

*This is an Accepted Manuscript of an article published by Taylor & Francis in*

*Substance Use & Misuse on 26 Apr 2023, available at:*

<https://doi.org/10.1080/10826084.2023.2205495>.

**Drunkenness and Regretted Online Social Risk Behaviors: The Role of Social  
Drinking Motives and Positive Urgency**

**Running title: Antecedents of Regretted Online Social Risk Behaviors While  
Drunk**

**Abstract**

Alcohol use and the use of social media and other forms of digital communications is characteristic of young adults. The present study prospectively examined the relationship between social drinking motives and positive urgency and the engagement in regretted online social risk behaviors while drunk (having posted on social media, called or texted someone, or been visibly drunk in a photo) among a community sample of young adults. Using a targeted sampling procedure, we accessed a baseline sample of 360 young adults aged 18-25 years old from the community. Of these, 339 (mean age: 21.1 [ $SD = 2.21$ ]; female = 50.7%) completed 2-month follow-up measures. Social drinking motives and the tendency to act impulsively under conditions of positive affect (i.e., positive urgency) were measured at baseline, and frequency of regretted online social risk behaviors were measured at follow-up. Results showed that baseline social drinking motives were positively associated with all three regretted online social risk behaviors examined at follow-up. Higher baseline positive urgency scores were associated with a higher frequency of regretted posting on social media and calling or

texting someone while drunk at follow-up. Our findings support the inclusion of positive urgency and social drinking motives as key components of preventive interventions aimed at reducing potential negative consequences of using social media and other forms of digital communications while under the effects of alcohol.

**Keywords:** social media, digital media, regretted online social risk behavior, alcohol, positive urgency, social motives

## Introduction

In recent years, there has been a global increase in the use of social networks and other forms of digital communication. Thus, it is estimated that these forms of digital communication have doubled between 2015 and 2021 worldwide, from 2.078 billion to 4.480 billion users (Statista, 2021a). In Spain, the use of social networks and mobile media among Internet users has increased from 51% in 2009 to 85% in 2019, with this percentage being higher (93%) among 16-24-year-olds (Statista, 2021b). While these forms of digital communication have been associated with positive aspects (e.g., facilitation of professional and academic activities, Hew, 2011), their use can also have a negative impact on people's lives, including mental health problems such as depression and anxiety (Keles et al., 2020), and deterioration of personal and work relationships (Wang et al., 2011).

Alcohol is the most widely used psychoactive substance worldwide, with young adults showing the highest prevalence of consumption (World Health Organization [WHO], 2018). Although alcohol consumption has been pointed out as a social lubricant that facilitates social interactions (Goodman et al., 2018), the disinhibition effect of alcohol, could increase the risk of suffering negative consequences following digital media use under its effects (Berdin & Saules, 2019; Wang et al., 2011). Previous studies have shown that many young people use social networks and other digital media (e.g., posting on social networks, calling, sending messages, sharing images) while under the influence of alcohol or other drugs (Gainza-Perez et al., 2021; Palamar et al., 2020). For example, Gainza-Perez et al. (2021) found that more than 25% of 620 college students reported drunk texting at least once per month. In addition, it has been shown that many of those who engage in these behaviors come to later regret them (Geusens & Vrankem, 2021; Palamar et al., 2020), which can negatively impact their

mental health and interpersonal relationships. For example, Palamar et al. (2020) reported that, in a sample of 872 adults attending electronic music parties, 34.3% had made a social media post while under the influence of drugs, 55.9% had called or texted, and 47.6% had been in a photo. Among those who engaged in these behaviors, 21.4%, 30.5%, and 32.7%, respectively, later regretted it.

Previous research has examined the factors associated with the engagement in online social risk behaviors while drunk, such as texting (Trub et al., 2021; Trub & Starks, 2017), dialing (Hollenbaugh & Ferris, 2017) or posting on social networking sites (Lee et al., 2019). These studies have shown, for example, that factors such as impulse control difficulties and binge drinking (Trub & Starks, 2017) are related to a higher likelihood of engaging in online social behaviors such as texting while drunk. However, although online social behaviors performed under the effects of alcohol are often regretted due to the social and psychological consequences experienced (Geusens & Vranken, 2021), the literature examining the explanatory factors of regretting online social behaviors while drunk is scarce. To our knowledge, only Dunne and Katz (2015) conducted this type of analysis in a cross-sectional study with 236 college students. Their results showed that alcohol-related expectancies for sociability (e.g., the expectancy that alcohol will make it easier to talk to people) were positively associated with regretted social behaviors (e.g., texting, phone calls or Facebook messages) while under the effects of alcohol. Thus, further research is needed to adequately address the explanatory factors of regretted online social risk behaviors while under the influence of alcohol, which may be useful for informing the design of preventive interventions aimed at avoiding the social-related consequences of alcohol use.

