

## Parental Bonding and Substance Abuse Motives among Adolescents with Substance Abuse

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### **Abstract:**

**Background:** Substance abuse among adolescents is a significant health concern. Disturbed bonding between adolescents and parents and various motives of substance abuse are cited as strong correlates of adolescents' substance abuse problems. **Aim:** the study aimed to explore parental bonding and substance abuse motives among adolescents with substance abuse. **Methods:** 300 adolescents who have substance abuse were recruited from out- patient clinic of addiction at Psychiatry and Addiction Prevention Hospital – Cairo University Hospital. Participants completed socio demographic and substance abuse data sheet, Parental Bonding Instrument (PBI) and drug abuse motives questionnaire. **Results:** majority of participants started substance abuse because of peer pressure, perceived parental bonding as affectionate constraint while none of participants perceived optimal parenting. Furthermore, majority of participants reported moderate levels of motives to abuse substances. Moreover, no statistically significant correlation between parental bonding and motives of substance abuse was found. **Conclusions:** The study concluded that motives of substance abuse during adolescence were not mediated by parental bonding. **Recommendations:** based on the results, it is recommended to develop parental education programs regarding the role of parental bonding in substance abuse prevention and to develop a culturally sensitive instrument to assess parental bonding and motives of substance abuse in Egypt.

**Keywords:** the role of parental bonding in substance abuse, motives of substance abuse, adolescents with substance abuse.

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### I. Introduction

Adolescence is a time of physical and psychological changes. It is a period of increased risk taking, learning and integration of unhealthy habits. Experimentation of unhealthy behaviors usually begins in early adolescence probably as adolescent tends to seek new experiences while unable to accurately estimate the risks associated with some behaviors. Substance abuse, including tobacco, alcohol and illicit drugs, is one of the most concerning risk behaviors during adolescence and remain a public health issue with high rates of mortality and morbidity [1].

According to [2-3], substance abuse among adolescents correlates with poor academic achievement, violence, greater delinquency. Moreover, behavioral problems, school dropout, truancy, conduct disorder, depression, and suicide are all linked to substance abuse. Additionally, adolescents who continue substance abuse during adulthood often experience poor child- parent relationship, child abuse and neglect, decreased quality of life, destruction of families, sexual assault, loss of work productivity and unemployment.

Regarding family bonding is defined as, “the feeling of closeness and intimacy towards one’s parents and reflected in communication, perceived monitoring and involvement in the family” [4]. Studies have shown that parental practices as overprotection, control, and authoritative parenting were found to correlate with the adolescent’s decision to initiate and continue using substances. On the contrary, parental practices such as warmth and support and limit setting are considered protective factors against initiation of drug use [5].

Parents and children have different opinions regarding bonding. To the child, the most important factor in parental bonding is self-identity and decision making capacity, while parents wish to communicate personal and social norms and parental expectations to the child. However, dramatic changes during adolescence include resistance and a reevaluation of the established rules governing parent-child relationships [6-7].

The results of a study by [8] revealed that childhood troubles with parents were associated with alcohol and drug abuse. Moreover, the results of [9] showed that parental extreme care along with inadequate support was associated with increased addiction potential among students.

Meanwhile parental bonding is considered as protective or risk factors for substance abuse in adolescents, motivational factors have been viewed as central to both the initiation and perpetuation of

substance abuse. Although many studies conducted on motives for alcohol drinking, fewer have focused on motives of abuse of drugs, i.e., explanations that people offer for their abuse of drugs. However, motivational models are mainly based on the assumption that individuals abuse substances to attain valued outcomes or to address a variety of needs [10].

In addition, [11] mentioned that substance abusing behavior is thought to represent multiple psychologically different underlying functions. For example, primary motivations for drug abuse among adolescents are to improve intellectual performance, increase alertness and concentration, relieve pain, experiment, and get high. Thus, drug abuse motives involve obtaining positive reinforcement or avoiding negative consequences

In this respect, [12] explained that in view of the fact that emotions consist of “feeling” states and classic physiological emotive responses, drugs of abuse elicit powerful emotions, ranging from pronounced euphoria to devastating negative emotional states that in the extreme can break homeostasis. Moreover, drugs of abuse produce an abnormal activation of incentive salience / reward systems that normally play a key role in guiding behavior toward high-value incentives in the environment.

## **II. Significance**

Substance abuse in Egypt is a serious public health threat. Many Egyptian studies have demonstrated increased prevalence over years. Reports of the Egyptian National Addiction Research Program in 1994 and 2005 revealed that 6.2 %, 12.6 % of the population (respectively) used substance(s) of abuse at least once or was regular users. [13].

