Predictors of unplanned drinking in daily life: The influence of context, impulsivity, and craving in those with emotion dysregulation

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Abstract

Objective: Unplanned drinking, or drinking that violates intentions, has been linked to significant alcohol-related consequences; however, little is known about what factors within individuals' daily lives predict whether unplanned drinking occurs. This study examines the influence of daily-life impulsivity, alcohol craving, and interpersonal contexts on unplanned drinking.

Method: Ecological Momentary Assessment (EMA) data were collected from 32 moderate drinkers. Participants were prompted six times per day for up to 21 days. Each morning participants reported whether they planned to drink that day. Multilevel and GEE models predicted drinking behaviors on days without intent to drink from daily-life interpersonal contexts, and pre-drinking ratings of impulsivity and craving.

Results: Spending time in a bar and spending relatively more time with other people on days with no intention to drink was associated with drinking. Individuals who experienced higher craving prior to drinking were relatively more likely to engage in unplanned drinking. When participants reported relatively greater difficulties with premeditation, they were more likely to subsequently report initiating an unplanned drinking episode. Results also suggest that individuals generally higher on negative urgency may be less likely to engage in unplanned drinking but drink more when they do.

Conclusion: These results indicate the influence of daily-life contexts, craving, and impulsivity on unplanned drinking behavior. We highlight several possible avenues for intervention and

prevention efforts including modifying social and interpersonal environments, screening for craving patterns, and targeting cognitive deficits in planning.

Keywords

Alcohol; Unplanned drinking; Ecological Momentary Assessment; Craving; Contexts

1. Introduction

Unplanned alcohol use, or drinking behavior that violates drinking intentions, is a relatively common behavior, with 16% (Fairlie et al., 2019) to 40% (Dvorak et al., 2014) of reported drinking occasions being unplanned. Importantly, some evidence suggests unplanned alcohol use relates to additional negative consequences beyond that seen in planned alcohol use (Fairlie et al., 2019; Pearson & Henson, 2013), particularly for unplanned episodes of heavy drinking. These studies suggest that the lack of planning inherent in unplanned drinking may convey some unique risk for negative alcohol-related consequences. Conversely, another study found that unplanned drinking was related to relatively fewer negative consequences compared to planned drinking (Lauher et al., 2020). This discrepancy may be due to the fact that Lauher et al. (2020) investigated any unplanned drinking while the other researchers examined heavy unplanned drinking specifically, suggesting that consequences may be more related to heavy unplanned drinking.

Most of the research to date on unplanned drinking has focused on its consequences; as such, little is known about the predictors of unplanned drinking in daily life. That is, are there certain contexts or factors within a day that may reliably influence whether one violates the intention to not drink later that day? Although momentary and aggregate experiences of positive affect appear unrelated to unplanned drinking (Fairlie et al., 2019; Stevens et al., 2021), individuals higher in trait-level urgency, lack-of-planning, and delay discounting are more likely to report *intending* to drink which in turn predicted daily alcohol consumption (Stevens et al., 2017). The question remains regarding what factors within a day influence whether a person violates plans to not drink. Studying predictive factors within individuals' daily lives has clear and obvious implications for both the assessment of unplanned drinking as well as for prevention and intervention. For example, if we can identify factors that influence a person to ultimately violate their intention to not drink, then intervention targeting those factors may prevent the individual from engaging in unplanned drinking and experiencing related consequences.

To address this, the current study tested the influence of daily-life impulsivity, craving, and interpersonal contexts on drinking behavior on days without intention to drink within a clinical sample. Impulsivity (Griffin & Trull, 2020), craving (Ramirez & Miranda, 2014), and specific contexts (Muraven et al., 2005; Simons et al., 2005) have all shown significant relations to general drinking in past daily-life research, so here we tested their relation to unplanned drinking specifically. Although trait-level research has not revealed significant links between impulsivity and unplanned drinking (e.g., Stevens et al., 2017), state-level facets of impulsivity have shown differential predictive relationships with drinking behavior in daily life above and beyond that attributed to traits (Griffin & Trull, 2020). Past daily-life

studies have also found that drinking most often occurred at home and in bars, and when spending time with other people (Muraven et al., 2005; Simons et al., 2005). Consequently, we hypothesized that higher levels of impulsivity, time spent in normative drinking contexts (e.g., with others, in a bar), and greater craving would predict drinking on days when participants reported no intention to drink.

