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Communication-Annealing Strategies for Spray Deposited Precursor Films of p-Type $\text{CuCr}_{1-x}\text{Mg}_x\text{O}_2$

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The PEERCARE peer led programme for college students: A qualitative evaluation of a “chill-out” harm reduction space

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Abstract

Aims: Harmful patterns of alcohol consumption, such as binge drinking, are prevalent among the student population at universities. Despite the risks of this behaviour, few secondary prevention

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programmes have been created to meet the specific needs of this population. The PEERCARE programme is a peer-based prevention programme that seeks harm reduction for alcohol overuse in party environments, among other goals. To do so, a “chill-out” space is created by peer educators in party environments to limit the risks associated with alcohol overuse. This study sought to examine peer educators’ experience with a chill-out space to identify their specific actions, difficulties and needs, and to consider possibilities for improvement. **Methods:** Nine engineering students from one French *grandes écoles* campus trained as peer educators (six men and three women; mean age 21 years) participated. Semi-structured interviews were used for data collection. **Results:** The thematic analysis showed that the peer educators were highly engaged with this programme in response to alcohol overuse on their campus. The chill-out space was lauded for its non-judgemental and non-moralising nature. In addition, the numerous risk reduction activities that were enacted confirmed the benefits of these spaces during parties. The peer educators’ experience was positive, and acting as managers of the chill-out space seemed to answer to a sense of competence recognition. **Conclusion:** This study confirms the relevance of utilising chill-out spaces during parties and provides preliminary data on the deployment and management of peer-led chill-out space approaches. Expanding the implementation of such spaces to more educational institutions is recommended.

Keywords

alcohol, binge drinking, harm reduction, peer support, prevention programme

Introduction

In France, alcohol is a legal and easily accessible psychoactive substance, the consumption of which is widely culturally accepted, particularly on festive occasions (World Health Organization, 2018). It is one of the most-consumed psychoactive substances among young people, particularly among those aged 20–24 years (World Health Organization, 2018). Alcohol use begins in adolescence, a particularly high-risk period for example from a brain maturation perspective (Hermens et al., 2013; Meruelo et al., 2017; Tapert et al., 2004). Young people are more likely than adults to engage in binge drinking behaviours—a specific pattern of alcohol consumption characterised by excessive episodic drinking with the primary intention of becoming intoxicated quickly (Hermens et al., 2013; Lannoy et al., 2017; Maurage et al., 2019). As in other European countries, the “culture of intoxication” is present at French universities, with students aware of the fact that alcohol is a big problem on their campuses (Van Hal et al., 2018).

In terms of students in sororities and fraternities (Wechsler et al., 2009), excessive alcohol consumption seems to be even more prevalent among those in competitive academic careers, such as the *engineering grandes écoles* (Slutske, 2005; Tavolacci et al., 2016). A study conducted in Haute-Normandie between 2009 and 2013 showed that among 601 engineering school students aged 18–25 years, 20.1% reported engaging in binge drinking occasionally (once a month or less) and 15.1% frequently (more than twice a month). Researchers have observed a significant positive association between binge drinking and problematic alcohol use among French college students (Tavolacci et al., 2016). College schools, which involve alternating between years of preparatory classes and campus life, are ideal circumstances for festivities to be held at which alcohol is prominent. That is, students who face intense academic competition in their preparatory classes first adopt ascetic lifestyles in which they overinvest in academics to the detriment of their social lives. However, admission to school is a form of liberation, and this asceticism

Table 1. Description of the PEERCARE programme modules.

| | Preventive objective | Goal | Content | Method | Duration (h) |
|--------------------|----------------------|--|---|--|--------------|
| Theoretical module | Health education | Learn the principles of peer-led prevention, addiction and harm reduction | <ul style="list-style-type: none"> • Student peer-led interventions • Determinants of substance use in young adults • Typology of use and associated risk • Alcohol use effects • Harm reduction | Lecture-based classes | 7 |
| Practical module 1 | Indicated prevention | Learn how to detect risky or problematic alcohol use and speak with students displaying this behaviour | <ul style="list-style-type: none"> • Early detection of problematic alcohol use • Encouragement of the self-assessment of substance use in the student community • Learn how to engage in a discussion about alcohol use with another student • Provide emotional support • Know how to refer people to health professionals | Case study analysis Role-plays Supervision sessions | 11 |
| Practical module 2 | Harm reduction | Learn how to deploy a chill-out harm reduction space and manage problematic or crisis situations at festive events | <ul style="list-style-type: none"> • Developing and managing a chill-out area • First aid after alcohol intoxication • Managing aggressive behaviour and conflict | Active learning strategy Role-plays Supervision sessions | 11 |

is replaced by hedonism (Masse, 2002). Festive alcoholic rituals are established and constitute a real rite of passage, particularly during integration weekends and parties. Initiated peers particularly value “knowing how to drink”, or drinking large amounts of alcohol quickly while continuing to participate in the festivities. In this context, acquiring and conforming to school drinking norms allow new students to integrate into a peer group and build a shared identity (Albert et al., 2013). Higher education students also have easier access to psychoactive substances than young adolescents, as they have greater financial resources and legal freedoms and less parental control, a context that favours experimentation (Botvin & Griffin, 2007; White, 2006). Furthermore, living in a campus community can contribute to drinking behaviours that were previously confined to festive events becoming more frequent, especially among students with existing vulnerabilities (Jennison, 2004). Therefore, despite the lack of consensus in the literature, several studies have shown that living on campus is associated with alcohol consumption (Simons-Morton et al., 2015), increased alcohol-related harm (Rickwood et al., 2011) and a greater prevalence of alcohol dependence (Dawson et al., 2004).

Despite these findings, data from meta-analyses have shown that programmes to prevent addictive behaviours are mainly focused on primary prevention and aimed at middle- and high-school students due to the early age of initial experimentation (Das et al., 2016). Few programmes focusing exclusively on addictive behaviours are tailored to young adults in higher education. However, given the short- and long-term risks of excessive alcohol consumption, selective prevention and harm reduction programmes tailored to the student population, especially in *grandes écoles*, seem necessary.

Studies of existing prevention programmes have recommended methods to prevent substance use disorders in younger populations (Botvin & Griffin, 2007; Das et al., 2016). First, knowledge transfer is important. Previous studies have shown

that a substantial proportion of university students lack knowledge about responsible drinking practices, such as the identification of standard drinks, blood alcohol concentration (BAC) limits for driving and actions effective in lowering BAC (Dowling et al., 2006). These results suggest that students can benefit from increased alcohol awareness, which can provide them with the same level of knowledge about responsible drinking practices and aid them in making informed choices about their alcohol consumption (Botvin & Griffin, 2007; Corney & du Plessis, 2022; MacArthur et al., 2016). However, while knowledge transfer appears to affect people’s understanding of the risks associated with substance use, it does not necessarily change their behaviours (Bruvold, 1993). For example, a study conducted in Sweden found that despite the existence of alcohol policies and guidelines developed by student unions, risky alcohol consumption among university students remained prevalent (Strandberg et al., 2019). Hence, awareness of the dangers involved in excessive alcohol consumption does not deter risky behaviours (Calvert et al., 2010). Nevertheless, knowledge transfer remains essential, but how knowledge is transmitted among this student population is equally important (Leontini & Corney, 2023). Indeed, studies have demonstrated that traditional approaches based on “one way, top down” methods, transmitting only facts presented as “do’s and don’ts”, have limited success in engaging young people (Leontini & Corney, 2023; Wilkinson & Ivsins, 2017). Models based on dynamic educational methods, in which students dialogue and become subjects of knowledge rather than objects or “passive recipients”, can thus lead to the greater appropriation of messages (Corney et al., 2020; Corney & du Plessis, 2022; Matthews, 2014). Second, peer participation is crucial to reaching this age group. The most effective programmes adopt developmental approaches that consider the psychosocial issues related to the construction of young people’s identities, which develop mainly through exchanges with their peer groups (Botvin & Griffin, 2007). In these programmes, volunteer peers are trained