Furthermore, a study in 2013 [14] revealed that 9.6% of subjects used illicit substances at least once, 4.64% had dependence. In addition, a study in 2016 [15] concluded that 19 % of participants were regularly using substances. Moreover, studies by [16 - 17] concluded that most of youth started tramadol abuse at age of 12-18 years old.

Thus, it is crucial to the society to establish every potential effort in prevention of substance abuse particularly among adolescents. Being in an advantageous position in hospitals, schools and the health care centers, nurses are able to carry out screening, early detection, intervention and health education. Thus, it is essential to nurses to understand the psychodynamics of drug abuse, its motives, and internal and external triggers.

Moreover, the question about pattern of parental bonding that is related to drug addiction remains unclear, although several studies have deepened the knowledge of this area. Furthermore, The Egyptian literature has many studies regarding substance abuse; none of these studies have investigated parental bonding and substance abuse motives among adolescents. Thus, the present study would highlight on the role of parental bonding and motives in substance abuse among adolescents.

## **III. Subjects and methods**

### **Aim of the study:**

The current study aimed to explore the parental bonding and substance abuse motives among adolescents with substance abuse.

### **Research design:**

A Descriptive exploratory design was utilized in this study.

### **Research Questions**

Q1: what are the parental bonding types among adolescents with substance abuse?

Q2: what are the levels of motives of substance abuse among adolescents with substance abuse?

Q3: what is the relationship between parental bonding and substance abuse motives among adolescents with substance abuse?

### **Sample:**

A convenient sample of 300 adolescents with substance abuse was recruited in the current study. Inclusion criteria included: both genders, age 12- 19 years. Exclusion criteria included: adolescents living with single- parent family, adolescents with dual diagnoses, the presence of ongoing medical or neurological conditions that would interfere with participant's ability to communicate.

### **Setting**

The study was carried out in the addiction clinic at the Hospital of Psychiatry and Addiction Prevention, Cairo university hospitals.

### **Tools for data collection**

1. Socio demographic and substance abuse data sheet. Developed by researchers and included: age, gender, education, occupation, type of substances, route of administration, causes of initiating substance abuse and person who help the adolescent during treatment.

2. Parental Bonding Instrument (PBI).

Developed by (Parker et al., 1979). It measures adolescents' perceptions of parents' attitudes and behaviors reflective of parent-adolescent bonding retrospectively. According to the instrument, parents can be "assigned" to one of four quadrants: "affectionate constraint" = high care and high protection, "affectionless control" = high protection and low care, "optimal parenting" = high care and low protection and "neglectful parenting" = low care and low protection. Assignment to "high" or "low" categories is based on the following cut-off scores: for mothers, a care score of 27.0 and a protection score of 13.5. For fathers, a care score of 24.0 and a protection score of 12.5. It consists of 25 items rated using 4-point Likert-type responses range from 0 (very unlike) to 3 (very like). The PBI has a test retest reliability of  $r = 0.761$  for the care scale, and  $r = 0.628$  for the protection scale [18].

3. substance Abuse Motives Questionnaire

Adapted from the Drinking Motives Questionnaire Revised (DMQ-R, Cooper, 1994). It asks participants to rate reasons of being motivated to drink alcohol. Items describe four models of motives: Coping (forget about problems), Enhancement (feels better and does things otherwise impossible), Social (be sociable, to celebrate parties), and Conformity (fit in with others). It consists of 20 statements with 6-point Likert scale (1 = never; 6 = always), with higher scores indicating stronger motives. Total score is derived by the sum of all items that make up each subscale and could range from 5 to 30. Internal consistency coefficients (Cronbach's alpha) were 0.92. The only modification done was that the word "you drink" at the beginning of each statement was changed to "you abuse substances" [19].

### **Ethical consideration**

Each participant was informed verbally about the aim and procedure of the study. Confidentiality of information and freedom to withdraw at any time were ensured to each participant who agreed to participate in the study.

### **Pilot study**

Pilot study was carried out on a sample of (30) participants to estimate the time needed for completion of the questionnaires, and those participants were included in the study sample.

### **Procedure:**

Parental bonding instrument and substance abuse motives questionnaires were translated into Arabic language and submitted for back translation by professional Arabic to English translator. An official permission was obtained from the director of the hospital and director of addiction unit. Data were collected through individualized semi structured interview with each participant. The process of data collection lasted for two months as the clinic works three days a week. Interview lasted for about 30 to 45 minutes.

