process. The validity of self-reported behaviors on MySpace is also unknown. Display of references to alcohol use may represent alcohol use, consideration of alcohol use, boastful claims, or nonsense. Previous studies have shown that adolescents report that majority of their online self-representation reflects their identity.[18,40]. A second limitation is that we only examined public web profiles. While it is possible that profiles with a "private" security setting may have higher prevalence of alcohol references, we were interested in the online display of alcohol references that were publicly available to adolescents. Third, we evaluated Web profiles from only one SNS and one county. The extent to which findings could be generalized to other Web sites or counties is unknown. Fourth, because our coding system was conservative, we may have underestimated the true prevalence of alcohol displays on MySpace. Last, content analysis coding can be considered subjective. In order to provide the most comprehensive coding possible we recruited coders

with expertise in adolescent alcohol use, and evaluated all categories using pilot data prior to this study.

Despite these limitations, our findings have important implications. This is the first comprehensive evaluation of adolescents' publicly displayed references to alcohol use on a SNS. This information could be used by providers, teachers as well as parents in considering new venues to interact with youth regarding alcohol use. We found that SNS alcohol references were prevalent and explicit. Therefore, we agree with recommendations that providing media literacy training to youth may help them to interpret alcohol messages received in media.[28] Further research should consider whether SNSs can be used towards reducing the harmful consequences of underage alcohol use.

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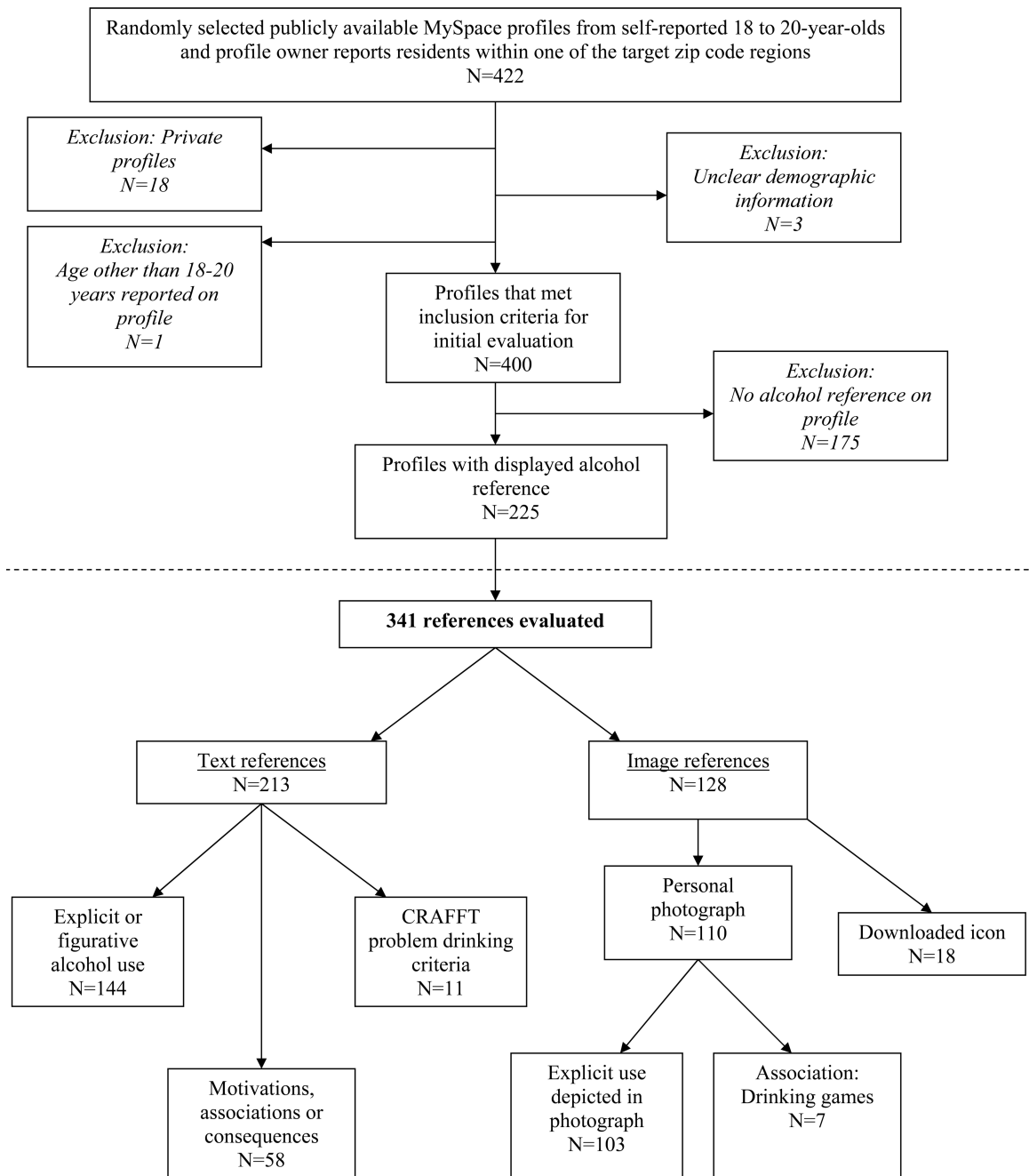