Table 2. Sociodemographic characteristics of the participants.

| | Total (<i>n</i> = 9) |
|---------------------------------|-----------------------|
| Sex | |
| Male | 6 |
| Female | 3 |
| Mean age (years) | 21.0 |
| Year of study | |
| First year | 4 |
| Second year | 5 |
| Member of a student association | |
| Yes | 9 |
| No | 0 |

Note. Values are given as *n* unless otherwise indicated.

to be resources for other individuals in their groups. Adolescence, defined as the ages between 12 and 25 years, is a time of identity construction and independence-seeking (Brizio et al., 2015). Therefore, young people more easily identify with and trust people who are similar to them. Moreover, horizontal communication is perceived as less judgemental than vertical communication, or information disseminated by expert adults, and thus promotes better adherence to healthy behaviours (Cuijpers, 2002). Peer educators also know how to tailor communication according to the characteristics of the target population, which contributes to the effectiveness of these programmes (Botvin & Griffin, 2007; MacArthur et al., 2016). Third, the importance of interactivity has been emphasised. Interactive programmes appear to be two to four times more effective than noninteractive programmes and are even more effective when conducted by peers (Hawkins et al., 1992; Tobler et al., 2000).

However, scientific studies evaluating peer-led interventions to prevent alcohol consumption among young people are scarce (MacArthur et al., 2016). In their recent overview, Lavilla-Gracia et al. (2022) identified only 13 quantitative studies conducted in the last three decades, all of which were conducted in the USA, evaluating the effectiveness of nine peer-led interventions for preventing alcohol consumption in a college setting (the Voice of Reason programme, Brief Advice

sessions, Peer Theater, the Alcohol Education programme, the Perceptions of Alcohol Norms intervention, the Motivational intervention, the Alcohol Skills Training programme, Lifestyle Management classes and Brief Alcohol Screening and Intervention for College Students). According to the National Institute on Alcohol Abuse and Alcoholism's (NIAA, 2019) guide, three types of interventions have been proposed: education and awareness; cognitive behavioural or skill-based; and motivation or feedback-related approaches. However, these interventions usually take place outside events where alcohol consumption is present. For example, although the French Noz'ambule programme (CIRDDB, 2012) has a prevention module that is conducted by trained students who go out to meet other young people at night in public spaces, as well as a harm reduction module that is conducted by professionals, peer intervention is limited to raising awareness in public spaces before student parties. Currently, professionals conduct risk and harm reduction actions during parties, probably because of the public context in which the parties take place. However, campuses are special environments where student parties occur in private locations. In this context, trained peers can perform risk and harm reduction actions as well, particularly because of the responsibility that student associations bear in the organisation and management of parties at the institution. Finally, as Lavilla-Gracia et al. (2022) highlighted, no existing peer-led intervention evaluates the impact of the intervention on the peer educators themselves, despite evidence showing its positive effect (i.e., improvement of educators' interpersonal communication and self-esteem) (King & Fazel, 2021; Newton & Ender, 2010). Hence, it is recommended that future studies evaluate the impact of these interventions on the educators conducting them.

Based on these observations and recommendations from the literature reviewed, as well as at the request of institutions for support to address the issue of addictive behaviours on campus (particularly excessive alcohol

Table 3. Thematic tree of themes and subthemes highlighted by peer educators.

| Theme and subtheme | Participant | | | | | | | | | Frequency | Case | % Case | Verbatim example |
|---|-------------|---|---|---|---|---|---|---|---|-----------|------|--------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | |
| Motivations to become a peer educator | | | | | | | | | | | | | |
| Sponsorship | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 5 | 5/9 | 55.5 | <i>I found myself in the association because I knew the presidents of the year before because they were my sponsors.</i> |
| Dealing with the overuse of alcohol and other drugs ^a | 4 | 3 | 1 | 2 | 3 | 2 | 0 | 1 | 2 | 18 | 8/9 | 88.8 | <i>There were many who got drunk very easily. It took a lot of people to take care of them.</i> |
| Lack of judgement and moralising ^a | 4 | 2 | 0 | 4 | 2 | 0 | 4 | 3 | 1 | 20 | 7/9 | 77.7 | <i>There is no judgement. We are all benevolent, and above all, we do not have this image of moralising.</i> |
| Need for competence and recognition ^a | 4 | 4 | 4 | 1 | 5 | 3 | 2 | 4 | 5 | 32 | 9/9 | 100 | <i>It was to bring help to people, but to see that the help we bring is useful really helps people.</i> |
| Functions of the chill-out space | | | | | | | | | | | | | |
| Not needing to leave the party | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 5 | 2/9 | 22.2 | <i>At the chill-out, you can sit down and then go back to the party, so it's ultra-positive.</i> |
| A place to socialise and relax | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 4 | 3/9 | 33.3 | <i>I thought it was nice to have a place where you could just sit and talk with your friends, drink some water.</i> |
| Feeling safe ^a | 0 | 0 | 0 | 1 | 1 | 3 | 2 | 3 | 1 | 11 | 6/9 | 66.6 | <i>Our security levels are much higher than they used to be because, a few years ago, the chill-out space didn't exist in our parties.</i> |
| Experience in their role as peer educators in the chill-out space | | | | | | | | | | | | | |
| Personal investment and cost ^a | 2 | 2 | 4 | 3 | 6 | 5 | 2 | 3 | 3 | 30 | 9/9 | 100 | <i>Before I did this, I never thought I'd have so much fun at a party just by staying completely sober and working.</i> |
| Positive perception of the training | 4 | 2 | 1 | 0 | 0 | 3 | 1 | 1 | 0 | 12 | 6/9 | 66.6 | <i>The training really confirmed to me the importance of doing harm reduction, and it gave me a lot of keys to implement such programmes.</i> |

(continued)

Table 3. (continued)

