

Predictors of completion and outcomes of a 1-month alcohol abstinence campaign in Belgium

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Abstract

Aims: This study aimed to identify predictors of successful completion of a 1-month alcohol abstinence period (OMAAP) in Belgium and to assess a potential rebound effect in alcohol consumption following the campaign (i.e. an increase in alcohol consumption relative to precampaign levels). Additionally, it explored whether participants' expectations regarding the benefits of OMAAP were met.

Methods: A short longitudinal study was conducted with participants of the Belgian OMAAP, "La Tournée Minérale," in 2023 and 2024. A total of 128 participants completed questionnaires assessing alcohol consumption, drinking refusal self-efficacy (DRSE), positive alcohol expectancies (i.e. positive expectancies and beliefs about the effects of alcohol consumption), and expectations about OMAAP benefits at three time points: before ($N = 172$), immediately after ($N = 132$), and 1-month post-campaign ($N = 128$).

Results: Positive alcohol expectancies significantly predicted the likelihood of successfully completing OMAAP. Participants with higher positive alcohol expectancies were less likely to complete the abstinence period. Alcohol consumption decreased significantly 1 month after OMAAP for all participants, with no evidence of a rebound effect. DRSE did not significantly change over time. Participants' expectations regarding benefits such as sleep improvement and weight loss were generally unmet, while expectations for alcohol dependency reduction and money savings were exceeded.

Conclusions: Positive alcohol expectancies were significant predictors of OMAAP completion. The campaign effectively reduced alcohol consumption without a rebound effect, highlighting its potential as a public health strategy. However, managing participants' expectations about the benefits of abstinence might enhance their experience and outcomes.

Keywords: alcohol; alcohol abstinence; 1-month abstinence; temporary abstinence

Introduction

Alcohol is one of the most widely consumed psychoactive substances in the world (World Health Organization 2024). Paradoxically, it was also classified by experts as one of the most dangerous substances when considering harm to both consumers and society (Nutt et al. 2010). According to the World Health Organization, harmful alcohol use contributed to 2.6 million deaths (4.7%) worldwide in 2019 (World Health Organization 2024). In Belgium, 77% of the population consumed alcoholic beverages in 2018, with an average weekly consumption of 9.4 glasses (Gisle et al. 2018). Furthermore, harmful alcohol use caused 5% of deaths in Belgium in 2018 (Gisle et al. 2018).

Given the widespread issues related to alcohol abuse, numerous initiatives have been developed to prevent or reduce alcohol consumption and abuse across various populations (Gisle et al. 2018). In recent years, temporary alcohol abstinence campaigns have gained popularity in several countries (de Ternay et al. 2022). These campaigns target the general population, including heavy drinkers, and encourage participants to abstain from alcohol for a predefined period, typically 1 month. The goal of these campaigns is to raise participants' awareness of their alcohol consumption levels, help them experience the benefits of abstinence, and prompt them to reflect on the role of alcohol in their lives and

society. Following the campaign, some participants adopt long-term measures to reduce their alcohol consumption (de Ternay et al. 2022). These campaigns are usually promoted by public health organizations or associations. In the French-speaking part of Belgium, the campaign ("Tournée Minérale") is promoted by "Univers Santé," a nonprofit organization for health promotion (de Ternay et al. 2022, Thienpondt et al. 2024).

Globally, most existing campaigns promote 1 month of alcohol abstinence, although the specific timing varies by country. For instance, these campaigns take place in January in England (Ballard 2016) and France (Naassila 2019), February in Belgium (Thienpondt et al. 2024), and November in Hungary (Pados et al. 2020). In the Netherlands, participants can choose the period and duration of their abstinence, as long as it lasts at least 28 days (Bovens et al. 2022). Some campaigns advocate for longer periods of abstinence, such as in Thailand, where the abstinence period extends to 3 months (Saengow 2019).

Several positive outcomes were observed following a 1-month alcohol abstinence period (OMAAP). Studies conducted in the context of these campaigns have reported numerous benefits experienced by participants, including improved well-being, weight loss, better sleep, money savings, increased energy, and overall better health (Hillgrove and

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Thomson 2012, Yeomans 2019, de Visser and Piper 2020, de Ternay et al. 2022). All participants, regardless of their success in completing OMAAP, exhibited greater drinking refusal self-efficacy (DRSE) and reduced their long-term alcohol consumption. However, more significant changes were observed among those who successfully completed the abstinence period (de Visser et al. 2016, de Visser and Piper 2020, Thienpondt et al. 2024).

The successful completion of OMAAP was influenced by several individual factors. Participants who successfully completed this abstinence period tended to have lower daily alcohol consumption (fewer drinks per day), lower drinking habits, less frequent drunkenness, higher DRSE, and better mental well-being (de Visser et al. 2016, de Visser and Nicholls 2020, de Ternay et al. 2022). Moderate drinkers were more likely to complete OMAAP, whereas heavier drinkers were more likely to fail (de Visser et al. 2016). Additionally, being male, having a lower score on the Alcohol Use Disorders Identification Test (AUDIT), having higher emotional DRSE, receiving supportive emails, and having a lower frequency of drunkenness were all predictors of successful completion (de Visser et al. 2016, de Visser and Nicholls 2020).

While many positive effects of OMAAP have been reported in the literature, a frequently mentioned concern is the risk of a rebound effect in alcohol consumption immediately after the abstinence period (i.e. an increase in alcohol consumption following OMAAP, relative to precampaign levels) (de Visser et al. 2016). Anecdotal evidence suggests that some people celebrate the end of their alcohol abstinence with binge drinking, potentially indicating a rebound effect characterized by increased alcohol consumption. In animal models, alcohol deprivation is often used to increase subsequent voluntary alcohol intake. The Alcohol Deprivation Effect (ADE) refers to significant increases in voluntary alcohol consumption compared to baseline levels following a period of alcohol deprivation, whether short or long. The ADE has been observed across various animal species (Spanagel 2000, Rodd et al. 2004, Allen et al. 2018). However, in these animal models, alcohol deprivation is involuntary and enforced, whereas in OMAAP, alcohol abstinence is voluntary and depends on the individual's motivation to refuse alcohol consumption. Furthermore, alcohol abstinence campaigns incorporate psychological social and cultural factors that are absent from animal models. For instance, previous studies have shown that social support is a crucial factor for the success of OMAAP (de Visser and Nicholls 2020). In humans, conflicting results have been reported regarding the risk of a rebound effect after alcohol abstinence. Some authors (Carey et al. 1988) have found that voluntary temporary abstinence had no impact on subsequent alcohol consumption levels. In contrast, others (Burish et al. 1981) reported an increase in alcohol consumption following a period of voluntary abstinence, mimicking the ADE in animal models. During the initial COVID-19 lockdown, participants aged 18–90 with diverse drinking habits reduced their alcohol consumption. However, some individuals, particularly young moderate drinkers, experienced a subsequent rebound effect (Bollen et al. 2021). After the British “Dry January” campaign, de Visser et al. (2016) indicated that most participants reported a reduction in the number of drinks consumed on a typical drinking day 6 months after the end of OMAAP, with only a minority experiencing a rebound effect. This pattern was consistent among participants who successfully and

unsuccessfully completed the alcohol abstinence period. However, regarding the frequency of drunkenness, participants who did not successfully complete the alcohol abstinence period were more likely to report an increase compared to those who were successful (de Visser et al. 2016).

