

# "Babeș-Bolyai" University, Cluj-Napoca

## Faculty of Sociology and Social Work

# **Summary of the doctoral thesis**

Risk factors in tobacco, alcohol and drug use among adolescents from Cluj-Napoca

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**Keywords:** adolescents, risk factors, tobacoo, alcohol, drugs, substance use, addiction

#### Summary

During teenage years, young people experience a transition period, which is probably the most difficult over the course of life, as teenagers do not yet have the knowledge package required in order to cope with the major changes they undergo. They will search for independence, and will move from the supportive family environment to making their own decisions. During this period, teenagers will live new experiences and will choose their group of friends, according to what they want or according to their own personality traits. These new experiences, as well as the group of friends contribute to the development of teenagers and may impact on young adults. During this period, young people may develop risk-taking behaviors that will endanger their optimal development. Tobacco, alcohol and drug use are part of the risk-taking behaviors, and studies show that during adolescence such experiences occur for the first time.

Curious by nature, teenagers are a vulnerable group when it comes to extreme experiences, and one of these experiences may include drug use. Drugs have become very accessible in terms of price as well as procurement, and the way groups of friends exert pressure may persuade teenagers to succumb to the temptation. According to a survey conducted by the National Anti-Drug Agency (ANA) and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Romania has become in the past few years a hallucinogenic drug user. According to another comparative analysis performed by ANA, for the years 2004, 2007 and 2010, recreational drugs (cannabis and ecstasy) ranked among the most popular, and users are aged between 15 and 34 years old.

For about 40 years, the use of hallucinogenic drugs, violent and suicidal behaviors have become a priority within risk-taking behaviors among teenagers. These factors are the causes of 70% of illnesses, disabilities and even death among teenagers and young adults. (USDHHS, 2000).

Teenagers go through a period of development, where one of the main objectives is to find their identity, therefore they will identify with the group of friends in order to achieve it. At this age, the group of friends is often times above family. This is precisely why parents

should monitor their children during this period, why they should try to get to know their friends and communicate openly with their child. There are results supporting the hypothesis that teenagers monitored by their parents are directly and indirectly influenced concerning initiation of drug use. The indirect effect is mediated by teenagers joining a deviant group. A low monitoring will increase the possibility of teenagers to join such a group. (Rahdert, Grabowski, 1988).

This paper consists of two main parts: theoretical framework and the research itself, which involves a mixed design consisting of a qualitative and a quantitative component.

The first part of the paper deals with tobacco, alcohol and drug use in line with studies and literature in the field. First of all, we shall become familiar with the basic concepts of this paper, namely: defining risk factors within substance use, protective factors, substance abuse, usage tolerance, addiction, withdrawal and prevention. In addition, we shall also define tobacco, alcohol and drugs, in different subchapters of the paper. In the following chapter we shall discuss about adolescence from several perspectives. We shall talk about adolescence from a medical point of view, and then we shall focus on its social perspective, namely, the social relationships of teenagers with family as well as with other groups within their environment. We shall also examine the emotional changes young people undergo during this period.

After becoming familiar with the key concepts and what adolescence involves, we shall approach the relevant theories in the field; we shall define and deal with them in relation to substance use. There are numerous theories with regard to tobacco, alcohol and drug use, addressing the biological, psychological and sociological area. We shall therefore focus on the theory developed by Bronfenbrenner (1994), as it particularly refers to the influence of the environment, and we shall address the social factors thereto.

General issues related to tobacco, alcohol and drug use shall be approached separately. We shall therefore define each substance and we shall talk about their effects from a somatic, medical, and especially social perspective. We shall emphasize the negative sides of substance use and how they may affect teenagers' social life and well-being. Within drug use, we shall mention and deal with ethnobotanicals. These are psychoactive substances, relatively recently emerged in our country, thus it is important to approach them and their effects, considering their tremendous impact over the past year. Young people, in particular teenagers,

are the largest ethnobotanical drug users, but they are also the group that have been most affected by their use.

We shall deal with drug use in various regions of the country, followed by a comparison between the situation in Romania and in other states within the European Union, to see where we stand compared to other member states in this respect.

In the following chapter we shall generally discuss risk factors and protective factors within tobacco, alcohol and drug use, followed by a detailed approach of the most important of them. Main factors detailed are therefore tested in the second and third section of the paper, to see their influence over our sample. Risk factors and protective factors described in the following pages refer to: the influence of the group of friends in tobacco, alcohol and drug use and the influence of family; the influence of school environment; the influence of community and teenagers' extracurricular and spare time activities, and influence on substance use.