| Theme and subtheme | Participant | | | | | | | | | Frequency | Case | Case % | Verbatim example |
|--|-------------|---|---|---|---|---|---|---|---|-----------|------|--------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | |
| Actions of the peer educators in the chill-out space | | | | | | | | | | | | | |
| Inform about the risks | 2 | 6 | 4 | 0 | 1 | 0 | 1 | 1 | 2 | 17 | 7/9 | 77.7 | It also allowed me to communicate with people about alcohol use and the risks. |
| Be supportive and vigilant | 1 | 0 | 1 | 3 | 5 | 1 | 0 | 0 | 2 | 13 | 6/9 | 66.6 | I take care of them during the party; I watch over them. |
| Interact with people under the influence of alcohol ^a | 4 | 3 | 2 | 1 | 1 | 4 | 2 | 3 | 3 | 23 | 9/9 | 100 | Typically, the actions we have are to approach a person who has drunk too much because, generally, they don't come to us by themselves. Approach them, manage to hold the discussion, then make them sit down. |
| Rehydrate students ^a | 3 | 1 | 0 | 3 | 5 | 1 | 1 | 1 | 4 | 19 | 8/9 | 88.8 | Getting people to drink water was one of our primary goals. |
| Assist people who are vomiting ^a | 2 | 2 | 1 | 0 | 2 | 3 | 0 | 2 | 2 | 14 | 7/9 | 77.7 | It's holding their garbage bag when they want to vomit. |
| Differentiate between substances used | 1 | 2 | 0 | 1 | 0 | 2 | 1 | 0 | 3 | 10 | 6/9 | 66.6 | There is also the recognition of the different symptoms of drugs. |
| Organise and manage the chill-out space | 2 | 3 | 2 | 1 | 0 | 1 | 3 | 3 | 2 | 17 | 8/9 | 88.8 | We mainly discussed how we could arrange the chill-out space, the extra material we could bring. |
| Collaborate with the Mobile First Aid Unit ^a | 1 | 3 | 1 | 5 | 0 | 1 | 0 | 2 | 4 | 17 | 7/9 | 77.7 | Typically, if we have any doubts, we take him immediately to the Mobile First Aid Unit. |
| The difficulties that peer educators encountered | | | | | | | | | | | | | |
| Addressing uncertainty | 1 | 8 | 0 | 2 | 0 | 0 | 0 | 2 | 3 | 16 | 5/9 | 55.5 | As there is no miracle solution, we have a lot of difficulties explaining to people who ask us for advice on what to do. |
| Making the chill-out space attractive ^a | 0 | 2 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | 9 | 6/9 | 66.6 | We had thought about how to organise the chill-out space with other activities. But the problem is that bringing in games also requires watching the people who play. |
| Determining a perimeter of intervention | 1 | 1 | 1 | 2 | 3 | 0 | 0 | 2 | 0 | 10 | 6/9 | 66.6 | We're always really torn between whether we're a space to relax, have fun, sit down, have a drink of water or whether we're a first aid space. |

(continued)

Table 3. (continued)

| Theme and subtheme | Participant | | | | | | | | | Frequency | Case | % Case | Verbatim example |
|--|-------------|---|---|---|---|---|---|---|---|-----------|------|--------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | |
| Helping people understand the role of the chill-out space ^a | 0 | 0 | 4 | 1 | 2 | 1 | 3 | 0 | 0 | 11 | 5/9 | 55.5 | We had to explain that we were serving a purpose, that it was something we had tested on our campus, and that it worked. As soon as there are people who are not from our school, who don't necessarily know about these prevention devices, they are less inclined to respect its existence. |
| Gaining legitimacy ^a | 2 | 4 | 0 | 1 | 1 | 2 | 0 | 1 | 1 | 12 | 7/9 | 77.7 | We have a very young association on campus. We were quite badly seen because we were known to be people who partied and go out often. |
| Handling refusal | 0 | 1 | 0 | 1 | 2 | 0 | 3 | 0 | 3 | 10 | 5/9 | 55.5 | It's quite easy, when you move around the room, to recognise the people who would need help; afterward, it's not so easy to convince them. |
| Addressing misbehaviour ^a | 1 | 1 | 3 | 5 | 1 | 2 | 3 | 0 | 3 | 19 | 8/9 | 88.8 | There are uncontrollable cases, people who just start to get completely excited under alcohol and start running everywhere. |
| Avenues for improvement | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 5 | 3/9 | 33.3 | Get people in training to talk about unmanageable people. |
| Learn how to handle misbehaviour ^a | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 2/9 | 22.2 | It would be nice to make a summary report or to send the slide show of what we learn during the training. |
| Have a training summary document ^a | 0 | 1 | 2 | 0 | 1 | 0 | 3 | 0 | 0 | 7 | 4/9 | 44.4 | Try to offer, as much as possible, the complete training, even if it's long, it takes time, and it must surely cost money because I think we underestimate the number of people who would be interested in doing that. |
| Offer complete training | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 2/9 | 22.2 | Giving instructions, even if they can't be absolute. I would be more serene if I knew approximately what to do in the most common situations. |
| Provide instructions for a plan of action | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |

Note. Participants = the number of times the subtheme was mentioned by each participant; Frequency = the number of times the subtheme was mentioned overall; Case = the number of interviews in which the subtheme was mentioned; % Case = the percentage of interviews containing the subtheme.

^aSubthemes that were discussed in the "Results" section.

consumption), a peer-led prevention programme named PEERCARE, a programme for teaching about and mutual aid in the detection of risky behaviours among students, was created and deployed at several French *grandes écoles* starting in 2017.

The PEERCARE programme is a multi-component peer-led prevention programme intended to reduce alcohol-related risks in the student environment. The programme has three specific prevention objectives: (1) health education: raise awareness about addictive behaviours; (2) indicated prevention: detect substance misuse to prevent substance use disorders; and (3) harm reduction: establish risk and harm reduction measures in party environments (i.e., manage a “chill-out” space during parties).

Student volunteers can join the programme on request throughout the academic year. Each course can accommodate up to 20 students per session. For each objective of the programme, there is a 1-day training module. Practical training courses are accompanied by two sessions of group supervision, during which students can reflect on their experience as peer educators and the questions that they have about or the difficulties posed by this practice. See Table 1 for the content of each module.

The main objective of the harm reduction module is to train peer educators to deploy and manage a “chill-out” space. The chill-out space is a friendly, safe space that students run during parties. It is relatively quiet and removed from the main party, allowing students to rest and chat. They can find assistance in handling alcohol overconsumption or a bad alcohol consumption experience. Depending on the organisers’ objectives, the chill-out space can also be a place to promote health by sharing information about and discussing alcohol consumption.

During training, peer educators are invited to determine the risk reduction objective of the event, the means available for and feasibility of hosting the event, the shape and animation of the space, the rules of the event, and how they want to communicate about or in the chill-

out space. They also learn about the different effects of psychoactive substances (such as alcohol, cannabis, ecstasy and cocaine) so that they can better assist students who find themselves in trouble due to the consumption of these substances. Peer educators are trained to assess situations, reassure students and provide students with assistance; they also learn about good communication practices when addressing an impaired student (due to intoxication, anxiety, a coma, etc.) and the immediate responses that are possible in various situations. After the initial training, peer educators are accompanied to install chill-out spaces and manage their first parties. Initially developed for rave parties, this harm reduction device seems to meet the needs of universities whose campuses have a tradition of festive events. To the best of our knowledge, they remain anecdotal in France and, therefore, represent a form of innovation that is important to understand. Hence, the aims of this study, which is part of a wider project to evaluate the PEERCARE programme, were: (1) to understand peer educators’ experiences with the project in terms of its perceived benefits and difficulties; (2) to identify peer educators’ needs; and (3) to document the concrete actions implemented in a chill-out space. Such a study can provide information about the value of such an intervention from the students’ point of view and highlight possible developments in both the chill-out space and student training.

Methods

Participants and recruitment

In 2021–2022, 80 students from CentraleSupélec (Paris–Saclay campus) benefited from the PEERCARE programme, including 40 students (30 men and 10 women) who underwent the chill-out space training module. Among the 40 students invited to participate in the study, 9 (22.5%) accepted (six men and three women; mean age 21.0 years).

The inclusion criteria were that students had to be in their first or second year of study and had to participate in the PEERCARE programme as peer educators. Participants were recruited from the end of January to the end of February 2022 via an email requesting voluntary participation in the study. The email contained a link to the study description and consent form. Only students who signed the consent form were included to ensure that our research was ethically and deontologically sound (Vallerand & Hess, 2000).