The aim of the present short longitudinal study was to track participants through OMAAP in Belgium, specifically during the month of February, known as “La Tournée Minérale,” and to include a 1-month follow-up period after the end of OMAAP.

The first purpose of the present study was to examine the effects of various factors believed to influence the successful completion of OMAAP. As reported above, previous research indicated that lower drinking habits and higher DRSE are predictors of successful OMAAP outcomes. In this study, we hypothesized that lower scores on the AUDIT and higher scores on the Drinking Refusal Self-Efficacy Questionnaire–Revised (DRSEQ-R) would predict a higher likelihood of successful OMAAP completion in the Belgium campaign. Additionally, since positive alcohol expectancies (i.e. positive expectancies and beliefs about the effects of alcohol consumption) are significant predictors of alcohol consumption (Villette and Quertemont 2015), we also predicted that higher scores on the Alcohol Expectancy Questionnaire (AEQ) would be associated with a higher probability of failure in OMAAP.

The second aim of this study was to determine whether a rebound effect in alcohol consumption occurred in the month following OMAAP, a period during which the ADE is typically observed in animal models. Specifically, we examined whether alcohol consumption increased or decreased relative to precampaign levels and whether this effect differed between those who successfully completed OMAAP and those who did not. The presence of a rebound effect would be indicated by a statistically significant increase in alcohol consumption following OMAAP, compared to precampaign levels.

Finally, we conducted additional exploratory analyses to determine if participants' belief in the ability to resist drinking alcohol had improved during and following the OMAAP campaign compared to precampaign levels. This effect has been reported in previous studies and is sometimes highlighted as a benefit of OMAAP (de Visser et al. 2016, de Visser and Piper 2020). We also assessed whether there were differences between those who successfully completed the OMAAP program and those who did not. Additionally, we examined if participants' precampaign expectations regarding the benefits of OMAAP were met by the end of the campaign. In previous studies, the benefits of OMAAP were generally assessed at the end of the campaign without considering participants' initial expectations (de Ternay et al. 2022). However, participants' satisfaction is likely more related to the fulfillment of their own initial expectations rather than the perceived benefits at the end of OMAAP.

Materials and methods

Participants

This study involved two cohorts of participants: one for OMAAP in 2023 and the other for the same period in 2024. Participants ranged in age from 18 to 76 years (mean = 39.6). In total, 172 participants completed the first part of the study,

Table 1. Demographic and alcohol-related variables.

	N (%)	Mean (SD)	Min-Max
First part of the study (first questionnaire)	N = 172		
Age		39.6 (14.1)	18–76
Gender (M/F/O)	54 (31.4)/117 (68)/1 (.6)		
Education (years)		15.7 (2.38)	9–23
TLFB score		10.3 (12.7)	0–91
AUDIT score		8.31 (5.68)	0–28
DRSEQ-R score		84.7 (16.9)	29–114
AEQ score		213 (103)	0–469
Second part of the study (second questionnaire)	N = 132		
TLFB score		2.76 (6.23)	0–39
DRSEQ-R score		87.8 (17.4)	19–114
Completion (successful/unsuccessful)	64 (48.5)/68 (51.5)		
Number of days without alcohol consumption (for unsuccessful completion, N = 66)		12.9 (8.27)	0–28
Third part of the study (third questionnaire)	N = 128		
TLFB score		6.75 (7.27)	0–41
DRSEQ-R score		84.2 (19.3)	19–113

Note. N, number of participants; %, percentage of participants; SD, standard deviation; Min, minimum; Max, maximum; M, male; F, female; O, other; TLFB, Alcohol Timeline Follow-back; AUDIT, Alcohol Use Disorders Identification Test; DRSEQ-R, Drinking Refusal Self-Efficacy Questionnaire-Revised; AEQ, Alcohol Expectancy Questionnaire.

with 94 participants in 2023 and 78 participants in 2024 (see Table 1 for a description of the participants).

This study was designed as a short longitudinal survey conducted in three parts at distinct points in time to assess the evolution of participants over time. Each part included different questionnaires, which are detailed below.

Some participants did not complete all three parts of the study. Participation was considered valid if the participant completed all the questionnaires in the first part of the study. Consequently, some included participants did not complete the second and/or third parts of the study. For each of the three parts, participants were required to answer all questions, ensuring that there were no missing data in the questionnaires of the valid participants.

The eligibility criteria for participating in the study included being at least 18 years old and planning to participate in OMAAP in Belgium (“La Tournée Minérale”) in 2023 or 2024. In Belgium, the legal drinking age is 16 for wine and beer and 18 for spirits.

Procedure and materials

This study was approved by the Ethics Committee of the Faculty of Psychology, Speech and Language Therapy, and Education Sciences at the University of Liège and was conducted in accordance with the ethical standards of the Helsinki Declaration. Individuals who intended to engage in OMAAP in Belgium (“La Tournée Minérale”—February) were recruited via the social network Facebook and through word of mouth from the authors, their acquaintances and colleagues, and students involved in the data collection process. Recruitment took place in January 2023 and January 2024.

The first stage of the study involved completing a recruitment questionnaire in January, which provided participants with information about the study. Participants were asked to provide their informed consent and their email address to receive the subsequent questionnaires.

Three questionnaires (corresponding to the first, second, and third parts of the study, respectively) were sent to the participants who completed the recruitment questionnaire. The first questionnaire was sent just before the beginning of

OMAAP (the last week of January). The second questionnaire was sent at the end of OMAAP (the first week of March). The third questionnaire was sent 1 month after the end of OMAAP (the first week of April). To minimize attrition, several reminders were sent by email for all three questionnaires. Participants’ data were anonymized for all the questionnaires.

