Research Proposal

UNIVERSITY STUDENTS’ PERCEIVED NORMS ABOUT PEERS AND DRUG USE:
A MULTICENTRIC STUDY FROM FIVE LATIN AMERICAN COUNTRIES

International Research Capacity-Building Program for Health Related Professionals
to Study the Drug Phenomenon in Latin America

Sponsoring Organizations

Organization of American States – OAS
Inter-American Drug Abuse Control Commission – CICAD
Centre for Addiction and Mental Health – CAMH / University of Toronto

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Introduction

Worldwide drug use consequences have affected many lives at a high cost. The magnitude of drug use, and associated mortality and burden of disease keep increasing as well as related psychosocial problems.

Regarding the magnitude of drug use; in the world, 5.1 litres of pure alcohol is the mean adult per capita consumption (World Health Organization, 2004), 1.25 billion people smoke (The Tobacco Atlas, 2002), and 4.8% of the population have used illegal drugs in the past year (United Nations Office on Drugs and Crime, 2007). According to WHO (2004) drug use is more prevalent in young adults than in older age groups around the world.

In Latin America, youth aged 18 to 24, especially university students have the highest lifetime and past year prevalence of legal and illegal drug use in the population. These differences are higher for illegal drugs than for alcohol and tobacco (based on Carlini, 2002; Consejo Nacional pra el Control de Estupefacientes, 2007; Centro de Informacion y Educacion para la Prevencion del Abuso de Drogas, 2006; Ministerio de la Proteccion Social-OMS/Harvard-FES, 2003). The last year prevalence of marijuana use is three times higher amongst youth aged 18 to 24 years than in the whole population in Chile (16% vs. 5.3%), and two times in Peru (6.8% vs. 3.3%). The past year prevalence for cocaine use is about two times higher amongst 18 to 24 years olds than in the whole population in these countries (based on CONACE, 2007; Comision Nacional para el Desarrollo y Vida sin Drogas, 2002).

Concerning mortality and burden of disease; worldwide, 8.8% of the total global mortality and 4.1% of the total burden of disease are attributable to tobacco, 3.2% of the mortality and 4% of the total burden of disease are attributable to alcohol and 0.4% of the mortality and 0.8% of the total burden of disease are attributable to illegal drugs (WHO, 2004).
In Latin America and Caribbean, 6.5% of the total burden of disease is attributable to high-risk alcohol use, and the eighth leading cause of disability and premature death in 2001 was alcohol use disorders (Mathers, Lopez, Stein, Fat, Rao, Inoue, Shibuya, Tomija, Bernard, & Xu, 2004). In young adults, the mortality rates associated with alcohol and with the use of other drugs are higher than in other groups of age (Rehm, Taylor, & Room, 2006).

Regarding drug use and psychosocial problems amongst young adults, specifically in university students, drug use has been found associated with traffic accidents (Morbidity and Mortality Weekly Report, 2002), violence, delinquent behaviour (Giancola, 2002; Richardson & Budd, 2003), and high sexual risk behaviour (Cooper, 2002).

Given the high prevalence of drug use amongst university students, and its impact on the life of people and the development of countries, several researchers have tried to understand the drug phenomenon. Peer influence has been found as a key factor associated with drug use amongst 18 to 24 years olds (Andrews, Tidesley, Hops, & Li, 2002; Sale, Sambrano, Springer, & Turner, 2003) and the Social Norms theory has been used as a framework to understand this relationship. One of the main concepts of this theory is Misperception of peer drinking; defined as the discrepancy between the actual norm (the prevalence of drinking) and the common perception of the norm (the perceived frequency of drinking by peers) (Perkins, 2002).

There is ample evidence of the association between misperception, in the form of overestimation, of peers drinking and drinking behaviour amongst college students in North America and in other developed countries. Students typically thought that the norms for both the frequency and the amount of drinking among their peers were higher than was actually the case, and they generally believed that their peers were more permissive in their personal attitudes about substance use than was in fact the case (Borsari & Carey, 2003; Neighbors, Dillard, Lewis,
Bergstrom, & Neil, 2006; Perkins, Haines, & Rice, 2005). Additionally, there are some evidence of the association between overestimation of peers smoking and tobacco use (Martens, Peige, Mowry, Damann, Taylor, & Cimini, 2006), and overestimation and illegal drug use, specifically marijuana (Kilmer, Walker, Lee, Palmer, Mallet, Fabiano, & Larimer, 2006; Martens et al., 2006; Wolfson, 2000) and cocaine (Martens et al., 2006).

It is of interest of this study to answer to the following research question: Do perceived norms amongst peers relate to drug use in a sample of university students, aged 18 to 24 years old, from 9 Universities in five Latin American countries?

A cross-sectional study will be carried out, self-report questionnaires will be answered by a census of sophomore and junior university students, aged 18 to 24, from schools of Health and Education of nine universities in five Latin American countries (Brazil, Colombia, Chile, Honduras and Peru).
Objectives

General

The purpose of this study is to analyze the relationship between perceived norms and drug use amongst peers in sophomore and junior university students, aged 18 to 24, from schools of Health and Education of nine Universities in five Latin American countries.

Specifics

1. Identify the perceived norms about drug use amongst university students, aged 18 to 24, from 9 Universities in 5 Latin American countries.

2. Contrast the perceived norms of University students, aged 18 to 24, about their peers drug use with the actual prevalence of drug use, from 9 Universities in 5 Latin American countries.

