

## PREVENTING DRUG ABUSE – FROM EXPLANATORY THEORIES TO INTERVENTION MODELS

*Mihaela RADOI \**

### **Abstract**

In the attempt to determine the causality of the delinquency phenomenon in minors, it is well-known that the weakening of the connection between the teenager and society is the main element. The components of this connection are: the attachment to a person that can motivate him/her; the involvement in utility inducing academic projects; constructively spent leisure time; the awareness that laws must be obeyed. Minors' criminality is rooted in the profound transformations that have altered the functions of the family, the school, the community, and that have dramatically reduced their formative role for teenagers. There are various risk or protective factors that influence the attitudes and behavior of teenagers in the case of substance consumption. The analysis of these factors is useful in the development, analysis and assessment of intervention/treatment programs. The studies suggest that the support for certain measures, campaigns, activities focused on protective factors (biological, psychological, social), especially when teenagers are the target group, is a viable alternative to the encouragement and leading of life without substance consumption.

**Key words:** drug abuse, risk and protective factors

### **Resumé**

Dans le but de déterminer la causalité du phénomène de la délinquance des mineurs, il est bien connu que l'affaiblissement du lien entre l'adolescent et de la société est l'élément principal. Les composants de ce cadre sont: l'attachement à une personne qui peut motiver lui / elle; l'implication dans utilitaires induire projets académiques; constructive passé du temps de loisirs; la prise de conscience que les lois doivent être respectées. La criminalité des mineurs est enracinée dans les transformations profondes qui ont modifié les fonctions de la famille, l'école, la communauté, et qui ont considérablement réduit leur rôle formateur pour les adolescents. Il existe différents facteurs de risque ou de protection qui influencent les attitudes et les comportements des adolescents dans le cas de la consommation de substances. L'analyse de ces facteurs est utile dans le développement, l'analyse et l'évaluation des programmes d'intervention / traitement. Les études suggèrent que le soutien pour certaines mesures, des campagnes, des activités axées sur les facteurs de protection (biologiques, psychologiques, sociaux) est une alternative viable à l'encouragement et la pointe de la vie sans consommation de drogues.

**Mots-clé:** drogue, l'abus de drogues, facteurs de risques et de protection

### **Rezumat**

În încercarea de a determina cauzalitatea fenomenului delinvențional în rândul minorilor s-a stabilit că slăbirea legăturii între adolescent și societate constituie elementul principal. Componentele acestei legături sunt: atașamentul față de o persoană care să îl

---

\* Lecturer at University „Al. I. Cuza” Iasi, Faculty of Philpsophy and Social-Political Sciences, Department of Sociology and Social Work, Bd. Carol I no.11, 700506, Iasi, Romania; e-mail: mihaelaciurlica@yahoo.com

motiveze, implicarea în proiecte academice valorizante și care să nu lase prea mult timp liber adolescentului, interiorizarea credințelor că legile trebuie respectate. Originea infracționalității în rândul minorilor se află în transformările profunde care au alterat funcțiile familiei, ale școlii, ale comunității și care au redus radical rolul formativ al părinților în raport cu tinerii. Există diferiți factori de risc și de protecție care influențează atitudinile și comportamentul adolescenților în cazul consumului de substanțe, analiza acestor factori fiind necesară în dezvoltarea, analiza și evaluarea de programe de intervenție și de tratament. Studiile efectuate relevă faptul că promovarea de măsuri, campanii, activități care să aibă în centru factorii protectivi (biologici, psihologici, sociali), în special când grupul țintă îl reprezintă tinerii, oferă o alternativă viabilă pentru promovarea și menținerea unui stil de viață fără consum de substanțe.