### **Statistical Design**

Statistical analysis was done using Statistical Package for the Social Sciences "SPSS version 18".

## **IV. Results and data analysis**

Table (1): Socio-demographic characteristics of participants (N = 300)

Socio-demographic characteristics	Frequency	%
<b>Gender</b>		
Male	243	81
Female	57	19
<b>Education</b>		
Educated	241	80
Not educated	59	20
<b>Occupation</b>		
Students	109	36
Working	119	40
Not working	72	24

Table (2): Substance abuse history among participants (N=300)

Item	Frequency	%
<b>Substance type</b>		
Multiple substances	187	62
Tramadol only	44	15
Hashish only	35	12
Others	34	11
<b>Route of administration</b>		
Oral	205	68
Inhalation	41	14
Oral and inhalation	83	27
Injection	4	0.013
Smoking	5	0.017
<b>Causes of initiating substance abuse</b>		
Peer pressure	212	71
Learning from relatives	30	10
Life stressors	58	19
<b>Person help the adolescent during treatment</b>		
Parents	228	76
Brother	42	14
Friends	19	6
No body	11	4

Table (2) reveals that majority of participants (62%) have multiple substances abuse, (68%) of participants take substances orally, (71%) of participants started substance abuse because of peer pressure and (76 %) of participants receive help during treatment by parents.

Figure (1): Parental bonding as perceived by participants (N=300)

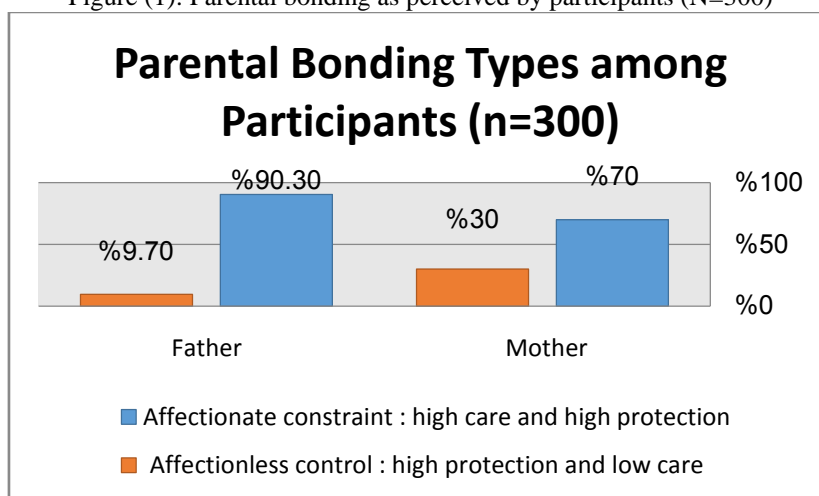


Figure (1) indicate that majority of participants (70%) and (90.3%) respectively perceived maternal and paternal bonding as affectionate constraint which denotes high care and high protection. Meanwhile, none of participants reported optimal parenting

Table (3): levels of different types of motives among the participants (N=300)

Types of motives	Low level	Moderate level	High level
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	No.	%	No.	%	No.	%
Coping motives	32	10.7	178	59.3	90	30
Social motives	18	6	170	56.7	112	37.3
Enhancement motives	15	5	197	65.7	88	29.3
Conformity motives	89	29.7	154	51.3	57	19

Table (3) shows that majority of participants (59.3%), (56.7%), (65.7%) and (51.3%) respectively reported moderate levels of different types of motives

**Table (4): Relationship between parental bonding instrument and substances abuse motives questionnaire**

substances abuse motives questionnaire	Parental Bonding Instrument	
	r.	p.
Enhancement motives	0.012	0.838
Social motives	0.017	0.765
Coping motives	0.031	0.597
Conformity motives	0.042	0.471

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table (4) shows that there is no significant correlation between parental bonding Instrument and enhancement motives, social motives, coping motives or conformity motives.  $p = (0.838, 0.765, 0.597, 0.471)$  respectively.

## V. Discussion

The current study revealed that majority of participants was male. This result does not denote low prevalence of substance abuse among females, but may be attributed to the stigma associated with substance abuse in Egyptian society, that may cause females not to seek health services to be treated from substance abuse. This result is in the same line with many Egyptian studies of substance abuse which revealed that the majority of participants were male (52%), (72.5%) and (67.5 %) respectively [15-17].