Demographic data

These questions aimed to gather demographic information from participants, including their age, gender, nationality, education, and occupation.

Daily alcohol consumption

The Alcohol Timeline Follow-back (TLFB) questionnaire (Sobell and Sobell 1992) measures participants’ daily alcohol consumption over a week. A French translation of the questionnaire was produced for this study. Participants were asked to recall their alcohol consumption for the week preceding the distribution of the questionnaire, specifying the number of standard drinks consumed per day. To assist them, a visual representation of a calendar for the week was provided, along with an illustration of one standard drink per type of alcohol. Participants were allowed to report zero consumption. This questionnaire was administered at three different times: the first questionnaire was given just before OMAAP (the last week of January), the second at the end of OMAAP (the first week of March), and the third 1 month after OMAAP (the first week of April). Thus, the recalled consumption corresponds to the week before OMAAP (first questionnaire), the last week of OMAAP (second questionnaire), and the week 1 month after OMAAP (third questionnaire). The data from one participant for the first questionnaire were excluded due to an ambiguous answer.

Drinking habits

The AUDIT (Saunders et al. 1993) is a 10-item multiple-choice questionnaire that assesses alcohol consumption and identifies problem drinking. Higher scores indicate potentially problematic alcohol consumption. The French version of the

questionnaire (Gache et al. 2005) was used in this study. This questionnaire was administered once (first part of the study). The Cronbach's alpha value was .81, indicating very good internal consistency.

Drinking refusal self-efficacy

The Drinking Refusal Self-Efficacy Questionnaire-Revised (DRSEQ-R) (Oei et al. 2005) consists of 19 items rated on a six-point Likert scale (1 = I am certain I would drink to 6 = I am certain I would not drink) to assess participants' beliefs about their ability to resist drinking alcohol in various situations. Higher scores indicate a stronger belief in the ability to resist drinking alcohol. For this study, a French translation of the questionnaire was produced. The questionnaire was administered three times (first, second, and third parts of the study). Cronbach's alpha values for the three administrations (first part = .91; second part = .93; third part = .94) indicated excellent internal consistency.

Positive alcohol expectancies

The Alcohol Expectancy Questionnaire (AEQ) (Goldman et al. 1997) consists of 55 items on an 11-point scale (0 = strongly disagree to 10 = strongly agree) and assesses participants' positive expectancies and beliefs about the effects of alcohol consumption. Higher scores indicate more positive expectancies regarding the effects of alcohol consumption. The French version of the questionnaire (Vautier and Moncany 2008) was used in this study. This questionnaire was administered once (first part of the study). The Cronbach's alpha value was .97, indicating excellent internal consistency.

Expectations regarding the benefits of 1-month alcohol abstinence period

This study-specific questionnaire assessed participants' expectations regarding the benefits of their involvement in the OMAAP and whether these expectations were met at the end of OMAAP. Participants were presented with a list of seven potential benefits and asked to indicate if each benefit matched their expectations (first questionnaire) and if these expectations were fulfilled (second questionnaire). The benefits included: sleep improvement, weight loss, well-being improvement, alcohol dependency reduction, money savings, health improvement, and energy improvement. To determine which benefits to include, we selected those frequently observed in other studies (Hamilton and Gilmore 2016, de Ternay et al. 2022). Participants rated their expectations and the fulfillment of these benefits on a scale from 0 to 100 (not at all to completely). Higher scores indicate greater expectations (first part of the study) or higher fulfillment (second part of the study) for a specific benefit. This questionnaire was administered twice (first and second parts of the study).

Successful completion of 1-month alcohol abstinence period

Participants were asked whether they had successfully completed the OMAAP (i.e. refraining from alcohol consumption during the whole month of February). Those who did not successfully complete this abstinence period were asked to specify the date on which they resumed drinking and to provide the reason for doing so. The data from two participants were excluded due to the lack of precision in their responses. This questionnaire was administered once (second part of the study).

Statistical analysis

Statistical analyses were conducted using Jamovi (*The Jamovi Project. Jamovi (Version 2.5)* 2024). The alpha level for statistical significance was set at .05 for all analyses.

First, a logistic regression analysis was conducted to examine the effects of drinking habits (AUDIT), drinking refusal self-efficacy (DRSEQ-R), and positive alcohol expectancies (AEQ) on the completion of OMAAP, with successful or unsuccessful completion of OMAAP as the dependent variable. To improve the interpretability of the odds ratio, the mean AEQ score was used as a predictor instead of the total score in the logistic regression analysis. Since the AEQ consists of 55 items scored from 0 to 10, the mean score ranges from 0 to 10, providing a narrower and more intuitive scale. Additionally, a multiple regression analysis was performed to assess the influence of these three variables on the number of alcohol-free days (i.e. the number of days participants abstained from alcohol during OMAAP, applicable only to participants who did not complete the period).

To test for an alcohol consumption rebound effect, a mixed-model analysis of variance (ANOVA) was employed. The analysis used successful or unsuccessful completion of OMAAP as the between-subjects factor and two measures (before and 1 month after OMAAP—first part and third part of the study) of the TLFB as the within-subjects factor. A rebound effect would be indicated by a significant increase in alcohol consumption 1 month after OMAAP (third part of the study) compared to precampaign levels (first part of the study).

To determine whether drinking refusal self-efficacy (DRSEQ-R) increased compared to precampaign levels and whether there was a difference between successful and unsuccessful completion of OMAAP, a mixed ANOVA was employed. Successful or unsuccessful completion of OMAAP served as the between-subjects factor, and the three measures of DRSEQ-R (taken at three different times) served as the within-subjects factor. An increase in drinking refusal self-efficacy (DRSEQ-R) would be indicated by higher scores for the second part of the study (during OMAAP) and/or the third part (1 month after OMAAP) compared to the first part (before OMAAP).

Given the deviation from normality observed in certain dependent variables, we complemented the two mixed ANOVAs with two generalized linear mixed models using a gamma distribution. This alternative modeling approach served to assess the robustness of our findings, which were consistent with those obtained from the ANOVAs. For the sake of clarity and conciseness, and since both methods yielded comparable conclusions, only the ANOVA results are reported below.

To examine whether participants' expectations regarding the benefits of OMAAP were met by the end of the campaign, we conducted a comparison using Student's *t*-tests or Wilcoxon signed-rank tests, depending on the normal distribution of the data. The mean levels of participants' expectations for each specific benefit of OMAAP were compared before the campaign began with their mean levels of perceived fulfillment of these benefits at the campaign's completion.

Results

Table 1 provides a summary of the demographic and alcohol-related variables for all participants across the three parts

Table 2. Results of the logistic regression analysis with successful completion of OMAAP as the dependent variable.