Figure 1.
Subject selection flowchart

Table 1
Descriptive statistics

Descriptive statistics from 400 publicly available MySpace profiles of self-reported 17 to 20 year olds in Washington state

Variables		Number (%) of Profiles displaying alcohol N=225	Number (%) of Profiles that did not display alcohol N=175	P value for Chi ² test
Age (yrs)	17	0	4 (2.3)	0.03
	18	52 (23.1)	62 (35.4)	0.001
	19	90 (40)	63 (37.7)	0.5
	20	83 (36.9)	46 (26.3)	0.02
Gender	Male	122 (54.2)	102 (58.3)	0.42
	Female	103 (45.8)	73 (41.7)	
Ethnicity ^a	Asian/Pacific Islander	14 (6.2)	19 (10.9)	0.14
	Black/African	15 (6.7)	17 (9.7)	0.25
	Latin/Hispanic	19 (8.4)	6 (3.4)	0.03
	Native American	3 (1.3)	3 (1.7)	0.4
	White/Caucasian	129 (57.3)	78 (44.6)	0.01
	Other	4 (1.8)	6 (3.4)	0.5
	Missing	41 (18.2)	46 (26.3)	0.06

^aCategories provided by MySpace


Table 2
Categories and examples of alcohol use references

N=341 references to alcohol use from 400 adolescents' MySpace profiles

Explicit versus figurative use categories were applied to alcohol references without personal context provided, references with personal context provided were evaluated using SLT or CRAFFT criteria.

Category	Explanation	Examples
<i>Explicit versus figurative use:</i>		
Explicit Use N=168 (49.3%)	Explicit text statements or photographs depicting profile owner drinking alcohol	"I love drinking beer"
Explicit Intoxication N=58 (17%)	Explicit text statements referring to profile owner being intoxicated	"I was so loaded on Friday"
Figurative N=39 (11.4%)	Statements that reference alcohol use but not use by the profile owner	"Beer: breakfast of champions!"

Category	Explanation	Examples									
		<p><u>Social Learning Theory:</u></p> <p><u>Motivations:</u></p> <table border="0"> <tr> <td data-bbox="217 1423 331 1465">Peer pressure N=16 (4.7%)</td> <td data-bbox="412 1423 526 1612">References to peer pressure as a reason to drink or use of peer pressure to motivate others to drink</td> <td data-bbox="548 1423 841 1465"><i>"I like to get drunk, if you like Vodka then you are my friend."</i></td> </tr> </table> <p><u>Associations:</u></p> <table border="0"> <tr> <td data-bbox="217 1667 315 1709">Sex N=3 (0.9%)</td> <td data-bbox="412 1667 526 1751">References to alcohol use in association with sex</td> <td data-bbox="548 1667 841 1709"><i>"Beer and a cock, what more could you ask for?"</i></td> </tr> <tr> <td data-bbox="217 1764 331 1806">Games N=14 (4.1%)</td> <td data-bbox="412 1764 493 1806">Drinking games</td> <td data-bbox="548 1764 841 1785"><i>"Beer pong rematch this weekend!"</i></td> </tr> </table>	Peer pressure N=16 (4.7%)	References to peer pressure as a reason to drink or use of peer pressure to motivate others to drink	<i>"I like to get drunk, if you like Vodka then you are my friend."</i>	Sex N=3 (0.9%)	References to alcohol use in association with sex	<i>"Beer and a cock, what more could you ask for?"</i>	Games N=14 (4.1%)	Drinking games	<i>"Beer pong rematch this weekend!"</i>
Peer pressure N=16 (4.7%)	References to peer pressure as a reason to drink or use of peer pressure to motivate others to drink	<i>"I like to get drunk, if you like Vodka then you are my friend."</i>									
Sex N=3 (0.9%)	References to alcohol use in association with sex	<i>"Beer and a cock, what more could you ask for?"</i>									
Games N=14 (4.1%)	Drinking games	<i>"Beer pong rematch this weekend!"</i>									