3. Compare the subjects own drug use with the perception about peers use of drugs amongst university students, aged 18 to 24, from 9 Universities in 5 Latin American countries.

4. Relate demographic and environmental characteristics to perceived norms about drug use amongst university students, aged 18 to 24, within each University.

5. Compare the extent to which demographic and environmental characteristics are related to perceived norms about drug use amongst university students, aged 18 to 24, across 9 Universities in 5 Latin American countries.
Significance

Given the high prevalence of drug use in university students, the importance of peers on drug use, and the lack of studies in this topic within Latin American countries, this study will be conducted in order to understand the accuracy of the perception of peers’ drug use and own drug use amongst university students in Latin America.

In addition, this research will focus not only in alcohol, but also in tobacco, marijuana and cocaine that have not been sufficiently studied.

The results of this research will raise awareness of the perception of peers’ drug use and its relationship with own drug use amongst university students, faculty, administrators, authorities, as well as governments and international organizations such as the Inter-American Drug Abuse Control Commission (CICAD) – Organization of American States (OAS), that may contribute to the implementation of specific policies intended to reduce drug use at the nine sites involve in this study (e.g. Smoke free university, binge drinking prevention). Also, the findings of this study could be useful for improving ongoing prevention programs at the universities.

In the long term, evidence – based brief interventions using a social norms or normative feedback could be designed to reduce drug use and hazardous drinking among the students, given that normative feedback have been shown to reduce problem drinking (Neighbors et al., 2006). According to Perkins et al. (2005), addressing the inaccuracy of perceived norms about peers’ drug use is a powerful component of any drug prevention program.
Background

**Countries Characteristics**

It is important to characterize each of the countries that will be involved in the study from a geographic and demographic perspective in order to have the context of drug use.

**Brazil:** It is the largest country in South America and is located in the northeast. It has 8,514,877 km², a population of 188,883,000 inhabitants with an annual growth rate of 1.3% (Organizacion Panamericana de la Salud, 2006). The median age is 28.2 years, 6,142,935 are between 20 to 24 years old and 1,690,872 are university students (www.ibge.gov.br). The Gross Domestic Product (GDP) is US$ 7,940 per capita (OPS, 2006).

**Chile:** It has a territory of 756,950 Km² and is located in the south west of South America. The population of Chile is 16,465,000 people with an annual growth rate of 1.0% (OPS, 2006). The median age is 30.7 years and 1,322,128 are between 20 to 24 years old (INE, 2004). The Gross Domestic Product (GDP) is US$10,610 per capita (OPS, 2006).

**Colombia:** It is located in the north of South America and has a territory of 1,141,748 km². The population is 46,279,000 inhabitants with an annual growth rate of 1.4% (OPS, 2006). The median age is 26.3 years, 3,280,000 are between 20 to 24 years old and 1,945,430 are university students (www.dane.gov.co). The Gross Domestic Product (GDP) is US$6,940 per capita (OPS, 2006).

**Honduras:** It is located in the middle of Central America and has a territory of 112,090 km². The population is 7,362,000 inhabitants with an annual growth rate of 2.16%. The median age is 19.5 years, and there is not available data either for the population between 20 to 24 years old or university students (Flores, 2001). The Gross Domestic Product (GDP) is US$2,760 per capita (OPS, 2006).
**Peru:** It is located in the west of South America and it has a territory of 1,285,220 km². The population is 28,380,000 with an annual growth rate of 1.5% (OPS, 2006). The median age is 23 years, 2,585,830 are between 20 to 24 years old ([www.inei.gob.pe](http://www.inei.gob.pe)) and 568,095 are university students (Asamblea Nacional de Rectores, 2006). The Gross Domestic Product (GDP) is US$5,400 per capita (OPS, 2006).

**Drug Use Prevalence**

The most used drugs in Latin American countries are alcohol and tobacco, followed by marijuana and cocaine (CONACE, 2007; CEDRO, 2006; Ministerio de la Proteccion Social-OMS/Harvard-FES, 2003).

The population between 18 to 24 years old, including university students, has the highest lifetime and past year prevalence of legal and illegal drug use (CONACE, 2007; CEDRO, 2006; Ministerio de la Proteccion Social-OMS/Harvard-FES, 2003). Furthermore, the difference of drug consumption between youth and the whole population is greater for illegal drugs than for alcohol and tobacco. For example, there is a difference about ten percent on alcohol past year prevalence between the age group of 18 to 24 years old and the whole population in Peru (83% vs. 73.8%). However, the last year prevalence of marijuana use amongst the group of age 18 to 24 years old is three times higher than the prevalence of the whole population in Chile (16% vs. 5.3%), and two times higher in Peru (6.8% vs. 3.3%). The past year prevalence of cocaine use for the group of 18 to 24 years old is two times higher than the prevalence of the whole population in these countries.

Specifically in university students, alcohol is the psychoactive substance most used (lifetime prevalence about 90% in Chile and Lima, Peru; past year prevalence 78.4% in Antioquia, Colombia), followed by tobacco (lifetime prevalence 51% in Sao Paulo, Brazil and
76% in Lima, Peru; past year prevalence 30.1% in Antioquia, Colombia). Amongst illegal drugs, marijuana is the most used (lifetime prevalence 35.4% in Sao Paulo, Brazil, 19.1% in Lima, Peru, 16.7% in Chile, and 6.3% in Honduras; past year prevalence 19.8% in Antioquia, Colombia). The past year prevalence for cocaine is 5.2% in Lima, Peru, 4.4% in Honduras, and 3.5% in Chile (Based on Asamblea Nacional de Rectores, 2006; Cardona & Hernandez, 2007; CONACE, 2005; Instituto Hondureno para la Prevencion del Alcoholismo, Drogadiccion Farmacodependencia, 2004; Ministerio de la Proteccion Social y FES, 2003; Wagner, Stempliuk, Zilberman, Barroso, & Andrade, 2005; Zarate, Zavaleta, Danjoy, Chaname, Prochazka, Salas, Maldonado, 2006).