Interviews

Half-hour semi-structured interviews were conducted via Zoom. Video conferencing was selected to facilitate organisation in consideration of the practical constraints of interviewing students. Semi-structured interviews were used to gather peer educators' experiences during the training for and deployment of chill-out spaces and their experiences as peer educators. This allowed participants to share their experiences directly while addressing themes related to the study objectives (Imbert, 2010). Sociodemographic data on participants' age, gender, year of study and involvement in student associations were collected at the beginning of the interviews. Given the degree of saturation, 7–12 interviews were initially planned (Guest et al., 2006).

Data analysis

Thematic content analysis was performed on the interview data. This involved identifying different themes in the interviewees' discourses that were related to the objectives of the study (Paillé & Mucchielli, 2021). Continuous analysis was used because, although it is slower, it allows for a more detailed analysis of the corpus (Paillé & Mucchielli, 2021). Hence, a thematic tree was built concurrently with the analysis of the corpus by identifying, grouping and prioritising the themes (Paillé & Mucchielli, 2021). Thematization was performed bottom-up (from themes to headings), and a thematization journal was kept to organise the

thematic tree. Thematic repetitions within a given interview and recurrences between interviews were noted to estimate their salience.

Results

The sociodemographic characteristics of the participants are presented in Table 2. The sample ($n=9$) consisted of six men and three women who were aged 19–22 years ($M = 21.0$ years, $SD = 0.14$) and members of at least one student association. The seven themes and 28 subthemes identified during the thematic content analysis are presented in Table 3. Since all of the themes and subthemes could not be presented in this article, only those that best answered our research questions were developed, resulting in 15 subthemes from six themes.

Motivations to become a peer educator

When peer educators were asked about their motivations for engaging in peer harm prevention, most ($n=8$) cited the need to address the overuse of alcohol and other drugs on campus. According to Participant 1, alcohol was the most used substance, followed by poppers, cannabis and other less-common products: *“Basically, regarding consumption on campus, it’s alcohol. Poppers are everywhere [...] I’ve never seen any laughing gas, but apparently some people use them; otherwise, it’s weed. But the good thing is that we don’t have any hard drugs that make things so much more complicated.”* The overconsumption of alcohol often begins during integration into CentraleSupélec, a period described by Participant 5 as a time of “letting go” after intensive work in preparatory classes: *“We’re coming out of preparatory classes. It’s 2 years that are rather complicated. The fact of being ‘dropped’ at the integration, there were many who drank a lot [...] It’s a new life. For many, we leave home. So, it’s really the moment to test the limits, and that’s why the contrast is very strong.”* The excessive, repeated consumption of alcohol was described as harming students' health and potentially

leading to dramatic consequences: *"We heard that a girl, a first-year student, ended up in the hospital with over 4 grams, intubated. Doctors said, 'Her condition was almost life-threatening'... It makes you wonder about the devastating effects of alcohol"* (Participant 1). In response to these concerns, the school administration implemented measures to control the consumption of alcohol, such as allowing only beer, cider and wine at parties. However, these measures failed to prevent students from consuming hard liquor in their residences before parties: *"Even if they try at CentraleSupélec, there is only beer in the parties, but people will drink hard liquor before the parties"* (Participant 4). Therefore, students emphasised the need for prevention and risk reduction measures, especially as some had never had access to prevention interventions before: *"I realised with the training that, in our school years, we never had any prevention on this subject before [...] Personally, except in middle school, when the local police officer came to show us hashish [...], I never had any prevention intervention"* (Participant 1).

Participants were also motivated to participate in the PEERCARE programme because of its lack of judgement and moralising ($n=7$). Participants emphasised the value of horizontal communication and having a common language with their peers: *"We don't have to be careful about the language we use [...] It's not as if it was a 50-year-old family man with greying hair who speaks 'formally'"* (Participant 1). Peer-to-peer relationships facilitate mutual identification, unlike vertical communication with an expert adult, which was perceived as moralising: *"Even if an adult also has advice, we identify more easily with a student of our age. There is less of a moralising aspect. You don't feel like your parents are talking to you [...] The idea of being careful with your consumption is more easily accepted with this horizontal communication, rather than if there is an authority figure who can be rejected more easily"* (Participant 8). Some also reported that they

found a moralising approach ineffective: *"We know that it's useless to tell people not to drink because they will do it anyway"* (Participant 4). However, identification with peers allows for the creation of a mutual aid relationship that is free of judgement: *"We know that sometimes people are in the same situation, so we are more at ease"* (Participant 7); *"We also like to party, and we were also sometimes not in our best shape, so we would never judge their condition"* (Participant 1). Finally, some peer educators mentioned that being the same age and from the same school as the students they were supporting increased their proximity and availability to these students: *"Peer educators are people we know and can talk to outside of the parties if we have questions. I think it's appropriate that it's a school association. They create a very comfortable environment, which would be more difficult to create with outside speakers"* (Participant 7).

Peer prevention also satisfies the need for competence and recognition. This subtheme was the most frequently mentioned (32 times) by all participants ($n=9$). Specifically, receiving training strengthened their self-confidence and sense of competence: *"I think the training gave me more confidence in my actions. I think it made me more effective"* (Participant 2). Helping and feeling useful aroused positive emotions and a feeling of personal satisfaction: *"Without even waiting for the thank you, just giving to people is something pleasant"* (Participant 4); *"At the end, there is still a feeling of duty accomplished, of having been useful"* (Participant 8). In addition, feedback and thanks from their peers gave meaning to peer educators' actions and satisfied their need for recognition: *"When they come back the next day and tell me, 'Thank you so much for taking care of us,' it gives a sense of having done that"* (Participant 3); *"When you do it, you just do it, you don't realise. It's when people come to thank you that you say to yourself, 'I helped someone'"* (Participant 6).

Functions of the chill-out space

According to the participants, one of the most important functions of the chill-out space was to provide students with a feeling of safety ($n = 6$). This is related to knowing where to go in case of difficulty, both for oneself and for others: *“This avoids being all alone, feeling unwell, or having other incompetent people who have to manage us [...] It’s reassuring to know that there is a chill-out space because we can always bring our friends there”* (Participant 7). This feeling also seemed to have increased following the implementation of the chill-out space, according to Participant 8: *“Our security levels are much higher than they used to be because, a few years ago, the chill-out space didn’t exist in our parties.”*

Peer educators’ actions in the chill-out space

The action performed in the chill-out space that all participants ($n = 9$) cited most frequently was interacting with people under the influence of alcohol. These interactions consisted primarily of asking students questions to assess their risk level and adjust the support provided: *“Questions like ‘Have you eaten?’ and ‘When was your last drink?’ that help to determine the person’s blood alcohol level in order to properly take care of them”* (Participant 8). Peer educators also had to adapt their communication methods to their peers’ state of intoxication, as a given state of intoxication can manifest very differently from one individual to another: *“Knowing how to adapt to the person, getting help from a guy if you can’t manage on your own [...] Some people are much more aggressive, some are much calmer, much easier to manage”* (Participant 4). On the one hand, a state of intoxication can facilitate contact: *“People are more open-minded when they have consumed alcohol or other substances, so approaching people is rather easy”* (Participant 1); however, on the other hand, it can make interactions more complex. In these cases, more self-control and

empathy were needed: *“We are not professionals, so it’s quite hard to manage our emotions. But you have to be as calm, as gentle, and as patient as possible”* (Participant 8); *“What we learned in training is to see the other person as a victim, in quotation marks [...] You have to help him and not tell him that he is annoying because he gets up from his chair or something”* (Participant 6).