	Estimate	SE	Z	P	Odds ratio	95% CI lower	95% CI upper
Intercept	2.22	1.34	1.65	.098	9.201	0.663	127.723
AUDIT	−0.04	0.04	−0.91	.361	0.964	0.891	1.043
DRSEQ-R	−0.01	0.01	−0.90	.366	0.988	0.964	1.014
AEQ	−0.26	0.12	−2.27	.023*	0.769	0.613	0.965

Note. AUDIT, Alcohol Use Disorders Identification Test; DRSEQ-R, Drinking Refusal Self-Efficacy Questionnaire-Revised; AEQ, Alcohol Expectancy Questionnaire; SE, standard error; CI, confidence interval. * $P < .05$.

Table 3. Results of the multiple regression analysis with the number of alcohol-free days as the dependent variable.

	Estimate	SE	t	P	η^2p
Intercept	15.38	8.32	1.85	.069	
AUDIT	−0.15	0.21	−0.73	.467	0.09
DRSEQ-R	0.009	0.08	0.11	.911	0.0002
AEQ	−0.008	0.01	−0.57	.572	0.005

Note. AUDIT, Alcohol Use Disorders Identification Test; DRSEQ-R, Drinking Refusal Self-Efficacy Questionnaire-Revised; AEQ, Alcohol Expectancy Questionnaire; SE, standard error.

of the study. The mean AUDIT score suggests hazardous alcohol consumption. However, considerable variation was observed among participants, with some exhibiting low levels of alcohol consumption, while others were problematic drinkers. Specifically, 54.6% of participants were moderate drinkers (AUDIT scores below 8), 32.1% were hazardous drinkers (AUDIT scores between 8 and 14), and 13.3% were problematic drinkers (AUDIT scores above 14). Additionally, Table A in the appendix shows that all alcohol-related variables were significantly intercorrelated, generally exhibiting medium-sized correlations.

Successful completion of 1-month alcohol abstinence period

Among the 132 participants who completed the second part of the study, 64 (48.5%) successfully maintained alcohol abstinence for 1 month. Table 2 presents the results of the logistic regression analysis predicting the likelihood of successfully completing OMAAP. The overall model was statistically significant, $\chi^2(3) = 9.31$, $P = .025$ and correctly classified 64.4% of the participants as successful or unsuccessful. Among the three predictors included, only the AEQ score was statistically significant ($P = .023$, OR = .769). Consequently, a successful completion of OMAAP was predicted by lower positive alcohol expectancies.

Based on these findings, Student's t -test was conducted to compare AEQ scores between participants who successfully completed OMAAP and those who did not. The results revealed that participants who did not successfully complete OMAAP had significantly higher positive alcohol expectancies ($M = 235.9$, $SD = 88.82$) compared to those who did ($M = 186.97$, $SD = 105.94$), $t(130) = 2.88$, $P = .005$. This effect was of medium size ($d = 0.5$). Therefore, successful completion was associated with lower positive alcohol expectancies. For completeness, Table B in the appendix also presents the results of the same analysis for AUDIT and DRSEQ-R scores.

In the subsample of participants who did not maintain alcohol abstinence, the same three factors did not significantly predict the number of alcohol-free days. The regression model explained only 3.18% of the total variance: $F(3,62) = 0.68$, $P = .569$, adjusted $R^2 = 0$ (Table 3).

Further analyses were conducted to investigate whether attrition could account for the observed results (see Tables C and D in the appendix). A comparison between participants who were lost to follow-up (no data were obtained for the second part of the study) and those who completed the second part revealed no statistically significant differences between these groups. There was no evidence indicating that the lost participants differed in terms of alcohol-related variables. However, when the lost participants were considered as having failed OMAAP, statistically significant differences were found in AUDIT and AEQ scores, with higher mean scores in participants who failed to complete OMAAP.

Changes in alcohol consumption and rebound effect

The mixed-model ANOVA computed on TLFB scores showed a statistically significant main effect of the time of measurement (before vs. 1 month after OMAAP): $F(1,114) = 8.81$, $P = .004$, $\eta^2 = 0.019$. In contrast, there were no significant main effects of the completion group, $F(1,114) = 1.13$, $P = .289$, $\eta^2 = 0.007$, and no significant interaction, $F(1,114) = 1.22$, $P = .271$, $\eta^2 = 0.003$. As shown in Fig. 1, the mean number of alcoholic drinks per week decreased in all participants 1 month after the end of OMAAP, regardless of whether they were able to maintain abstinence for the full duration of OMAAP. For participants who successfully completed OMAAP, the mean number of drinks per week decreased from 9.3 before OMAAP to 6.19 1 month after the end of the campaign. For those who failed to maintain alcohol abstinence during OMAAP, these mean numbers of drinks per week were 11 and 6.78, respectively.

Drinking refusal self-efficacy

The mixed-model ANOVA conducted on DRSEQ-R scores revealed no statistically significant effects. There were no significant main effects for either the time of measurement (three parts of the study): $F(2,230) = 2.4$, $P = .093$, $\eta^2 = 0.011$, or the completion group: $F(1,115) = 0.9$, $P = .344$, $\eta^2 = 0.004$. Additionally, there was no significant interaction between the two factors: $F(2,230) = 0.94$, $P = .391$, $\eta^2 = 0.004$.