Social drinking motives (i.e., drinking for positive social reinforcement) and positive urgency (i.e., the tendency to act rashly under positive emotional states) have

been consistently associated with higher alcohol use (e.g., Cooper et al., 2016; Cyders et al., 2010) and alcohol use consequences (e.g., Martens et al., 2011). Moreover, in relation to regretted behaviors while under the influence of alcohol, social drinking motives have shown to be associated with non-online regrettable risk behaviors under the effects of alcohol, such as risky sexual behaviors (Kilwein & Looby, 2018) and regretted sexual intercourse (Gmel et al., 2012). Similarly, previous research has shown a positive relationship between positive urgency and risky sexual behaviors (Michellini et al., 2021) and regretted sexual behaviors while drunk (Simons et al., 2010). However, to our knowledge, the association between these two factors (i.e., social drinking motives and impulsivity) and regretted online social risk behaviors has not been examined.

Thus, given the scarcity of studies examining the explanatory factors of regretted social risk behavior while under the effects of alcohol, the objective of the present study was to prospectively examine the relationships between the social drinking motives and positive urgency and regretted online social risk behaviors while drunk (i.e., posting on social media, calling or texting someone, or having been visibly drunk in a photo) in a community sample of young adults who use alcohol. Considering previous findings regarding the relationship between social drinking motives and positive urgency with non-online regrettable risk behaviors under the effects of alcohol (e.g., Gmel et al., 2012; Simons et al., 2010), it is expected that both, social drinking motives and positive urgency, will be positively associated with regretted online social risk behaviors while drunk. This type of information might then be useful for informing the design of preventive interventions aimed at minimizing the social-related negative consequences of alcohol and digital communications use among young people.

## **Method**

### ***Sample and Procedure***

The participants consisted of 360 young adults from the province of Huelva (Spain) aged 18-25 years ( $M=21.1$  [ $SD=2.2$ ], females=50.7%) who reported having consumed alcohol two or more times in the last month. The participants were recruited (between September to December 2019) through a targeted sampling procedure (Watter & Biernacki, 1989). We used a mixed method procedure (Dillman et al., 2014) to request participation in a 2-month follow-up, gaining a response rate of 94.2% ( $n=339$ ). Seven days before the exact date that participants were supposed to complete the follow-up questionnaire, they were contacted via WhatsApp (i.e., through a notification) and informed that they would receive a telephone call to request their participation and to schedule an appointment in the next 2-3 days. Participants who did not respond were contacted two more times (via WhatsApp and telephone call). Eighteen participants refused to participate in the follow-up assessment, and three did not respond to any contact. Thus, the analytic sample in this study was made up of 339 participants who completed baseline and the 2-month follow-up assessments. Of this sample, 96.2% reported being born in Spain and 59.0% were studying at university at the time of participating in the study. The main sources of income reported were a family allowance (51.6%) or a paid job (25.1%), and 77.6% lived with their parents. At baseline, the mean number of drinking days in the past two months was 15.8 ( $SD = 11.5$ ), while the mean number of days on which young adults had been drunk was 5.7 ( $SD = 7.2$ ).

For participants who completed follow-up ( $n=339$ ) and those who did not ( $n=21$ ), no significant differences were found in terms of age, gender, mean number of drinking days, mean number of drunkenness days, scores on positive urgency and scores on social drinking motives (all  $p$  values  $>.05$ ).

The present study was approved by the Regional Bioethics Research Committee of Andalusia (Consejería de Sanidad, Junta de Andalucía, Spain).

### *Instruments*

A pilot study was carried out in which the questionnaire was administered to 127 participants with similar characteristics to the target population, and their responses were subsequently discarded. The final version of the questionnaire included questions related to the following:

#### *Sociodemographic Characteristics*

Participants reported their age, gender, country of birth, main source of income, cohabitation pattern (e.g., family, roommates), and university status (pursuing university studies or not).

#### *Alcohol Consumption*

Similarly to previous studies (e.g., Hatch et al., 2023; Pilatti et al., 2020), in the baseline questionnaire, two questions were used to assess frequency of alcohol use and frequency of drunkenness episodes during the previous two months. Specifically, participants were asked: 1- During the LAST TWO MONTHS (60 days), how many days did you drink alcohol?, and 2- During the LAST TWO MONTHS (60 days), how many days have you been drunk?. Answer options could range from 0 to 60.