Furthermore, participants frequently distributed water to rehydrate students ($n = 8$) and reduce the discomfort of alcohol consumption during parties: *“Drinking water calms you down and allows you to recover. When you go back into the party [...], you’re softer in the way you have fun, so you’re better for longer”* (Participant 5), as well as after them: *“The next day, people were telling me, ‘Thank you for making me drink water so I don’t have a headache’”* (Participant 9). This action was also intended to slow students’ alcohol consumption: *“It won’t reduce our blood alcohol level; it will only prevent us from drinking alcohol during this time”* (Participant 4). Water was offered in ways from the more traditional (e.g., fountains and water bottles) to the more creative: *“I had a water-filled jet pack. It was funny because when you offered people water, at first, they thought it was alcohol, but it was just water. So, they wanted to drink because it was funny”* (Participant 6).

Another common action was to assist people who were vomiting ($n = 7$), a task that may be perceived by some as unpleasant: *“I would have preferred not to have to do it, but for them, it was the only way”* (Participant 1), but necessary: *“The goal is to try to avoid this state, but when it happens, it must be managed”* (Participant 8).

Peer educators also collaborated with the Mobile First Aid Unit ($n = 7$) by caring for people requiring little assistance and referring the most serious cases to professionals, a collaboration that seemed effective, as highlighted by Participant 1: *“The Mobile First Aid Unit team leader told us that the chill-out space helped reduce the influx of people, which allowed*

them to take time for each person and only treat severe cases.”

Students' experiences as peer educators in the chill-out space

All participants ($n=9$) discussed their emotional investment in being peer educators in the chill-out spaces. Several of them mentioned the need to stay sober during their duty periods, especially during crowded parties with 2500 people or more. Participant 1 seemed surprised that he enjoyed doing his job while sober: “I was thinking, ‘You’re going to be sober, so you’re going to be completely bored of managing people’ [...] But no, on the contrary, it was really only pleasure.” Other students mentioned that staying sober made them feel that they were unable to fully enjoy the party: “If you have a huge party that ends at 5 o’clock, you might want to be there, have a drink with your friends, and dance. So, that’s one of the limits” (Participant 4). However, moving around the room at times to ensure that fellow students were not struggling helped to counteract this feeling of not fully enjoying the party: “I like to move around the room because you’re also in the party. You can enjoy the music while keeping an eye on the drunk people” (Participant 9). Similarly, this feeling of missing out was reduced by knowing the partygoers: “We also take care of our friends [...] We keep an eye on people, but it doesn’t prevent us from enjoying the party because our friends come to see us, and we chat with them in the chill-out space. We are partially in the party; we can have fun” (Participant 5). Furthermore, participants reported that their roles were not very costly and were appreciated during “normal” parties (500 people) but became more tiring during crowded parties (2500 people): “At normal parties, I found it nice because I was enjoying the party, and 2 hours of work didn’t bother me at all. Afterward, for the crowded parties [...], having to manage all the people while being completely sober until 6 a.m.... it gets on your nerves [...] I

think that you really shouldn’t go over 3 hours of work, and if you can stop at 2 hours, that’s fine” (Participant 2). Fatigue increased after midnight due to attendance at the chill-out space increasing then, leading to peer educators requiring regular breaks: “When there are rush periods, especially 1 to 2 hours before the end of the party, when people who arrived very drunk and danced start to feel bad, we have to run around” (Participant 8). Conversely, the smaller crowds at “normal” parties can lead to boredom. Nevertheless, being surrounded by other peer educators seemed to limit boredom and bring pleasure: “It’s a pleasure to work because you’re with friends, so if there are empty moments, you’re not bored [...]” (Participant 9).

The difficulties that peer educators encountered

The main difficulty that participants ($n=8$) encountered was handling misbehaviour. The major issues here included students’ failure to respect the rules of the chill-out space: “We had to kick people out of the chill-out space because they were making a mess. So, now we’re almost doing the work of security people” (Participant 2), and having to manage aggressive behaviour: “There are many different types of aggressive behaviour, from the person who runs off and doesn’t want to stay to the person who starts gesticulating everywhere and insulting everyone” (Participant 3) and agitation: “There are uncontrollable cases, people who just start to get completely excited under the influence of alcohol and start running everywhere” (Participant 9). Participants were also expected to be vigilant for gender-based and sexual violence, although this mission was another student association’s responsibility: “There were a lot of cases of assault and rape on the campus... So, it was a bit stressful to work. You thought, ‘I have to be careful.’ So, that was a little less cool [...], especially since there is a specific student association for that. It’s up to the association to

watch, that's what's a bit annoying" (Participant 6). The peer educators often felt helpless to address these behaviours, as Participant 4 explained: *"What I liked least was all the behaviour where you feel overwhelmed, when there are guys who are aggressive, not at all collaborative."* Acting in tandem became a preferred approach: *"We were always in duo. I found that good because I think we are better able to face situations when we work together"* (Participant 7).

Faced with these complex situations, some participants identified avenues for improvement, such as learning more about how to handle difficult behaviours ($n = 3$): *"Add a little extra to the programme on managing aggression because it happens in the parties but also in other events not supervised by the school, in residences or things like that. I think it's good that people are trained to take care of this"* (Participant 3). They would also like to have a training summary document to help them react to different situations they may encounter ($n = 2$): *"It would be nice to make a summary report or to send the slide show of what we learn during the training"* (Participant 2).

Peer educators also described the difficulty of gaining sufficient legitimacy to offer assistance and information to their peers ($n = 7$), especially for those who consume alcohol themselves and who are perceived by their peers as people who like to party: *"We were quite badly seen because we were known to be people who partied and go out often. At first, it was a little hard to get it to dissociate in people's heads"* (Participant 1). According to the participants, based on their peers' feedback, these initial negative representations seemed to change after the students' first experience with the chill-out space: *"People who know [the chill-out space] lose these preconceptions"* (Participant 8); *"People who go there realise that it really helped them"* (Participant 6).

Moreover, the participants mentioned their difficulty in clarifying the role of the chill-out space when the parties were organised off-

campus, in places where party organisers and security are not aware of the functions of this risk reduction device ($n = 5$): *"We had to explain that we were serving a purpose [...] As soon as there are people who are not from our school, who don't necessarily know about these prevention devices, they are less inclined to respect its existence"* (Participant 7).

Finally, the peer educators reported difficulties in making the chill-out space more attractive by proposing playful activities ($n = 6$). They described providing materials for these activities as difficult or impossible at large-scale parties because they were quickly overwhelmed by caring for people in distress: *"We had thought about how to organise the chill-out space with other activities. But the problem is that bringing in games also requires watching the people who play"* (Participant 5).

Discussion

This study sought to explore peer educators' subjective experiences during the deployment and management of chill-out harm reduction spaces at parties. We wanted to better understand what these students perceived as useful, the actions that these students performed, the students' possible needs and what caused difficulties so that we could consider avenues for improving this harm reduction intervention and its training.