Existing studies have only assessed predictors of unplanned drinking in college-age drinkers, where influences on the decision to engage in unplanned drinking may differ systematically from community or clinical samples of adults. To address this, we examined predictors of unplanned drinking in a clinical sample of adults, recruited from outpatient clinics as a part of a larger study focused on emotion dysregulation and alcohol use. Emotion dysregulation has shown a consistent relationship with problematic alcohol use (Berking et al., 2011; Garofalo & Velotti, 2015), so this sample was appropriate to address our current research question.

2. Method

2.1. Participants

We recruited 37 participants aged 18–45 who reported consuming alcohol at least twice a week on average. As part of a larger parent study, participants also met criteria for a current psychiatric disorder characterized by dysregulated mood (i.e., current mood, anxiety, or borderline personality disorder), confirmed via semi-structured interview. Participants were excluded from the study if they were pregnant or planning on becoming pregnant, had a history of head trauma, or were currently in treatment for alcohol related problems. Data from days where participants reported no intention to drink were included in analyses; 32 participants reported at least one day where they did not plan to drink. Participants were 81% female (n =26) with an average age of approximately 24 years old (SD=5.10). Participants primarily identified as white (91%; Black/African American: 9%) and three percent identified as Hispanic/Latinx. In total, these participants provided 2,210 reports over the 371 days with no plans to drink. Participant compliance with morning and random prompts was excellent, averaging 82%.

2.2 Procedure

All study procedures were approved by the Institutional Review Board and all participants provided informed consent prior to enrollment in the study. After screening for eligibility and completing diagnostic interviews, participants completed baseline self-report measures and were trained to use the data collection application (app) on their smartphones. Participants were loaned a smartphone if they did not own one.

2.2.1.   EMA protocol.—Participants completed up to 21 days of EMA surveys via the smartphone app. Participants were prompted to complete *morning reports* each day of the study after waking (but prior to 12:00pm). On average morning reports were completed at approximately 9:30AM. Participants were then notified six times per day to complete *random prompts*, which were scheduled at least 60 minutes apart. Participants were also instructed to complete *user-initiated drinking reports* after finishing their initial drink of a

drinking episode, and *follow-up drinking assessments* were administered 30, 60, 120, and 180 minutes after recording an initial drink. Follow-up assessments were extended 60 minutes for each subsequent drink logged.

2.3. Measures

2.3.1.   Alcohol Craving and Consumption.—Participants indicated on each morning report if they planned to consume alcohol that day ("Do you plan on drinking today or tonight?"). At all prompts, participants were asked the degree to which they craved alcohol in the past 15 minutes (1 = *not at all* to 5 = *extremely*), whether they had consumed alcohol since the previous prompt, and if so, how many standard drinks they had consumed. For these analyses, only craving ratings provided *before* participants began drinking each day were included.

2.3.2.   Impulsivity.—State-level impulsivity was assessed on all EMA prompts, using four items based on each of the four UPPS subscales (Whiteside & Lynam, 2001). Participants were asked the degree to which they endorsed the items within the past 15 minutes from 1 = *very slightly or not at all* to 5 = *extremely.* Items included "I felt and acted on a strong impulse" (negative urgency), "I did something without really thinking about it" (lack of premeditation), "I gave up easily" (lack of perseverance), and "I did something for the thrill of it" (sensation seeking). These items previously have shown to be valid indicators of UPPS facets and differentially related to alcohol use in daily life (Griffin & Trull, 2020). As with craving reports, only impulsivity reports provided *before* participants began drinking were included in analyses.

2.3.3.   Contexts.—At each prompt, participants indicated their current location (work, bar/restaurant, home, other public location[1], other). Based on prevalence rates in our sample and prior work showing that being at bars strongly predicts alcohol consumption (Muraven et al., 2005; Simons et al., 2005), we only included home and bar/restaurant in our analyses. Participants also indicated who they had spent time with in the past 15 minutes (romantic partner, friend/acquaintance, another family member, or someone else). For these analyses, we created a dichotomous *with others* (versus *alone* if none of the options were selected) variable.