#### *Social Drinking Motives*

These motives were measured at baseline through the social drinking motives subscale of the Drinking Motives Questionnaire-Revised (DMQ-R; Cooper, 1994) in its Spanish version (Mezquita et al., 2018). Participants were asked to indicate how often, during the past two months, they had been drinking for each of the reasons specified in the three subscale items (e.g., because it makes social gatherings more fun), using a

Likert scale with 5 response options (1 = almost never or never and 5 = almost always or always). Internal consistency, estimated using Cronbach's alpha, was .84.

### *Positive Urgency*

Positive urgency was measured at baseline by using the positive urgency subscale of the UPPS-P Impulsive Behavior Scale (Whiteside & Lynam, 2001), in its short Spanish version (Candido et al., 2012). This subscale consists of four items comprising statements for which participants must indicate their degree of agreement using a Likert-type response scale with four response options (range: 1=strongly agree to 4=strongly disagree). Once the scores are reversed, the responses to each item are summed to give the total score (range = 4-16), where a higher score indicates greater positive urgency. The internal consistency, estimated by Cronbach's Alpha, was adequate ( $\alpha = .75$ ).

### *Regretted Social Risk Behaviors*

Following previous work from Palamar et al. (2020), in the 2-month follow-up questionnaire, participants were asked about how often, in the past two months, they had engaged in the following behaviors while drunk and which they later regretted: 1) posting something on social media (e.g., Twitter, Facebook, Instagram, or Snapchat); 2) calling or texting someone; and 3) appearing in a photo in which they were visibly drunk. The response format was a Likert-type scale with five response options ranging from 1=never to 5=always.

### *Data Analysis*

First, bivariate correlations were run to test the relationship between age, alcohol use indicators (i.e., frequency of use and number of drunkenness episodes), social drinking motives, positive urgency, and the frequency of regretted online social risk behaviors. According to the measurement level of the variables, Person's product-



moment or Spearman's Rank Order correlations were used. Then, to examine the association between baseline positive urgency and social drinking motives with online regretted social risk behaviors while intoxicated at follow-up, a multivariate multiple regression model was run. This technique estimates a single regression model with more than one outcome variable. Specifically, the three examined regretted online social risk behaviors in our study (measured in an ordinal scale ranging 1=never to 5=always) were included as the dependent variables in our multivariate model. Positive urgency and social drinking motives were included as predictors in this model. Gender, age, and number of days of alcohol consumption and drunkenness episodes in the past two months at baseline, were introduced as covariates. Moreover, considering that alcohol use has been identified as an important part of the college culture (Riordan & Carey, 2019), college status (being a college or university student or not) was also included as a covariate in the multivariate regression model.

Then, we computed a new variable that indicated the number of regretted social risk behaviors that participants reported experiencing in the past two months at follow-up. For each behavior we first created a dichotomous variable with "never" responses coded as no=0, and the other responses (from "almost never" to "always") coded as yes=1. These three dichotomous variables were then summed to obtain the total number of regretted online social risk behaviors experienced during the previous two months (ranging from 0 behaviors to 3 behaviors). Since this variable is a linear function of the other three dependent variables, it was not included in the multivariate multiple regression model. Instead, we conducted a separate multiple regression model with the sum of regretted behaviors as the dependent variable, and positive urgency and social drinking motives as predictors (covariates in this model were similar to those introduced in the multivariate regression model).

## Results

More than a half of the sample (60.2%) reported having regretted at least one online social risk behavior while drunk (Table 1). Of the three online social risk behaviors examined, the one most reported by participants was the regret of having posted on social media while drunk (40.5% of the sample reported having regretted this at least once in the past two months).

**\*\*\*INSERT TABLE 1 AROUND HERE\*\*\***

The means, standard deviations, and correlations between the variables under study are presented in Table 2. All the regrettable online social risk behaviors and the sum of the variables correlated significantly and positively with the two indicators of alcohol consumption (frequency of consumption and frequency of drunkenness), and with social drinking motives and positive urgency.

**\*\*\*INSERT TABLE 2 AROUND HERE\*\*\***

The results of the multivariate multiple regression analysis are shown in Table 3. Our results revealed that, after controlling for the effects of gender, age, college status, frequency of alcohol use, and frequency of drunkenness, increases in social drinking motives and positive urgency at baseline assessment were positively associated with the frequency of drunk texting/dialing ( $\beta = .05, p < .01$  and  $\beta = .06, p < .01$  for social drinking motives and positive urgency, respectively) and drunk posting on social media ( $\beta = .04, p < .05$  and  $\beta = .05, p < .05$  for social drinking motives and positive urgency,

respectively). Moreover, our results showed that neither social drinking motives nor positive urgency, were significantly associated with the frequency with which participants regretted appearing in a photo in which they were visibly drunk. Finally, the multiple linear regression model revealed that both social drinking motives ( $\beta = .05, p < .01$ ) and positive urgency ( $\beta = .05, p < .05$ ) measured at baseline were positively associated with the sum of regretted online social risk behaviors reported at follow-up assessment. As can be seen in Table 3, effect sizes for both variables were very similar across all the tested dependent variables.