Peer educators' comments on the benefits of horizontal communication that is free of moralising and judgement confirmed the value of peer-led interventions rather than repressive or moralistic approaches. According to the participants, the effectiveness of this approach derived from students' easy identification with their peers and willingness to adhere to their recommendations because they shared a common language. This result aligns with recommendations suggesting that this type of communication is particularly appropriate for this age group, in which issues of identity construction and peer group relationships are driving factors (Albert et al., 2013; Botvin & Griffin, 2007; Brizio

et al., 2015). Moreover, although information transmission alone is insufficient to change behaviours, participants found it helpful for creating a common knowledge base and feeling empowered enough to inform their peers about the risks of alcohol overconsumption (Botvin & Griffin, 2007; Bruvold, 1993; MacArthur et al., 2016). Specifically, how participants informed their peers was different from traditional “one way, top down” information transmission approaches. It was based on a direct peer-to-peer approach, a discussion in which both exchange partners played an active role. These interactions were often more informal and relaxed, which seemed to promote free speech and reduce the fear of punishment and judgement. These exchanges also took place directly during festive evenings and were led by peer educators familiar with their campus environment, which could have made the exchanges more suitable for young people’s real-life context (Botvin & Griffin, 2007; MacArthur et al., 2016; Wilkinson & Ivsins, 2017). Another interesting point is that for some participants, a state of intoxication facilitated contact with their peers. Although this may seem counter-intuitive, we can hypothesise that alcohol, because of its disinhibiting and anxiolytic effects, may lead some students to be less reluctant to talk about their alcohol consumption than when they are sober (Babor et al., 1983; Tobore, 2020). Finally, the results of this study, as well as those of a previous French qualitative study on festive settings (Mutatayi, 2019), show that the chill-out space fulfils its theoretical function of providing a sense of safety. Knowing that there is a place to go in case of difficulty, for oneself and for others, is reassuring because students know that they will not be alone and that they will always find someone to help them if necessary. This feeling of safety is present both inside and outside the party because peer educators are present on campus and become a resource that students can approach if they have a problem or a question. In addition, the chill-out space appears to foster the notion of self-support,

which can be defined as volunteers gathering around a common goal of providing mutual material, physical and psychological aid for their peers to reduce the risks of consuming alcohol (Hoareau, 2007). However, a specific study on the scale of the student community will allow for a more precise evaluation of the impact of having a chill-out space on attendees’ feeling of safety during parties.

The interviews confirmed that peer educators perform many actions for their peers (e.g., rehydration) that adhere to good practices for risk and harm reduction in party environments (Martens et al., 2005, 2007). Their actions were also performed in collaboration with Mobile First Aid Unit members, which affirms the need to offer these services jointly (CIRDDDB, 2008). Such spaces offer a respite without requiring people to leave the party, unlike the aid station, which implies a permanent exit from the party. Moreover, the chill-out space is not exclusively a place of assistance but also a place of socialisation and relaxation. These aspects seem to help reduce the pressure imposed by others’ judgement, which is particularly strong at this age and can reduce investment in such spaces (Albert et al., 2013; White, 2006). Chill-out spaces also permit preventive actions that are compatible with students’ motivations for attending parties, such as conviviality and sociability (Larson & Seepersad, 2003; Pedersen & LaBrie, 2007).

Through the interviews, peer educators expressed certain difficulties in the management and maintenance of the chill-out space. With regard to the difficulty of making the chill-out space more attractive by proposing playful activities on large-scale parties, one solution can be to increase the number of peer educators managing the space or to consider having separate spaces for assistance and socialising within one chill-out space. Peer educators also described difficulties in gaining sufficient legitimacy to offer assistance and information to their peers. This difficulty appears in other programmes as well and seems to be a limitation of peer prevention (Gillaizeau, 2019). That is,

knowing that peer educators face the same issues facilitates communication with other students through identification and gives peer educators a certain credibility, but this credibility can be tainted by peer educators' reputations as copious drinkers or partiers. These students must thus change their peers' perceptions. Finally, the participants mentioned their difficulties in clarifying the role of the chill-out space when the parties were organised off-campus. This result is consistent with the findings of another study showing that the managers of party establishments can be reluctant to implement risk reduction measures (G erome & Guilbaud, 2021).

Although the participants talked about their difficulties, they also discussed the benefits of their experiences. First, they highlighted the pleasure and enrichment that managing the chill-out space offered. Peer educators enjoyed the company of their prevention partners, which contributed to their pleasure in helping and supporting them while handling the difficulties that they encountered. This social dimension also seemed to mitigate their impression of being unable to fully enjoy parties, supporting reports from other studies that have indicated that people who like to party seek sociability as much or more than drunkenness (Moreau, 2010). Finally, the benefits from helping peers, such as feelings of usefulness, competence and recognition, were frequently mentioned in the interviews with peer educators and seemed to have compensated for the difficulties that they encountered. The interviews also highlighted what peer educators would need to become more competent in managing the chill-out space. For example, some students wanted to develop skills for managing aggressive behaviours or first aid procedures. The participants also wanted summaries of essential information, as well as a guide on what to do in the most common situations. This information will be particularly useful when training future volunteer peer educators.

Our data also confirm the positive effects of peer support in facilitating actions aimed at reducing the risks and harm associated with alcohol

consumption. Furthermore, the experience of managing chill-out spaces gives peer educators a sense of confidence and competence by helping their peers. Indeed, peer educators acquire a greater sense of competence and confidence while they manage these spaces. Regarding the logistics of managing chill-out spaces, our results underline the importance of rotating peer educators during parties, as well as the need to encourage peer educators to take breaks, as managing these spaces is demanding. In addition, it seems important to better differentiate between areas for socialising or activities outside the party and areas dedicated to people who have consumed too much alcohol.

This research also shows the need for prevention programmes whose scope of action is not restricted to alcohol consumption in public spaces but extends to private spaces as well (Porath-Waller et al., 2010). The PEERCARE programme, by being located on campus, seems to fulfil this objective. Indeed, PEERCARE interventions take place at the centre of festive events where alcohol consumption is present, unlike existing peer-led interventions aimed at preventing the overconsumption of alcohol, which are usually conducted outside these events (Lavilla-Gracia et al., 2022). Some participants mentioned students' habit of drinking hard liquor in their residences before parties (Pedersen & LaBrie, 2007). As the chill-out space was not set up in student residences, it could only address this issue indirectly once the students arrived at the party. However, participants reported using their experience in managing the chill-out space to act in the private setting of residence hall parties as well. This suggests the potential transferability of their skills and the possibility for peer educators to be identified as resources beyond formal parties.

Finally, during the interviews, students confirmed that the overconsumption of alcohol on campus is particularly related to the transition between the 2 years of preparatory classes, which are marked by overinvestment in school, and matriculation from higher education, which is characterised by new possibilities beyond parental control. This context, combined with the need to integrate with a peer

group, was described by participants as conducive to the experimental use of new substances or the intensification of existing substance use.

Conclusion

In conclusion, this study's results support the relevance of the implementation of chill-out spaces during parties on campuses. Although exploratory and based on a limited number of students, this study offers interesting initial data on the deployment of this prevention approach, allowing us to better understand its value for risk reduction, as well as the perceived benefits and challenges related thereto in terms of educational support and training. These programmes are particularly well-suited to young adults since they support them in taking responsibility for their health and encourage them to reflect on their substance use (Larimer & Cronce, 2007; Sueur, 2005).

In terms of PEERCARE training, it seems important to (1) enhance peer educators' sense of legitimacy (preparing them to deal with the role of managing a chill-out space while also being a student who consumes alcohol when not managing a chill-out space); (2) enhance peer educators' skills in dealing with misbehaviour, especially aggressive behaviours (e.g., through role play); and (3) increase the visibility and function of off-campus chill-out spaces and, eventually, their specificities.