**Characteristics of University Students and Drug Use**

Some authors have recently considered the period between late adolescence and early adulthood as an important stage in the life cycle (Arnett 2000; 2005). This stage is critical for the development of personal identity, sexual affective affiliations, and career development (Erikson, 1971). Exploration and commitment are key elements to achieve the developmental tasks of this stage (Marcia, 1966).

The university is an important setting for development in this stage. It is a source of personal and professional growth, but also is related to different risk factors that may lead students to engage in health-compromising behaviours, including drug use (Maggs, 1997). There are some elements that promote the use of drugs in the University:

- The transition from the school system, where the boundaries were clear and students had to make few decisions, to a university system where they become protagonist and have to make decisions independently (Maggs, 1997).
- The challenge of new academic demands could lead to drug consumption as a coping mechanism to deal with anxiety and stress (Zaleski, Levey – Thors, & Schiaffino, 1998).

- The easy access to the substances by retailers in the surrounding areas associated to a culture that promotes the use through initiation rites and parties (Dowdall & Wechsler, 2002).

- The influence of peers amongst university students has been founded in several studies as an important risk factor for drug use (Andrews et al., 2002; Sale et al., 2003).

**Peers and Drug Use**

One of the most important predictor of drug use in college students is peer influence. This influence could be either a protective or a risk factor for drug use given the similarity amongst peers’ behaviours (Andrews et al., 2002).

Two processes could explain this similarity: selection and influence (Ennet & Bauman, 1993; Beauvais & Oeting, 1986). Selection occurs when the student chooses to join peer groups that drink at a desired level. In terms of selection, friends may be chosen not simply for their similarity in drinking behaviour but also for their similarity in why, when and how, they drink. Influence occurs when the group of peers leads the student to use drugs. Influence may result from friends teaching young adults drinking as a response to emotions (promoting coping motives), to a desire to meet and get to know others (promoting social motives), or to unwind and to enjoy a night out (promoting enhancement motives) (Borsari & Carey, 2006).

**Theoretical Framework for Peer Influence in Drug Use**

Peer influence on drug use has been explained by different approaches. One of the most important is the Social Norm theory.
Social norms.

The Social Norms approach defines a social norm as “an attribute of a group that is considered to be both descriptive of and prescriptive of its members” (Miller & Prentice, 1996). The perception of social norms influences behaviours by a process of social comparison that serve as a standard to evaluate and adjust ones behaviours in order to be seen as similar to the reference group (as cited in Mattern & Neighbors, 2004).

The social norms approach explains how social norms predict individual behaviours describing two types of norms: descriptive and injunctive. Descriptive norms refer to the perception of others behaviours and are base on observations of how people behave in certain situations. Injunctive norms, refers to the perceived approval of a particular behaviour and represent moral rules of the peer group, acceptable and unacceptable social behaviour (Cialdini, Raymond, & Kallgren, 1990). Social norms have been proved as the best predictor of college students drinking. Several studies have found independent effects for descriptive norms and injunctive norms on drug use (Borsari & Carey, 2003; Neighbors et al., 2006).

According to Miller & Prentice (1996) Social Norms are constructed by inference processes that come from raw data from three primary sources: 1) Observable behaviour, 2) Direct (words and deeds) and indirect communications (what does that words and deeds imply), and 3) Knowledge of the self (Personal attitudes and behaviour). The combination of these three sources to make inferences about the behaviours of others, may lead to inaccurate perception of the norm.

Given that, previous research has shown that descriptive norms are a stronger predictor for drug use than injunctive norms (Neighbors et al., 2006) and that they are conceptually and
motivationally different (Cialdini, Raymond, & Kallgren, 1990), this study will focus on descriptive norms to explain peer influence on drug use.

*Descriptive norms and drug use.*

The literature shows strong evidence of the influence of inaccurate perception of the norm (misperception) about peers’ drug use on University students’ use (Perkins, 2002). In other words, students perceive that their peers’ drug used is higher than it really is and this misperception influences their own drug use.

To understand how misperceptions of peer norms develop on university students it is important to refer to the Attribution Theory. According to this theory people tend to perceive drug use of their peers based on their own dispositions rather than context characteristics because of lack of information about their peers’ drug used (Jones & Nisbett, 1971; Perkins, Meilman, Leichliter, Cashin, & Presley, 1999). Furthermore, there is a higher misperception with increased social distance (Perkins, 1997).

Another explanation that can shed light of how misperception develops is the fact that students tend to recall more vividly drug use amongst their peers when they observe and talk about drug use experiences. Usually, students talk about their drunkenness rather than remaining sober given that are “positively rewarded by praise and attention” of their peers. Even abstainers have a role in the process of misperception by communicating the misperceived norms to their peers (Perkins 1997).

Cultural perception, frequently promoted by media and other entertainment outlets, have also and important role in the development of misperception about peers drug used defining what is normal in a university campus (Perkins, 2002).
This university setting is embedded in a macro – social system that encompasses not only a cultural dimension but also social and economical ones. This macro – social system is important to understand environmental factors that could influence the association between misperceptions about drug use and own use.