**Cuvinte cheie:** drog, consum abuziv, factori de risc și factori de protecție

## Introduction

In their book, Jessor and Jessor (1977, p. 33) define risk behaviour as involvement in social behaviours defined by the social norms and by the institution of parent authority, as issues, worrying or undesirable sources, and that require a social answer in terms of control. The definition risk behaviour focuses on two concepts: the potential risk or danger for the individual and the potential acknowledgement, reward, or achievement resulting from this behaviour (Byrnes, Miller and Schafer 1999, pp. 367–383; Leigh 1999, pp. 371–383). Research has underlined that numerous risk factors can increase the adolescents' chances to develop harmful behaviours, as well as a multitude of protective factors with the role of preventing behaviours such as substance abuse. Hawkins, Catalano and Miller (1992, pp. 64–105) identify the (adolescent-specific) determining risk factors of alcohol, tobacco, drug consumption as the following: “contextual factors” – closely connected to the structure of the society and to its culture, and “individual and interpersonal factors”. The authors have identified the protective factors, based on the model of social development, which underline the role of family, school, church, and peer group. So far, research has underlined that the young people with a close and positive connection to school are less likely to develop substance abuse or deviant behaviours (Hawkins 1999, pp. 226–234). It is well-known that these types of behaviour are shaped and consolidated especially during adolescence (Windle et al. 2008, pp. S273–S289) and that there should be a real insight on the factors that potentiate these behaviours in order to develop coherent intervention programmes.

## 2. Explanatory theories and models of substance use – an analysis from the perspective of building intervention models

Among the explanatory theories and models of drug use, the majority have focused on the causes that determine the individuals to use drugs. These theories have been grouped by Becona as follows (Abraham apud Becona 2004, p. 21):

1. Partial theories and models or based on a few elements, which include the biologic theories and models (Georgescu, Moldovan, Cicu 2007, p. 24 apud Casas et al. 1992), *the social learning theories* (Bandura 1977), *the attitude-behaviour theories* (the theory of reasoned action, by Fishbein and Ajzen (1975, p. 47), and the theory of planned behaviour (Ajzen 1988); *the psychological theories* based on intrapersonal causes include the model of self-esteem increase and Kaplan's integrative theory of deviant behaviour, *the affectivity model* (Abraham apud Pandina 2004, p. 23), *the theories based on family and on the systemic approach* (Waldron and Slesnick 1998, p. 271–283).

2. Evolutionary or stage-based theories and models; their explanations rely on stages or on the evolution of the development concerning maturation and consecutive drug use. *The evolutionary model* (Kandel and Davies 1992, pp. 211–253) and *Peele's social model* (1985) based on the role of addictions in our lifestyle; they pinpoint that neither the substance per se, nor the behaviour produce the addictions, but the way in which a person interprets this experience and responds physiologically, emotionally, and behaviourally to those substances. *The multicomponent motivational stages model*, by Werch and DiClemente (1994, pp. 37–46), based on the stages of change of Prochaska and DiClemente (1983, pp. 390–395; 1992, pp. 184–218). *The youth empowerment process model* (Kim et al. 1998, pp. 1–17) is based on an ample set of theories or theory components, such as the social control theory, the social development model, the problem-behaviour model, and the social learning model. Within this model, a particular importance is ascribed to family as basic element in the socialization of the dominant values in the society.

Glantz (1992) proposes an explanation for drug abuse through the *developmental psychopathology model*, concerning the aetiology of drug abuse. This author's model is based on the risk factors proven to be associated with the aetiology of substance abuse (neurologic and genetic factors; tendency towards problematic behaviours; psychological and psychopathologic factors; environmental and social factors) and on the basic principles of development and of development-related psychopathology. This model is different from other etiological models given its psychopathological orientation concerning the development and the fact that it includes the antecedents of early childhood. Vulnerability would be the product of the interaction between the temperamental characteristics of the child and the persons and experiences in his environment. This way, a child's somewhat difficult temper is not a sufficient condition a subsequent substance use.

*The primary socialization theory* (Oetting et al. 1998, pp. 5–38) proposes to solve the limitations of the previous theories given that – according to some authors – they either analyse only one aspect of the problem (psychological, biologic, or social variables), or they fail to indicate the linking elements between the components. This theory focuses on the problem-behaviour, and drug use is one of them. The fundamental premise of this theory is as follows. Though the

biological basis of human behaviour is incontestable, all social behaviours essentially are learned or they contain principal components that are learned.