In the last chapter within the theoretical part of this paper we shall deal with prevention in substance use among teenagers and we shall mention several successful national prevention programs, together with the results following their implementation.

The second major part of the paper consists of the research itself and results thereof. For the quantitative dimension we shall describe: purpose and main objectives of the research, research hypothesis, variables used, methods and techniques, procedures for data collection and processing. Next step is the presentation and interpretation of results following the review of the statistics, using IBM SPSS Statistics 20 program. At the end of this section we shall present the conclusions of the results, limitations of the study and ideas for further research.

Research also involves a qualitative dimension. Similar to the quantitative research design, we shall describe the research questions, population concerned, methods and techniques, the procedure for data collection and processing. Subsequently, we shall present the results following the coding and review of qualitative data, using QSR Nvivo 10 program. Last but not least, we shall present the conclusions of the qualitative part, as well as limitations of our study and future research opportunities.

The last chapter of this paper shall include general conclusions. We shall discuss aspects relating to both quantitative and qualitative dimension of the study and we shall present the main results obtained in accordance with available studies. We shall also address

new aspects in the study within tobacco, alcohol and drug use among teenagers, practical implications and ideas for further research in the field of substance use.

#### **Reasons for choosing topic**

Alcohol, tobacco and drug use among teenagers is currently a serious issue in Romania and figures in the reports of ANA (the National Anti-Drug Agency) and ESPAD (European School Survey Project on Alcohol and Other Drugs) are there to prove it.

Adolescence is the period of high temptations and teenagers' desire to integrate into a popular group among colleagues or friends becomes a major preoccupation. It is the age where control of the situation and the sense of responsibility are almost nonexistent. Adolescence is the perfect time to make mistakes with major consequences on the optimal development of the future adult.

It is well known that during adolescence, teenagers come into contact for the first time with alcohol and tobacco use, as well as drug abuse. What is really worrisome is the introduction of new psychoactive substances in Romania at the beginning of 2009, the so-called ethnobotanicals (party pills, bath salts, plants/ powders, etc.). ESPAD has included in their study questions relating to the use of such substances among 16 year old teenagers, in order to have a clearer picture on the extent of the phenomenon (National Report on Drugs, 2012).

Given the above, we think that any contribution in this area is welcome in order to better understand alcohol, tobacco and other psychoactive substance use among this age group. At the same time, each contribution will help to develop more effective prevention and control programs.

#### Relevant scientific theories

There are several theories and explanatory models in the academic literature according to which a set of factors should be considered within the analysis and explanation of drug use, as the phenomenon involves a medical and psychological dimension, as well as a sociological dimension. These explanatory models are divided into explanatory models focused on the

individual and explanatory models focused on the society. Based on these aspects, the theories on substance use are divided as follows (Radulescu, Damboveanu, 2006):

**Biological theories** – biologically speaking, individuals' tendency to use psychoactive substances and to continue to use them once they initiated is emphasized. Biological theories focus on biochemical processes which occur in the human body and on genetic factors.

**Psychological theories** - they primarily refer to the personality types of individuals using these substances, but especially of individuals who are already addicts. They also emphasize reinforcement mechanisms within the usage process of addicts.

One of the theories underlying the results of this research is *the social learning theory*. This theory developed by Albert Bandura (1977) shows us that the effects of substance use are shaped by subculture, and then they are learned by individuals from older users. Certain persons may become addicted following the advice of friends already using substances, thus reasons to further explain why they have come to use these substances, as well as sensations related to usage, are learned from other individuals.

Social learning theory shows us how behavior is shaped by the results expected by individuals following their actions. In the case of substance use, results refer to the feeling of wellbeing created by drugs or avoiding unpleasant withdrawal symptoms. The latter provides short-term benefits, as long-term benefits following withdrawal are much less motivating for addicts.

Moreover, social learning theory is based on the self-efficacy concept and comprehensively brings together the application of learning principles to the way individuals behave within the social environment. Self-efficacy refers to a person's belief that they have the capacity or skills required to accomplish certain tasks or to cope with life's challenges. Behavior modification is carried out by means of three systems: the first one is classical conditioning (external stimuli affecting the behavior), the second one is operant or instrumental conditioning (direct consequences of behaviors become external reinforcements) and cognitive mediation processes adjusting the influence of the environment and deciding which stimuli will be taken into account (Simache, 2010).

Social learning perspective has largely served as an investigation framework for the connection between the relationship with the group and family and substance abuse. This perspective looks at how social processes, in particular group membership, influence drug use

by shaping and strengthening processes. Social development theory has received less attention as regards substance abuse. This theory holds that individuals' involvement in constructive activities and rewards for success prevent crime (Prinstein, Boergers, Spirits, 1988).