_Normalization and environment._

A conceptual framework to understand the macro – social system in which descriptive norms develop is Normalization. It is defined as “a barometer of changes in social behaviour and cultural perspectives, in this case focusing in both illicit drug use and users” by Parker, Williams & Aldridge (2002).

Five dimensions of normalization have been identified: 1) Increasing access and availability of illicit drugs, especially of marijuana, because of the increment of seizures and decrement of street prices and easy access through social networks. 2) Rising prevalence of drug use since this has become recreational for young adults. 3) Recent and regular drug use, which means an increase of the proportion of younger recreational users. 4) Social accommodation of sensible recreational of drug use, showed by the increasingly tolerance attitudes towards drug use among both users and non-users, and the friendship of abstainers with drug using peers who respect their decision of using drugs. 5) Cultural accommodation of recreational drug use where the media, film, Television series discuss recreational illicit drug use with a more neutral and even positive perspective than in past decades (Parker, 2005; Parker, Williams & Aldridge, 2002; Parker, Aldridge, Measham, 1998).

One of the evidence of this normalization process is that laws concerning illicit drugs use have become less severe. Parker (2005) shows that in Great Britain the law shifted, from 1994 to
2002, from a repressive approach to a decriminalization of those who use drugs. For example, the possession of marijuana has become legal and its use is seeing as recreational.

In addition, globalization has fostered the expansion of recreational drug use in different parts of the world increasing the demand, and global drug trafficking and marketing has increased the availability of illicit drugs, in other words the supply (Parker, 2005).

However, there are some critics to the normalization framework that highlight its narrowed perspective to explain the points of view of young adults about drug use, mentioning than some young people do see drug use as a problematic activity (Shiner & Newburn, 1997).

In conclusion, peer influences on drug use are explained by the Social Norms theory, for the purpose of this study, specifically by descriptive norms. Several studies have found an overestimation of peers drug use amongst university students; which can be explained by the Attribution Theory, by the fact that students tend to recall more vividly drug use amongst their peers, and by the cultural perception, that defines what is normal in a university campus. In addition, the normalization framework shed light of the cultural changes that have promoted the use of drugs as a recreational activity where non – drug users’ youth are more tolerant to illicit drug use amongst their peers.

*Environment of misperception about peers drug use and own drug use.*

In order to have a better understanding of misperception about peers drug use and own drug use, it is important to address economical, political and organizational factors such as public police, college environment, alcohol environment on and off campus (Dowdall & Wechsler, 2002) and accessibility and availability of drugs.

The location of the university campus is related to the availability of drugs, prize and marketing, as well as to ordinances and laws that control the supply (Dowdall & Wechsler,
2002). The access to drugs has also an impact on drug use. Weitzman, Nelson, & Wechsler (2003) reported that access to alcohol was related to the uptake of binge drinking in university students. And those who started binge drinking in college were more likely to think that the legal age of drinking should be changed from 21 to 18 years old.

*Previous Studies of Misperception about Peers Drug Use and Own Drug Use*

After discussing the theoretical framework, as well as the environmental factors of drug use, previous studies on misperception about peers drug use and own drug use are presented.

The literature show consistently that University students overestimate the quantity and frequency of their peers’ alcohol use (Borsari & Carey, 2003; Neighbors et al., 2006; Perkins, Haines, & Rice, 2005), as well as the percentage of students who use tobacco (Martens et al., 2006), marijuana (Kilmer et al., 2006; Martens et al., 2006; Wolfson, 2000) and cocaine (Martens et al., 2006).

Several variables such as gender, reference group, and campus size amongst others have been studied for a better understanding of the influence of overestimation of peer drug use and own drug use.

Regarding gender, some studies have found that women tend to overestimate peers drinking in a higher proportion than men (Borsari & Carey, 2003; Hartzler & Fromme, 2003). While others have shown that perceived norms did not vary as a function of gender (Read, Wood, Davidoff, MacLacken, & Cambell, 2002). In addition, it has been found that women and men overestimate the quantity and frequency of the drinking of the same – gender peers in a higher proportion than non – specific – gender peers, being this overestimation stronger in women than men (Lewis & Neighbors, 2004).
Several studies have shown that overestimation of peer drinking and marijuana use occurs regardless of the reference group. However, the perceived drinking levels of the most socially proximate reference group are strongly associated with individual drinking levels (Borsari & Carey, 2003; Kypri & Langley, 2003). The same pattern holds for marijuana (Kilmer et al., 2006).

Overestimation of drinking amongst peers is higher in larger campus than in smaller ones, probably because students have fewer opportunities in getting to know each other (Borsari & Carey, 2003).

Finally, Kypri & Langley (2003) have found that students whose drinking was the heaviest were more likely to overestimate the drinking norms.

Based on the previous evidence, this study has the following hypotheses: 1) Students will overestimate peers’ drug use compared to the actual prevalence on drug use. 2) Sex, access and availability to drugs, and the lack of drug related policies on campus will be associated with overestimation about peer drug use within a country. 3) Sex, access and availability to drugs, and the lack of drug related policies on campus will be associated with overestimation about peer drug use also across countries.

Method

Design

This is a quantitative cross-sectional multi-centric study. It involves nine universities from five Latin American countries (Brazil, Colombia, Chile, Honduras and Peru).