**\*\*\*INSERT TABLE 3 AROUND HERE\*\*\***

## **Discussion**

While previous studies have shown that many people regret certain online social risk behaviors performed while under the influence of alcohol or other substances (Dunne & Katz, 2015; Palamar et al., 2020; Wang et al., 2011), there is a lack of research exploring the explanatory factors for engaging in these behaviors and then regretting them. The present study has therefore prospectively examined the association between social drinking motives and positive urgency with three different regretted online social risk behaviors performed while drunk (i.e., having posted on social media, having called or texted someone, and having been visibly drunk in a photo) which were measured two months later. Our findings indicate that increases in positive urgency and social drinking motives were associated with a higher frequency of engaging in regretted posting and regretted calling/texting while drunk. The analysis of effect sizes showed that both variables (i.e., social drinking motives and positive urgency) similarly contributed to the explanation of the different regretted online social risk behaviors.

Consistent with previous studies (e.g., Dunne & Katz, 2015; Palamar et al., 2020) our results have shown that more than half of the participants have regretted engaging in online social risk behaviors under the influence of alcohol. The literature on alcohol related consequences has been primarily focused on health-related consequences (Cservenka & Brumback, 2017; Ferreira et al., 2014) and on high-risk behaviors such as unprotected sex or drunk driving (Brown et al., 2016; Valderrama-Zurián et al., 2020). However, regrettable online social risk behaviors, perhaps considered of low-risk, have received much less attention, even though they have been related to a wide variety of social and interpersonal consequences (Geusens & Vranken, 2021; Trub et al., 2021). This reinforces the importance of developing preventive interventions aimed at reducing alcohol harm that not only focus on the health-related consequences of alcohol use, but also on potential social-related consequences of using social networking sites or other types of digital communication while under the effects of alcohol.

Previous research has shown that the need for popularity is associated with sharing alcohol-related content on social networking sites (Vanherle et al., 2022). Moreover, as identified by Hendriks et al. (2017), one of the four main motives for sharing alcohol-related content on social media is socially driven, including using social media to stay socially connected with others or to get attention. Thus, unsurprisingly, the present study has shown that social drinking motives at baseline were positively associated with two of the three regretted social risk behaviors examined and with the sum of these regretted behaviors. As established by the motivational model of alcohol use (Cooper et al., 1994), expectancies about alcohol use are a proximal determinant of motives for drinking. Taking this into consideration, our findings are consistent with those reported by Dunne and Katz (2015), who found that the expectancies that alcohol

could serve as a social facilitator in college students were positively associated with regrettable online social behaviors such as texting, making phone calls, or posting Facebook messages while under the effects of alcohol. In addition, if social drinking motives are strong predictors of alcohol use and its consequences, our findings highlight the usefulness of including social motives as a key component of preventive interventions aimed at minimizing both the health-related consequences of alcohol and social-related consequences of using online communication media while under the influence of alcohol.

Impulsivity in general — and positive urgency in particular — have shown to be associated with numerous risk behaviors, including the use of alcohol and other drugs. (Dinc & Cooper, 2015; González-Ponce et al., 2020), risky sexual behavior, and regretted sexual intercourse (Gmel et al., 2012; Kilwein & Looby, 2018). However, the role of impulsivity as an explanatory factor for engaging in online risky behaviors while under the influence of alcohol has been understudied, with only one cross-sectional study (Trub & Starks, 2017) showing that impulse control difficulties were associated with drunk texting. Our results have shown that those participants with a higher tendency to act rashly under positive emotional states (i.e., positive urgency) at baseline, were more likely to engage in regretted online social risky behaviors while drunk at follow-up. These results could add to the literature twofold. First, we focus on impulsive behaviors while under positive emotional states, which are typically experienced by young adults who use alcohol recreationally. Second, we include regret as a component of these online social behaviors, which might indicate that participants had already experienced negative consequences of their online behaviors. Thus, considering the behavioral disinhibition effects of alcohol, our findings support the utility of providing young adults who use this substance with strategies to help them

control impulses under positive affective states and, therefore, reduce the risk of engaging in regrettable online social behaviors.

