# Motives for Use and Cessation, and Abstinence Strategies in Dual Cannabis and Tobacco Users: A Qualitative Study of Residential Treatment Patients

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## RESUMEN

**Introducción:** el consumo dual de cannabis y tabaco (definido como el uso simultáneo o alternado de ambas sustancias) representa un desafío relevante para la salud pública debido a su asociación con mayores niveles de dependencia y dificultades para lograr la cesación. A pesar de su alta prevalencia, existen escasas intervenciones diseñadas específicamente para esta condición. **Objetivo:** identificar y comprender, desde la perspectiva de los participantes, los motivos asociados al consumo dual de tabaco y cannabis, los intentos previos de cesación y las estrategias percibidas como más útiles para el mantenimiento de la abstinencia. **Método:** se realizó un estudio cualitativo mediante un grupo focal con cinco hombres en tratamiento residencial por consumo problemático de cannabis. Se exploraron motivos de consumo, intentos de cesación y estrategias efectivas de mantenimiento de la abstinencia. **Resultados:** los principales motivos de consumo incluyeron la potenciación de los efectos del cannabis, la regulación emocional y el afrontamiento del aburrimiento. Los intentos de cesación mostraron alta incidencia de recaídas, frecuentemente asociadas al fenómeno de sustitución entre sustancias. Las estrategias más efectivas reportadas incluyeron actividad física regular, búsqueda de reforzadores alternativos, planificación de actividades cotidianas y modificación de contextos que favorecen el consumo. **Discusión y conclusiones:** los hallazgos aportan evidencia sobre los factores implicados en el consumo dual y sugieren la necesidad de diseñar intervenciones específicas que integren psicoeducación, manejo del tiempo y fortalecimiento de redes de apoyo, adaptadas a las características de esta población.

**Palabras clave:** cannabis, trastorno por consumo de tabaco, abandono del hábito de fumar, recaída, trastornos relacionados con sustancias.

## ABSTRACT

**Introduction:** dual cannabis and tobacco use—defined as the simultaneous or alternating consumption of both substances—constitutes a significant public health concern due to its association with increased dependence and significant challenges to cessation. Despite its high prevalence, few treatment approaches are specifically tailored to address this pattern of use. **Objective:** to identify and understand the reasons associated with dual tobacco and cannabis use from the participants' perspective, past quit attempts, and the strategies perceived as most useful for maintaining abstinence. **Method:** a qualitative study was conducted through a focus group with five male participants undergoing residential treatment for problematic cannabis use. The discussion explored motives for substance use, quit attempts, and effective strategies for abstinence maintenance. **Results:** the primary motives for dual use included enhancement of cannabis effects, emotional regulation, and alleviating boredom. Quit attempts frequently resulted in relapse, often linked to the phenomenon of substance substitution. Effective strategies for maintaining abstinence included regular physical activity, engagement in alternative sources of reinforcement, structured planning of daily activities, and modification of the social and environmental cues associated with use. **Discussion and conclusions:** these findings provide insight into the functional role of dual use. They highlight the need to develop specific interventions incorporating psychoeducation, time management, and the strengthening of social support networks, adapted to the characteristics and needs of individuals with concurrent cannabis and tobacco use.

**Keywords:** cannabis, tobacco use disorder, smoking cessation, relapse, substance-related disorders.

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## INTRODUCTION

Dual cannabis and tobacco use means using both substances in the past 30 days, either through coadministration or alternately (Hindocha et al., 2017).

Cannabis and tobacco are psychoactive substances widely used globally, often jointly consumed with different patterns and means of administration. This modality has a consistent, well-researched association that is becoming increasingly common among young adults (Comité Nacional para la Prevención del Tabaquismo [CNPT], 2016; Glasser et al., 2022).

Dual use prevalence in regions such as North America, Europe and Australia oscillates between 20.9% and 90.9% according to various studies and surveys (Boyle et al., 2021; DuPont et al., 2018; Hindocha et al., 2017; Pacek et al., 2018). In Mexico, although there are no specific epidemiological data that directly characterize the dual use of cannabis and tobacco, the most recent data from the National Survey on Drug, Alcohol, and Tobacco Use (Comisión Nacional de Salud Mental y Adicciones [CONASAMA], 2025) show a sustained increase in cannabis use among the adult population, as well as the coexistence of multiple substance use patterns, which allows for an indirect approximation to the phenomenon of polysubstance use, particularly with tobacco as a frequently concomitant substance. (Comisión Nacional de Salud Mental y Adicciones [CONASAMA] et al., 2025). Although these data make it possible to gauge the scope of the problem at the population level, they do not fully explore the motives, functions, or coping strategies associated with the joint use of both substances. They also overlook the experiences of quitting and abstinence in individuals under treatment, leaving key areas of the phenomenon outside the scope of population analysis and limiting their understanding from a clinical perspective.

The literature has documented that dual cannabis and tobacco use constitutes a frequent, clinically relevant phenomenon, associated with greater exposure to toxic substances, greater frequency of use and higher levels of dependence compared to the separate use of each substance (Akbar et al., 2019; Albert et al., 2020; Glasser et al., 2022; Jacobs et al., 2021).

Likewise, dual use has been associated with various negative social and health consequences, including academic difficulties, lower social acceptance, and greater vulnerability to psychiatric disorders (Cooper & Haney, 2009; Jacobs et al., 2021; Nguyen et al., 2019). In treatment contexts, individuals who present this pattern of use often experience greater difficulties in quitting both substances and a higher risk of relapse, particularly when quit attempts focus on a single substance (Driezen et al., 2022; Esteban et al., 2019; Lemyre et al., 2018; McClure et al., 2019; Rogers et al., 2020; Vogel et al., 2018; Weinberger et al., 2018, 2020).