The current study revealed that majority of participants was educated. This result is not an indicator that education is not a protective factor against substance abuse. It might be related to the predetermined age for the study 12-19 years which is age of school or university education. But the Egyptian study of [20] found 65 % of participants with substance abuse were school or university education. On the contrary [21] concluded that drug abuse was significantly higher among individuals with low educational qualifications than among secondary and university education.

Regarding types of abused substances, two thirds of participants in the current study had multiple substances. That may be related to curiosity of adolescents to try every new substance and their belief that one trial of each substance is not harmful. In the same line [22] stated that about 57 % of participants used poly-substances. This result was contradicting with [21] who concluded the most commonly abused substances among participants (83%) was tramadol, only while (16.7%) were using poly-substances.

Concerning causes of initiating substance abuse, the current study revealed that more than two thirds of participants started substance abuse because of peer pressure. This result explains the extent of negative effects of peers, adolescent's desire to make a positive impression among peers and the importance of being like friends to feel mature and gain autonomy from their parents.

On one hand , [23] Conducted a five years prospective, longitudinal study and found that involvement with deviant peers was associated with initiation and increased use of tobacco and alcohol and other risky behaviors among adolescents.

On the other hand, [20] concluded that positive family history as parents and relatives was predictor of substance abuse and relapse among participants. They explained that exposure to drug-related stimuli and distorted models of family represent significant role of identification and learning in entering the dilemma of substance abuse.

Regarding parental bonding, majority of participants perceived their parents as being affectionate constraint which implies high care and high protection. That might be explained as substance abusers adolescents perceive their parents as being authoritative, as authoritarian parenting tends to focus on discipline and high expectations and extremely being involved in the lives of children without being warm and loving. Meanwhile, none of participants reported optimal parenting which implies high care and low protection.

Furthermore, this result is not supported by participants' answers about persons help them during treatment as more than three quarters of participants receive help during treatment by their parents. That could reflect parents' caring behavior regarding their adolescents' treatment. knowing that the Egyptian society is not permissive in nature, this incongruity may indicate that parents' fears and trials to set limits to protect their children, is misinterpreted by adolescents as a form of practicing authority and constraints against them.

This result is in the same line with [24-25] who concluded that adolescents with strong bonds to parents are less likely to report drug abuse. They added that a strong bond to parents makes substance use less likely because adolescents value their close relationship with parents and believe that substance use will harm these relationships.

Additionally, [26] studied dysfunctional parental styles perceived during childhood in participants with substance use disorders; they found that correlates of addiction as age at onset of tobacco, alcohol and cocaine use and situations that are associated with substance abuse as suicide attempts were inversely correlated to neglectful mother and father.

Contradicting to [27] whose results showed that affectionless control bonding is overrepresented in substance and alcohol abusers. They added that paternal overprotection correlates positively with cocaine, heroin, cannabis, and negatively with alcohol abuse. Paternal care correlated positively with ecstasy and alcohol abuse, and negatively with cocaine, heroin. Meanwhile, cannabis and ecstasy abuse correlated positively with maternal overprotection. In addition, maternal care correlated positively with ecstasy and negatively with LSD abuse.

Concerning motives of substance abuse, results of the current study revealed that majority of participants reported moderate levels of motives of substance abuse as enhancement, coping, social and conformity respectively. Possible explanation may be that, unlike abusing drugs to cope, to conform, or for social reasons, abusing drugs for enhancement reasons can be easily observed and expressed by adolescents.

On one hand, this result is supported by studies of [20] and [28] which revealed that most common positive thoughts about tramadol among participants were its pleasurable effect to improve mood and be happy, followed by loss of tension and be relaxed, control of negative emotions as anxiety, anger and, feeling that he is part of the group and getting better contact with others.

On the other hand, these results are not in the same line with [10] who found majority of participants (82%) abusing substances to cope with stress as parental separation or death of a family member or for social reinforcement to gain entry into a substance-using social group. Furthermore, [29] reported that higher motives of drinking alcohol were social, enhancement, coping and conformity respectively. Moreover, [30] concluded that the most commonly reported motives for illicit substance abuse were to help with concentration, study and increase alertness.

Results of the current study revealed no statistically significant correlation between parental bonding and substance abuse motives. That could be attributed to the powerful effect of peer pressure on adolescents rather than lack of feelings of closeness to their parents. On one hand, this result is supported by the study of [29] entitled the parental bond and alcohol use among adolescents: the mediating role of drinking motives and concluded that relationship between the parental bond and frequency and quantity of alcohol use by adolescents was not mediated by any motives for drinking.