Surprisingly, neither social drinking motives nor positive urgency were significantly related to the frequency with which participants regretted appearing in a photo in which they were visibly drunk. This finding could be explained by the fact that this is the only one of the three explored behaviors that does not imply the person to perform an active behavior such as posting, calling or texting someone. Future studies should confirm this lack of association, and explore other potential explanatory factors of this behavior.

Certain limitations should be considered when interpreting these results. Although a targeted sampling procedure was used to access a community sample of young adults, the lack of a sampling frame made it impossible to carry out probability sampling, thus limiting the generalizability of the findings to other young adults. Furthermore, although we used a short time period (two months) to collect the data, the validity of our results may be affected by memory bias. In the present study we did not measure positive affect, and it is feasible that the relationship between positive urgency and regretted online social behaviors is moderated by this variable. Specifically, it could be hypothesized that the effect of positive urgency on regretted behaviors is stronger (or only occurs) in participants with high positive affect. Thus, future research with larger and more representative samples of young adults might consider examining the role of affectivity in the relationship between positive urgency and regrettable online risky behaviors. Finally, since we did not measure regretted online social behaviors at baseline, these variables were not included as covariates in our regression models, which limits the possibility of interpreting our results in terms of prediction.

### ***Conclusions***

Nowadays, young adults operate in a digital environment characterized by the high use of social networks and other forms of digital communication (Statista, 2021b). To date, most research has focused on health-related consequences of alcohol use, while the potential social consequences of using digital communications under the effects of alcohol have been understudied. Our findings have shown the positive relationship between positive urgency and social drinking motives and engaging in regretted online social risky behaviors while drunk (i.e., having posted on social media, having called, or texted someone, and having been visibly drunk in a photo). These results support the inclusion of positive urgency and social drinking motives as components of those preventive interventions aimed at reducing the potential negative consequences of alcohol drinking and of using digital communications while under the influence of alcohol.

### **Acknowledgements**

Funding for this study was provided by the Consejería de Salud (Junta de Andalucía, Andalucía, Spain) under Grant Number PI-0503-2018.

### **Disclosure of Interest**

The authors report there are no competing interests to declare.

### **Data Availability**

Materials and data used in this manuscript will be available by emailing the corresponding author.

## References

- Berdin, A. N., & Saules, K. K. (2019). Combined Use of Alcohol and the Internet: Associated Features. *Substance Use and Misuse, 54*(13), 2099–2107.  
<https://doi.org/10.1080/10826084.2019.1630440>
- Brown, J. L., Gause, N. K., & Northern, N. (2016). The association between alcohol and sexual risk behaviors among college students: A review. *Current Addiction Reports, 3*(4), 349-355. <https://doi.org/10.1007/s40429-016-0125-8>
- Candido, A., Orduna, E., Perales, J. C., Verdejo-Garcia, A., & Billieux, J. (2012). Validation of a short Spanish version of the UPPS-P impulsive behavior scale. *Trastornos Adictivos, 14*(3), 73-78. [https://doi.org/doi:10.1016/S1575-0973\(12\)70048-X](https://doi.org/doi:10.1016/S1575-0973(12)70048-X)
- Cooper, M. L. (1994). Motivations for alcohol use among adolescents: Development and validation of a four-factor model. *Psychological Assessment, 6*(2), 117-128.  
<https://doi.org/10.1037/1040-3590.6.2.117>
- Cooper, M. L., Kuntsche, E., Levitt, A., Barber, L. L., & Wolf, S. (2016). Motivational models of substance use: A review of theory and research on motives for using alcohol, marijuana, and tobacco. In K. J. Sher (Ed.), *The Oxford handbook of substance use and substance use disorders* (Vol. 1, pp. 375–421). Oxford University Press.
- Cservenka, A., & Brumback, T. (2017). The Burden of Binge and Heavy Drinking on the Brain: Effects on Adolescent and Young Adult Neural Structure and Function. *Frontiers in Psychology, 8*, 1111. <https://doi.org/10.3389/fpsyg.2017.01111>
- Cyders, M. A., Zapolski, T. C. B., Combs, J. L., Settles, R. F., Fillmore, M. T., & Smith, G. T. (2010). Experimental Effect of Positive Urgency on Negative