From an explanatory perspective, dual tobacco and cannabis use has been conceptualized as an integrated behavioral pattern, rather than the sum of two separate types of use. Studies have indicated that the two substances tend to perform different yet complementary functions. Tobacco is associated with more automatic, habitual patterns, whereas cannabis is associated with emotional regulation and the modulation of subjective states. However, their joint use is organized around a shared behavior, the act of smoking, which has been associated with generalizing and maintaining use (Liu et al., 2025; McClure et al., 2019). This functional convergence helps explain why quit attempts targeting a single substance tend to be accompanied by substitution or compensatory behaviors as well as the emergence of craving during abstinence, particularly in everyday, emotionally significant contexts. This underlines the need to analyze dual tobacco and cannabis use as an integrated, situated phenomenon, particularly in clinical contexts where persistent difficulties in achieving sustained abstinence are observed (Pedersen, 2022; Ruleman et al., 2024).

Simultaneous and sequential interventions have been implemented to address the treatment of problematic tobacco and cannabis use (Lee et al., 2018; Vogel et al., 2018) together with telephone and computerized strategies (Hindson et al., 2020; McClure & Lapham, 2021; Nguyen et al., 2022), and joint interventions (Becker et al., 2015; Beckham et al., 2018).

These studies report treatment completion rates of 62%, albeit with limits on tobacco quitting (23 to 41%), with no significant differences in cannabis abstinence rates and low levels of therapeutic commitment (McClure et al., 2021).

Interventions based on Cognitive Behavioral Therapy components have also been used, including the motivational interview, self-control training, contingency management, counselling, and advice (Becker et al., 2013; Becker et al., 2014; Becker et al., 2015; Beckham et al., 2018; Carpenter et al., 2020; Dallery et al., 2019). These strategies have proved feasible, even though they have shortcomings in terms of adherence and effectiveness for achieving abstinence and its maintenance.

Despite growing evidence of the implications of dual tobacco and cannabis use and the need for specific treatments, no structured interventions

have been developed in Mexico to jointly address this problem. The review conducted for this study found no evidence of structured interventions specifically designed for the dual use of these substances or controlled clinical trials evaluating the efficacy of combined intervention strategies. Most approaches available in Mexico focus on treating problematic cannabis or tobacco use separately, without considering the particularities of polyuse or its implications for adherence, relapse or smoking cessation success.

This lack of integral approaches limits the therapeutic options available for those coping with this form of use, underlining the need to undertake research and design therapeutic strategies adapted to this emerging reality.

Quantitative literature has made it possible to identify relevant associations between dual tobacco and cannabis use, higher dependence levels and difficulty quitting. A gap remains, however, in understanding how people with this pattern explain the motives for their use, previous quit attempts and successful strategies for maintaining long-term abstinence (Liu et al., 2025; McClure et al., 2019). In this respect, qualitative approaches offer a particularly useful means of approaching the subjective experience of dual use. They provide access to the meanings, functions and contexts organizing drug use behavior beyond its descriptive measurement, particularly in complex, situated patterns of use (Tong et al., 2007). In residential treatment centers, where various patterns of use and heterogeneous clinical demands converge, it is crucial to understand how dual tobacco and cannabis use is shaped in people undergoing treatment for problematic substance use (Pedersen, 2022).

Dual tobacco and cannabis use is a situated, relational, socially shared phenomenon. Focus groups are therefore an appropriate methodological strategy for examining how the experiences of use, quitting and relapse are constructed, negotiated and re-signified in the interaction with others. This type of approach has been identified as particularly useful in the study of psychoactive substance use. It encourages the emergence of shared narratives and captures the influence of sociocultural and contextual processes often overlooked in exclusively individualistic or quantitative approaches (Barbour, 2007; Krueger & Casey, 2015; Morgan, 1997).

In this context, this study seeks to use participants' perspectives to identify and understand the motives associated with dual tobacco and cannabis use. It also examines previous quit attempts and identifies the most useful strategies for maintaining abstinence in a sample of adult men under residential treatment. Given the size and characteristics of the sample, findings are not intended to be generalizable but to provide a phenomenological understanding of dual use in a specific clinical context and to generate inputs for future research (Tong et al., 2007; Ruleman et al., 2024).

## METHOD

### Design

A qualitative, exploratory design was used to understand the experience of participants through a focus group conducted on the basis of a semi-structured interview. The material obtained was studied through content analysis to identify patterns, categories, and relevant meanings for the phenomenon under study (Kvale, 2011; Sayrs, 1998).

### Participants

The sample comprised a non-probabilistic convenience sample of five adult male dual tobacco and cannabis users undergoing treatment for cannabis use at a well-known residential treatment center specializing in addictions. The inclusion criterion was having used cannabis and tobacco daily in the past 30 days prior to beginning treatment. Exclusion criteria were engaging in moderate or severe psychoactive drug use or being under treatment for other substances according to the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) (Humeniuk et al., 2011).

### Instruments

A semi-structured interview with 66 guiding questions, designed expressly for this study, was used as a flexible question bank to explore participants' experience of dual tobacco and cannabis use. The interview guide was organized into thematic areas including motives for use, previous quit attempts and relapses, periods of maintaining abstinence and effective strategies for long-term abstinence.

Participants were encouraged to expand on key aspects of their own experience through questions such as "What situations do you usually use tobacco or cannabis in?" or "What strategies have helped you remain abstinent for the longest time?" These domains have previously been explored in qualitative research with focus groups in the sphere of substance use (Becker et al., 2013). The semi-structured interview made it possible to guide the discussion without limiting the depth or spontaneity of the dis-

course, encouraging the emergence of relevant narratives to understand the phenomenon under study.

We used the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), a screening tool for identifying psychoactive substance use and the associated risk level. ASSIST evaluates the use of tobacco, alcohol, cannabis, and other substances, considering frequency of recent use, associated problems, and signs of dependence. International validation studies have reported adequate levels of reliability and validity of ASSIST, with acceptable internal consistency coefficients for the tobacco, alcohol and cannabis subscales. They have also provided evidence of concurrent validity with other screening instruments for detecting substance use (Humeniuk et al., 2008). In this study, ASSIST was used exclusively for screening and classifying the sample (Humeniuk et al., 2011).