Deviant social behaviours – such as drug use, murders, violence – are among these learned behaviours. Deviation is not a simple flawed situation that emerges when there is a rupture between the pro-social connections and norms; both the pro-social and the deviant norms are actively learned within the primary socialization process. To this end, there are certain sources of primary socialization, which influence the individual, family, school, peer cluster. There are also indirect influences in primary socialization given by the following aspects: the personality traits and the secondary socialization sources, such as the characteristics of the community, city, neighbourhood, size, population mobility, age-based population distribution, social opportunities, poverty, large family, religion, and religious institutions. As regards the passage from primary socialization to drug use, this theory posits that transition can occur as follows: addiction appears as a result of socialization through an addiction to a lifestyle based on drug use. This includes the type of drug, its accessibility, and the degree of acceptance.

### 3. Integrative and comprehensive theories

*The social development model* developed by Catalano, Hawkins et al. (2008, p. 96) represents a general theory of human behaviour; its objective is to explain the antisocial behaviour through the predictive specifications of development. This model hypothesizes that the development processes are similar concerning both those leading to pro-social behaviours and those leading to antisocial behaviours. Throughout his life, an individual passes through various phases, during which the risk and protective factors are highly important for the development of antisocial behaviours. This model includes three main elements: the delinquent and drug use-related behaviour merged into one model; the existence of a development perspective, which leads to sub models specific to various ages: pre-school, elementary school, high school, university; the risk and protective factors for both delinquency and drug use (Olaio 2001, pp. 24–36 apud Becona 1999).

*The interactional theory of delinquency* of Thornberry (1996, pp. 210–214) conditions the deviant behaviour to the result of weak bonds between the individual and the society and a poor environment, where such a behaviour can be acquired and consolidated. This theory combines elements from the control and social learning theory. According to this theory, the deviant behaviour develops dynamically throughout one's lifetime through the interaction of several processes.

This way, the first relevant element in the production of a delinquent behaviour is the lack of conventional bonds. Those adolescents who have a close connection to their parents, a good relation with school, and other conventional activities are less likely to develop delinquent behaviours. Moreover, these adolescents are usually part of conventional social networks, which decreases even more the

probability of getting involved in deviant activities. On the other hand, if the conventional bonds are weak or absent or if there is a weak social control of the behaviour, delinquency is likely to emerge.

It is beyond doubt that a stable delinquent behaviour requires a social setting where it can be acquired and consolidated. This way, being among peer delinquents, with values in this sense, is relevant for the consolidation of deviant behaviour. Hence, this theory insists on the fact that the relation between these variables is dynamic and not static, bidirectional between variables, and with a modelling potential throughout an individual's evolution.

*The deviant subcultures theory* taken over from Merton and developed by those who have studied delinquency in adolescence – Cohen, Cloward, Ohlin (Boncu 2000, p. 120) – includes three types of subcultures. They are differentiated by the group's access to illegitimate means: "criminal subculture", "conflict subculture", and "retreatist subculture". The retreatist subculture model is drug addiction (Ogien 2002, p. 118), and its members have to face a double failure. They cannot use legitimate means to reach their goals; however, the same goes for illegitimate means, because they failed to become part of the hierarchies of criminality. They cannot pay their duties to the societies just like other citizens; hence, they find a refuge in the consumption of drugs, which allows them to shake away frustration.

*The theory of adolescent risk behaviour* (Jessor and Jessor 1993) ascribes – within the appearance of adolescent risk behaviour – a fundamental role to socially organized poverty, opportunity, and discrimination in producing and maintaining what the authors called a "population of at-risk youth". The implications of this theory, for both prevention and intervention in drug use, are that a comprehensive approach is more effective than a partial one. Furthermore, a comprehensive approach is more likely to produce successes and maintain sustainable effects. This way, this theory posits that the risk factors should be reduced and that the protective factors should be developed; the theory introduces the idea of lifestyle change, especially for young people with disadvantaged social backgrounds. One of the principles deriving from this theory is that of not placing the entire responsibility on the individual, given that the responsibilities of social context, poverty, opportunity, and discrimination are also very important. According to the book – *Problem behaviour and psychosocial development. A longitudinal study of youth* – by Jessor and Jessor (1977), adolescents look for risk because it allows them to get control on their own life, to express their discontent towards the parental authority and the social norms, to face frustrations, dissatisfactions, anxiety, lack of adaptation or failure. It also allows them to gain access to the peer cluster, and to prove their adherence and loyalty to the group. Risk also confirms their personal identity and it asserts their maturity, as it marks the passage towards the next development stage, that of young adulthood. Starting from the theories of Farley (1971) and Zuckerman (1964), the theory of stimuli adjustment, of "sensation seeking", Jessor and Jessor (1977) explain the need of adolescents to get

involved in risk behaviours as a need to get pleasure, to be entertained. Research has shown that the adolescents who get involved in risk behaviours will seek these experiences (Jessor, Donovan, Costa 1991, pp. 99–155). In their series of longitudinal studies, Jessor and Jessor (1977) demonstrate that substance abuse, juvenile delinquency, aggressive behaviours, and all types of risk behaviours are closely inter-correlated.