Population

Registered sophomore and junior university students of health sciences (medicine, nursing, dentistry, public health) and education will compose the study population. This study
will be developed in nine universities in five Latin American countries: Universidad do Estado do Rio de Janeiro (Rio de Janeiro, Brazil), Universidade de Sao Paulo (Ribeirao Preto, Brazil), Faculdade de Medicina do ABC (Sao Paulo, Brazil), Universidad de Concepción (Concepción, Chile), Pontificia Universidad Católica de Chile (Santiago, Chile), Pontificia Universidad Javeriana (Bogotá, Colombia), Universidad de Antioquia (Medellin, Colombia), Universidad Pedagógica Nacional Francisco Morazán (Tegucigalpa, Honduras), and Universidad Peruana Cayetano Heredia (Lima, Perú).

Census

The study will be conducted through a census. All current sophomore and junior health sciences and education students, aged 18 to 24, will be invited to participate in the study. It is estimated that approximately 2,700 students will be surveyed. This number will permit inferential associations among the variables described below.

Measures

The following variables will be assessed:

Socio – demographic characteristics: Age, sex, working status, marital status, career, and year of study.

Environment: Type of university, drug use university policies, as well as places of drug use, drug use partners, access and availability of drugs for alcohol, tobacco, marijuana and cocaine.

Perceived norms: Defined as what students perceive to be the peer norm of drug use at their university (Perkins, 1999). This will be measured by the following questions: 1) In your opinion, what percentage of students in your university has ever used…, 2) have use in the past
year, 3) How often do you think the typical student in your university uses... The questions above will measure perceived norms for alcohol, tobacco, marijuana and cocaine.

Drug use: Frequency, lifetime and past year use of alcohol, tobacco, marijuana, and cocaine, as well as the amount for alcohol and tobacco use will be assessed (e.g. During the past month, how many cigarettes have you smoked?). Additionally, consequences of drug use will be measured.

Procedures

The recruitment process will be conducted by the principal investigator in each university and his/her trained assistants upon obtaining permission and presenting the project to all the respective university authorities (president, deans, coordinators).

The data collection will be carried out through an anonymous paper – pencil self-report questionnaire (Appendix A). The questionnaire will be answered by all sophomore and junior students, aged 18 to 24 who agree to participate in the study, during the last hour of a required course.

The principal investigators or research assistants will follow the next procedure for the data collection: 1) explain the purpose of the study to the students, 2) hand out the inform consent, 3) give time for questions, 4) collect the inform consent, 5) hand out the questionnaire, 6) clarify doubts about the questionnaire, 7) collect the completed questionnaire, and 8) Give the information brochure (Appendix B).

All ethical aspects including confidentiality, voluntarily, and informed consent (Appendix C and D) will be considered.
**Questionnaire Description**

This study will utilize a 30-item questionnaire that was created from two different instruments (The Core drug and alcohol Survey, 1989; Canadian Campus Survey, 2004) commonly used to assess drug use and perceptions about peers drug use amongst college students. The questionnaire is divided in four sections: 1) The first section focus on social and demographic data; 2) The second section assesses the perception about drug use amongst peers, 3) The third section estimates the student own drug use, and 4) The fourth section measures university campus policies regarding drug use, consequences of drug use, and drug access.

The questionnaire will be translated to Spanish and Portuguese languages. A person who has fluency in the three languages will revise the comparability of the translations.

In order to assess reading comprehension and completion time, a group of Spanish and Portuguese speaking students, with the same socio-demographic characteristics as the population of this study, will be asked to fill out the questionnaire in a fictitious manner. The questions that are not clear or that are not measuring what the questionnaire is intended to assess will be modified based on the students’ feedback.

**Data Management**

The data will be entered in a database using EpiData v 3.1 in each site of the study, and for quality control 10% of it will be randomly verified against the completed questionnaires. This process will be continued until no errors are found. The data will be exported to the Statistical Package for the Social Sciences (SPSS) and will be sent to CICAD/OAS for comparative analysis across countries.
Analysis Plan

Exploratory analyses will be carried out in order to look for missing values, outliers and the distribution of the variables of interest.

To achieve objective 1: to identify the perceived norms about drug use amongst university student, it will be computed the proportion of perceived norms about drug use by the university students in the past year reported by the participants of the study.

To achieve objective 2: contrast the perceived norms of university students about their peers drug use with the actual prevalence of drug use, it will be estimated the difference between the perceived norms and the prevalence of drug use (Perkins, 1999).

\[ \text{Accurate/overestimation/underestimation} = \text{Perceived norms} - \text{prevalence of drug use} \]

The prevalence of drug use will be obtained from the most recent epidemiological study on university students of each country.

This perception could be accurate, underestimate or overestimate. In accordance with Kypri and Langley (2003) participant’s estimates of last year use will consider accurate if they fell within an interval plus or minus 10 percentage points of the prevalence reported in the university. Responses more than 10 percentage points lower than the prevalence reported in the university will be classified as underestimates, and responses more than 10 percentage points higher will be classified as overestimates.

To achieve objective 3: Compare the subjects own drug use with the perception about peers use of drugs, it will be computed the difference between the perceived norms and the self reported drug use by the participants.

To achieve objective 4: Relate socio-demographic and environmental characteristics to perceived norms about drug use within each site of the study, multinomial logistic regression
analysis or logistic regression analyses will be carried out depending on the distribution of the outcome variable (perception about drug use).