## Procedure

We contacted the directors of a well-known residential rehabilitation center specializing in addictions, who granted us access to potential participants. The center staff helped with the initial identification of patients who met the inclusion criteria by reviewing clinical files and ASSIST results but did not participate in undertaking the study or analyzing the data.

They then invited candidates to voluntarily attend a briefing session on the study (conducted by the first author of this article). During the session, the author explained the purpose of the research, the nature of patients' participation and assured that participation would not affect their treatment. Participants also provided informed consent.

Five people agreed to participate and signed the informed consent form (approved by the institutional ethics committee) prior to the start of the meeting. The focus group was held in a private room in the center, in person, with an approximate duration of 142 minutes. During this time, the authors considered that the information obtained had achieved a sufficient level of thematic saturation, since no new relevant elements emerged in relation to the analysis axes defined. The session was audio-recorded with a mobile device, for subsequent encoding and analysis.

The recordings were solely used for the transcription, encoding and analysis of the information gathered.

Once the focus group session concluded and data collection was completed, participants were offered a brief psychoeducation session on the characteristics of dual tobacco and cannabis use and its consequences. They were also invited to perform breathing and relaxation exercises to cope with possible anxiety symptoms that might have emerged during the group interaction. This activity was undertaken for the purposes of containment and ethical care and was not included in the material analyzed. At the end, participants were offered snacks.

The focus group technique was chosen because of its ability to facilitate interaction between participants and generate information through the exchange of experiences and points of view. Focus groups permit the structured exploration of the perceptions, experiences and meanings attributed to the phenomenon under study through group discussion, encouraging the identification of discursive patterns and relevant interaction dynamics for analysis (Krueger & Casey, 2015). In a group interview, the moderator steers the conversation in a more structured way with less feedback among participants. Conversely, a focus group promotes the co-construction of discourse, horizontal interaction and the contrast of perspectives in real time, contributing to the richness and depth of the data obtained (Barbour, 2007; Morgan, 1997).

## Data Analysis

Participants' answers were audio-recorded, transcribed and analyzed using Atlas.ti 23 to organize and systematize the information (Trobia, 2003). The analysis was conducted using a content analysis by category approach (Kvale, 2011) based on the thematic axes defined in the semi-structured interview guide. These included motives for use, quit attempts and effective strategies for maintaining abstinence, which at the same time permitted the emergence of categories based on participants' discourse.

During the initial stage, axial coding was conducted to identify relationships between categories and sub-categories (Al-Eisawi, 2022). Selective coding was subsequently undertaken to integrate the findings and develop interpretative frameworks to describe the processes involved in the phenomenon of dual tobacco and cannabis use (Creswell, 1994).

## Quality Criteria

To enhance the methodological rigor of the study, emphasis was placed on the quality criteria for qualitative research, such as credibility, dependability, confirmability and transferability (Lincoln & Guba, 1985; Kvale, 2011). Credibility was ensured through the use of direct quotations supporting the interpretations of empirical data, dependability through a systematic analytical procedure and confirmability through interpretation anchored in participants' discourse. Transferability was guaranteed through a description

of the context and sample characteristics, while acknowledging the non-generalizability of findings.

### Ethical Considerations

The Institutional Ethics Committee approved this study. All participants signed an informed consent form prior to joining the study. The form explained the purpose of the study, the confidentiality of the information, and the voluntary nature of the collaboration, and ensured that participants could withdraw at any time. The authors guaranteed the anonymity of the data and the ethical principles established in the Declaration of Helsinki and the current national guidelines for research on human beings.

The report in this study was based on the Consolidated Criteria for Reporting Qualitative Research (COREQ), which sets specific standards for ensuring the transparency of the research team, study design, and data analysis and interpretation based on interviews and focus groups. Based on these criteria, data were collected until theoretical saturation was achieved. Results were presented by incorporating direct quotations from participants, enabling the reader to evaluate the consistency between the empirical data and analytical interpretations, strengthening the credibility and transparency of findings (Tong et al., 2007).

## RESULTS

Participants in the focus group ($n$ = 5) had an average age of 29.4 years ($SD$ = 15.6). Tobacco consumption began at an average age of 13.4 years ($SD$ = 17) whereas cannabis use began later, at a mean age of 19 years ($SD$ = 6.4). Average tobacco use amounted to 14.7 cigarettes a day ($SD$ = 10.8) while average cannabis use was 6.8 grams a day ($SD$ = 2.7).

Participant narratives made it possible to identify pathways of use characterized by early onset of tobacco use, followed by the subsequent incorporation of cannabis use at various points in their personal histories. Their narratives showed marked heterogeneity, both in the means of use and in the way they incorporated the two substances into their everyday experience.

Participants described various patterns of combining tobacco and cannabis, including sequential use, periods of simultaneous use on a single occasion as well as substituting or compensating for substances, particularly in specific contexts of their everyday lives. These pathways are not linear or homogeneous but configurations that change over time, influenced by personal, contextual and emotional circumstances, reflecting the complexity of dual use beyond the mere sum of types of use.

On the basis of the material produced in the focus group, three thematic areas were identified to organize the study results. These included the motives associated with dual tobacco and cannabis use, quit attempts and relapse and the strategies participants found effective for maintaining abstinence. These axes, drawn from systematic discourse analysis, made it possible to identify the experiences, meanings and functions attributed to dual use from the participants' perspective. Results are given below in the form of an analytical narrative incorporating representative text fragments. Table 1 and 3 are included as a complementary resource for summarizing the emerging analytical categories identified. Based on an analysis of the material obtained in the focus group, findings were initially organized in an analytical matrix combining participant narratives.

Each of these categories was developed separately to explore their components, relationships, and meanings from the participants' perspective.