*The lifestyles model* – (Olaio 2001, pp. 24–36 apud Calafat et al. 1992) is one of the most utilized models within the prevention and assistance campaigns in Europe and it is based on the consideration of the risk and protective factors in drug use. This approach contributed to the increase in the effectiveness of the interventions that involve this model starting from the following premise: what makes the individuals be interested in drugs is related to the entire personal and social dynamics preceding the contact with the drugs. It also applied in the case of more or less causative relationships, as there are many factors more important than the drug *per se*. This way, though it may sound paradoxical, it can be stated that the drug is not a risk factor for drug addiction (Calafat et al. 1992), but that it represents one of the multiple factors associated to drug use, just an element among all the aspects to be considered.

For Calafat and his colleagues, these factors associated to drug use are included in the categories of risk and protective factors. In what they call the network of risk and protective factors, they consider the following: social structuring, societal consumption behaviours, family, school, leisure use, relationship with the parents, relationship with the colleagues, information, personality, attitudes, experiences with other drugs and their consumption.

Prevention and assistance in substance use is oriented in such a manner that the influence of these risk and protective factors allows the individual to be free from consumption. According to Calafat, Amangual and Palmer (1997), the causes or factors facilitating the interest for drugs are related to the personal and social dynamics and, most of all, to the contact with the drugs. Authors posit that the main idea of this model is the definition of addiction, seen as a result of the relations between the consumer and the consumed product, and which creates a need (psychic dependence) to maintain the consumption of certain drugs, as well as expectations related to getting benefits from consumption.

The authors suggest a sequential model that potentiates the risk factors in substance use, starting with difficulties in communicating with the parents and especially with a lack of identification with them. This leads to depression and to immaturity or deviance. This model accentuates, on one hand, the importance of the familial setting and, on the other hand, the role of individual characteristics in the debut, maintenance, and consolidation of the addictive behaviour.

*Bronfenbrenner* (1979 in Cole edit. 1994, pp. 37–43) proposes an *ecological model* of human being development in which the child is considered the centre of a four-level ecosystem: the microsystem level (with entities with a direct educative

role); the mesosystem level; the exosystem level (integrating the microsystems, mesosystem, and the parents' belonging groups that determine the educational practices); the macrosystem level (the cultural models that directly influence the roles of parents and child within the family). Finally, there is also the chronosystem level. In many situations – as the creator of this model posits – we have to consider the elements and mechanism through which the family-specific educational process is influenced, and through which the parental roles are completed by other networks of professional and social services. Bronfenbrenner sees the family, peer group, community, or culture as microsystems whose interactions make up a megasystem. Each of these macrosystems has a specific influence on the person; the interactions between the different microsystems are as important for the individual's development as the events occurring within each of them and the impact of the interactions affect both the individual and the system as a whole. According to the theories of Dishion et al. (1999, pp. 755–764), *the ecological model is the most adequate in understanding the emergence of adolescent risk behaviours and it can also serve as guide to elaborate specific prevention programmes for each development stage*. One of the implications of the ecological model is the following: a prevention programme meant to have effective results in reducing the risk factors should take into account *the contextual factors* that influence the causative process and it must be applied within a relevant context. According to Diez and Peirats (1999, pp. 609–617), the ecological model intends to exceed the stage of partial and insufficient perspectives for the approaches related to substance use: the juridical model, the distributive model, the medical, psychosocial, or social model. *This model resizes the issue of substance use to a global phenomenon and to a social issue that includes the individual, the family, the community, the society, the cultural-historical system, and the political system, the economic and legal system. It also includes the multitude of relations between these factors, as well as the effects of each microsystem on the individual's behaviour. According to this model, prevention should act upon the causes of the issue and not only on its effects; hence, this action model requires multidisciplinary actions.*

*The cultural-identity theory of drug abuse* (Anderson 1998, pp. 233–262) brings to attention several factors. In this sense, there are three individual micro-level factors (personal marginalization, lost control in defining an identity, and ego identity discomfort), two meso-level factors (social marginalization and identification with a drug subcultural group), and three macro-level factors (economic, educational, and cultural opportunities) that constitute motivating factors in substance abuse.