Sociological theories – focus on the analysis of social situations, social relationships and social structures. The phenomenon of substance use matches the social learning theory (which holds that substance use is a social behavior learned), the sub-cultural theory (individuals joining a group of consumers or likely to develop substance use), the social interaction theory (for instance the impact of socialization within the family, the group of friends, at school or the influence of mass-media on initiation of substance use) and the social control theory (the more powerful social control is, the fewer the chances for an individual to adopt a deviant behavior such as substance use). Sociological theories regard substance use as a social process, as a result of the interaction of certain social factors and less from a biological perspective (i.e. chemical processes occurring in the human body during drug use). These theories suggest that there are higher rates of psychoactive substance use in societies with higher levels of stress, guilt, aggression and its suppression, conflicts, sexual tension and internal tension. As a conclusion to this statement, drugs work as painkillers and reduce individuals' anxiety in such societies. Other theories claim that societies where alcohol and drug use is allowed by law usually have higher rates of addicts. These theories mainly approach the role of psychoactive substances suppliers and the influence of mass media on substance abuse (Simache, 2010).

Among sociological theories concerning substance use, the results of the research underline the sub-cultural theory developed by Cohen and the ecological systems theory developed by Bronfenbrenner.

#### *The subcultural theory*

K. Cohen says that certain unprivileged or frustrated groups can be named "delinquency subcultures". Their values, norms and beliefs are opposed to those promoted by the society. Because of their way of living, these groups are often marginalized or rejected by the rest of the population living in that specific society. This theory sustains that becoming part of a group with positive attitudes toward drug use, is the most important factor in encouraging an individual to become a user himself (Tomiţă, 2008).

#### *Ecological systems theory*

In order to better explain alcohol, tobacco and psychoactive substance use, we shall focus on the ecological systems theory developed by Bronfenbrenner. According to this theory, development is an associated function of persons and all environmental levels. The ecological environment is a system involving 5 components (Bronfenbrenner, 1994):

Microsystem - forms of interaction, activity pattern and social roles within close proximity of the person. Microsystem may consist of family, friends, school and workplace.

Mesosystem - connections and processes occurring between two components of the immediate environment. For example the way school experiences affect individuals' activities at home and vice versa.

Exosystem - presents connections and processes between settlements which involve the child and those which affect him without involving him (for example, the relationship between home and a parent workplace).

Macrosystem - presents global models of the microsystem, mesosystem and exosystem, typical to a culture or subculture. It includes social classes, habits, lifestyle, ethnicities, religious groups, beliefs, social values, material resources and hazards.

Cronosystem - includes changes or conformities arising over the course of time, concerning both individuals' characteristics and those of the environment where they live (changes in family structure, socio-economic status, residence, etc).

#### Research methodology and data analysis

The phenomenon studied in this paper refers to risk factors and protective factors in tobacco, alcohol and drug use among teenagers. First of all, the investigation aims at collecting information on substance use and the various factors which may influence it in accordance with the academic literature in the field. Secondly, it seeks to identify the factors having a significant impact and at the same time to examine the relationship between these factors and usage.

As we could see in the previous studies as well, many of these factors do not have a direct influence on tobacco, alcohol or drug use, or their explanatory power is rather low. Therefore, certain factors are correlated in explaining drug abuse or should be grouped in

order to provide a clearer understanding. Thus, risk factors and protective factors analyzed in this paper have been divided into categories in order to provide a more adequate explanation of the phenomenon.

This research aims to identify and explore risk factors having a large influence on teenagers' use of alcohol, tobacco or other psychoactive substances, as well as protective factors.

#### Research specific objectives

- 1. Establishing the prevalence of alcohol, tobacco and drug use among high school students in Cluj-Napoca.
- 2. Identifying risk factors in alcohol, tobacco and other psychoactive substance use among high school students in Cluj-Napoca.
- 3. Identifying the group membership with the largest influence on teenagers' use of psychoactive substances.
- 4. Exploring teenagers' perception with respect to group membership that has influenced them to use psychoactive substances.

#### **Research hypotheses**

- 1. The group of friends has a conclusive influence in persuading teenagers to use alcohol, tobacco or psychoactive substances.
- 2. Leisure time activities (both hobbies and extracurricular activities) play a role in teenagers' choice to consume or not alcohol, tobacco or psychoactive substances.
- 3. Parental control and support, family harmony and parents' interest are keyelements in teenagers' decision not to consume alcohol, tobacco or psychoactive substances.