The variable perception about drug use will be broken down in three categories (accurate, underestimate and overestimate perception of drug use) or in two categories (overestimate and accurate perception) depending on the distribution and outliers of this variable.

First, it will be computed unadjusted odds ratios and their confidence intervals for the outcome variable for each of the relevant socio-demographic and environmental characteristics. Then adjusted odds ratios will be computed for the variables that were found associated to the outcome variable.

To achieve objective 5: Compare the extent to which demographic and environmental characteristics are related to perceived norms about drug use across ten sites of five countries.

Bivariate analysis will be used to determine which variables will be considered for the multiple logistic regression analyses. Multinomial logistic regression analysis or logistic regression analysis will be done to measure the possible independent association between socio-demographic, environmental characteristics and the outcome variable. It will be taken into account the possible correlation of the data by including in the models the site variable as an independent variable.
Ethical Aspects

The study will follow all ethical aspects to ensure the participants safety. All procedures will be reviewed and approved by the Institutional Review Boards of CAMH and by each one of the universities involved in the study. Important elements as voluntary participation, support in case of discomfort, confidentiality, benefit, cost, and inform consent are described below.

Voluntarily Participation

The participation in this study will completely voluntary and the participant have the right to stop answering the questionnaire at any time or refuse to answer any specific question.

Risks/Discomforts

Considering the design of this study, discomforts are not expected. However, the participants will received a brochure with help services information at the end of their participation. Previous contacts will be done with the Student Services Department in each one of the participant Universities.

Confidentiality

The participants’ identity will remain confidential, as the questionnaire will be anonymous. In the sites that a signed written consent is required, the consent forms will not be linked to the questionnaires and will be kept in a separate cabinet.

All information collected during the course of this study will be kept secure and confidential and will only be available for the researchers.

Informed Consent

Based on the sample selection procedures the informed consent could be signed or implied. If it is signed the students will received a separated form to sign and a copy will be given to them.
Knowledge Transfer

The research proposal will contribute to raise awareness of issues regarding drug use in university students amongst: University decision makers, student services, faculty and students in the nine sites of the study, as well as regional stakeholders (regional health agencies, community health centres, special programs with emphasis in youth health, health and educational authorities and professional associations), national stakeholders (Ministry of Education, Ministry of Health, and National agencies involved in drugs and addiction issues), and international stakeholders (CICAD/OAS, CAMH).

The actions that will be taken to raise awareness are the following: 1) A report of the findings per site will be sent to CICAD/OAS and CAMH. 2) The findings of the research will be presented in meetings to the university councils, students associations and stakeholders. 3) Research results will be disseminated at national and international conferences. 4) Manuscripts addressing the findings of the research will be written and submitted to peer–reviewed journals for publication.
## Timeline

<table>
<thead>
<tr>
<th>Activities</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal writing and translation</td>
<td>x x x x x x x x x x</td>
<td></td>
</tr>
<tr>
<td>Proposal presentation to CAMH and CICAD</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Proposal final revision</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Proposal submission to CAMH Ethics Committee</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Proposal submission to each University Ethics Committee</td>
<td></td>
<td>x x</td>
</tr>
<tr>
<td>Selection and training of research assistants</td>
<td>x x</td>
<td></td>
</tr>
<tr>
<td>Data collection plan</td>
<td></td>
<td>x x</td>
</tr>
<tr>
<td>Data Collection</td>
<td></td>
<td>x x x x x x</td>
</tr>
<tr>
<td>Data Entry and data cleaning</td>
<td></td>
<td>x x x x x x x x</td>
</tr>
<tr>
<td>Data Analysis</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td>Writing of reports and translations for CICAD and CAMH</td>
<td></td>
<td>x x x</td>
</tr>
<tr>
<td>Dissemination of results at the universities, and national, international organizations</td>
<td></td>
<td>x x</td>
</tr>
<tr>
<td>Writing of manuscripts to be submitted to national, international conferences and journals</td>
<td></td>
<td>x x</td>
</tr>
</tbody>
</table>

*Note: X indicates the months where the activity was planned to occur.*
Reference


Cardona, A., & Hernández, F. (2007), Consumo de alcohol y otros psicoactivos en estudiantes universitarios y su relación con aspectos de la calidad de vida y factores psicosociales. Tesis de pregrado no publicada, Medellín, Colombia.


*Epidemiologia de drogas en la población urbana peruana.* CEDRO: Author


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Brasileira de Psiquiatria, 27(3), 185 – 193.

influences of person, social group, and environment. Journal of Adolescent Health, 32,
26 – 35.


from


support, and health problems in college students. Applied Developmental Sciences, 2 (3),
127 – 137.

Bibliography


Maddock, J., & Glanz, K. (2005). The relationship of proximal normative beliefs and global
subjective norms to college students’ alcohol consumption. *Addictive Behaviors, 30*, 315 – 323.


APPENDIX A – QUESTIONNAIRE

The following instrument will ask you about drug use among university students, in general. Some questions are personal. Remember that your answers are totally confidential and anonymous.

Part A- General Information

1) In what year were you born? ________

2) What is your marital status?
   - Common law/living together
   - Married
   - Separated/Divorced/Widowed
   - Single/never married

3) What is your sex?
   - Male
   - Female

4) What is your current year of study?
   - First year
   - Second year
   - Third year
   - Fourth year
   - Fifth or more year

5) In which program are you enrolled?
   - Medicine
   - Nursing
   - Dentistry
   - Education (specify……………………………)
   - Public Health (specify……………………………)

6) Are you working?
   - Yes
   - No

Part B- In this section of the questionnaire you will be asked about your general perception of drug use in your university campus. Please, follow the instructions presented in each question.