### Motives associated with dual tobacco and cannabis use

Discourse analysis was used to organize three main sub-categories: the enhancement of the effect of cannabis through tobacco use, use as a strategy for coping with emotions and the specific situations in which both substances were used concurrently.

These sub-categories shed light on the way dual use is incorporated into the everyday experience of participants and the role it plays in various contexts of their everyday lives.

### Effect Enhancement

In regard to the enhancement of the effect of cannabis, all participants noted that tobacco use tended to follow cannabis use and that it intensified or prolonged the perceived effects of cannabis. In their narratives, tobacco appears as an element that reactivates or amplifies the subjective experience of use, creating a greater sensation of pleasure or "lift" (see Table 1).

This association is clearly expressed in their narratives, in which participants note that smoking tobacco after cannabis "intensifies the effect" or enabled them to "feel it again" when its effects began to wear off. As one of them noted: "I think that…perhaps I began to associate it with being something that made it more pleasurable" while another participant explained that smoking tobacco after using cannabis recreated the sensation: "and when I was really high, I'd smoke a cigarette… and I'd sort of feel the effect again" (see Table 1).

For some participants, this practice was experienced as a deliberate means of intensifying the experience of dual use, even though they admitted that the effect could be mild yet significant in subjective terms: "so it would increase the effect, I thought. It was very mild, but I definitely felt it." In this respect, the combined use of both substances is a learned practice, based on shared experience with peers and the repeated association between the two (see Table 1).

### Emotional Management Strategy

Another key subcategory refers to dual use as an emotional management strategy, in which participants described dual tobacco and cannabis use as a means of regulating unpleasant emotional states, particularly anxiety, anger, worry, and sadness. In their narratives, the two substances are linked to the possibility of momentarily distancing themselves from problematic thoughts or alleviating the emotional distress associated with family, work or personal conflicts.

Some participants noted that use enabled them to disconnect from persistent emotional burdens or "forget about their problems" as borne out by the following testimonial: "when I smoked I forgot, I forgot about everything that was weighing me down." Others described a reduction of anger or cognitive rumination, noting that use helped them feel calmer or "find more solutions for things."

In certain contexts, dual use was described as a means of reducing social anxiety or nervousness before certain activities, particularly in the work sphere. One participant explained that using before going to work made them feel more functional: "it makes me less nervous and I start working…it's like an incentive, a "vitamin" in inverted commas." These narratives show how dual use is incorporated into everyday life as a subjective strategy for emotional regulation (see Table 1).

### Dual Use Situations

Lastly, participants identified specific situations in which dual tobacco and cannabis use were most frequent. The main ones include the workplace, sexual relations and moments of boredom. In these situations, dual use served to reduce anxiety, increase motivation, improve perceived performance, and relax.

**Table 1**

*Motives Associated with Dual Tobacco and Cannabis Use.*

| *Subcategory* | *Definition* | *Discourse* |
|---|---|---|
| Effect enhancement | All the participants stated that they used tobacco after smoking cannabis. Tobacco tends to enhance the effects of the first substance used. | "It had a stronger effect, in other words, I think that…maybe I began to feel that it was something that made it more pleasurable." (P1)<br>"I used to smoke cigarettes and then my friends said that after smoking weed … or when you were really high, you smoked a cigarette … And you sort of felt the effect again." (P3)<br>"Yes, after I smoked marijuana…I smoked nicotine." And it gave me a lift, because it contributes to you being addicted to marijuana." (P2)<br>"so I could exploit the effect, I thought, and it was very mild, but I definitely felt it." (P4)<br>"With weed, but I don't feel the same. I prefer smoking them both". (P5) |
| Emotional Management Strategy | Using both substances was regarded as a strategy for coping with unpleasant emotions, such as anxiety, anger and sadness. | "It sort of took me out of myself … away from my problems with my parents; when I smoked I forgot, I forgot about everything that was getting me down." (P1)<br>"Yes, when I had problems and so on, that's what I used to do. I did it too, I sort of felt better, without that feeling of anger, it cleared my thoughts and produced new ones." (P2)<br>"Emotions, when I was annoyed or worried by a problem I'd smoke a joint and be able to find more solutions or see things more calmly." (P3)<br>"When there are people, it stops me being nervous and I start working." Conversely, when there are no people, I have a joint before having a cigarette and I start working. It's like an incentive or a 'vitamin'." (P4) |
| Dual use Situations | The three main cues for using cannabis and tobacco are work, sex and boredom.<br>The main functions in these situations have to do with handling anxiety and relaxation, performing executive tasks related to work and motivation to perform their everyday tasks.<br>Moreover, various participants mentioned the emergence of primary disorders, mainly those related to anxiety, which they associated with dual tobacco and cannabis use due to the function these substances perform in regulating their emotions. | "I started using it every day and associated it with my work (making wrought iron) to stop feeling tired and sleepy." (P3)<br>"At work, because my work was physical and marijuana gave me more stamina." (P2)<br>"…At work, because I used to smoke three times a day, because I used to find it boring…and then I smoked… I used to go on the metro and listen to music by Bob Marley… (pretends to smoke a cigarette). Then, before going into work, because work was really boring, you know, work and so on, so I smoked." (P1)<br>"Yes, I also did so after having sex. I also felt like smoking and I used to go off and have a few puffs." (P5)<br>"In that respect, if I went to see my partner, I would smoke a joint outside, so I would be high when I had sex." That was the extra incentive I had…so to speak." (P4)<br>"After sex, I really wanted to smoke … a cigarette. I had a desperate urge to smoke!" (P2)<br>"In my case, it was before, not while we were at it but before we had sex" (P3) |

*Note:* the elements presented are derived from the qualitative analysis of participant narratives.

In the work sphere, particularly in physical or repetitive activities, some participants noted that using cannabis and tobacco helped them cope with tiredness or boredom. One participant noted: "I associated it with my work … to stop feeling tired" while another said that cannabis gave him "a certain amount of stamina" to be able to continue to perform demanding physical tasks (see Table 1).