**Sampling** was performed by CAST project team. Research was carried out on a representative sample of 1105 participants, aged between 14 and 22 years old, students of 31 high schools and post-secondary schools in Cluj-Napoca. The average age of participants is 16.85 years old (SD = 1.26). As gender distribution is concerned, the sample consists of 516 girls (46.7 %) and 586 boys (53 %). 0.3 Percent of the participants have not stated their gender.

#### Data collection methods and research tools

The data is obtained within the CAST project (Behavior and Attitudes for Health among Young People) where I was the interviewer. CAST is a research project carried out among teenagers and young adults in Cluj-Napoca. The research was initiated and coordinated by the Faculty of Psychology and Educational Sciences and the Faculty of Sociology and Social Work, within Babeş-Bolyai University. Team consisted of: Maria Roth, PhD and Adriana Baban, PhD (Coordinators), Eugen Baican PhD, Assistant Professor, Paul Haragus PhD, Assistant Professor, Octavian Rusu PhD, Assistant Professor, Diana Taut, Professor's Assistant PhD candidate, Claudia Rus, Professor's Assistant PhD candidate and Dr. Florina Spanu. The project investigates attitudes toward new psychoactive substance use, perception of risks involved, users' experience, as well as a wider set of attitudes and behaviors posing a risk to health among teenagers and young adults in Cluj-Napoca.

The CAST questionnaire was used for data collection, which was drawn up within the project referred to above, by the research team. Although the questionnaire also includes areas with no connection to substance use or addiction, it is a tool for the assessment of behaviors and attitudes toward health, as its name suggests. The CAST questionnaire assesses all aspects of a teenager's life, which may affect their health and a healthy lifestyle. It includes 8 areas:

- psychoactive substance, tobacco and alcohol use;
- dietary behavior and physical activity;
- risky sexual behavior;
- violence and harassment among young people;
- media and social networking use;
- satisfaction with school and school activity;
- leisure time and extracurricular activities;
- emotional health, somatic and psychosomatic disorders.

**Data analysis** has been carried out using the program IBM SPSS Statistics 20. Data has been processed in three major stages. Within the first stage simple techniques of descriptive analysis have been used. The simple variables have been analyzed each in turn in order to create an overview of the topic concerned (descriptive analyses). Within the second stage a

series of unifactorial analyses has been performed. Risk factors (independent variables) related to the use of tobacco, alcohol and drugs found in the academic literature have been analyzed. T tests, correlation tests, multiple regression and hierarchical regression tests have been carried out within this analysis. After we have determined which independent variables have an effect on the dependent variables, the final stage has been put in place. Within this stage hierarchical multiple regression techniques have been used in order to see what category of factors has the largest explanatory power on tobacco, alcohol and drug use. For this study, hierarchical regression analyses involved four models for each variable of interest (total substance use, tobacco use, alcohol consumption and drug abuse). Individual variables (dummy) have been introduced within these steps, variables related to teenagers' leisure time activities (at school as well as outside school) and unidmensional scales: extracurricular activities, leisure time activities, family harmony, parental support, parental control, parental interest and support from teachers. The thresholds for statistical significance have been of 0.05, 0.01 and 0.001.

#### Principal results for the quantitative research

Results above show that tobacco and alcohol consumption in particular is a topical and serious enough issue among teenagers in Cluj-Napoca. Although in terms of drug use figures are not very high, this aspect should not be ignored.

As for tobacco use, 21.8% of teenagers questioned admitted to smoking daily. 23% of them consume alcohol several times per month and 10.5 % said they have used at least once a classic drug. Half of the teenagers using drugs have also tried cocaine or heroin and this should be a wake-up call.

Males scored higher in any one of the three substance use; nevertheless, differences between males and females were not high.

Although "media consumption" and "social networking" would not seem to be risk factors in substance use (certain parents believe that these two activities keep teenagers indoors, thus they are more protected from temptations and dangers), results show that these two variables significantly contribute to tobacco and alcohol use.

The fact that teenagers from families with a lower socioeconomic status tend to consume more alcohol is not new. SES is recognized for its contribution to alcohol consumption, regardless of age group. However, this factor does not seem to have an influence when it comes to tobacco or drug use. Still related to family issues, parents' education has a significant contribution to alcohol consumption among teenagers. Contrary to expectation, it is not a low level of parents' education leading to consumption, but the higher the level of parents' education, the more teenagers use alcohol.