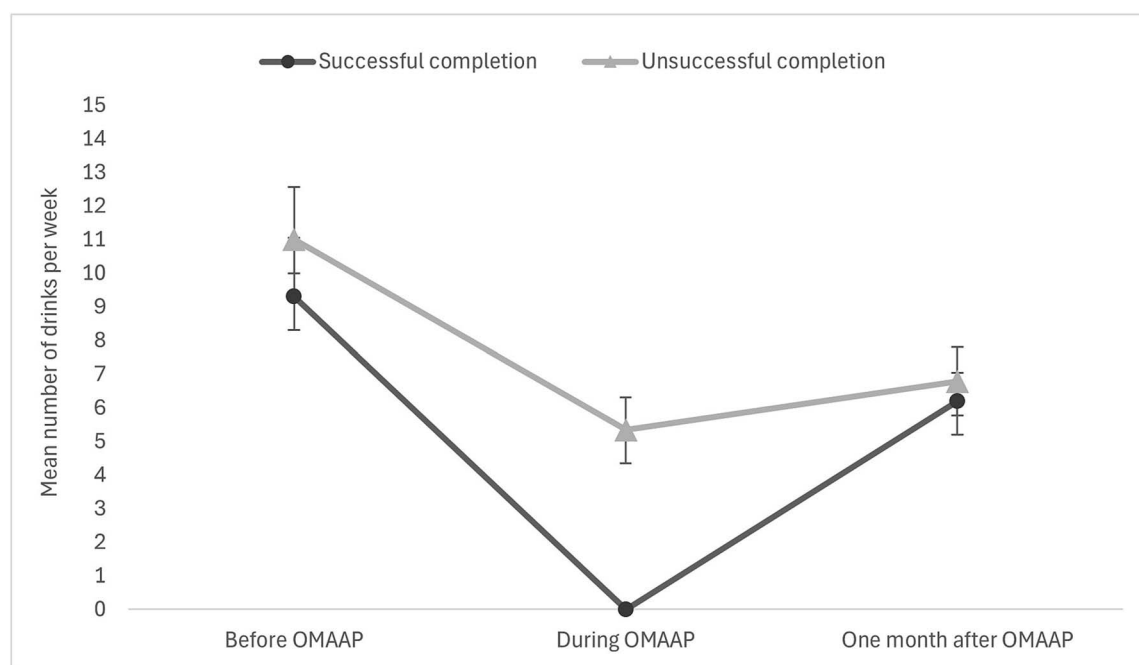


Figure 1 Mean numbers (and standard errors of the mean) of alcoholic drinks per week before, during, and 1 month after OMAAP, for successful or unsuccessful completion. Note: All time points are shown in the figure to provide a comprehensive presentation. However, for the statistical analyses, only two time points were included ("before OMAAP" and "one month after OMAAP") to test for a possible rebound effect, as all successful participants have a score of 0 for the time point "during OMAAP."

Expectations regarding the benefits of 1-month alcohol abstinence period

Table 4 presents the mean levels on a 100-point scale of participants' expectations for each specific benefit of OMAAP before the campaign began and their mean levels of perceived fulfillment of these benefits at the campaign's completion. As shown in Table 4, the difference between the levels of expectation and fulfillment was statistically significant for all benefits. However, for some benefits ^(a), such as alcohol dependency reduction and money savings, the levels of perceived fulfillment exceeded the levels of expectation. Conversely, for other benefits ^(b), including sleep improvement, weight loss, well-being improvement, health improvement, and energy improvement, the levels of fulfillment were lower than expected.

Discussion

Successful completion of 1-month alcohol abstinence period

In accordance with our hypothesis, positive alcohol expectancies (as measured by AEQ scores) were found to predict the success or failure of completing OMAAP in this study. Further analysis revealed that participants who did not complete the abstinence period had significantly higher positive alcohol expectancies compared to those who successfully completed it. These findings align with previous research indicating that positive alcohol expectancies predict current levels of alcohol consumption (Lee et al. 1999, Kreusch et al. 2013, Vilenne and Quertemont 2015). Additionally, earlier studies have demonstrated that positive alcohol expectancies increase the risk of relapse in individuals with alcohol use disorders (Sliedrecht et al. 2019). Notably, our results also indicated that positive alcohol expectancies are better predictors of

OMAAP success than drinking habits (measured by AUDIT scores) or drinking refusal self-efficacy (measured by DRSEQ-R scores). This underscores the importance of considering the role of alcohol expectancies in temporary alcohol abstinence campaigns. For instance, these campaigns could include information or prevention strategies addressing these expectancies.

Contrary to the findings of de Visser and Nicholls (2020), our study did not identify drinking habits (measured by AUDIT scores) as a statistically significant predictor of OMAAP success. This discrepancy is likely due to our smaller sample size compared to their study. In our sample, participants who did not complete OMAAP exhibited higher average AUDIT scores. The difference between these participants and those who successfully completed OMAAP was nearly statistically significant and demonstrated a medium effect size ($d = 0.32$; see Table B in the appendix). Furthermore, the relationship between OMAAP completion and drinking habits may have been underestimated due to the higher dropout rate among participants with elevated AUDIT scores. When considering those who did not complete the second part of the study as having failed OMAAP, a significant difference in drinking habits emerged (see Table D in the appendix), with lower mean AUDIT scores observed in participants who successfully completed OMAAP.

In our study, no significant predictors for the number of alcohol-free days were identified. However, it is important to note that the analysis only included participants who did not complete OMAAP, resulting in a smaller sample size with likely insufficient statistical power. To our knowledge, no previous studies have examined predictors from the perspective of the number of alcohol-free days during a temporary alcohol abstinence period. Methodologically, our results suggested that it is more powerful to study the successful completion of OMAAP as a binary yes/no outcome, rather than the number of alcohol-free days, which would require larger sample sizes.

Table 4. Mean levels (and standard deviations) of expectations and perceived fulfilment of OMAAP benefits.

	Expectation of the benefit before OMAAP	Fulfilment of the benefit after OMAAP	Difference
Sleep improvement ^b	54.3 (37.2)	45.7 (35.1)	$t(131) = 2.24$ $P = .027^*$ $d = 0.2$
Weight loss ^b	56.5 (39.1)	31.7 (34.8)	$W = 5449$ $P = <.001^{***}$ $d = 0.54$
Well-being improvement ^b	64.8 (35.2)	45.8 (32.1)	$t(131) = 5.41$ $P = <.001^{***}$ $d = 0.47$
Alcohol dependency reduction ^a	31.8 (36.3)	44 (35.6)	$W = 2002$ $P = <.001^{***}$ $d = 0.31$
Money savings ^a	38.2 (38.4)	50.3 (36.8)	$W = 2269$ $P = .001^{**}$ $d = 0.29$
Health improvement ^b	58.3 (38.1)	45 (34.5)	$W = 4485$ $P = <.001^{***}$ $d = 0.31$
Energy improvement ^b	57.9 (37.9)	42.5 (34.5)	$t(131) = 4.49$ $P = <.001^{***}$ $d = 0.39$

Note. Mean levels of expectations and fulfilment were calculated on 100-point scales for the 132 participants who completed the questionnaires for both the first and second parts of the study. Benefits marked with superscript “a” indicate higher levels of perceived fulfilment than expected, whereas benefits marked with superscript “b” indicate lower levels of perceived fulfilment than expected. * $P < .05$, ** $P < .01$, *** $P < .001$.

This study aimed to identify predictors of OMAAP success related to alcohol consumption. However, it is evident that other factors not included in this study also influence the likelihood of success. For instance, mental well-being and social support during OMAAP have been shown to aid participants in successfully completing the period (de Visser and Nicholls 2020). The participants’ social environment, especially, was reported to be crucial. Previous studies have found that some participants attempting temporary alcohol abstinence faced negative reactions from others, difficulties remaining abstinent during social events, and unsuccessful completion due to social factors such as social pressure (Pennay et al. 2018, Pados et al. 2020).