2.4. Analytic Plan

All analyses were conducted in SAS 9.4. As mentioned, only data from days where participants reported no intention to drink were included in these analyses (n =371 aggregate days across 32 participants)[2]. Analyses included a total of 2,210 prompts completed by participants on these days with no intended drinking (assessed via participants' response on the morning report). Participants included in these analyses completed an average of 69 prompts (SD=28.10) across days without intention to drink, or an average of 3.4 prompts per

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[1]We tested models including the "other public location" context variable at all levels; however, it was not significant and did not alter the significance or magnitude of any other effects in any model. Therefore, we excluded it from the models reported here.
[2]Supplemental analyses were conducted to predict drinking behavior on days when participants did report intention to drink that morning. Analytic plan, results, and discussion are included in supplementary materials. Generally, results showed some convergence in the daily-life factors associated with planned and unplanned drinking; however, planned and unplanned drinking do not show identical relationships with daily-life experiences and contexts.

day (SD=2.75). Though the number of participants in this study is somewhat small, our analyses are adequately powered (power .80) to detect medium to large effects at the moment- and day-levels, and large effects (minimum detectable effect size >0.5) at the person-level (Arend & Schäfer, 2019).

In all models, day-level aggregates were centered on person averages of pre-drinking values. Person-level aggregate variables were centered on sample means. The bar context variable was heavily skewed, with roughly 41% of participants reporting spending no time at a bar over the course of the study; this variable was therefore entered as a dichotomous variable at both the day- and person-levels. The other two context variables (with others, at home) were entered as proportion scores and transformed by multiplying the proportion by 100 to improve interpretability of the effect size. Day-level variables represent the percentage of the day spent with others or at home, while person-level variables represent the percentage of all prompts in the study when participants endorsed spending time with others or being at home. All models also included gender, whether it was a weekend day, age, and day in the study as covariates.

Two-level generalized estimating equation (GEE) models predicting dichotomous drinking (Y/N) on days with no drinking intention were conducted using PROC GENMOD. Additional two-level models predicting total amount consumed on unplanned drinking days were constrained to instances where individuals did drink on days without intention to drink (75 data points from 26 individuals). Those models were conducted using PROC GLIMMIX specifying a Poisson distribution. This distribution was chosen since the outcome is a count variable and was appropriate according to fit statistics (chi-square/df=0.98). Because of the restricted sample, these analyses were powered to detect medium-to-large effect sizes at the day-level (minimum detectable effect approximately 0.33; Arend & Schafer, 2019).

We also ran *post hoc* analyses predicting momentary drink *initiation* on days with no reported plans to drink. The two-level model described above predicting whether or not someone drank alcohol examines the factors on a given day that influence drinking. In contrast, the post-hoc analyses focused on the moments surrounding the first drink participants consumed on any given day with no reported intention to drink. This three-level model (moments nested in days nested in people) predicting drink initiation (Y/N) was also conducted with PROC GENMOD and was restricted to pre-drinking and drink initiation moments. For this model, reports after the first drink (during and following drinking episodes) were not included. Momentary ratings of impulsivity and craving were centered on pre-drinking day-level means. Lagged variables were also entered, which represent participant responses at the previous prompt. Dichotomous responses for momentary and lagged context variables were also included as predictors, indicating whether participants were in at a bar, at home, or with other people at the prompt when they initiated drinking as well as whether they reported being in these contexts at the previous prompt, respectively.

3. Results

Participants reported consuming alcohol on 20% of days they reported no intent to drink (*n* =75 days), consistent with rates of unplanned drinking reported in other studies (Dvorak et

al., 2014; Fairlie et al., 2019). When participants reported drinking, they reported drinking 4 or more drinks approximately 40% of the time (on $n = 30$ days). On average, participants drank 3.5 drinks (SD= 2.51) when they engaged in unplanned drinking. Table 1 reports frequencies and descriptives of primary study variables.

The left-hand section of columns in Table 2 presents the results of the GEE model predicting drinking (yes/no) on days with no drink intention from day- and person-level impulsivity scores, craving, and context variables. Results show that *spending any time in a bar* and relatively *more time with other people* on a day without drinking intention increased the odds of drinking that day. Individuals who experienced relatively *higher craving* prior to drinking were also more likely to drink that day. Conversely, individuals *higher in negative urgency* across the EMA period were significantly less likely to drink compared to others. Spending time in a bar at the person-level also increased the likelihood of drinking.

The right-hand section of columns of Table 2 presents the results from the model predicting *how much individuals drank* when they did drink on unplanned drinking days. Participants who reported experiencing greater urgency, lower sensation seeking, and more time with other people over the study period reported drinking relatively more when they did drink on unplanned drinking days.