In order to test the first hypothesis (the group of friends has a large influence on teenagers' decision to use tobacco, alcohol or drugs) a series of t tests and correlations and frequencies have been carried out. Results of these analyses confirm this hypothesis. 91% of teenagers declare that the first time they have been given tobacco by friends at school or in various places; instead only 4.5 % declare that the first time tobacco has been offered to them by parents. In the case of alcohol consumption, 82% have been first tempted by friends, compared to 12.5 % by parents. 40.3% of them have received drugs for the first time from friends, and 1.4% from parents. Friends' influence in substance use is easily noticeable, given the high percentages. Within the testing of this hypothesis the variable "social networking" has been also introduced, which has a significant influence in tobacco and alcohol consumption. This does not apply, however, to drug use. Another factor that supports this hypothesis is attendance of various pubs with friends. This variable also has an effect on tobacco and alcohol consumption, although not on drug use. What is surprising in testing this hypothesis is that going to clubs significantly contributes to the use of the three substances. At the same time, attending student associations significantly contributes to alcohol consumption. To sum up the results within this hypothesis, the group of friends has the largest influence on teenagers when it comes to tobacco, alcohol or drug use, whether we talk about constructive/educational activities or spending time in clubs, bars or cafés.

The second hypothesis (leisure time activities play a role in teenager's choice to use alcohol, tobacco or psychoactive substances) has been tested using the correlation analysis, as well as the hierarchical regression analysis. It is easy to notice how teenagers' extracurricular activities may have both a positive influence on substance use, but also a negative influence. Most of these activities are carried out together with friends or a group of peers, which means that it is not the activity itself that would present a risk factor, but it is rather the group features and the pressure exerted by the group. Leisure time activities appear to always work as risk factors in substance use among teenagers.

In order to test the last hypothesis (Parental control and support, family harmony and parents' interest play an important role in teenagers' decision not to use alcohol, tobacco or psychoactive substances.), three multiple regressions have been performed. Results are as expected. Teenagers who do not benefit from parental support, control and interest or experiencing family issues will use more tobacco, alcohol or drugs. In the case of tobacco use, factors which contribute the most are parental support ( $\beta$  = -.106) and parental control ( $\beta$  = .189). For alcohol consumption, factors with the largest influence are family harmony ( $\beta$  = -.099) and parental control ( $\beta$  = .211). For drug use, factors are identical to those in the case of tobacco use: parental support ( $\beta$  = -.175) and parental control ( $\beta$  = .094). On the other hand, parents' interest concerning the places attended by teenagers in their spare time does not appear to make a significant contribution to any of the three models.

Within the last stage of results analysis, four hierarchical regressions have been carried out in order to explain the use of tobacco, alcohol and drugs, as well as the overall use of substances. Results are as expected, except when it comes to parents' education where often times a high educational level of the father is associated with a higher substance use. Males seem to use any of the 3 substances to a greater extent than females. Parents' marital status also has a say concerning substance use, and the fact that teenagers from single-parent or dysfunctional families are more prone to a risk-taking behavior, comes as no surprise. Variables related to leisure time activities performed by teenagers have an effect on all types of substance use; thus, the variable "party" is always a risk factor, while involvement in activities run by the church and voluntary services are always protective factors.

The situation in teenagers' families is very important in order to predict substance use, thus lack of family harmony and a low parental support are risk factors in substance use. On the other hand, a high parental control and interest may have an undesirable effect on usage. Although most strict parents would expect to protect their children, it seems that the effect of these two factors will be the other way round.

Increased support from teachers at school, gratitude and praises can protect teenagers from substance use. Being harassed does not seem to explain usage in this study, while being a harasser is a risk factor in most models presented.

#### **5.8.** Limitations of the study

One of the major limitations of this study is the fact that the research tool has not been built to study strictly the use of tobacco, alcohol and drugs among teenagers. The CAST questionnaire sought to explore several dimensions related to teenagers' attitudes and behaviors toward health. However, analyses and items related to other dimensions have been included, but they could be connected with those related to substance use, in order to explore the phenomenon from several points of view.

Another limitation of the study refers to the honesty/validity of replies received from students. Although questionnaires were anonymous and teenagers have received envelopes in which to seal the questionnaire filled out, still some of them may have not given honest answers. Honesty of replies is doubted when dealing with sensitive topics, such as those related to substance use, illegal or sexual behavior. Similarly, some of the students tended to influence each other upon filling out the questionnaire.

Qualitative dimension of the research proposes to explore teenagers' biases with respect to drug use, and usage experience among teenagers in Cluj-Napoca. We have chosen to examine more closely drug use among teenagers because it is the period where young people are more vulnerable and easier to persuade to try various psychoactive substances. It is the period where teenagers will try almost anything in order to feel better and to be accepted by those around them. Since tobacco and alcohol use is closely studied by many researchers, and teenagers do not have trouble approaching this topic, we have found drug use to be a challenge. The qualitative section shall use the semi-structured interview for data collection. The research tool is the semi-structured interview guide (Annex 2) which includes the following areas:

- 1. Information regarding the context where teenagers have made the decision to use drugs, as well as their perception related to risks involved.
  - 2. Information concerning the group of close friends and leisure time activities.
- 3. How drug use has affected relationships with people around them and day-to-day life.