Dual use was also said to occur in the context of sexual relations, both before and after, associated with feelings of relaxation, pleasure or the desire to smoke. Some participants reported a marked increase in desire due to using tobacco after having sex, describing it as an intense urge. In short, these narratives

**Table 2**

*Quit Attempts and Relapses in Dual Tobacco and Cannabis Use.*

| *Subcategory* | *Definition* | *Discourse* |
|---|---|---|
| Reasons for quitting | The main reasons for quitting both substances are the negative consequences participants experienced of negative social perception, the unpleasant smell of the substance, health consequences (teeth, respiratory system) and cognitive function (attention and memory). Other reasons are associated with the specific requirement of passing an anti-doping test to secure certain types of employment. | "The sensations are like the moments when I felt happy and good but that depended on the moments because if I was also with my family and was happy without feeling any other sensation, then I didn't feel like using either." (P2)<br>"Well. I'm already missing some teeth, I don't have some molars, but in my front teeth I already have caries I'll have to get fillings for or some other treatment. And nicotine obviously affects your teeth. Eating without teeth isn't the same. So I need to stop using to avoid both things (tobacco and cannabis) to avoid more extensive treatment which would be having all my teeth removed and getting a new set of teeth." (P1)<br>"Quit smoking. I've always known I should get over that addiction, because it even affects you physically you know. I mean, quite apart from all the physical harm it causes your lungs, it also affects your appearance." (P3)<br>"In my case, it was because I was going to get a job, so they asked me to do an anti-doping test. So I did some research, you know. Like how long does it take to clean up your body? and they said three months." (P5) |
| Risk Perception | Three of the participants mentioned that the consequences of dual use would have a cumulative effect on attention, memory and respiratory health. Two of them said that cigarettes had more negative consequences and were more addictive than cannabis, which they thought posed a low or no risk. | Yes, I agree that they don't inhibit each other. In fact, they can boost each other or combine the damage." (P4)<br>"I have begun to notice memory loss such as forgetting things that occurred recently in addition to changes in attitude. I saw it recently in a guy I spent a lot of time with and he still consumes [*marijuana*]. He has become a frequent user. Now he is really irritable. He's changed a lot since I met him. I think we used to hang out from middle school to high school. We started school together. He has changed a lot, his way of being, his attitude and all that." (P1)<br>"Separately they don't do a lot of damage. Because everyone says cigarettes cause more harm than marijuana, you know?" (P3)<br>"I've heard cannabis isn't addictive, so it's not a problem." (P5)<br>Well, [*marijuana*] doesn't make you dependent the way nicotine does." (P2) |
| Substitution or compensation (relapse) | All the participants agreed that their relapses during previous quit attempts were associated with the phenomenon of compensatory replacement in which quitting or reducing the use of one substance tended to increase the use of the other one. They also said that regular use of one substance led to craving for the other one. At the same time, two participants with long periods of abstinence said that their relapses had been influenced by the difficulty of continuing their physical or sports activities that had once motivated them to remain abstinent. | "It happened when I was anxious because I wasn't smoking cannabis. When I had that anxiety was when I wanted tobacco so I could at least smoke something." (P1)<br>"When I completely gave up marijuana, I ramped up my tobacco consumption. That's when I started to buy whole packs of cigarettes." (P3)<br>"If I didn't have marijuana, I'd smoke a cigarette." (P5)<br>"Yes, first, it was always cannabis, I never combined them. I started smoking when I ran out of marijuana, to calm my nerves." (P4)<br>"I think it was like compensation, I mean, it has nothing to do with it, it was just for the sake of it." The fact of just smoking in other words, the relationship with smoking, because it is not the same. I think it's not the same. It is not that I want it. The effect or the taste or anything or the smell." (P2)<br>"To feel, or simply because you are smoking. Because of the act of inhaling and exhaling smoke. (P1)<br>"I think it's like substitution because I don't really like the taste and it makes me feel nauseous when I use it. (P2) |
| Periods of abstinence | Participants' periods of abstinence ranged from one month to two years of uninterrupted combined abstinence. Together with pleasant emotions and enjoyable time spent with the family, they also reported that sports and regular physical activity sustained them during those periods. Withdrawal symptoms included depression, craving, irritability, lack of motivation and dreaming about using. All the participants reported dual relapses during periods of abstinence. | "I did sport, I wanted to look after myself and keep fit but I didn't drink, you know? So basically no." (P2)<br>For a while I quit marijuana and alcohol cold turkey, I mean marijuana and tobacco: When I did boxing training." (P3)<br>"when I run every day or do some sort of physical activity, I don't smoke. When I do, it hurts a lot. It was as though I was starting smoking for the first time and it was a very unpleasant feeling. So I quit smoking for about two years." (P1)<br>"I like playing football and training. So what happened was this. In that case, I stopped cold turkey to get fit and it wasn't difficult. As far as quitting is concerned, I quit for about four or five months and then I stopped (playing football) and went back to using." (P5)<br>"It may be difficult to recognize, but I did have withdrawal symptoms. I mean syndrome. Yes, in fact … anxiety … less motivation to do certain things, I got lazy and more solitary." (P4) |

*Note:* the elements presented are drawn from the qualitative analysis of participant narratives.

show how dual use is linked to routines, specific contexts and emotional states, becoming functionally incorporated into participants' everyday experience.

To preserve participants' anonymity and facilitate the traceability of the analysis, direct quotations were identified with alphanumerical codes (P1-P5), corresponding to each of the five participants in the focus group.

### Quit Attempts and Relapse in Dual Tobacco and Cannabis Use

Discourse analysis identified subcategories encompassing participants' quit attempts, the difficulties experienced during periods of abstinence and the way relapses occurred. In other words, they described how the processes of quitting and resuming substance use occurred in participants' everyday experience.