The cultural-identity theory focuses on identity change motivations specific especially to early ages the passage from childhood to adolescence – 11–15 years old. During that period, individuals depend on adults. The onset of drug use is documented at this age because they have (micro-level) difficulties in ego identities

(meso-level). Drug deviant groups (macro-level) attract them; the economic and educational opportunities, as well as popular culture encourage them in this direction. (Anderson 1995, Anderson, DeMott, 1998). In their studies, Anderson (1994, 1998), Anderson and Anderson and DeMott (1998) identify 14 situations that can determine drug-related identity change and that can make the passage from non-use to drug abuse. We refer here to the parents separation or divorce, to the death of someone significant (Hoffman 1993), to frequent moves of the family, to inappropriate relationships with an adult, to taking over caretaker responsibilities (for siblings or other relatives). We also refer to rigid and age-inappropriate family responsibilities (earning money to support the family), early parenthood (children with children, teenage parents), to physical, psychic, emotional, sexual abuse, especially when committed by the parents, strict parental expectations, to physical, psychic, emotional, sexual abuse committed by the teachers, school suspension, placement in a special institution, frequent involvement in conflicts, involvement in activities requiring police intervention.

The different theories on poverty provide various explanations and they adopt different attitudes regarding the social isolation and the marginalization of the poor. This concept meets the criteria for a meso-level factor (Feree and Hall 1996, pp. 929-950), closely linked to the identification with drug-consumer groups. Marginalization and its immediate effects – “feeling out of place and different from others” (Peluso and Peluso 1988) also constitute a motivating factor of drug use.

Drugs, just like coffee and cigarettes, exceptionally demonstrate the capacity to want to belong. People consume a drug because, last time they did it, the feeling was pleasant, and the last experience proposes the next one and the one after that; this way, the habit is formed gradually, and the custom leaves its mark. Gratification is immediate, and pain is postponed. A fundamental psychological truth is that immediate gratification will have a stronger influence on behaviour than the subsequent and uncertain pain.

### **3. Role of the risk factors in the elaboration of drug-taking prevention programmes**

The large-scale prevention programmes are meant to bring useful information on the negative effects of risk behaviour; however, they have a low success rate when dealing with preventing youth risk behaviours. (Malow et al. 2007, pp. 173–180). For instance, an assessment of the alcohol-taking universal strategies (addressed to youth) has concluded that they have a dangerously low effectiveness (Foxcroft et al. 2003, pp. 397–411).

In contrast to all of these one-size-fits-all programmes, the individual prevention programmes based on individual skills have proven their effectiveness in the reduction of risk behaviours (Ingram et al., 2008, pp. 374–383).



Within these types of programmes, an important role is played by the personality traits, which lead to a part of the youth adopting risk behaviours (Conrod et al. 2008, pp. 181–190; 2006, pp. 550–563; 2000, pp. 231–242). Various risk or protective factors influence the attitudes and behaviour of the youth when considering substance use. The analysis of these factors is a useful coordinate in elaborating, analyzing, and assessing the intervention/treatment programmes.

The World Health Organization's Programme on Substance Abuse had modified this model to include the effects of substances, the personal response of the individual to substance use, as well as variables related to the social and cultural environment. This model allows a better understanding of the vulnerability to risk behaviours by analyzing the risk and protective factors. The model includes several components that influence vulnerability. We refer here to stress (major life events, everyday problems, adolescent-specific changes), normalization of substance use (availability, price, advertising, sponsorship, and promotion, media presentation, and culture), attachment (positive attachment is the one connected to people, animals, objects, and supportive; negative attachment is the connection to people and institutions associated with substance use). We also refer, in the same context, to skills, capabilities that allow the individual to succeed in life, coping strategies including social behaviours and abilities, which help a person manage stress, and to resources (individual resources such as willingness to work hard, and environmental resources such as school, financial resources, and supportive people).