4. Views on psychoactive substance withdrawal, as well as rehabilitation.

#### **Research questions**

- 1. What are the main reasons for psychoactive substance use by teenagers?
- 2. What changes have occurred in teenagers' life following psychoactive substance use?
  - 3. What is teenagers' perception with respect to their own use of substances?
- 4. What are, according to teenagers, the best methods to stop using psychoactive substance and rehabilitate?

**Population** - a number of 11 students within three high schools in Cluj-Napoca have been interviewed. They are aged between 15 and 18 years old, of whom 8 males and 3 females. Some of the participants have been selected through some acquaintances and the rest using the "snowball" method, as we have already mentioned. Although we have expected teenagers to be more defensive and hesitate to answer questions, considering the interview guide questions and the topic concerned, they have been instead extremely cooperative and have provided comprehensive answers. Characteristics of subjects are provided in Table 26 according to their categories in the Nvivo program.

The qualitative method used in this paper for data collection is the semi-structured interview. Its tool is an interview guide (see Annex) consisting of 14 main questions and other secondary questions which have been used as appropriate. Interviews have been performed face-to-face or online, based on participants' availability. Each interview lasted, on average, 30 to 40 minutes.

We have also chosen a qualitative approach in this paper in order to add more information relating to drug use, the only phenomenon studied within the qualitative research. We think that teenage users' opinions may be interesting and they may be particularly used for further research or even for the development of prevention or intervention programs for this age group.

The interview guide drawn up focuses mostly on results within the quantitative area of this research, so we have performed further analysis on the influence of group of peers and

leisure time, on drug use initiation, as well as on substance use continuation. All those listed above are risk factors in drug use among teenagers, confirmed by this research as well as plenty of studies in the field.

Interviews have been performed at subjects' residence or online, based on their availability. Subjects are teenagers who had been previously questioned for the quantitative area of this paper. They are soft drug users for the most part, and they have been selected based on the "snowball" method. This method involves finding participants able to provide names of other respondents who are part of the study population.

#### Principal results for the qualitative dimension

After transcription of interviews, organization of information obtained by coding and their analysis, we could get a clear picture of drug use among teenagers. The quantitative dimension of this paper has provided a quantified overview on the phenomenon. The qualitative dimension has allowed us to go into further detail and to discover subjective ideas and experiences of young users, building on those results.

Therefore, in addition to QSR Nvivo program we have also used the phenomenological analysis in order to interpret results. Phenomenology is the study of one's awareness of an object or event (Giorgi, 1995 apud Băban, 2009). Phenomenological research deals with the way humans perceive their world, attempting to describe in detail the content and structure of conscious processes. We think this method is the most appropriate for our research, as it helps answering research questions comprehensively, and given the small number of participants, drug use among teenagers is thoroughly examined.

During the analysis, we have tried to give a comprehensive answer to the research questions concerned. Thus, curiosity is one of the main reasons for which teenagers have decided to use psychoactive substances (first research question). In addition to curiosity, teenagers also state that they wanted to see how it is or to have fun. Approximately the same results are to be found in the research of Shinew and Parry (2005), where reasons for alcohol consumption have been either social or just for fun, and in the case of drugs, motivation was linked to entertainment and drug effects (reason found among subjects' answers within this research too) or the relaxation provided by certain drugs.

Another reason of teenagers' decision to initiate and continue to use drugs is boredom. In 2015 Hendricks and collaborators have found within their study that in the case of teenagers coming from poor communities, peer pressure together with boredom due to a lack of leisure time activities result in the use of psychoactive substances.

As the above study shows, peer pressure is a key element for drug use among teenagers. This is the third and probably the most important reason. Some of them have openly admitted to having been influenced by friends, or at least that was the starting point for their curiosity; however a significant proportion of young people are convinced that it was their own decision, without being influenced, although they admit they have first seen their friends using such substances or have heard about the effects of such substances. The questionnaire included questions regarding teenagers' relationship with their friends: "How does your group of friends see you as a consumer?"; "How close are you and your friends? "; "Describe your group of close friends." These questions aim at determining the influence friends may have on teenagers. In the same way Urberg et al. (2003) argues, the relationship itself can tell us to what extent teenagers are influenced by their friends. If teenagers value their relationship with friends, they might adopt the same behaviors just to please them. Teenagers who are emotionally attached to their friends spend a lot of time with them and as a result, they will have more time to shape one another.