Category	Explanation	Examples
Dancing/partying N=75 (22%)	included beer pong, keg stands and other drinking related games and activities References to dancing or being at a party in association with alcohol use	<i>"My hobbies include drinking and partying."</i> 
Consequences:		
Positive emotional consequences N=2 (0.6%)	References that highlight positive mood, feeling or emotion associated with alcohol use	<i>"A glass of wine and I'm just fine."</i>
Negative emotional consequences N=2 (0.6%)	References that highlight negative mood, feeling or emotion associated with alcohol use	<i>"I don't like the person I am when I'm drunk."</i>

Category	Explanation	Examples
Positive social consequences N=6 (1.8%)	References that highlight perceived social gain associated with alcohol use	"When I'm drunk I'm very outgoing"
Negative social consequences N=3 (0.9%)	References that highlight perceived poor social outcomes associated with alcohol use	"I'm embarrassed that I drank Bailey's out of a shoe"
Negative physical consequences N=7 (2.1%)	References that describe adverse physical consequences or outcomes associated with alcohol use	"I'm exhausted and hung over"
<u>CRAFFT:</u>		
Problem drinking N=11 (3.2%)	Text references that met the CRAFFT problem drinking criteria	"Blacked out drunk at 7am"

Table 3

CRAFFT problem drinking criteria applied to 400 adolescents' MySpace profiles

	<p>Statements that the profile owner had driven while intoxicated or ridden in a car with an intoxicated driver</p> <p><i>References from MySpace profile data</i></p> <p><i>C=Car</i> --"My interests including driving while drinking"</p>
	<p>Statements that the profile owner used alcohol to relax</p> <p><i>References from MySpace profile data</i></p> <p><i>R=Relax</i> --"My escape will come in the form of a bottle of tequila"</p> <p>--"Nothing like relaxing with 3 shots of Jaeger"</p>
	<p>Statements that the profile owner had drunk alcohol while alone</p> <p><i>References from MySpace profile data</i></p> <p><i>A=Alone</i> --"I'm sick and depraved, snuck a beer into my room to survive the evening"</p>
	<p>Statements that the profile owner had forgotten things he/she did while drinking or had blacked out while using alcohol</p> <p><i>References from MySpace profile data</i></p> <p>--"Here's me in this pic, blacked out drunk at 8am"</p> <p>--"I was so drunk I don't remember leaving that party"</p> <p>--"I don't remember that, I was pretty drunk."</p> <p>--"Whoa, I blacked out last night."</p> <p>--"I saw that picture and realized I don't remember that part of last night."</p> <p><i>F=Forget</i> --"How could I remember that? I'm never sober."</p>
	<p>Statements that someone in the profile owner's friends or family had suggested the profile owner should cut down on drinking</p> <p><i>References from MySpace profile data</i></p> <p><i>F=Friends/family</i> --"She said I'm a lush"</p>
	<p>Statements that the profile owner had been in legal or other trouble due to events that occurred while drinking</p> <p><i>T=Trouble</i></p>

CRAFFT criteria from: Knight, J.R., et al., *A new brief screen for adolescent substance abuse*. Arch Pediatr Adolesc Med, 1999. **153**(6): p. 591-6.