An analysis of the scholars within the World Health Organization (2001) has identified the following risk factors: conflicts in the family and the existence of a group of friends where substance use is allowed and encouraged. As protective factors, they have identified a positive relationship with parents and/or family, parents who provide norms and boundaries, a positive school environment, and the presence of spiritual beliefs. Both risk and protective factors exist on several levels: at an individual level, at the peer level, at the family level, at the societal and community level.

At the individual level, life experiences play a more important role in the development of addictive behaviours than genetic factors. Determining factors are the support and care from the family, the quality of school experience, as well as social skills and competences such as feeling control and purpose setting. Moreover, adolescents with solid moral and religious beliefs and who do not let themselves be influenced by their friends with deviant behaviours will not develop deviant behaviours themselves.

At the peer level, the determining elements are the choice of the peers and the nature of peer relationships. The difference is made by the nature of the group associated with the adolescent – groups who adopt and promote a pro-norm behaviour or groups who adopt and promote a deviant lifestyle.

At the family level, the factors include the following: family history of drug use, the efficiency of family management (communication and discipline), the structure of coping strategies, the degree of attachment between parents and children, the nature of parental rules and expectations, as well as the quality of the relationships within the extended family. Adolescents who come from families who promote a system of moral norms and values and whose parents provide both support and authority, are less likely to develop deviant behaviours.

At the societal and community level, the factors include the existence of norms and attitudes incriminating deviant behaviours. At the school level, adolescents care who have a positive relationship with teachers, who attend school regularly, who learn well, and who benefit from a positive school environment are less likely to develop deviant behaviours.

#### **4. Conclusions**

It is essential to analyze the special needs of adolescents in the attempt to understand why young people end up consuming drugs and how they build a drug-taking identity. The efficiency of the intervention will depend on the correlation of all the factors involved in consumption. The unique and specific characteristics of drug-taking or substance addicted adolescents have to be taken into account when elaborating an intervention method. The intervention specificity and the treatment method depend on each stage of consumption. We can talk about a treatment continuum, mostly when the individual can always relapse to the previous stage. Taking into account that Romania does not benefit from psychic addiction treatment services through therapeutic communities, relapses are very frequent among substance users.

The effective interaction between family and the personnel within support institutions is essential for the reintegration of these young people. In the social reintegration process of young substance users, one should consider the creation of treatment motivation. When the request for treatment is not voluntary and when family, friends, or other specialists direct the young person toward seeking treatment, their involvement is not complete and this has an influence on the therapeutic endeavour. Consequently, the young people in question only fake the involvement within the treatment and, once it is over, they usually relapse and start using again. Thus, the young people should participate actively in the reintegration process. In order to determine a motivation for change, several factors should be considered: the role of family, the possibility of associated psychic disorders, empathic practices and attitudes from the specialists

In order to facilitate the intervention process, it is also necessary to involve the family or extended family, the peers, and the community. Their support is most necessary in order to understand the implications of the treatment and their own role in the recovery of young substance users.