Table 3 presents the effects from the model predicting momentary drink initiation on days without intent to drink. Results showed that participants were significantly more likely to report drinking initiation when they experienced craving at the prior prompt that was greater than that day's typical craving. Drink initiation was also related to concurrent increases in craving. When participants reported their first drink on an unplanned drinking day, they were significantly more likely to report being in a bar or with other people; however, this effect was not explained by being with others or in a bar at the previous prompt (prior to drink initiation). Day- and person-level experiences of urgency were related to lower odds of drink initiation. Reporting greater than usual poor premeditation in a day was also significantly related to drink initiation.

4. Discussion

The primary aim of the present study was to identify proximal predictors of unplanned drinking in the daily life of those with emotion dysregulation. Results indicate that certain social and environmental contexts and increases in impulsivity and craving were the primary predictors of drinking and the amount of alcohol consumed on unplanned drinking days.

The contexts related to unplanned drinking behaviors in this study are consistent with contexts related to drinking in general (planned or unplanned). General drinking most often occurs in socially-normative environments, such as being with other people or in a bar/restaurant (Lane et al., 2016), which are the same contexts associated with unplanned drinking here. Interestingly, these contexts primarily related to whether participants drank and not *how much* participants drank. Moreover, spending time in a bar or with other people did not significantly predict subsequent drink initiation on days without intention to drink (although these were related to concurrent drinking initiation). Participants tended to be in

bars and with people when they initiated unplanned drinking but did not tend to be at bars or with people at the prompt prior, which suggests that the decision to enter these socially-normative drinking contexts (and possibly the decision to engage in unplanned drinking) may have occurred somewhere between these two prompts. The time between responses prior to drinking in this sample averaged 157 minutes, or roughly 2.5 hours.

Future studies interested in capturing the momentary circumstances surrounding the decision to engage in unplanned drinking may want to consider a sampling schedule with more frequent prompts and ask about intention to drink throughout the day. Additionally, these analyses highlight that time with other people tends to increase the likelihood of unplanned drinking; however, it is possible that certain "types" of individuals may have differential effects on drinking behavior. For example, spending time with "drinking buddies" or individuals with whom a person frequently drinks may increase the likelihood of drinking while spending time with other groups of individuals (e.g., boss, children) may decrease the likelihood of drinking. The differential impact of different social influences on unplanned drinking would be a meaningful avenue for future research.

Subjective experience of impulsivity in daily life predicted whether individuals engaged in unplanned drinking and how much they drank in that unplanned episode; however, the relationship between impulsive facets and drinking varied across drinking outcomes. Participants who experienced relatively *more* negative urgency (emotion-based impulsivity) on that day and over the course of the EMA period were *less likely* to engage in unplanned drinking. Conversely, individuals who experienced greater urgency over the study period were *more likely* to drink more when they did drink. Previous cross-sectional studies have consistently shown that urgency is a significant predictor of both alcohol use patterns (Pearson et al., 2012; Pedersen et al., 2019) and alcohol-related problems (McCarty et al., 2017; Settles et al., 2012; Tran et al., 2018). Our findings suggest that individuals who experience greater urgency in their day-to-day lives are not necessarily more likely to engage in unplanned drinking but they are more likely to drink more heavily when they do. As such, they may be more susceptible to the greater problems and consequences associated with heavy unplanned drinking (e.g., Fairlie et al., 2019). This interpretation is consistent with some research on the Model of Unplanned Drinking Behavior (MUDB; Pearson & Henson, 2013), which has shown cross-sectional associations between urgency and alcohol-related consequences via unplanned drinking. Interestingly though, our supplementary analyses did not find urgency associated with engagement in *planned* drinking, in contrast to previous studies (Stevens et al., 2017), and actually urgency predicted consuming less alcohol on planned drinking days (See Supplementary Materials). This pattern of findings implies that the relationship between urgency and alcohol problems demonstrated in the cross-sectional literature may be driven by the increased problems and consequences for heavy unplanned drinking. As this is one of the first projects investigating impulsive states, traits, and unplanned drinking, this hypothesis should be tested in future studies and should be considered only a tentative finding until corroborated by additional studies.