- Outcomes From Risk Taking and on Increased Alcohol Consumption. *Psychology of Addictive Behaviors*, 24(3), 367–375. <https://doi.org/10.1037/a0019494>
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: the tailored design method*. John Wiley & Sons.
- Dinc, L., & Cooper, A. J. (2015). Positive affective states and alcohol consumption: The moderating role of trait positive urgency. *Addictive Behaviors*, 47, 17–21. <https://doi.org/10.1016/j.addbeh.2015.03.014>
- Dunne, E. M., & Katz, E. C. (2015). Alcohol outcome expectancies and regrettable drinking-related social behaviors. *Alcohol and Alcoholism*, 50(4), 393–398. <https://doi.org/10.1093/alcalc/agt026>
- Ferreira, J. A., Martins, J. S., Coelho, M. S., & Kahler, C. W. (2014). Validation of Brief Young Adult Alcohol Consequences Questionnaire (B-YAACQ): Portuguese Version. *Spanish Journal of Psychology*, 17, 1–8. <https://doi.org/10.1017/sjp.2014.74>
- Gainza-Perez, M. A. G., Lerma, M., Torres, J., & Cooper, T. V. (2021). Posting Alcohol-Related Content and Texting Under the Influence Among Hispanic College Students. *Journal of Technology in Behavioral Science*, 6(4), 589-598. <https://doi.org/10.1007/s41347-021-00211-9>
- Geusens, F., & Vranken, I. (2021). Drink, Share, and Comment; Wait, What Did I Just Do? Understanding Online Alcohol-Related Regret Experiences Among Emerging Adults. *Journal of Drug Issues*, 51(3), 442-460. <https://doi.org/10.1177/0022042621994542>
- Gmel, G., Labhart, F., Fallu, J. S., & Kuntsche, E. (2012). The association between drinking motives and alcohol-related consequences - room for biases and

measurement issues. *Addiction*, 107(9), 1580–1589.

<https://doi.org/10.1111/j.1360-0443.2012.03892.x>

Goodman, F. R., Stikma, M. C., & Kashdan, T. B. (2018). Social anxiety and the quality of everyday social interactions: the moderating influence of alcohol consumption. *Behavior therapy*, 49(3), 373-387.

<https://doi.org/10.1016/j.beth.2017.10.002>

González Ponce, B. M., Díaz-Batanero, C., Vera, B. V., Dacosta-Sánchez, D., & Fernández-Calderón, F. (2020). Personality traits and their association with drug use and harm reduction strategies among polysubstance users who attend music festivals. *Journal of Substance Use*, 25(2), 177-185.

<https://doi.org/10.1080/14659891.2019.1672818>

Hatch, M. R., Bravo, A. J., Looby, A., Hurlocker, M. C., & Stimulant Norms, P. S. (2023). Who's at greatest risk? Latent profiles of alcohol and cannabis use and related consequences among college students. *Addictive behaviors*, 137, 107536.

<https://doi.org/10.1016/j.addbeh.2022.107536>

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>

Hew, K. F. (2011). Students' and teachers' use of Facebook. *Computers in Human Behavior*, 27(2), 662–676. <https://doi.org/10.1016/j.chb.2010.11.020>

Hollenbaugh, E. E., & Ferris, A. L. (2017). “I Love You, Man”: Drunk Dialing Motives and Their Impact on Social Cohesion. In R. Ling, & S. W. Campbell (Eds.), *Mobile communication* (pp. 303-332). Routledge.

- Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. *International Journal of Adolescence and Youth*, 25(1), 79–93.  
<https://doi.org/10.1080/02673843.2019.1590851>
- Kilwein, T. M., & Looby, A. (2018). Predicting risky sexual behaviors among college student drinkers as a function of event-level drinking motives and alcohol use. *Addictive Behaviors*, 76, 100-105. <https://doi.org/10.1016/j.addbeh.2017.07.032>
- Lee, H., Seok, B., & Sohn, A. (2019). The role of social media content on solitary drinking among Korean adults. *Cyberpsychology, Behavior, and Social Networking*, 22(6), 397–403. <https://doi.org/10.1089/cyber.2018.0381>
- Martens, M. P., Pedersen, E. R., Smith, A. E., Stewart, S. H., & O'Brien, K. (2011). Predictors of alcohol-related outcomes in college athletes: The roles of trait urgency and drinking motives. *Addictive Behaviors*, 36(5), 456-464.  
<https://doi.org/10.1016/j.addbeh.2010.12.025>
- Mezquita, L., Ibáñez, M. I., Moya-Higueras, J., Villa, H., Arias, B., Fañanás, L., & Ortet, G. (2018). Psychometric Properties of Drinking Motives Questionnaire-Revised (DMQ-R) in Spanish Adolescents. *European Journal of Psychological Assessment*, 34(3), 145–153. <https://doi.org/10.1027/1015-5759/a000319>
- Michellini, Y., Rivarola-Montejano, G., & Pilatti, A. (2021). Risky sexual behaviors in a sample of Argentinean college students: Relationship with substance use, early sexual onset and trait-like impulsivity. *Suma Psicológica*, 28(2), 120–127.  
<https://doi.org/10.14349/sumapsi.2021.v28.n2.7>
- Palamar, J. J., Le, A., & Acosta, P. (2020). Posting, texting, and related social risk behavior while high. *Substance Abuse*, 41(3), 382–390.  
<https://doi.org/10.1080/08897077.2019.1635966>