Results of Bahr, Hoffman and Yang (2005) match the social learning theory, which explains the direct impact of drug use among peers, on teenagers. Johnson, Marcos and Bahr share the same view in their study (2006), confirming that teenagers are more prone to substance use when they have users among friends rather than when parents are users.

As for leisure time, teenagers mostly prefer to spend it with friends. Thus, if a teenager chooses his/her group of friends based on leisure time activities, he/she can be "protected" against alcohol and drug use, even if they may know persons who are users (Thorlindsson and Bemburg, 2006). In the case of teenagers participating in this study, they have adopted certain leisure time activities from their friends, which led them to drug use.

To the research question "What changes have occurred in the teenager's life, following psychoactive substance use?" most of them state that no change has occurred within the family due to the fact that parents are not aware that they are users, although in two of the cases parents have found out, thus negative consequences have resulted. Within the group of

close friends no major changes have occurred, and although teenagers say they have not noticed changes for the worse, there are cases where certain members of the group do not react positively knowing that their friends use psychoactive substances. When the relationship with other people has been approached, most young people do not seem to care about what others think about them; nevertheless, examples provided show the contrary. Certain teenagers are negatively affected from a social point of view, no matter how disinterested they might try to seem.

Several studies have concluded that drug use, in particular marijuana smoking and alcohol consumption, facilitate the development of relationships with friends (Putnoky, Vlaicu, 2007). There are situations that may lead to drug use, but also drug use may result in those situations, creating a bi-directional relationship between certain risk factors and drug use. Therefore, drug abuse may affect the relationship with family, but also the relationship with family may result in drug use, in the case of dysfunctional families. Certain studies show that toxic substance addiction is more often encountered at teenagers with a modest income, with different problems - frequent cases of delinquency, dropout, unemployment of parents, dysfunctional families, emotional, physical or sexual abuses, etc.

The results of Botescu (2011) show that the most often long-term risks related to substance use are: issues concerning family, partners, school, friends, community or authorities following the use of ethnobotanicals (58.3 %). At the same time, quarrels with parents or other family members and runaway are often times raised. The most important with respect to this chapter is the fact that quarrels and even marginalization of teenagers within the community have been reported. Results of this study are similar to those of Botescu.

The next-to-last research question refers to "What do teenagers think with respect to their own use of substances?". In fact, this question aims to explore teenagers' own opinion with regard to substance addiction. We have sought to discover to what extent teenagers are aware of danger and whether they realize their need of help. As expected, none of the teenagers consider themselves addicted to the substance used. Three of the participants only consider it because it has been a while since they do it, but they do not think of themselves as addicts.

The last research question within the qualitative dimension of the paper "Which are the most suitable methods of psychoactive substance withdrawal and rehabilitation, in teenagers' opinion?" have received comprehensive answers. Most teenagers are aware of methods of withdrawal and rehabilitation following drug use. They know that there are rehab clinics, support groups and that in extreme cases addicts will not manage to withdraw by themselves. They will need professional help, as well as the support of their close family. The person concerned should in the first place admit their addiction. If they do not want to admit it, they will not accept help from anyone. Although all young people consider themselves well-informed about this matter, some of them claim that certain drugs (such as marijuana), are not addictive.

#### **Limitations of the study**

Firstly, the sample under study was a group small enough to be representative for a larger population. Even if the number of participants is enough for the phenomenological analysis, a larger number of participants would have helped to better understand this phenomenon.

Another limitation of this research is the tool used. It is built based on the academic literature and results obtained in other studies, but it is not a standardized tool, which might have been used within similar research.

Still as a limit of the research is the fact that teenagers may not have been completely honest in their answers. Every interview was provided with a worksheet of the interview guide, which also includes a section related to the honesty of replies. Based on responses and body language, teenagers appeared to be sincere, however this could be just the researcher's biased opinion.

#### **Final conclusions**

This paper proposes to explore tobacco, alcohol and drug use among teenagers, from the perspective of risk factors and protective factors, which have an influence on substance use initiation as well as continuation. There have not been any official statistics in terms of drug transit, production, trafficking and use in Romania, before 1989. Drug issues were dealt with only in other countries, thus drug trafficking and consumption was totally unknown to the population. After 1989 and with the opening of borders, in the absence of drug legislation specific to that period, our country has become a transit area and later a real outlet and

implicitly a drug use area. Over the last 10 years, from being a drug transit country, Romania has become a growing market of drug use, particularly heroin (Report ANA, 2005). Fortunately, at European level, Romania does not have high figures in terms of drug use compared to other countries. As for alcohol and tobacco use, Romania ranks high, even within this age group, adolescence being considered the start-up period for any substance use.