This study provides important data on the deployment and management of other peer-led chill-out space approaches (such as the supervision of peer educators throughout the year, the provision of specific material to aid in managing aggressive behaviour and reflection on the organisation of chill-out spaces). Extending the chill-out concept to other educational settings, such as business schools or medical universities, holds promise for limiting the risks associated with alcohol overuse in party environments and preventing the possible evolution of risky consumption into alcohol use disorders. Finally, as peer educators are the main actors in this approach, recognising their skills can be

valuable, for example, by allowing them to earn academic credits (through the European Credits Transfer System) or a certification to show appreciation for their commitment and encourage other volunteers to join the programme (Ministère de l'Éducation Nationale, de l'Enseignement Supérieur et de la Recherche, 2015). Further research is needed to support and deepen these conclusions. Exploring the experiences of those people whom peer educators have assisted in chill-out spaces would also be particularly informative in clarifying how well this approach meets their needs and identifying new avenues for improvement.

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References

- Albert, D., Chein, J., & Steinberg, L. (2013). The teenage brain: Peer influences on adolescent decision making. *Current Directions in Psychological Science*, 22(2), 114–120. <https://doi.org/10.1177/0963721412471347>
- Babor, T. F., Berglas, S., Mendelson, J. H., Ellingboe, J., & Miller, K. (1983). Alcohol, affect, and the disinhibition of verbal behavior. *Psychopharmacology*, 80(1), 53–60. <https://doi.org/10.1007/BF00427496>
- Botvin, G. J., & Griffin, K. W. (2007). School-based programmes to prevent alcohol, tobacco and other drug use. *International Review of Psychiatry*, 19(6),

- 607–615. <https://doi.org/10.1080/09540260701797753>
- Brizio, A., Gabbatore, I., Tirassa, M., & Bosco, F. M. (2015). “No more a child, not yet an adult”: Studying social cognition in adolescence. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.01011>
- Bruvold, W. H. (1993). A meta-analysis of adolescent smoking prevention programs. *American Journal of Public Health*, 83(6), 872–880. <https://doi.org/10.2105/AJPH.83.6.872>
- Calvert, G., Gallopel-Morvan, K., Sauneron, S., & Oullier, O. (2010). *Nouvelles approches de la prévention en santé publique: L'apport des sciences comportementales, cognitives et des neurosciences*. Centre d'analyse stratégique. <https://www.vie-publique.fr/sites/default/files/rapport/pdf/104000139.pdf>
- CIRDDDB: Centre d'Information Régional sur les Drogues et Dépendances Bretagne. (2008). Guide pratique pour favoriser la prévention et la réduction des risques en milieu festif. https://peidd.fr/IMG/pdf/site_soirees_festives.pdf?517/ae56cd888d5f19cebafebcb243256070c3e156c0d
- CIRDDDB: Centre d'Information Régional sur les Drogues et Dépendances Bretagne. (2012). *Évaluation du dispositif Noz'ambule*. Ministère de l'Éducation nationale et de la Jeunesse. https://media.eduscol.education.fr/file/Action_sanitaire_et_sociale/70/6/prevention-conduites-addictives-dossier-documentaire_169706.pdf
- Corney, T., Cronin, D., Leontini, R., Lim, M., & Wright, C. (2020). *Engendering positive alcohol cultures in university residential colleges: An alcohol culture change initiative*. Vichealth. https://vuir.vu.edu.au/40169/12/Engendering20Positive20Student20Alcohol20Cultures20In20University20Residential20Colleges_T20Corney202800229.pdf
- Corney, T., & du Plessis, K. (2022). Australian first-year university college residents' alcohol consumption and alcohol-related harms. *Nordic Studies on Alcohol and Drugs*, 39(4), 406–417. <https://doi.org/10.1177/14550725221090037>
- Cuijpers, P. (2002). Effective ingredients of school-based drug prevention programs: A systematic review. *Addictive Behaviors*, 27(6), 1009–1023. [https://doi.org/10.1016/S0306-4603\(02\)00295-2](https://doi.org/10.1016/S0306-4603(02)00295-2)
- Das, J. K., Salam, R. A., Arshad, A., Finkelstein, Y., & Bhutta, Z. A. (2016). Interventions for adolescent substance abuse: An overview of systematic reviews. *Journal of Adolescent Health*, 59(4), 61–75. <https://doi.org/10.1016/j.jadohealth.2016.06.021>
- Dawson, D. A., Grant, B. F., Stinson, F. S., & Chou, P. S. (2004). Another look at heavy episodic drinking and alcohol use disorders among college and noncollege youth. *Journal of Studies on Alcohol*, 65(4), 477–488. <https://doi.org/10.15288/jsa.2004.65.477>
- Dowling, N., Clark, D., & Corney, T. (2006). Responsible drinking knowledge: A comparison of Australian apprentices and university students. *Youth Studies Australia*, 25(3), 42–48.
- Gérome, C., & Guilbaud, F. (2021). Usages de drogues et réduction des risques et des dommages en contextes festifs techno: Quelques enseignements de 20 ans d'observation in situ. *Psychotropes*, 27(3), 87–112. <https://doi.org/10.3917/psyt.273.0087>
- Gillaizeau, I. (2019). *Évaluation d'un programme de prévention par les pairs des consommations de substances psychoactives*. Santé publique France. https://www.santepubliquefrance.fr/content/download/103799/document_file/rapport-evaluation-programme-prevention-pairs-consommations-substances-psychoactives.pdf
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112(1), 64–105. <https://doi.org/10.1037/0033-2909.112.1.64>
- Hermens, D. F., Lagopoulos, J., Tobias-Webb, J., De Regt, T., Dore, G., Juckes, L., Latt, N., & Hickie, I. B. (2013). Pathways to alcohol-induced brain impairment in young people: A review. *Cortex*, 49(1), 3–17. <https://doi.org/10.1016/j.cortex.2012.05.021>

