***Data analysis***: Data will be analysed using SPSS. Descriptive statistics will be generated on the prevalence of marijuana and alcohol use among university students aged 18 to 24. Knowledge scores will be generated. A score of (1) for a correct answer and (0) for an incorrect/don't know answer, then sum these up to get a total score for each person and calculate the mean/median across participants, then categories each into above or below the mean/median; this will be used the dependent variable ‘total knowledge score’ (high/low). Chi-square will be used to determine bivariate associations of knowledge score of marijuana and alcohol use with socio-demographic characteristics. A multivariable logistic regression will be performed to examine the associations between knowledge score and the significant bivariate associations at a confidence level of 0.05.

Table 1: A description of the Independent Variables in the Study

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable Name** | | **Coding** | **Type data** | | **Aim of analysis** | **Test used** | |
| **Gender** | | 1= Male  2= Female  3= Other | Categorical | | **Descriptive analysis**    **Bivariate analysis**   To measure association between gender and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | Number and percentage      Chi-squared    Logistic regression | |
| **Age** | | 1 = 18-20  2 = 21-24 | Categorical | | **Descriptive Analysis**  **Bivariate Analysis**  To measure association between age and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | Number and percentage  Chi-squared  Logistic regression | |
| **Year** | | 1 = First year  2= Second year  3= Third year  4= fourth year | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between age and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | Number and percentage  Chi-squared  Logistic regression | |
| **Course** | | 1=Health sciences  2=Social sciences  3= Education | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between age and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | | Number and percentage  Chi-squared  Logistic regression |
| **Who they live with** | | 1=Alone  2=Parents  3=Relatives  4=Friends | Categories | | Descriptive analysis  **Bivariate Analysis**  To measure association between who the student lives with and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analysis. | | Number and percentage  Chi-squared  Logistic regression |
| **Ethnicity** | | 1=Canadian  2=Non-Canadian | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between ethnicity and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | | Number and percentage  Chi-square  Logistic-regression |
| **Parent(s) you have** | | 1= One Parent  2= Two Parents  3= Other | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between number of parent(s) they have and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | | Number and percentage  Chi-square  Logistic-regression |
| **Parental Death** | | 1=alive  2= Deceased  3= At least one parent deceased | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between parental death and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | | Number and percentage  Chi-square  Logistic-regression |
| **Parental Education** | | 1=University Degree  2=At least one with a university degree  3= High School Diploma  4=At least one with a high School Diploma  5=Other | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between parental education and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | | Number and percentage  Chi-square  Logistic-regression |
| **Parent’s Employment Status** | | 1= Working -Full Time  2=Working – Part Time  3= At least one parent working – Part Time  4=Unemployed  5= At least one parent unemployed | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between parent’s Employment status and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | | Number and percentage  Chi-square  Logistic-regression |
| **Student Employment Status** | | 1= Working – Full Time  2= Working – Part Time  3= Unemployed | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between Student’s Employment status and the knowledge of university on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses. | | Number and percentage  Chi-square  Logistic-regression |
| **Household income per annual (in ‘000)** | | 1=<CA 20,000  2=CA (20,000 -40,000  3= >CA 40,000 | Categorical | | **Descriptive analysis**  **Bivariate Analysis**  To measure association between annual household income and the knowledge of university students on Marijuana and alcohol use and factors associated with it.  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses? | | Number and percentage  Chi-square  Logistic-regression |
| **Beleifs about the effect of Marijuana and Alcohol** | **1=Strongly Disagree**  **2=Disagree 3=Unsure 4=Agree**  **5=Strongly Agree** | | **Categorical** | **Bivariate Analysis**  To measure the association between socio-demographic and socio-economic factors and Beliefs about the effects of Marjuana and Alcohol  **Multivariate Analysis**  To measure the joint effects of all variables which were significant in the bivariate analyses? | | | Number and percentage  Chi-square  Logistic-regression |