### Reasons for Quitting

Participants reported numerous previous quit attempts, mainly driven by the negative consequences associated with use, particularly in the sphere of physical health, personal image and workplace demands. In particular, tobacco was described as the substance that produced the most visible and immediate consequences. These included respiratory problems, dental issues and the deterioration of one's physical appearance, which contributed to the aim of reducing its use or quitting. For example, one of the participants noted: 'I'm already missing teeth… and nicotine obviously affects your teeth. So I need to stop using to prevent both things."

Likewise, some quit attempts were linked to specific work requirements, such as the need to pass anti-doping tests to get a job, leading to temporary periods of abstinence Conversely, cannabis use was less frequently described as a direct reason for quitting, meaning that quit attempts tended to target tobacco rather than cannabis. These reasons are summarized in Table 2.

### Risk Perception

Participants provided various evaluations of tobacco and cannabis use. Some stated that dual use could have cumulative effects or improve health, attention and memory. Conversely. others thought that tobacco posed a greater risk than cannabis, which they thought had a smaller or even no effect in terms of dependence and damage. One participant remarked: "Separately they might not harm you, because they say cigarettes are more harmful than cannabis," while another declared: "Well, cannabis doesn't create dependence the way nicotine does."

This asymmetric perception of risk influenced the prioritization of quit attempts and the way participants evaluated the consequences of dual use, particularly in relation to the difficulty of simultaneously quitting both substances (Table 2).

### Substitution and Compensation (relapse)

A recurrent finding in participants' narratives was the presence of substituting or compensating for substances during quit attempts. All the participants agreed that reducing the use of one substance or quitting is generally accompanied by an increase in the use of the other, particularly during the early stages of abstinence. This process was described as a means of coping with anxiety, intense craving, or the discomfort associated with quitting smoking.

For example, one of the participants noted: "When I felt anxious about not smoking marijuana, I would reach for a cigarette so I could at least smoke something," while another participant remarked: "Well, if I didn't have any marijuana, I'd smoke a cigarette." In several cases, participants said they did not necessarily seek the effect of the substitute substance but the act of smoking as a means of momentarily relieving discomfort. These substitution processes contributed to the resumption of dual use and hampered the combined quitting of both substances, as summarized in Table 2.

### Periods of Abstinence

Participants reported joint periods of abstinence of varying duration, oscillating between one month and two years These periods were associated with the implementation of specific strategies such as regular physical activity, taking part in sports and enjoying spending time with the family, described as factors that made it easier to remain abstinent. One participant noted: "When I did boxing training, I gave up marijuana and tobacco cold turkey, while another participant said: "When I run every day or do physical activity, I don't smoke … the feeling was very unpleasant so I quit smoking for about two years."

They also mentioned the presence of withdrawal symptoms, such as anxiety, irritability, lack of motivation, craving and dreams related to use, which hampered continuity. In each case, periods of abstinence were followed by dual relapses, described not as an abrupt event but as a gradual process in which emotional, contextual and behavioral factors converged, leading participants to resume use The elements corresponding to this subcategory are given in Table 2.

**Table 3**
*Strategies Perceived as Effective for Maintaining Abstinence.*

| *Subcategory* | *Definition* | *Discourse* |
|---|---|---|
| Physical activity or sport | Useful for feeling motivated, active, and physically stimulated. Users reported an increase in self-efficacy and a feeling of satisfaction at achieving their goals within their sports or physical context, based on various aspects of self-care. | "At the time, I was smoking a lot of marijuana and tobacco. Then I met a neighbor who did boxing training and began to introduce sport into the community We started training in the park. We gradually took in punching bags and a tire and even built an improvised ring. Sport gave me discipline and constancy. It changed my life because I stopped feeling lonely. I began to feel physically better and set personal goals, progress and do well at something and organize my routines better." (P1)<br>"I really enjoyed the effort and all that, because to make up for that, I focused on doing exercise." (P4) |
| Doing activities that provide satisfaction | Participants found activities such as being with the family, spending time with close friends, working and engaging in pleasant activities an effective means for not consuming. | "Yes, when I was busy doing things, when I was working with relatives, when I was busy with them I didn't have time to smoke. I had to wait to finish up those things before I could go out and do it on my own." (P1)<br>"OK, I think that being busy or doing the things that make you happy, in other words, I don't know what you call the sensation or the thing your body releases when you are happy." (P1)<br>"I think it's ok … to be busy, you know? Your mind is occupied so you don't think about using." (P4)<br>""And afterwards, because at home, I started working and that sort of kept my mind off doing that." (P3) |
| Avoiding people, places and situations where there are triggers for using substances | Participants mentioned that certain social settings act as precipitators or triggers of substance use. Conversely, interacting with people who do not use substances makes it easier to avoid them and contributes to the consolidation of healthy habits sustained over time. | "Being surrounded by people stopped me from using marijuana. Although I did use nicotine, cigarettes." (P4)<br>"Yes, social aspects and if you're with the wrong people or you're at a low point in your life, that doesn't help either." (P5)<br>"The people you're with and where you are also has an influence, because if you're not with those people, then you don't have those problems that then lead you to use. Well, you just don't do it or simply enjoy the moment when you are there." (P1)<br>"In my case, it was mainly when I was living with my ex partner. There were times when we would go on a trip with her family or when we were at home when everything was fine. And I didn't even think about it. I didn't smoke. I kept it tucked away but I had no need to escape." (P2) |
| Organizing and planning activities | One of the main triggers of cannabis and tobacco use has been reported as "boredom" or "having idle time." Conversely, something that has proved effective for users who have remained abstinent has been to organize and manage their times to plan and schedule each of their activities, which reduced their likelihood of using. | "Well, when I have free time, I get distracted with other things and don't feel the need to use. But when I have more free time and don't have any tobacco, that's when I feel like "blowing out smoke" so to speak, especially if I don't have any marijuana." (P3)<br>"Exercise, organizing or restructuring your routine so you don't have as much or can reduce your stress or whatever it is that makes you want to escape. I've also tried quitting smoking cold turkey, uh huh. But it is not so much that I personally crave smoking, but that it's a habit. In other words, the things I associated with smoking, such as chatting to a friend, walking, finishing a meal, which is why it is important to get organized." (P1)<br>"In the beginning, I used to do it when I had free time, when I was bored and had nothing to do, because I'd smoke a joint and feel better." (P5) |

*Note:* The elements presented are drawn from the qualitative analysis of participant narratives.