7) In your opinion, what percentage of students in your university has ever used the following drugs at least ONCE in their lives? Put a number between 0 and 100% beside each of the drugs below.

<table>
<thead>
<tr>
<th>Drug</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td></td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
</tr>
</tbody>
</table>

8) In your opinion, what percentage of students in your university has ever used the following drugs at least ONCE in the LAST 12 MONTHS? Put a number between 0 and 100% beside each of the drugs below.

<table>
<thead>
<tr>
<th>Drug</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td></td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
</tr>
</tbody>
</table>

9) How often, do you think, a typical student in your university uses the following drugs in the last 12 months? Mark with an x in each line the frequency for each drug. (You must mark only one alternative per drug).

<table>
<thead>
<tr>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once in a year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once in a month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 to 3 times in a month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 to 3 times in a week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Everyday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10) Where do you think a typical student in your university usually uses the following drugs? Mark with an x all items that apply. (You can mark more than one alternative for each drug).

<table>
<thead>
<tr>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>On campus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In bars</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In parties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At friends’ houses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At home</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11) With whom do you think a typical student in your university usually uses the following drugs? (You can mark more than one alternative).

<table>
<thead>
<tr>
<th></th>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With classmates of university</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With close friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With boy or girl friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family members</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquaintances</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part C - Now we will ask you a few questions about your own EXPERIENCE with drugs. Please answer the questions considering that we are not interested in identifying drug users; instead we are interested in having a clear idea of drug use among students in university, in general.

12) Have you ever smoked tobacco at least once in your life?
   - Yes
   - No

   If no, go to question 15.

13) In the last 12 months, how often have you smoked tobacco?
   - Once in a year
   - Once in a month
   - 2 to 3 times in a month
   - Once a week
   - 2 to 3 times in a week
   - Everyday
   - I did not smoke in the last 12 months.

14) In the last 30 days, how many cigarettes have you smoked?
   - Less than one cigarette daily.
   - One cigarette daily.
   - 2 to 5 cigarettes daily.
   - 6 a 10 cigarettes daily.
   - 11 a 20 cigarettes daily.
   - More than 20 cigarettes daily.
   - I did not smoke in the last 30 days.

   A drink refers to either: one 350 ml can of beer, or one 150 ml glass of wine, or one drink with 45 ml (ron, vodka, whiskey, pisco, aguardiente, etc).

15) Have you ever drunk alcohol at least once in your life?
   - Yes
   - No

   If your answer is no, go to question 20.

16) In the last 12 months, how often have you drunk?
   - Once in a year
   - Once in a month
   - 2 to 3 times in a month
   - Once a week
   - 2 to 3 times in a week
   - Everyday
   - I did not drink in the last 12 months

   If you did not drink go to question 20

17) During the past 12 months, on the days when you drank, how many drinks did you usually have?
   - Number of drinks ______

18) About how often DURING THE PAST TWELVE MONTHS would you say you had five or more drinks at the same setting or occasion?
   - Every day
   - 3 or 4 times a week
   - Once or twice a week
   - 2 or 3 times a month
   - About once a month
   - 1 to 5 times a year
   - Never in the past 12 months

19) During the last 30 days, what is the highest number of drinks you can recall having on a single occasion?
   - Highest number of drinks ______

20) Have you ever smoked marijuana at least once in your life?
   - Yes
   - No

   If not go to question 22.
21) In the last 12 months, how often have you smoked marijuana?
   - Once in a year
   - Once in a month
   - 2 to 3 times in a month
   - Once a week
   - 2 to 3 times in a week
   - Everyday
   - I did not smoke marijuana in the last 12 months.

22) Have you ever used cocaine at least once in your life?
   - Yes
   - No
   If not go to question 24.

23) In the last 12 months, how often have you used cocaine?
   - Once in a year
   - Once in a month
   - 2 to 3 times in a month
   - Once a week
   - 2 to 3 times in a week
   - Everyday
   - I did not use cocaine in the last 12 months.

24) If you have used the following drugs, where do you use them? Mark with an x the items that apply. (You can mark more than one alternative).

<table>
<thead>
<tr>
<th></th>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>On campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In bars</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In parties</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At friends’ houses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have never used</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

25) If you have used the following drugs, with whom have you usually used them? Mark with an x the items that apply (You can mark more than one alternative).

<table>
<thead>
<tr>
<th></th>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With classmates of university</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With close friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With boy or girl friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family members</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquaintances</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have never used</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part D – In this section we ask about consequences of drug use, university policies and access to drugs.

26) In which of the following ways does other students’ use of tobacco, alcohol, marijuana or cocaine interfere with your life on or off campus? (You can mark more than one alternative for each drug)

<table>
<thead>
<tr>
<th></th>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrupts your studying</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes you feel unsafe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Messes up your physical living space (cleanliness, neatness, organization)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adversely affects your involvement on athletic team, artistic groups or others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevents you from enjoying events (concerts, sports, social activities, etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doesn’t interfere with my life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
27) Please indicate whether you experienced the following consequences to your use of the following drugs. (You can mark more than one alternative for each drug).

