

Abstract

Background: Amphetamine-type stimulants (ATS) encompass a varied assortment of substances that possess comparable pharmacological effects and stimulant characteristics. ATS display diversity in patterns of use among different substances and users' sociodemographic characteristics. The utilization of ATS is associated with both favorable and unfavourable outcomes. The biopsychosocial model of substance use provides a comprehensive framework for understanding ATS use.

Aims: The primary objective of this study is to cultivate a thorough comprehension of the motivating factors driving individuals to initiate, cease, escalate, and/or curtail their ATS use.

Material and methods: In a mixed methods approach, qualitative interviews were conducted to explore distinct groups of ATS users and one group of non-ATS users. These qualitative interviews then informed standardized quantitative computer-assisted personal interviews that utilized a range of (standard) instruments. The interviews were carried out in five European Union member states, and a minimum of five years had to elapse between the first usage of or exposure to ATS and the conducted interview. In the qualitative study arm, a total of 279 individuals were interviewed. Among them, 17% were identified as currently dependent on ATS, 20% were formerly dependent, 17% were current frequent users, 13% were former frequent users, 18% were non-frequent users, and 15% individuals were non-ATS users who had direct exposure to ATS availability. The interviews revealed distinct characteristics unique to each group. In the quantitative study arm, a total of 1,656 individuals were included in the interviews. Among the participants, 21% were identified as non-ATS users who had been exposed to ATS, 16% as rare users, 17% as moderate users, 18% as frequent users, and 29% as users with a probable ATS dependency.

Results: Findings revealed distinct characteristics specific to each group. A considerable number of participants have developed a pattern of ATS use that can, in broad terms, be classified as non-problematic. Notably, the non-user, rare user, and moderate user groups exhibited highly similar results, while the group with likely ATS dependency displayed contrasting patterns. The frequent user group demonstrated an intermediate position, with varying proximity to both the group with ATS dependency and the other three groups. Frequent users and persons likely dependent on ATS, showed a pronounced tendency to leverage these substances as a means to enhance their functional capacity and to facilitate the execution of routine tasks and demonstrated a reduced regulatory framework when engaging with ATS. Lifetime incidences of mental health issues and current mental distress were markedly higher in the group dependent on ATS. However, when considering the Big Five personality traits, no discernible disparities between the user groups were identified. A vast majority of ATS users, irrespective of their group designation, generally demonstrated

notable temporal fluctuations in ATS use, characterized by periods of escalation and de-escalation. Factors contributing to decreased use included concerns about health effects, the subjective feeling of loss of control, as well as changes in social environment and situational determinants.

Conclusions: There are varied trajectories and driving factors associated with different patterns and stages of ATS consumption. This shows a need for tailored intervention strategies for various groups. The central emphasis at all groups should be on harm reduction in relation to ATS use.