Changes in alcohol consumption and rebound effect

Alcohol consumption among all participants decreased following the OMAAP. Specifically, their consumption was significantly lower 1 month after the OMAAP compared to before the campaign. There was no difference between those who successfully completed the abstinence period and those who did not, nor was there any interaction effect. Contrary to concerns, no rebound effect was observed in the month following the OMAAP. The alcohol deprivation effect seen in animal studies (Spanagel 2000, Rodd et al. 2004, Allen et al. 2018) did not appear to apply to the human OMAAP. On the contrary, the OMAAP proved beneficial in reducing alcohol consumption for both those who succeeded and those who did not complete the challenge. Several factors might explain the differences between animal and human studies. In the OMAAP, participants are volunteers, and the campaign includes prevention messages about the negative effects of alcohol consumption. Previous studies also showed that participation in the OMAAP, regardless of success, led to reductions in alcohol consumption over a longer period, up

to 6 months after the OMAAP (de Visser et al. 2016). These findings suggest that such campaigns are effective public health strategies for promoting reduced alcohol consumption.

Drinking refusal self-efficacy

At first glance, drinking refusal self-efficacy should be one of the best predictors of success in the OMAAP, as the ability to refuse alcohol consumption was expected to be challenged during the OMAAP. Additionally, DRSE was expected to improve during the OMAAP, especially in participants who successfully completed OMAAP, as their ability to refuse alcohol consumption was effectively trained. This has been demonstrated in previous studies (de Visser et al. 2016, de Visser and Nicholls 2020, de Visser and Piper 2020), which showed that drinking refusal self-efficacy scores increased for participants who successfully completed OMAAP. Furthermore, temporary alcohol abstinence is generally reported to increase drinking refusal self-efficacy (Wood et al. 2023).

Contrary to these expectations, drinking refusal self-efficacy was not a significant predictor of successful completion in the present study. Additionally, no significant increases were observed in DRSE for all participants, including those who successfully completed the OMAAP. Further analyses indicated that selective dropout rates were unlikely to explain this lack of effects (see Tables C and D in the appendix). Further studies are required to explain these discrepancies, which might be related to methodological features such as the different timing of measurements. Another possible explanation is that the DRSE questionnaire used in the present study was a different version, as we chose the revised questionnaire comprising 19 items (DRSEQ-R) (Oei et al. 2005). Additionally, it is plausible that some participants avoided social events to prevent alcohol consumption or negative comments, further impacting their perceived self-efficacy (Pennay et al. 2018, Pados et al. 2020).

Expectations regarding the benefits of 1-month alcohol abstinence period

To our knowledge, this study was the first to assess participants' expectations of the benefits of participating in OMAAP and whether these benefits were met after the 1-month period, using a scale measurement. In contrast, other studies typically reported the percentage of participants having specific expectations or the percentage experiencing benefits (Hillgrove and Thomson 2012, de Ternay et al. 2022). The results indicated that while expectations were generally high before OMAAP, only the levels of perceived fulfilment related to alcohol dependency reduction and money savings were significantly greater after the OMAAP than initially expected. Interestingly, for several expectations, participants reported that the benefits did not meet their expectations. It would be valuable to investigate whether providing a more realistic message about the OMAAP might enhance participants' experiences.

Limits and perspectives

This study had several limitations that must be acknowledged. Firstly, we observed a loss of participants between the first and third questionnaires, which is not unusual in longitudinal studies but has detrimental effects on sample size and induces potential attrition biases.

Secondly, regarding our sample, the participants represented only a small subset of individuals who participated in the OMAAP in Belgium. The recruitment process was not conducted directly through the organization responsible for promoting and organizing the event, as is done in some other studies. Additionally, the voluntary nature of participation in both the OMAAP and the study itself might have attracted a specific subset of the population for whom abstaining from alcohol for 1 month seemed manageable and who had a positive perception of OMAAP (Hamilton and Gilmore 2016). Moreover, the sample consisted exclusively of participants from the French-speaking region of Belgium. Given that Belgium is a multilingual country, this regional homogeneity might have influenced the results and might not have fully captured the experiences of the entire population living in Belgium (Thienpondt et al. 2024). All these factors might have introduced a selection bias, limiting the generalizability of the findings.

Since our recruitment process was not conducted directly through the organization responsible for promoting and organizing the event, we did not know if our participants received any supportive emails. This information was not collected, as it was not among the main objectives of the present study. Moreover, it is likely that some participants engaged in the OMAAP informally, without registering for the official campaign, and therefore did not receive supportive emails. As mentioned above, support is linked with the successful completion of OMAAP (de Visser et al. 2017, de Visser and Nicholls 2020). Consequently, our participants might have lacked support, which could explain the differences in the results compared to previous studies.

Given that the OMAAP varies significantly across different countries, it is crucial to consider these differences in both the campaigns and the populations when interpreting and comparing results. Currently, there is considerable heterogeneity

among the studies conducted, with variations in the period chosen and the duration of the campaign. Standardizing and generalizing these elements could enhance observations, comparisons of the populations involved, and the overall effectiveness of the campaigns (de Ternay et al. 2022).

Conclusion

The present study provided insights into the factors influencing the success of OMAAP and detailed the overall reduction in alcohol consumption following this period in Belgium. Positive alcohol expectancies, as measured by AEQ scores, were a significant predictor of the completion of OMAAP. Participants with higher positive alcohol expectancies were less likely to complete OMAAP, highlighting the importance of considering this factor to improve abstinence outcomes. Furthermore, a significant reduction in alcohol consumption was observed among all participants, regardless of whether they successfully completed OMAAP. This finding underscored the beneficial impact of temporary alcohol abstinence campaigns in reducing alcohol consumption, even when not entirely successful.

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Author contributions

Etienne Quertemont (Conception, Methodology, Interpretation of data, Writing—review and supervision) and Charlotte Paulis (Methodology, Acquisition and data analysis, Interpretation of data, Writing—original draft)

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Data availability

The data are available at: <https://doi.org/10.58119/ULG/IFYHNS>.

Appendix

Participants who failed to abstain from alcohol consumption might have been more likely to drop out of the study. As part of a worst-case analysis, participants who did not complete the questionnaires for the second part of the study were classified as having failed the OMAAP. The two groups were then compared on the three variables included in the logistic regression (AUDIT, DRSEQ-R, and AEQ) using Student's *t*-test or a Mann–Whitney *U* test. Statistically significant differences were found in AUDIT and AEQ scores when comparing these two groups.

