## Assessing subgroups of 2,301 young adults who never drink alcohol (YANDA) according to their substance use patterns using aggregative hierarchical clustering

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## Abstract

A growing number of young adults report never drinking alcohol. Little is known about this population that is likely to be heterogeneous.

Using the 2000, 2005, 2010, 2014 and 2017 editions of the French Health Barometer, we first performed a hierarchical clustering to identify subgroups within a population of 2,301 young adult who never drink alcohol (YANDA) aged between 18 and 30 years based on their patterns of other substance use. Then, we conducted a multivariable multinomial regression to investigate the association between the obtained subgroups and socio-economical determinants as well as potential factors accounting for the non-drinking behavior.

We identified three different profiles: 1) never-experimenters-non-users, 2) all substance users, and 3) legal substance only users. Compared to the group of never-experimenters-non-users, being a male (OR: 1.56, IC95% [1.20; 2.03]), reporting a lifetime past suicide attempt (OR: 2.56, IC95% [1.52; 4.31]) or past alcohol misuse (OR: 8.70, IC95% [3.30; 22.96]), being underweighted (OR: 2.14, IC95% [1.37; 3.33]), were risk factors for being classified in the all substance users' group and reporting a lifetime past suicide attempt (OR: 1.72, IC95% [1.10; 2.68]), being underweighted (OR: 1.84, IC95% [1.30; 2.62]), were risk factors for being classified in the legal substance only users' group.

YANDA constitute a heterogeneous population. A better characterization of the different profiles of the subgroups is needed in the future, particularly regarding risk factors for using other substances.

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