Individuals experiencing poorer *premeditation* on a given day without intent to drink were more likely to subsequently report drink initiation. Considering that premeditation is required to plan later behaviors and activities, this finding is perhaps not surprising. Previous

research has also found that poor premeditation is related to drinking behaviors in general and risky drinking cross-sectionally (Adams et al., 2012; Tran et al., 2018) and in daily life (Griffin & Trull, 2020). Recent evidence shows positive intervention effects on individual planning deficits (Javaras et al., 2019); therefore, improving premeditation skills may be an avenue for intervention among those experiencing negative consequences of unplanned drinking.

Experiencing greater sensation seeking over the study period showed a negative association with amount of alcohol consumed on unplanned drinking days. Sensation seeking has shown inconsistent links with alcohol use in the cross-sectional and trait-based literature, with one review showing that the relationship may be better explained by covariate and/or moderating effects (Hittner & Swickert, 2006). The studies to date on momentary or state sensation seeking and alcohol use did not find a significant link between the two (e.g., Griffin & Trull, 2020; Pedersen et al., 2019); however, the influence of state sensation seeking on alcohol use behavior is a relatively under-studied area and could be a fruitful area for future investigation, particularly as it pertains to unplanned alcohol use.

Craving also related to drinking alcohol on days without intention to drink, but was not related to amount consumed. These results suggest that craving for alcohol increases the odds of alcohol consumption at the subsequent prompt and that experiencing increased craving in general also increased the likelihood of unplanned drinking. Importantly, these day-level and lagged craving effects are independent of actual alcohol consumption as craving ratings were only included prior to drinking initiation. This is consistent with previous studies that have shown that alcohol craving predicts consumption (Ramirez & Miranda, 2014; Ray et al., 2010); however, this study is the first to show this relationship for unplanned drinking. It is notable that craving predicted unplanned drinking above and beyond other contextual factors in these models.

Taken collectively, these findings offer several possible points of intervention. One possibility is modification of social and environmental contexts; individuals attempting to reduce unplanned drinking should minimize the time they spend in bars and restaurants and/or with other people on days they do not plan to drink. Future work to identify specific groups or types of individuals who might be particularly salient risk factors for unplanned drinking (e.g., drinking buddies) would aid in the implementation of these types of interventions. Second, individuals at high risk or in treatment for drinking problems should be screened for pre-drinking craving, as intervention on unplanned drinking may be targeted to those who experience higher levels of craving. Lastly, cognitive-behavioral intervention targeting planning deficits may also be useful in reducing engagement in unplanned drinking.

These results should be interpreted with several limitations in mind. First, while our sample size is adequate for the within-person effects of interest here, these findings should be replicated in larger and more diverse samples. This sample was primarily female (81%) and white (91%). While gender was adjusted for in our analyses, future investigations should investigate these findings in more heterogeneous samples. Second, EMA assessments of impulsivity facets, craving, contexts, and amount of alcohol consumed were limited to

single-item questions. Lastly, this sample was recruited for moderate/regular alcohol use, and was selected for emotion dysregulation diagnoses (i.e., current mood, anxiety, or borderline personality disorder), which are relatively common but may limit the generalizability of these findings to non-clinical samples and/or to heavier drinking samples. It is possible that including moderate/regular alcohol users inherently limited the range of drinking related variables including unplanned drinking engagement, quantity consumed, and craving. Future work should investigate predictors of unplanned drinking among heavier drinkers or individuals already experiencing alcohol-related impairments.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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Highlights

- Increases in alcohol craving preceded unplanned drinking that day.

- Spending time with other people or in a bar related to unplanned drinking that day.

- Poor premeditation was associated with unplanned drinking later that day.

Table 1.

Frequencies and descriptives of primary study variables on days with no reported drinking intention

	Frequency	Mean (SD)
Drink day	75	
Number of drinks per day		3.55 (2.51)
Prompts at Bar/restaurant	86	
Prompts at Home	1166	
Prompts with Others	1084	
EMA Urgency		1.20 (0.32)
EMA (lack of) Premeditation		1.17 (0.30)
EMA (lack of) Perseverance		1.19 (0.25)
EMA Sensation Seeking		1.13 (0.17)
EMA Craving		1.37 (0.48)

Table 2.