Risk factors that have an influence on substance use initiation among teenagers are numerous; some of them have a direct and definite influence, while others depend on various aspects of individuals, either personal or at community level. This paper proposes to analyze the main risk factors in tobacco, alcohol and drug use among teenagers. Results show both the separate influence of factors on the three types of substances, and the way they contribute together. As expected, factors as a whole have a much larger influence and better explain substance use. Since we talk about teenagers, we cannot consider only factors related to individuals, we shall also consider environment and the way it may influence their decisions. Teenagers undergo psychical and emotional changes; they learn how to make their own decisions, although they are still influenced by family, school, community and friends, in particular.

This paper aims to provide a synthesis of the academic literature and a series of theories and explanatory models related to substance use among teenagers have been approached; nevertheless, the social learning theory, the sub-cultural theory and the ecological systems theory have proved to be the most applicable for this age group. In fact, we cannot refer to substance use among teenagers without taking into account behavioral learning and association with certain peer groups within one's environment. At this age, teenagers have already noticed users' behavior in family or in other close groups. Whether they will adopt this behavior or not is of course a matter of genetic predisposition and certain personality traits, but for the most part it depends on the behavior of people in close proximity, relating to tobacco, alcohol or drug use. Teenagers would like to be part of those groups which they consider appropriate, regardless of reasons for such beliefs. Thus, teenagers who understand the harmful effects of substance use or who do not come into contact with a large number of users are more protected from this point of view. On the other hand, those who have already tried one of these substances and have been "pleased" will most likely continue to use them. As we can see in the academic literature, as well as in the results of this research, teenagers

may become users out of a desire to join a group they consider "cool" and where most members are users. However, joining such a group is not necessarily the key to adopting such behavior. Teenagers have to make a choice, and if they are able to withstand pressure in the group where they are already a member or want to be a member, they will be protected against substance use. Contrary to popular belief, attending parties or places where tobacco, alcohol or drugs are used does not have a direct influence on teenagers. Their decision to become users largely depends on the group of friends with whom they attend such places.

Many studies emphasize the importance of parent involvement in order to avoid substance use: the operational level of the family, parental control and monitoring, parents' interest concerning the places attended by their children and also their friends and family harmony (the level of agreement and communication between parents, as well as between parents and children). As we can see in the results of this research, parental control is important to prevent teenagers to become users, but the higher the control, the more teenagers will use substances. An explanation may be rebellion against parents and social rules specific to this age group.

School plays an important role in protecting teenagers against substance use. An appropriate school environment, trained teachers providing support to students when it is needed, as well as getting informed on the harmful effects of these substances can significantly reduce risk.

Communities of which teenagers are part, as well as the socio-economic status are risk factors in substance use. This research shows that a low socio-economic status is associated with alcohol consumption. On the other hand, a high socio-economic status is associated with a higher rate of illicit drug use.

As we can see within the results of this paper, leisure time or extracurricular activities where teenagers get involved may be protective factors as well as risk factors in substance use. Contrary to certain authors' beliefs, extracurricular activities are not strictly protective factors, in the same way leisure time activities are not strictly risk factors. In analyzing these factors, we shall consider involvement of parents and school in order to determine their role.

To complement quantitative research, we have conducted a qualitative study on drug abuse, using the interview method. These results cannot be generalized, as the number of participants is small, but this chapter can surely be used to better understand drug abuse and

the reasons for which teenagers become users. At the same time, the results of this section may be taken into account to develop prevention programs.

#### **Practical implications and future research**

This research is performed on a representative sample of 1105 subjects in Cluj-Napoca. The quantitative dimension is complemented by a qualitative study for a better comprehension of results obtained from data analysis.

Prevention or intervention programs related to tobacco, alcohol and drug use among teenagers shall consider both the general data of a research and the subjective opinion of the participants. Thus, such programs shall aim at informing the population with regard to substance use risks and effects. Prevention programs shall aim at informing teenagers, teachers and parents as well. Prevention and intervention programs shall also consider characteristics of this age group in such a way that they can be easily understood and enjoyable in order to keep young people's attention. Programs, as well as social policies shall be permanently adjusted in order to meet the needs and changes in the life style of this age group, and the matter concerned should be seen as a real problem within present-day Romanian society, with many negative effects, and should not be treated as a serious problem only in other countries.

Further research may focus on the study of risk factors according to the context of subjects. We shall consider the fact that many of the risk factors are studied separately, and their contribution is not always significant in order to classify them as risk factors. Substance use among teenagers should be regarded as a complex issue underlying the contribution of several factors simultaneously, and not individually.

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