Table A. Spearman correlation matrix for alcohol-related variables measured in the first part of the study.

	TLFB	AUDIT	DRSEQ-R	AEQ
TLFB				
AUDIT	0.59 <0.001***			
DRSEQ-R	-0.51 <0.001***	-0.51 <0.001***		
AEQ	0.22 0.004**	0.49 <0.001***	-0.41 <0.001***	

Note. The matrix shows Spearman correlation coefficients and *P*-values. TLFB, Alcohol Timeline Follow-back; AUDIT, Alcohol Use Disorders Identification Test; DRSEQ-R, Drinking Refusal Self-Efficacy Questionnaire-Revised; AEQ, Alcohol Expectancy Questionnaire. ***P* < .01, ****P* < .001.

Table B. Mean scores (and standard deviations) for the AUDIT, DRSEQ-R, and AEQ in the groups of participants who successfully completed OMAAP and those who did not.

	Successful completion	Unsuccessful completion	Statistic	<i>P</i>	<i>d</i>
AUDIT	7.13 (5.29)	8.91 (5.89)	<i>U</i> = 1762	.059	0.32
DRSEQ-R	84.55 (18.63)	83.88 (14.71)	<i>U</i> = 2028	.502	0.04
AEQ	186.97 (105.94)	235.9 (88.82)	<i>t</i> = -2.88	.005**	0.50

Note. AUDIT, Alcohol Use Disorders Identification Test; DRSEQ-R, Drinking Refusal Self-Efficacy Questionnaire-Revised; AEQ, Alcohol Expectancy Questionnaire. To determine whether the lost participants had different profiles on their TLFB, AUDIT, DRSEQ-R, and AEQ scores, those who did not complete the second part of the study were compared to those who did (Table C). The two groups were analyzed using Student's *t*-test or a Mann-Whitney *U* test for the four variables. No statistically significant differences were observed between these groups, indicating that the lost participants did not significantly differ in terms of alcohol-related variables. ***P* < .01.

Table C. Mean scores (and standard deviations) for the TLFB, AUDIT, DRSEQ-R, and AEQ in the groups of participants who did not complete the second part of the study and those who did.

	No data for the second part	Data for the second part	Statistic	<i>P</i>	<i>d</i>
TLFB	10.88 (10.31)	10.16 (13.41)	<i>U</i> = 2305	.249	0.06
AUDIT	9.20 (5.73)	8.05 (5.66)	<i>U</i> = 2253	.160	0.20
DRSEQ-R	86.13 (17.69)	84.20 (16.66)	<i>U</i> = 2365	.320	0.11
AEQ	213.85 (113.52)	212.17 (1.17)	<i>t</i> = 0.09	.929	0.02

Note. TLFB, Alcohol Timeline Follow-back; AUDIT, Alcohol Use Disorders Identification Test; DRSEQ-R, Drinking Refusal Self-Efficacy Questionnaire-Revised; AEQ, Alcohol Expectancy Questionnaire.

Table D. Mean scores (and standard deviation) for the AUDIT, DRSEQ-R, and AEQ in the groups of participants who successfully completed OMAAP and those who did not, in the worst-case scenario.

	Successful completion	Unsuccessful completion	Statistic	<i>P</i>	<i>d</i>
AUDIT	7.13 (5.29)	9.02 (5.81)	<i>U</i> = 2734	.022*	0.34
DRSEQ-R	84.55 (18.63)	84.71 (15.83)	<i>U</i> = 3393	.843	0.01
AEQ	186.97 (105.94)	227.73 (98.75)	<i>t</i> = -2.55	.012*	0.40

Note. AUDIT, Alcohol Use Disorders Identification Test; DRSEQ-R, Drinking Refusal Self-Efficacy Questionnaire-Revised; AEQ, Alcohol Expectancy Questionnaire. **P* < .05.

References

- Allen DC, Gonzales SW, Grant KA. Effect of repeated abstinence on chronic ethanol self-administration in the rhesus monkey *Psychopharmacology*. 2018;235:109–20. <https://doi.org/10.1007/s00213-017-4748-9>.
- Ballard J. What is dry January? *Br J Gen Pract*. 2016;66:32–2. <https://doi.org/10.3399/bjgp16X683173>.
- Bollen Z, Pabst A, Creupelandt C. *et al*. Longitudinal assessment of alcohol consumption throughout the first COVID-19 lockdown: contribution of age and pre-pandemic drinking patterns *Eur Addict Res*. 2021;28:48–55. <https://doi.org/10.1159/000518218>.
- Bovens RHL, Hoevenaars G, Planken MJE. De bijdrage van IkPas aan de landelijke en lokale preventieakkoorden TSG *Tijdschr Gezondheidswet*. 2022;100:72–5. <https://doi.org/10.1007/s12508-022-00339-w>.
- Burish TG, Maisto SA, Cooper AM. *et al*. Effects of voluntary short-term abstinence from alcohol on subsequent drinking patterns of college students *J Stud Alcohol*. 1981;42:1013–20. <https://doi.org/10.15288/jsa.1981.42.1013>.
- Carey MP, Carey KB, Maisto SA. Effects of short-term abstinence from alcohol on subsequent drinking patterns of social drinkers *J Clin Psychol*. 1988;44:298–301. [https://doi.org/10.1002/1097-4679\(198803\)44:2<298::AID-JCLP2270440235>3.0.CO;2-P](https://doi.org/10.1002/1097-4679(198803)44:2<298::AID-JCLP2270440235>3.0.CO;2-P).
- Gache P, Michaud P, Landry U. *et al*. The alcohol use disorders identification test (AUDIT) as a screening tool for excessive drinking in primary care: reliability and validity of a French version *Alcohol Clin Exp Res*. 2005;29:2001–7. <https://doi.org/10.1097/01.alc.0000187034.58955.64>.
- Gisle L, Demarest S, Drieskens S. Enquête de santé 2018: *Consommation d'alcool*. Bruxelles: Sciensano; 2018. <https://www.sciensano.be/fr/biblio/enquete-de-sante-2018-consommation-dalcool>.