Models predicting day-level unplanned alcohol use

		Unplanned alcohol use (Y/N)				Amount consumed			
		OR	95% CI		p	Estimate	SE	DF	p
Day	Urgency	0.26	0.03	1.91	0.18	0.12	0.64	29	0.85
	(lack of) Premeditation	2.40	0.49	11.74	0.28	−0.39	0.45	29	0.39
	(lack of) Perseverance	1.38	0.46	4.18	0.57	0.19	0.23	29	0.43
	Sensation Seeking	0.71	0.15	3.39	0.67	1.00	0.59	29	0.10
	Craving	2.04	0.76	5.49	0.16	−0.13	0.19	29	0.51
	Bar (Y/N)	6.67	2.78	16.00	<.0001	0.04	0.22	29	0.85
	Time with other people	1.02	1.01	1.04	0.003	0.01	0.00	29	0.22
	Time at home	1.01	0.99	1.02	0.29	0.00	0.00	29	0.48
Person	Urgency	0.01	0.0001	0.50	0.02	3.61	1.76	29	0.05
	(lack of) Premeditation	8.40	0.65	108.08	0.10	0.38	0.77	29	0.63
	(lack of) Perseverance	0.42	0.05	3.29	0.41	0.96	0.67	29	0.16
	Sensation Seeking	0.53	0.01	46.28	0.78	−4.89	1.96	29	0.02
	Craving	3.90	1.41	10.77	0.01	0.20	0.39	29	0.61
	Bar (Y/N)	2.15	0.92	5.01	0.08	0.11	0.28	29	0.71
	Time with other people	0.99	0.97	1.01	0.44	−0.01	0.01	29	0.04
	Time at home	1.02	0.98	1.06	0.31	−0.01	0.01	29	0.30
Covariates	Gender	0.95	0.34	2.64	0.93	0.04	0.34	29	0.92
	Weekend	2.41	1.02	5.66	0.04	0.38	0.21	29	0.08
	Age	1.18	1.06	1.31	0.002	−0.01	0.03	29	0.69
	Study day	1.01	0.96	1.07	0.70	−0.01	0.01	29	0.54

Note. OR= Odds ratio. SE=Standard error. Y/N=dichotomous variable. DF= degrees of freedom.

Table 3.

Model predicting momentary unplanned drink initiation

		OR	95% CI		p
Moment	Urgency	0.82	0.37	1.79	0.61
	(lack of) Premeditation	1.06	0.36	3.12	0.92
	(lack of) Perseverance	0.63	0.25	1.63	0.35
	Sensation Seeking	2.14	0.80	5.70	0.13
	Craving	3.19	1.15	8.85	0.03
	Bar (Y/N)	22.25	4.69	105.63	<.0001
	People (Y/N)	4.03	1.48	10.93	0.01
	Home (Y/N)	1.52	0.64	3.60	0.35
Lagged moment	Urgency	0.45	0.09	2.23	0.33
	(lack of) Premeditation	2.70	0.73	9.99	0.14
	(lack of) Perseverance	0.22	0.04	1.32	0.10
	Sensation Seeking	2.15	0.65	7.10	0.21
	Pre-drink craving	5.09	2.56	10.13	<.0001
	Bar (Y/N)	0.62	0.03	11.89	0.75
	People (Y/N)	1.49	0.65	3.45	0.35
	Home (Y/N)	0.82	0.36	1.89	0.65
Day	Urgency	0.10	0.01	0.76	0.03
	(lack of) Premeditation	5.81	1.45	23.30	0.01
	(lack of) Perseverance	0.55	0.09	3.22	0.50
	Sensation Seeking	0.67	0.05	8.32	0.76
	Pre-drink craving	0.45	0.06	3.30	0.43
	Bar (Y/N)	0.68	0.20	2.33	0.54
	Time with other people	1.00	0.98	1.02	0.82
	Time at home	1.00	0.98	1.01	0.82
Person	Urgency	0.0003	0.000001	0.18	0.01
	(lack of) Premeditation	31.76	0.97	1045.03	0.05
	(lack of) Perseverance	0.19	0.01	5.08	0.32
	Sensation Seeking	2.78	0.01	1066.14	0.74
	Pre-drink craving	0.48	0.08	3.02	0.43
	Bar (Y/N)	1.86	0.84	4.12	0.12
	Time with other people	1.00	0.98	1.02	0.93
	Time at home	1.03	0.99	1.08	0.13
Covariates	Gender	0.88	0.32	2.36	0.79
	Weekend	2.37	1.25	4.48	0.01
	Age	1.14	1.03	1.27	0.01
	Study day	1.02	0.97	1.07	0.53

Note. OR=Odds ratio. CI= Confidence interval.