- Pilatti, A., Bravo, A. J., & Pautassi, R. M. (2020). Contexts of alcohol use: A latent class analysis among Argentinean college students. *Drug and Alcohol Dependence*, 209, 107936. <https://doi.org/10.1016/j.drugalcdep.2020.107936>
- Riordan, B. C., & Carey, K. B. (2019). Wonderland and the rabbit hole: A commentary on university students' alcohol use during first year and the early transition to university. *Drug and Alcohol Review*, 38(1), 34–41.  
<https://doi.org/10.1111/dar.12877>
- Simons, J. S., Maisto, S. A., & Wray, T. B. (2010). Sexual risk taking among young adult dual alcohol and marijuana users. *Addictive Behaviors*, 35(5), 533-536.  
<https://doi.org/10.1016/j.addbeh.2009.12.026>
- Statista. (2021a). *Global digital population in 2021*.  
<https://www.statista.com/statistics/617136/digital-population-worldwide/>
- Statista. (2021b). *Redes sociales: porcentaje de usuarios por edad de redes sociales en España en 2020, por edad*. <https://es.statista.com/estadisticas/1260093/redes-sociales-porcentaje-de-usuarios-por-edad-en-espana/>
- Trub, L., & Starks, T. J. (2017). Texting under the Influence: Emotional Regulation as a Moderator of the Association between Binge Drinking and Drunk Texting. *Cyberpsychology, Behavior, and Social Networking*, 20(1), 3–9.  
<https://doi.org/10.1089/cyber.2016.0468>
- Trub, L., Doyle, K. M., Parker, V., & Starks, T. J. (2021). Drunk Texting: When the Phone Becomes a Vehicle for Emotional Dysregulation and Problematic Alcohol Use. *Substance Use & Misuse*, 56(12), 1815-1824.  
<https://doi.org/10.1080/10826084.2021.1954027>
- Valderrama-Zurián, J. C., Melero-Fuentes, D., Álvarez, F. J., & Herrera-Gómez, F. (2020). Worldwide research output trends on drinking and driving from 1956 to

2015. *Accident Analysis & Prevention*, 135, 105364.

<https://doi.org/10.1016/j.aap.2019.105364>

Vanherle, R., Hendriks, H., Gebhardt, W. A., van den Putte, B., & Beullens, K. (2022).

The role of personality factors in young adults' motives for sharing alcohol references on social networking sites. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 16(3), 3. <https://doi.org/10.5817/CP2022-3-3>

Wang, Y., Norcie, G., Komanduri, S., Acquisti, A., Leon, P. G., & Cranor, L. F. (July 20-22, 2011). "I regretted the minute I pressed share" a qualitative study of regrets on Facebook. Proceedings of the seventh symposium on usable privacy and security. Pittsburgh, Pennsylvania, United States.

Watters, J. K., & Biernacki, P. (1989). Targeted sampling: Options for the study of hidden populations. *Social Problems*, 36(4), 416-430.

<https://doi.org/10.2307/800824>

Whiteside, S. P., & Lynam, D. R. (2001). The Five Factor Model and impulsivity:

Using a structural model of personality to understand impulsivity. *Personality and Individual Differences*, 30(4), 669-689. [https://doi.org/10.1016/S0191-8869\(00\)00064-7](https://doi.org/10.1016/S0191-8869(00)00064-7)

World Health Organization. (2019). *Global status report on alcohol and health 2018*.

World Health Organization.

<https://www.who.int/publications/i/item/978924156563>

**Table 1**

*Descriptive statistics of past 2-month frequency of regretted online social risk behaviors while drunk and sum of regretted online social risk behaviors*

Response options	Regretted posting on social media (%)	Regretted calling/texting someone (%)	Regretted having been in a photo (%)	Sum of regretted social behaviors	Percentage (%)
Never	59.5	63.1	67.3	0	39.8
Almost never	18.3	14.5	12.7	1	25.1
Sometimes	16	12.7	10	2	20.4
Almost always	4.7	6.5	6.2	3	14.7
Always	1.5	3.2	3.8	Mean number of regretted social risk behaviors (SD)	1.10 (1.08)

Note. Regretted online social risk behaviors while drunk were measured at follow-up