## Strategies Perceived as Effective for Maintaining Abstinence

The third thematic axis reveals the strategies participants identified as being most useful for maintaining periods of abstinence from dual tobacco and cannabis use. On the basis of discourse analysis, this category was organized into sub-categories describing the behavioral, contextual and relational resources used to quit and cope with the discomfort associated with abstinence. These strategies were reported as active attempts to reorganize everyday life and reduce exposure to risky situations, rather than specific or definitive decisions.

### Physical Activity

One of the activities most consistently mentioned for maintaining abstinence was incorporating physical activity or structured exercise. Participants stated that exercise not only served as a form of distraction but as a means of regulating the physical and emotional distress associated with abstinence, particularly irritability and craving. In various narratives, exercise was described as an activity incompatible with use, either because of its immediate physical effects or because of the commitment involved in a self-care routine.

Moreover, participants noted that the suspension or reduction of physical activity was associated with an increase in the likelihood of relapse, suggesting that this strategy played a key role in organizing time and regulating the desire to use substances (see Table 3).

### Structuring Time and Modifying Cues

Participants reported that modifying routines, reducing contact with users and limiting exposure to leisure

contexts associated with substance use facilitated the maintenance of abstinence, particularly during the initial phases.

This restructuring was described by participants as a gradual process that involved distancing oneself from certain social settings and engaging in new activities to occupy the moments previously spent on use. Nevertheless, participants noted that these strategies were difficult to maintain unless they were accompanied by significant alternative activities, which increased their vulnerability to relapse.

### Undertaking Alternative Activities

Strategies regarded by participants as useful for maintaining abstinence included engaging in alternative activities as a key source of satisfaction and emotional containment. In particular, spending time with the family, strengthening close links and participating in relationships perceived as being more stable were described as elements that contributed to reducing the desire to use and maintaining periods of abstinence. Some participants declared that the emotional wellbeing associated with these contexts spontaneously reduced the need to use, as observed in the following account. "If I was with my family and was happy and did not have any other feelings, I didn't feel like using."

These activities and links served as incentives to remain abstinent, not only because of the support received but because of the possibility of experiencing pleasant emotions, a sense of belonging and affective stability outside use. However, this resource was described ambivalently. Participants declared that in the absence of consistent relational networks or when faced with interpersonal conflicts, they tended to experience more emotional distress, reducing the effectiveness of these strategies. In this respect, undertaking alternative activities linked to relational support was not regarded as an absolute protective factor but as a resource whose usefulness depended on the quality and continuity of available links.

Participants described various strategies designed to cope with craving and withdrawal symptoms, which were integrated into alternative activities not associated with use. These activities included rest, sleep regulation and participating in pleasurable activities enabling them to occupy their time and reduce their focus on the desire to use. Some narratives showed how these activities encouraged prolonged periods of abstinence.

However, participants noted that craving persisted as an intense, recurrent experience, especially at times of stress, tiredness or boredom, even when these strategies were implemented. The difficulty of sustaining alternative activities, either due to lack of motivation or changes in a person's routine, contributed to the likelihood of relapse. As one participant explained "I gradually started using again when I stopped training." In their experience, maintaining abstinence was a dynamic, vulnerable process, in which alternative activities performed an important yet limited function in a balance that could relatively easily be upset.

## DISCUSSION AND CONCLUSIONS

The aim of this study was to identify and understand the motives associated with dual tobacco and cannabis use, previous quit attempts and strategies regarded as useful for maintaining abstinence in a sample of adult men under residential treatment. The information analyzed made it possible to approach the way people in residential treatment describe and organize their experience of use, as well as the difficulties and resources involved in quitting. The behaviors, beliefs and cognitive processes mentioned by participants converge with the theoretical assumptions previously documented in the literature on dual use, particularly regarding simultaneous substance use, substitution and maintaining use (Driezen et al., 2022; Lemyre et al., 2018; McClure et al., 2019; Vogel et al., 2018).

The results obtained provide indications that could help understand dual tobacco and cannabis use as an integrated functional pattern, in which the two substances play different yet complementary roles in participants' everyday experience. Another key finding was the role attributed to tobacco in enhancing the effect of cannabis. Participants consistently reported that the subsequent or concomitant use of tobacco with cannabis intensified or prolonged the perceived effects of the latter, reinforcing the repetition of dual use. This phenomenon suggests that tobacco not only operates as a secondary or accessory substance but as an active modulator of the subjective experience of cannabis use. From a clinical perspective, this enhancement effect helps explain the close relationship between the two substances and the difficulty of quitting them both (Hindocha et al., 2017; McClure et al., 2019; Rubinstein et al., 2014).

In particular, the instrumental role of tobacco as a facilitator of cannabis use and a trigger of the desire to use cannabis coincides with the findings of previous studies describing the functions of each substance within dual use. Liu et al. (2025) report that tobacco tends to be associated with more automatic, habitual patterns whereas cannabis is associated with emotional

regulation. This encourages its joint use, even without direct co-administration, a pattern observed in participant narratives (Becker et al., 2013; Becker et al., 2014; Becker et al., 2015; Beckham et al., 2018).

Engaging in dual use as a strategy for regulating emotions such as anxiety, anger, and boredom aligns with the literature describing cannabis use as a resource for modulating affective states, particularly when combined with tobacco as a supportive behavior or preparation for use. From this perspective, the reasons mentioned by participants not only reflect the quest for pleasure but also a system of use organized around shared emotional and contextual functions.