- Goldman MS, Greenbaum PE, Darkes J. A confirmatory test of hierarchical expectancy structure and predictive power: discriminant validation of the alcohol expectancy questionnaire *Psychol Assess*. 1997;9:145–57. <https://doi.org/10.1037/1040-3590.9.2.145>.
- Hamilton I, Gilmore I. Could campaigns like dry January do more harm than good? *BMJ*. 2016;352:i143. <https://doi.org/10.1136/bmj.i143>.
- Hillgrove T, Thomson L. *Evaluation of the Impact of Febfast Participation*. Carlton, Australia: Victorian Health Promotion Foundation (VicHealth); 2012.
- Kreusch F, Vilenne A, Quertemont E. Assessing the stimulant and sedative effects of alcohol with explicit and implicit measures in a balanced placebo design *J Stud Alcohol Drugs*. 2013;74:923–30. <https://doi.org/10.15288/jsad.2013.74.923>.
- Lee NK, Greely J, Oei TPS. The relationship of positive and negative alcohol expectancies to patterns of consumption of alcohol in social drinkers *Addict Behav*. 1999;24:359–69. [https://doi.org/10.1016/S0306-4603\(98\)00091-4](https://doi.org/10.1016/S0306-4603(98)00091-4).
- Naassila M. Quels bénéfices des défis “sans alcool”? *Alcoolologie et Addictologie*. 2019;41:297–307. <http://95.142.161.48/index.php/aa/article/view/866>.
- Nutt DJ, King LA, Phillips LD. Drug harms in the UK: a multi-criteria decision analysis *Lancet*. 2010;376:1558–65. [https://doi.org/10.1016/S0140-6736\(10\)61462-6](https://doi.org/10.1016/S0140-6736(10)61462-6).
- Oei TPS, Hasking PA, Young RMCD. Drinking refusal self-efficacy questionnaire-revised (DRSEQ-R): a new factor structure with confirmatory factor analysis *Drug Alcohol Depend*. 2005;78:297–307. <https://doi.org/10.1016/j.drugalcdep.2004.11.010>.
- Pados E, Kovács A, Kiss D. *et al*. Voices of temporary sobriety – a diary study of an alcohol-free month in Hungary *Subst Use Misuse*. 2020;55:839–50. <https://doi.org/10.1080/10826084.2019.1705861>.
- Pennay A, MacLean S, Rankin G. *et al*. Hello Sunday morning: strategies used to support temporary alcohol abstinence through participation in an online health promotion program *Health Promot J Austr*. 2018;29:321–7. <https://doi.org/10.1002/hpja.22>.
- Rodd ZA, Bell RL, Sable HJK. *et al*. Recent advances in animal models of alcohol craving and relapse *Pharmacol Biochem Behav*. 2004;79:439–50. <https://doi.org/10.1016/j.pbb.2004.08.018>.
- Saengow U. Drinking abstinence during a 3-month abstinence campaign in Thailand: weighted analysis of a national representative survey *BMC Public Health*. 2019;19:1688. <https://doi.org/10.1186/s12889-019-8051-z>.
- Saunders JB, Aasland OG, Babor TF. *et al*. Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption—II *Addiction*. 1993;88:791–804. <https://doi.org/10.1111/j.1360-0443.1993.tb02093.x>.
- Sliedrecht W, de Waart R, Witkiewitz K. *et al*. Alcohol use disorder relapse factors: a systematic review *Psychiatry Res*. 2019;278:97–115. <https://doi.org/10.1016/j.psychres.2019.05.038>.
- Sobell LC, Sobell MB. Timeline follow-back. In: Litten RZ, Allen JP (eds.), *Measuring Alcohol Consumption: Psychosocial and Biochemical Methods*. Totowa, NJ: Humana Press, 1992, 41–72. https://doi.org/10.1007/978-1-4612-0357-5_3.
- Spanagel R. Recent animal models of alcoholism *Alcohol Res Health*. 2000;24:124–31. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6713016/>.
- de Ternay J, Leblanc P, Michel P. *et al*. One-month alcohol abstinence national campaigns: a scoping review of the harm reduction benefits *Harm Reduct J*. 2022;19:24. <https://doi.org/10.1186/s12954-022-00603-x>.
- The Jamovi Project*. *Jamovi (Version 2.5)*. Computer Software. Sydney, Australia: The Jamovi Project; 2024. <https://www.jamovi.org>.
- Thienpondt A, Van Cauwenberg J, Van Damme J. *et al*. Process evaluation of the Belgian one-month-without alcohol campaign “Tournée Minérale”: a mixed method approach *BMC Public Health*. 2024;24:383. <https://doi.org/10.1186/s12889-024-17941-z>.
- Vautier S, Moncany D. Positive alcohol expectancies in the French context: factorial properties of data from a large sample of alcohol drinkers *Eur Rev Appl Psychol*. 2008;58:133–44. <https://doi.org/10.1016/j.erap.2007.02.002>.
- Vilenne A, Quertemont E. Explicit and implicit positive alcohol expectancies in problem and non-problem drinkers: differences across age groups from Young adolescence to adulthood *Front Psychol*. 2015;6:6. <https://doi.org/https://www.frontiersin.org/articles/10.3389/fpsyg.2015.01773>.
- de Visser RO, Nicholls J. Temporary abstinence during dry January: predictors of success; impact on well-being and self-efficacy *Psychol Health*. 2020;35:1293–305. <https://doi.org/10.1080/08870446.2020.1743840>.
- de Visser RO, Piper R. Short- and longer-term benefits of temporary alcohol abstinence during “dry January” are not also observed among adult drinkers in the general population: prospective cohort study *Alcohol Alcohol*. 2020;55:433–8. <https://doi.org/10.1093/alcal/agaa025>.
- de Visser RO, Robinson E, Bond R. Voluntary temporary abstinence from alcohol during “dry January” and subsequent alcohol use *Health Psychol*. 2016;35:281–9. <https://doi.org/10.1037/hea0000297>.
- de Visser RO, Robinson E, Smith T. *et al*. The growth of “dry January”: promoting participation and the benefits of participation *Eur J Pub Health*. 2017;27:929–31. <https://doi.org/10.1093/eurpub/ckx124>.
- Wood EE, Liang Y, Moon T-J. *et al*. Reduced alcohol use increases drink-refusal self-efficacy: evidence from a contingency management study for DWI arrestees *Drug Alcohol Depend*. 2023;242:109706. <https://doi.org/10.1016/j.drugalcdep.2022.109706>.
- World Health Organization (WHO). *Global Status Report on Alcohol and Health and Treatment of Substance Use Disorders*. Geneva: World Health Organization; 2024. <https://www.who.int/publications/item/9789240096745>.
- Yeomans H. New year, new you: a qualitative study of dry January, self-formation and positive regulation *Drugs (Abingdon Engl)*. 2019;26:460–8. <https://doi.org/10.1080/09687637.2018.1534944>.