**Table 2**

*Correlations between age, alcohol use, positive urgency, social drinking motives, and regretted online social risk behaviors*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Age	21.1	2.2	1								
2. Alcohol use frequency	15.8	11.5	.07	1							
3. Drunkenness frequency	5.7	7.2	-.10	.63***	1						
4. Positive Urgency	8.3	2.6	-.09	.26***	.31***	1					
5. Social Motives	9.8	3.0	.01	.25***	.35***	.28***	1				
6. Freq. of regretted posting	1.7	1.0	-.16**	.18**	.33***	.23***	.26***	1			
7. Freq. of regretted calling/texting	1.7	1.1	-.08	.15**	.31***	.22***	.20***	.45***	1		
8. Freq. of regretted photo	1.7	1.1	-.08	.13*	.30***	.19***	.21***	.40***	.34***	1	
9. Sum of regretted social behaviors	5.1	2.5	-.14**	.18**	.34***	.28***	.26***	.72***	.69***	.65***	1

Note. Pearson's product-moment correlations were employed for continuous variables and Spearman's rank order correlations were used when an ordinal variable was involved. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 3**

*Regression models examining the association between positive urgency and social drinking motives at baseline and the frequency of regretted online social risk behaviors at follow-up*

<b>Multivariate multiple regression model</b>					
<b>Regretted online social risk behaviors and predictors</b>	$\beta$	95% CI	<i>t</i>	<i>p</i>	Partial $R^2$
<b>Regretted having posted on social media while drunk</b>					
Gender	0.16	[-0.04, 0.36]	1.60	.111	.008
Age	-0.04	[-0.09, 0.00]	-1.96	.051	.012
College status	-0.02	[-0.22, 0.18]	-0.20	.841	.000
Alcohol use frequency	-0.01	[-0.02, 0.01]	-1.01	.313	.003
Drunkenness frequency	<b>0.03</b>	<b>[0.01, 0.05]</b>	<b>3.30</b>	<b>.001</b>	<b>.032</b>
Social motives	<b>0.05</b>	<b>[0.01, 0.08]</b>	<b>2.63</b>	<b>.009</b>	<b>.021</b>
Positive urgency	<b>0.06</b>	<b>[0.01, 0.09]</b>	<b>2.67</b>	<b>.008</b>	<b>.021</b>
<b>Regretted having called or texted someone while drunk</b>					
Gender	0.01	[-0.23, 0.24]	0.04	.968	.000
Age	-0.02	[-0.07, 0.03]	-0.79	.432	.002
College status	0.12	[-0.12, 0.36]	1.02	.307	.003
Alcohol use frequency	-0.01	[-0.02, 0.01]	-0.84	.400	.002
Drunkenness frequency	0.02	[-0.00, 0.04]	1.86	.064	.010
Social motives	<b>0.04</b>	<b>[0.00, 0.08]</b>	<b>1.97</b>	<b>.049</b>	<b>.012</b>
Positive urgency	<b>0.05</b>	<b>[0.01, 0.10]</b>	<b>2.2</b>	<b>.029</b>	<b>.015</b>
<b>Regretted having been in a photo while drunk</b>					
Gender	-0.15	[-0.38, 0.09]	-1.24	.216	.005
Age	-0.03	[-0.08, 0.03]	-0.97	.334	.003
College status	0.19	[-0.04, 0.43]	1.6	.110	.008
Alcohol use frequency	-0.00	[-0.02, 0.01]	-0.54	.592	.001
Drunkenness frequency	<b>0.02</b>	<b>[0.00, 0.05]</b>	<b>2.23</b>	<b>.027</b>	<b>.015</b>
Social motives	0.04	[-0.00, 0.08]	1.94	.054	.011
Positive urgency	0.05	[-0.00, 0.09]	1.97	.051	.012
<b>Multiple regression model</b>					
<b>Sum of regretted social behaviors</b>					
Gender	-0.10	[-0.31, 0.11]	-0.93	.351	.002
Age	<b>-0.05</b>	<b>[-0.10, -0.00]</b>	<b>-2.14</b>	<b>.033</b>	<b>.013</b>
College status	0.10	[-0.12, 0.32]	0.91	.363	.002
Alcohol use frequency	-0.00	[-0.02, 0.01]	-0.68	.500	.001
Drunkenness frequency	<b>0.04</b>	<b>[0.02, 0.06]</b>	<b>3.95</b>	<b>.000</b>	<b>.043</b>
Social motives	<b>0.05</b>	<b>[0.01, 0.09]</b>	<b>2.64</b>	<b>.009</b>	<b>.020</b>
Positive urgency	<b>0.05</b>	<b>[0.00, 0.09]</b>	<b>2.06</b>	<b>.040</b>	<b>.012</b>

Note. Significant results are indicated in bold font. College status=being [1] or not [0] studying at university. Gender = male [0], female [1]