These findings expand on what has been reported in previous studies, showing how these functions are linked in specific everyday contexts such as physical labor, sexual relations and leisure time. Based on the subjective experiences of adult men in residential treatment, they provide a situated interpretation of dual use to complement the predominantly quantitative evidence available (Agrawal et al., 2012; Liu et al., 2025; Reboussin et al., 2021).

In relation to quit attempts, the findings of this study suggest that quitting dual tobacco and cannabis use is experienced as a complex process, particularly when quit attempts focus on a single substance. Participants frequently mentioned that attempts to reduce or quit tobacco or cannabis use were accompanied by a compensatory increase in the use of the other substance, making it difficult to maintain prolonged periods of abstinence (Hindocha et al., 2015; Hindocha et al., 2017). This pattern of substitution or compensation has been documented by McClure et al., (2019) and Driezen et al., (2022), who note that dual use increases the likelihood of relapse when quitting is approached sequentially or partially.

Participant narratives highlight a low risk perception associated with the use of cannabis compared with tobacco (Keyes et al., 2017), meaning that quit attempts tend to focus more on tobacco. This finding converges with studies reporting that cannabis use tends to be normalized and perceived as less problematic, even in contexts of concurrent use, which may contribute to the persistence of the dual pattern (Pedersen et al., 2022). From this perspective, relapse is not regarded as an isolated event but as a gradual process. It is mediated by craving, emotional distress and the permanence of routines associated with the act of smoking, which have been identified as key factors in the difficulty of quitting dual use (Ruleman et al., 2024; Weinberger et al., 2018).

Participants consistently identified regular physical exercise, structuring time and engaging in gratifying activities as key resources for reducing the desire to use and cope with the distress associated with abstinence. These strategies coincide with the findings of previous studies that replacing behaviors associated with the use of these substances with alternative reinforcing activities may reduce relapse risk, particularly in dual use contexts (McClure et al., 2020; Lemyre et al., 2018).

Participants also noted that the deliberate modification of cues, in other words, people and situations associated with use, sometimes facilitated the temporary quitting of dual use, particularly during initial stages of abstinence. These changes included avoiding spaces, routines, or interactions previously linked to the act of smoking, described as a practical means of reducing the desire to use at critical moments. Similar findings reported in previous studies on dual use indicate that continuous exposure to habitual contexts of use is associated with greater difficulty in maintaining abstinence (Driezen et al., 2022). However, participant narratives also show that the effectiveness of these strategies varied. It depended on the possibility of maintaining these changes over time, as well as the presence of other sources of support or alternative activities that could help alleviate the discomfort associated with abstinence.

Participant narratives show that quit attempts focusing on a single substance can be hampered by substitution processes, craving and the persistence of routines associated with smoking behavior. These factors may limit the effectiveness of sequential interventions or those targeting a single substance. This coincides with clinical proposals indicating the importance of intervening in the shared functions of use, use contexts and associated behaviors, rather than addressing the use of each substance separately (Hindocha et al., 2017; McClure et al., (2019) ).

This perspective points to the need to incorporate behavioral activation components, cope with craving and modify routines in treatment design, which could be particularly relevant in residential treatment contexts. The explicit incorporation of dual use into the initial clinical evaluation and therapeutic planning could help prevent early relapses and encourage more sustained quit processes, tailored to the actual needs of this population.

It is suggested that qualitative research be expanded by organizing new focus groups or individual interviews with active users, incorporating a range of ages, genders, pathways of use and the presence of psychiatric comorbidity. It would be useful to explore strategies that increase the risk perception of cannabis use. It would also be helpful to replicate the present study in a population that has not received treatment to explore

the contextual, cognitive, and motivational factors influencing dual use behavior.

This study contributed qualitative evidence on the subjective experience of dual tobacco and cannabis use in adults in residential treatment, on the basis of participants' discourse. It identified the motives associated with emotional regulation, substitution processes during quit attempts and key behavioral strategies for maintaining abstinence, shedding light on the difficulties and resources involved in the cessation of dual use in clinical contexts.

Although the results are not generalizable, they provide key inputs for formulating clinical hypotheses and designing more sensitive interventions to address the complexity of dual use, particularly in residential treatment settings. They also highlight the need to continue developing research that will incorporate qualitative and quantitative perspectives to explore this emerging phenomenon.

### Limitations of the Study

This study has limitations that should be considered when interpreting its findings. Firstly, the qualitative, exploratory nature of the design and the small sample size and the fact that there was only one focus group limit the generalizability of results to other populations or contexts. The fact that participants were under residential treatment and abstinent during data collection may have influenced the way they reconstructed and narrated their experiences prior to use, quitting and relapse.

Another key limitation is the exclusive inclusion of male participants, making it impossible to explore sex differences in the motives associated with dual use, quit attempts, and strategies for maintaining abstinence. Likewise, the study focused solely on combustible tobacco and cannabis use, meaning that the findings cannot be extrapolated to other patterns of use, such as electronic devices or vaping.

Nevertheless, these limitations define the scope of the study, whose results should be interpreted as a qualitative, contextualized approach to the subjective experience of dual tobacco and cannabis use in a specific clinical context.

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## CONFLICT OF INTEREST

The authors declare that there is no conflicts of interest. They also declare that they did not use any artificial intelligence assistance in the writing and/or production of the document. All contents were verified and edited by the authors who assume full responsibility for the final version of the article.

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## AUTHORS CONTRIBUTION

**Israel Isaac Zamora Velázquez:** conceptualization, methodology, data collection, data curation, writing-original draft.
**Jennifer Lira Mandujano:** conceptualization, methodology, formal analysis, writing-revision and editing.
**Marcela Tiburcio Sainz:** formal analysis, writing-revision and editing, supervision.

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