



The European School Survey Project on Alcohol and Other Drugs

## Application form for use of the ESPAD 07 Database

**Date: 18- 05 - 2009**

**Person responsible for the dataset<sup>1)</sup>**

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**Working title of the project:**

Multiple indicators of poly drug use using structural equation modeling.

**Abstract:** (Please describe objectives, methods and specify the research question(s), maximum 250 words.)

**Objective:** An important aspect in drug prevalence's study is poly drug use. Most drug users do not limit themselves to a single substance and use typically two or more drugs; in particular those who use illicit drugs (i.e. cannabis, cocaine or other hard drugs) also tend to use alcohol or cigarettes. Our aim is to study the detailed relationship between poly drug use (expressed as underlying latent construct) and personal attitudes and/or interpersonal relationships, among adolescents.

**Methods:** A structural equation model (SEM) will be fit with AMOS 16, using a confirmatory-factor-analysis procedure. Confirmatory-factor-analysis considers a number of latent variables as the underlying factors that explain the correlations between the observed multiple indicators. In SEM every variable, be it latent or manifest, is defined as either independent or dependent. Dependent variables are those that can be expressed as a structural regression function of other variables. Independent variables are never regressed on each other. The two type of variables are then related by a set of structural equations. The SEM approach consider the model as a system of equations and estimates all the structural coefficients simultaneously.

**Research questions:** to understand the complex relationships among various factors and the identification of possible interventions for drug use prevention.

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<sup>1)</sup> This can only be a Principal Investigator or a Chair of an ESPAD Thematic group. When the application is approved the Principal Investigator/Chair of a Thematic group has to sign an agreement that the delivered copy of the 07 Database only will be used for the applied project and that the database will be handled according to the rules in the document "Rules for the use of ESPAD databases".

**Planned type of publication:**  Paper/article  Report  PhD  
 Other, which:

**Variables to be included in the analysis:**  
all

**Countries to be included in the analysis:**

- All accessible countries (Level 2)
- A more limited number of countries, namely:

To have the application reviewed by the Application Committee please e-mail this document to:  
[bjorn.hibell@can.se](mailto:bjorn.hibell@can.se)