## References

1. Abraham, P., Ciucu, D., Pedaru, D., Moldovan A. (2004). *Prevenire și consiliere antidrog*, Ed. Ministerului administrației și internelor, București;
2. Aldinger, C., Whitman, C.V. (2001). *Skills for Health Skills-based Health Education including Life Skillsp, An Important Component of a Child-friendly*. Available at: [http://www.who.int/school\\_youth\\_health/media/en/sch\\_skills4health\\_03.pdf](http://www.who.int/school_youth_health/media/en/sch_skills4health_03.pdf) ;
3. Anderson, T.L. (1998). A cultural identity theory in drug abuse. *Sociology of Crime, Law and Deviance*, 1, pp. 233-262;
4. Anderson T. L., Mott J. A. (1998). Drug-related identity change: theoretical development and empirical assessment, *Journal of Drug Issues*, 28(2), pp. 299-328;
5. Anderson, T.L (1995). Toward a Preliminary Macro Theory of Drug Addiction, *Deviant Behavior*, 16(4), pp. 353-372;
6. Anderson, T.L. (1994). Drug Abuse and Identity: Linking Micro and Macro Factors, *Sociological Quarterly*, 35(1), pp. 159-174;
7. Ajzen, I., (1988). *Attitudes, personality, and behavior*, Dorsey Press, Chicago;
8. Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavior Change, *Psychological Review*, 84, pp. 191-215;
9. Boncu, Ș. (2000). *Devianța tolerată*, Ed. Universității Alexandru Ioan Cuza din Iași;
10. Bronfenbrenner, U. (1994). Ecological models of human development. *International Encyclopedia of Education*, vol 3, 2nd Ed., Elsevier Sciences, Oxford, pp.1643-1647,
11. Byrnes, J., Miller, D., Schafer, W. (1999). Gender differences in risk taking: A meta-analysis, *Psychological Bulletin*, 125(3), pp. 367-383;
12. Catalano, R., F., Park, J., Harachi, T., W., Haggerty, K., P., Abbott, R., D., Hawkins, D., J. (2008). Mediating the effects of Poverty, Gender, Individual Characteristics, and External Constraints on Antisocial Behaviorp. A test of the Social Development Model and Implications for Developmental Life- Course Theory, in Ed., David, P., *Integrated Developmental and Life Course Theories of Offending, Advances in Criminological Theory*, 14, Transaction Publisher, Farrington;
13. Calafat, A., Amangual, M., Palmer, A. (1997). Drug use and its relationship to other behaviour disorders and maladjustment signs among adolescents, *Substance Use and Misuse*, 32, pp. 1–24;
14. Conrod, P., Castellanos, N., Mackie, C. (2008). Personality-targeted interventions delay the growth of adolescent drinking and binge drinking, *Journal of Child Psychology and Psychiatry*, 49(2), pp. 181-190;
15. Cusson, M.(1997). Devianța în *Tratat de sociologie*, Boudon, R.,(ed.), Ed. Humanitas, București, pp. 439- 477;
16. Díez,J.P., Peirats, E. B., (1997). Analysis of socialization parenting styles related to adolescent alcohol abuse, *Psicothema*, 9(3), pp. 609–617;
17. Dishion, T. J., McCord, J., Poulin, F. (1999). When interventions harmp. Peer groups and problem behavior, *American Psychologist*, 54 (9), pp. 755–764;
18. Dunlap, E., Johnson, B. (1992). The Setting for the Crack Era: Macro Forces, Micro Consequences, 1960-1992, *Journal of Psychoactive Drugs*, 24(4), pp. 307-321;
19. Feree, M.M., Hall, E. (1996). Gender, Race and Class in Mainstream Textbooks, *American Sociological Review*, 61(6), pp. 929-950;