<table>
<thead>
<tr>
<th></th>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have never used</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have felt relaxed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have gotten nauseated or vomited</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has helped me in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have had a memory loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has helped me in reasoning faster</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have had a hangover</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has helped me in reasoning clearer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been hurt or injured</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has helped me to break the ice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have missed a class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has helped me in participating in groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been criticized by someone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has helped me to deal with stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have done something I later regretted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It has helped me to be more confident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have performed poorly on a test or important project</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have tried unsuccessfully to stop using</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have gotten into an argument or fight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have driven a car while under the influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have damaged property</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been in trouble with police, residence hall, or other colleges authorities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been arrested for DWIDUI (Driving while influenced)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have thought I might have a drinking or other drug problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

28) This question is related to your university policies regarding drug issues.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your university have tobacco policy?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your university have alcohol policy?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your university have illicit drugs policy?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If exist drug policies are they enforced?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your university have a tobacco, alcohol and drug prevention program?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you believe your university is concerned about the prevention of tobacco, alcohol and drug use?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you actively involved in efforts to prevent tobacco, alcohol or drug use in your university?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29) What do you think about the access, of the students of your university, to the following drugs? (Mark only one alternative for each drug).

<table>
<thead>
<tr>
<th></th>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very difficult</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficult</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neither difficult nor easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30) Where do you think students of your university usually access the following drugs? (Mark with x the alternatives for each drug)

<table>
<thead>
<tr>
<th></th>
<th>Tobacco</th>
<th>Alcohol</th>
<th>Marijuana</th>
<th>Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>On campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you for your collaboration!
If your participation in this research made you feel any discomfort or you think that you need some help, you can contact or make an appointment with:

_______________________________________________
_______________________________________________

Address:
_______________________________________________
_______________________________________________

________________________________________

Telephone:
_______________________________________________
_______________________________________________

Remember that what you discuss with a help professional will be completely confidential.

Once again thank you participating in this research!
Appendix C Signed Inform Consent

University Students’ Perceived Norms about Peers and Drug Use: A Multi-centric Study from Five Latin American Countries

INFORMED CONSENT

The present document invites you to participate in an investigation. You will be informed about the objective, benefits and risks of participating in this study in order that you make an informed and autonomous decision.

This study will be carried out by a group of researchers who work in nine universities in Brazil, Chile, Colombia, Honduras and Peru. In ………………. (University name) the Principal Investigator is ………… (Name/telephone number). This research is conducted with the support of the Inter-American Drug Abuse Control Commission (CICAD) of the Organization of American States (OAS) and the Centre for Addiction and Mental Health (CAMH).

OBJECTIVES AND BENEFITS

The study objective is to analyze the relationship between perceived norms defined as what students perceive to be the peer norm of drug use at their university and drug use amongst peers in university students, aged 18 to 24 years old, who study at Schools of Health and Education in nine universities in five countries.

The information being obtained by this study may be useful to raise awareness of drug use and associated factors amongst university students.

PROCEDURE

You will be asked to answer an anonymous questionnaire about you, your age, sex, drug use and drug use by other students. The questionnaire last approximately 20 to 30 minutes to respond. You may refuse to answer any question or to stop at any time.

RISKS, STRESS AND UNEASINESS

We don’t expect you to feel uncomfortable answering these questions; however, if you experience some distress you can refer to the contacts provided in the brochure.
CONDIDENTIALITY AND PRIVACY

Your participation is anonymous. The principal investigator will keep the signed consent forms in a locked cabinet apart from the questionnaires, in the case you are asked to sign it. The data will not include any characteristic that could identify you.

ADDITIONAL INFORMATION

The participation in this study is voluntary. You do not have to take part in this study, if you are not willing to. If you agree to participate, you will be given a copy of this document. It is important that you feel comfortable about your decision to participate in the study.

CONFIRMATION OF THE PARTICIPANT

I have been informed about the study and decided to participate in it. If there is any question about the investigation, I could contact (name of research of the site) by telephone XXXX. Likewise it is possible to call to Dr. XXXXXXXXXX, Representative from The Institutional Review Board at the (name of the site) to the telephone XXXXXXXX

Name of city, , 2007

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Signature of Participant Date
Appendix D Imply Inform Consent

University Students’ Perceived Norms about Peers and Drug Use: A Multi-centric Study from Five Latin American Countries

INFORMED CONSENT

The present document invites you to participate in an investigation. You will be informed about the objective, benefits and risks of participating in this study in order that you make an informed and autonomous decision.

This study will be carried out by a group of researchers who work in nine universities in Brazil, Chile, Colombia, Honduras and Peru. In ………………. (University name) the Principal Investigator is …………… (Name/telephone number). This research is conducted with the support of the Inter-American Drug Abuse Control Commission (CICAD) of the Organization of American States (OAS) and the Centre for Addiction and Mental Health (CAMH).

OBJECTIVES AND BENEFITS

The study objective is to analyze the relationship between perceived norms defined as what students perceive to be the peer norm of drug use at their university and drug use amongst peers in university students, aged 18 to 24 years old, who study at Schools of Health and Education in nine universities in five countries.

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ADDITIONAL INFORMATION

The participation in this study is voluntary. You do not have to take part in this study, if you are not willing to. If you agree to participate, you will be given a copy of this document. It is important that you feel comfortable about your decision to participate in the study.

CONFIRMATION OF THE PARTICIPANT

If you wish to participate in this study, please tell the interviewer that you consent to participate.

For more information you could contact (name of research of the site) by telephone XXXX. Likewise it is possible to call to Dr. XXXXXXXXXX, Representative from The Institutional Review Board at the (name of the site) to the telephone XXXXXXXX