- Hoareau, E. (2007). L'impact de la réduction des risques dans les espaces festifs techno. *Psychotropes*, 13(2), 27–48. <https://doi.org/10.3917/psyti.132.002>
- Imbert, G. (2010). L'entretien semi-directif: À la frontière de la santé publique et de l'anthropologie. *Recherche en Soins Infirmiers*, 102, 23–34. <https://doi.org/10.3917/rsi.102.0023>
- Jennison, K. M. (2004). The short-term effects and unintended long-term consequences of binge drinking in college: A 10-year follow-up study. *American Journal of Drug & Alcohol Abuse*, 30(3), 659–684. <https://doi.org/10.1081/ADA-200032331>
- King, T., & Fazel, M. (2021). Examining the mental health outcomes of school-based peer-led interventions on young people: A scoping review of range and a systematic review of effectiveness. *PLoS ONE*, 16(4), e0249553. <https://doi.org/10.1371/journal.pone.0249553>
- Lannoy, S., Billieux, J., Poncin, M., & Maurage, P. (2017). Binging at the campus: Motivations and impulsivity influence binge drinking profiles in university students. *Psychiatry Research*, 250, 146–154. <https://doi.org/10.1016/j.psychres.2017.01.068>
- Larimer, M. E., & Cronce, J. M. (2007). Identification, prevention, and treatment revisited: Individual-focused college drinking prevention strategies 1999–2006. *Addictive Behaviors*, 32(11), 2439–2468. <https://doi.org/10.1016/j.addbeh.2007.05.006>
- Larson, R., & Seepersad, S. (2003). Adolescents' leisure time in the United States: Partying, sports, and the American experiment. *New Directions for Child & Adolescent Development*, 2003(99), 53–64. <https://doi.org/10.1002/cd.66>
- Lavilla-Gracia, M., Pueyo-Garrigues, M., Pueyo-Garrigues, S., Pardavila-Belio, M. I., Canga-Armayor, A., Esandi, N., Alfaro-Díaz, C., & Canga-Armayor, N. (2022). Peer-led interventions to reduce alcohol consumption in college students: A scoping review. *Health & Social Care in the Community*, 30(6), e3562–e3578. <https://doi.org/10.1111/hsc.13990>
- Leontini, R., & Corney, T. (2023). Student drinking cultures in tertiary education residential accommodation: A contextual research study. *Nordic Studies on Alcohol and Drugs*, 40(3), 270–286. <https://doi.org/10.1177/14550725221143169>
- MacArthur, G. J., Harrison, S., Caldwell, D. M., Hickman, M., & Campbell, R. (2016). Peer-led interventions to prevent tobacco, alcohol and/or drug use among young people aged 11–21 years: A systematic review and meta-analysis. *Addiction*, 111(3), 391–407. <https://doi.org/10.1111/add.13224>
- Martens, M. P., Ferrier, A. G., Sheehy, M. J., & Corbett, K. (2005). Development of the protective behavioral strategies survey. *Journal of Studies on Alcohol and Drugs*, 66(5), 698–705. <https://doi.org/10.15288/jsa.2005.66.698>
- Martens, M. P., Pedersen, E. R., LaBrie, J. W., Ferrier, A. G., & Cimini, M. D. (2007). Measuring alcohol-related protective behavioral strategies among college students: Further examination of the protective behavioral strategies scale. *Psychology of Addictive Behaviors*, 21(3), 307–315. <https://doi.org/10.1037/0893-164X.21.3.307>
- Masse, B. (2002). Rites scolaires et rites festifs: Les « manières de boire » dans les grandes écoles. *Sociétés Contemporaines*, 47(3), 101–129. <https://doi.org/10.3917/soco.047.0101>
- Matthews, C. (2014). Critical pedagogy in health education. *Health Education Journal*, 73(5), 600–609. <https://doi.org/10.1177/0017896913510511>
- Meruelo, A. D., Castro, N., Cota, C. I., & Tapert, S. F. (2017). Cannabis and alcohol use, and the developing brain. *Behavioural Brain Research*, 325, 44–50. <https://doi.org/10.1016/j.bbr.2017.02.025>
- Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche. (2015). Plan national de vie étudiante. https://cache.media.enseignementsup-recherche.gouv.fr/file/actus/48/9/Plan_national_de_vie_etudiante_01-10-2015_478489.pdf
- Moreau, C. (2010). Jeunesses urbaines et défonçes tranquilles: Évolution anthropologique de la fête et quête d'identité chez nos jeunes contemporains. *Pensée Plurielle*, 23(1), 77–91. <https://doi.org/10.3917/pp.023.0077>
- Mutatayi, C. (2019). Prévenir et réduire les risques et les dommages par les pairs en milieu festif électro. Observatoire français des drogues et des

- toxicomanies. <https://www.ofdt.fr/BDD/publications/docs/epfxczmz5.pdf>
- National Institute on Alcohol Abuse and Alcoholism. (2019). Planning alcohol interventions using NIAAA's CollegeAIM. Alcohol Intervention Matrix. Revised and updated.
- Newton, F. B., & Ender, S. C. (2010). *Students helping students: A guide for peer educators on college campuses* (2nd ed.). Jossey-Bass.
- Paillé, P., & Mucchielli, A. (2021). *L'analyse qualitative en sciences humaines et sociales*. Armand Colin.
- Pedersen, E. R., & LaBrie, J. (2007). Partying before the party: Examining prepartying behavior among college students. *Journal of American College Health, 56*(3), 237–245. <https://doi.org/10.3200/JACH.56.3.237-246>
- Porath-Waller, A. J., Beasley, E., & Beirness, D. J. (2010). A meta-analytic review of school-based prevention for cannabis use. *Health Education and Behavior, 37*(5), 709–723. <https://doi.org/10.1177/1090198110361315>
- Slutske, W. S. (2005). Alcohol use disorders among US college students and their non-college-attending peers. *Archives of General Psychiatry, 62*(3), 321–327. <https://doi.org/10.1001/archpsyc.62.3.321>
- Strandberg, A. K., Elgán, T. H., Jägerskog, M., & Gripenberg, J. (2019). Alcohol policies and attitudes toward alcohol prevention at Swedish student unions. *Nordic Studies on Alcohol and Drugs, 36*(1), 51–60. <https://doi.org/10.1177/1455072518800432>
- Sueur, C. (2005). Réduction des risques en milieu festif. In Giroux-Arcella, P., Joubert, M., & Mougin, C. (Eds.), *Villes et toxicomanies* (pp. 249–270). Érés.
- Tapert, S. F., Caldwell, L., & Burke, C. (2004). Alcohol and the adolescent brain: Human studies. *Alcohol Research & Health, 28*(4), 205–212.
- Tavolacci, M. -P., Boerg, E., Richard, L., Meyrignac, G., Dechelotte, P., & Ladner, J. (2016). Prevalence of binge drinking and associated behaviours among 3286 college students in France. *BMC Public Health, 16*(1), 10–19. <https://doi.org/10.1186/s12889-016-2863-x>
- Tobler, N. S., Roona, M. R., Ochshorn, P., Marshall, D. G., Streke, A. V., & Stackpole, K. M. (2000). School-based adolescent drug prevention programs: Meta-analysis. *The Journal of Primary Prevention, 20*(4), 275–336. <https://doi.org/10.1023/A:1021314704811>
- Tobore, T. O. (2020). On alcohol disinhibition and inhibition: The intricate relationship between oxidative stress and behavior. *Aggression and Violent Behavior, 51*, 101378. <https://doi.org/10.1016/j.avb.2020.101378>
- Vallerand, R. J., & Hess, U. (2000). *Méthodes de recherche en psychologie*. Gaëtan Morin.
- Van Hal, G., Tavolacci, M. P., Stock, C., Vriesacker, B., Orosova, O., Kalina, O., Salonna, F., Lukacs, A., Ladekjaer Larsen, E., Ladner, J., & Jacobs, L. (2018). European University students' experiences and attitudes toward campus alcohol policy: A qualitative study. *Substance Use and Misuse, 53*(9), 1539–1548. <https://doi.org/10.1080/10826084.2017.1416402>
- Wechsler, H., Kuh, G., & Davenport, A. E. (2009). Fraternities, sororities and binge drinking: Results from a national study of American colleges. *Journal of Student Affairs Research and Practice, 46*(3), 763–784. <https://doi.org/10.2202/1949-6605.5017>
- White, H. R. (2006). Reduction of alcohol-related harm on United States college campuses : The use of personal feedback interventions. *International Journal of Drug Policy, 17*(4), 310–319. <https://doi.org/10.1016/j.drugpo.2006.02.006>
- Wilkinson, B., & Ivsins, A. (2017). Animal house: University risk environments and the regulation of students' alcohol use. *International Journal of Drug Policy, 47*, 18–25. <https://doi.org/10.1016/j.drugpo.2017.06.002>
- World Health Organization. (2018). Global status report on alcohol and health 2018. <https://www.who.int/publications/i/item/9789241565639>