20. Finer, L.B., Henshaw, S.K. (2006). Disparities in rates of unintended pregnancy in the United States, 1994 and 2001, *Perspectives on Sexual and Reproductive Health*, 38(2), pp. 90-96;
21. Fishbein, M., Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior*. An Introduction to Theory and Research, Reading, MA, Addison-Wesley;
22. Foxcroft, D.R., Ireland, D., Lister-Sharp, D.J., Lowe, G., Breen, R. (2003). Longer-term primary prevention for alcohol misuse in young people: A systematic review. *Addiction*, 98(4), pp. 397- 411;
23. Georgescu, D., Moldovan, A.M., Cicu, G. (2007). *Despre droguri*, Ed. Concordia, Arad;
24. Glantz, M., Pickens, R. (1992). *Vulnerability to drug abuse*, Washington DC, American Psychological Association;
25. Hawkins, J.D., Catalano R.F., Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: implications for substance abuse prevention, *Psychological Bulletin*, 112(1), pp. 64-105;
26. Hawkins, J.D., Catalano, R.F., Kosterman, R., Abbott, R., Hill, K.G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood, *Archives of Pediatric and Adolescent Medicine*, 153, pp. 226-234;
27. Hoffman, J.P. (1993). Exploring the Direct and Indirect Family Effects on Adolescent Drug Use, *Journal of Drug Issues* 23, pp. 535-557;
28. Ionescu, I., Lupu, A. (2007). *Sociologia sănătății studenților*, Ed. Universității Alexandru Ioan Cuza din Iași;
29. Ingram, B.L., Flannery, D., Elkavich, A., Rotheram-Borus, M.J. (2008). Common processes in evidence-based adolescent HIV prevention programs, *AIDS Behavior*, 12, pp. 374-383;
30. Jessor, R. (1993). Successful adolescent development among youth in high risk settings, *American Psychologist*, 48, pp. 117-126;
31. Jessor, R., Donovan, J. E., Costa, F. (1991). *Beyond Adolescence: Problem Behavior and Young Adult Development*, Cambridge University Press, New York;
32. Jessor, R., Jessor, S. L. (1977). *Problem behavior and psychological development: A longitudinal study of youth*, Academic Press, New York;
33. Kandel, D. B., Davies, M. (1992). Progression to regular marijuana involvement: phenomenology and risk factors for near-daily use in *Vulnerability to abuse*, Glantz M., Pickens, R., (eds), American Psychological Association, Washington, DC, pp. 211-253;
34. Kaplan, H.I., Sadock, B. (2001). *Manual de buzunar de Psihiatrie clinică*, Ed. Medicală, București;
35. Kim, S., Crutchfield, C., Williams, C., Hepler, N. (1998). Toward a new paradigm in substance abuse and other problem behavior prevention for youth: youth development and empowerment approach, *Journal of Drug Education*, 28(1), pp. 1-17;
36. Leigh, B. (1999). Peril, chance, adventure: Concepts of risk, alcohol use and risky behavior in young adults, *Addiction*, 94(3), pp. 371-383;
37. Malow, R.M., Kershaw, T., Sipsma, H., Rosenberg, R., Devieux, J.G. (2007). HIV preventive interventions for adolescents. A look back and ahead, *Current HIV/AIDS Report*, 4, pp. 173-180;
38. Merton, R.K. (1968). *Social Theory and Social Structure*, Free Press, New York;

39. Newcomb, M.D. (1996). Pseudomaturity among adolescents: Construct validations, sex differences and associations in adulthood, *Journal of Drug Issues*, 26, pp. 477-504;
40. Oetting, E. R., Edwards, R. W., Beauvais, F. (1989). Drugs and Native-American youth, *Drugs and Society*, 3, pp. 5-38;
41. Ogiean, A. (2002). *Sociologia devianței*, Polirom, Iași;
42. Olaio, A. (2001). Theoretical Models and drug use prevention in *Family: the challenge of prevention of drug use*, Mendes, F., Relvas, A., P., Olaio, A., Rovira, M., Broyer, G., Pietralunga, S., Borhn, K., Recio, J. L., (eds.), IREFREA, Palma de Mallorca;
43. Peele, S. (1985). *The meaning of addiction: Compulsive experience and its interpretation*, Lexington Books, Lexington, MA;
44. Peluso, E., Peluso, L.S. (1988). *Women and Drugs: Getting Hooked and Getting Clean*, Compcare Publishers, Minneapolis;
45. Prochaska, J. and DiClemente, C. (1983). Stages and processes of self-change of smoking: toward an integrative model of change, *Journal of Consulting and Clinical Psychology*, 51, pp. 390-395;
46. Social Issues Research Centre of Oxford (2002). *Social and Cultural Aspects of Drinking*, U.K., <http://www.sirc.org/publik/drinking3.html>;
47. Thornberry, T. P. (1996). Empirical support for interactional theory: A review of the literature in *Delinquency and Crime. Current Theories*, Hawkins D.J. (Ed.), Cambridge University Press, 198-235;
48. Waldron, H. B., Slesnick, N. (1998). Treating the family in *Treating addictive behaviors, 2nd edition*, Miller, W.R., Heather, N. (Eds.), Plenum Press, New York, 271-283;
49. Werch, C., DiClemente, C. (1994). A multi-component stage model for matching drug prevention strategies and messages to youth stage of use, *Health Education Research*, 9, pp. 37-46;
50. WHO (2002), *The world health report 2002, Reducing Risks, Promoting Healthy Life* Available at: [http://www.who.int/whr/2002/en/whr02\\_en.pdf](http://www.who.int/whr/2002/en/whr02_en.pdf).
51. Windle, M., Spear, L., Fuligni, A., Angold, A., Brown, J., Pine, D. (2008). Transitions into underage and problem drinking: Developmental processes and mechanisms between 10 and 15 years of age, *Pediatrics*, 121 (4), pp. S273-S289.