On the other hand, this result is not in agreement with [31] who studied the impact of parental attachment on alcohol use and drinking motives and concluded that students who reported more secure attachment to their parents endorsed fewer motives for drinking, and experienced fewer negative consequences

## **VI. Conclusion**

The current study concluded that adolescents who perceived their parents as affectionate constraints might be at heightened risk for substance abuse. Additionally, peer pressure is powerful factor for initiation and perpetuation of substance abuse among participants of the current study. Although motives of substance abuse is various among participants, the study concluded that those motives were not mediated by parental bonding.

## **VII. Recommendations**

1. Develop parental education programs regarding the role of parental bonding in substance abuse prevention.
2. Further intervention researches to help adolescents to compete substance abuse internal and external motives.
3. Further assessment of other factors leading to substance abuse as peer pressure, emotional and social as well as school failure.
4. Development of a culturally sensitive instrument to assess parental bonding and motives of substance abuse in Egypt.

## **References**

- [1]. Iglesias A, Moreno C, Rivera F and 'a-Moya I. (2013). The Role of the Family in Promoting Responsible Substance Use in Adolescence. *Journal of Child and Family Studies*, 22, 585–602.
- [2]. Parsai M, Voisine S, Marsiglia F, Stephen Kulis S., and Nieri T. (2009). The protective and risk effects of parents and peers on substance use, attitudes and behaviors of Mexican and Mexican American female and male adolescents. *Journal of Youth and Society*, 40 (3), 353–376.
- [3]. Li Y and Learner M. (2011). Trajectories of School Engagement during Adolescents: Implications for Depression, Delinquency and Substance Abuse. *Developmental psychology*, (47), 233-247.

- [4]. Kuendig, H., & Kuntsche, E. (2006). Family Bonding and Adolescent Alcohol Use: Moderating Effect of Living with Excessive Drinking Parents. *Journal of Alcohol and Alcoholism*, 41(4), 464- 471.
- [5]. Griffin K., Samuolis J and Williams C. (2011). Efficacy of a Self-Administered Home-Based Parent Intervention on Parenting Behaviors for Preventing Adolescent Substance Use. *Journal of Child and Family Studies*, v20 n3 p319-325
- [6]. Lac, A., Crano, W., Berger, D. & Alvaro, E. (2013). Attachment theory and theory of planned behavior: An integrative model predicting underage drinking. *Developmental Psychology*, 49(8), 1579-1590.
- [7]. Cohen N. (2014). Parental Experience with Adolescent Substance Abuse. A published thesis. Kaplan University, USA
- [8]. Benjet C, Borges G, Mendez E, Casanova L, and Mora M. (2014). Adolescent alcohol use and alcohol use disorders in Mexico City. *Journal of Drug and Alcohol Dependence*. 136:43–50.
- [9]. Ziari A, Mirmohammadkhani M, Vafaei M, and Moonesan M. (2017). Parental Bonding and Academic Burnout on Addiction Potential among Students. *Middle East Journal of Rehabilitation and Health Studies*. 4(4), 1-7.
- [10]. Redman D. (2010). Substance Use Motives Related to Social Reinforcement among People with a History of Incarceration. *Journal of Social Work*, 10 (1): 23–41
- [11]. Tang I Y, Posner M, Rothbart M, and Volkow N. (2015). Circuitry of self-control and its role in reducing addiction. *Trends in Cognitive Sciences*, Vol. 19, No. 8. 439-444
- [12]. Koob G. (2015). The dark side of emotion: The addiction perspective. *European Journal of Pharmacology* 753, 73–87
- [13]. Ghanem M (2005) The General Secretariat of Mental Health- MOH (2005): the yearly report of the General Secretariat of Mental Health- MOH about the rate of substance use.
- [14]. Hamdi E, Gawad T, Khoweiled A, Sidrak AE, Amer D, Mamdouh R. (2013). Lifetime prevalence of alcohol and substance use in Egypt: a community survey. *Journal of Substance Abuse*, 34, (2), 97–104.
- [15]. Hamdi E, Sabry N, Sedrak A, Khoweiled A, Loza N, Menan R and Ramy H. (2016). Sociodemographic Indicators for Substance Use and Abuse in Egypt. *Journal of Addiction Prevention*, 4, (1), 1-8
- [16]. Fawzi M. (2011). Some medicolegal aspects concerning tramadol abuse: The new Middle East youth plague 2010. An Egyptian overview. *Egyptian Journal of Forensic Sciences* 1, 99–102
- [17]. Mohamed N, El Hamrawy L, Shalaby A, El Bahy M and Abd Allah M. (2015). An epidemiological study of tramadol HCl dependence in an outpatient addiction clinic at Heliopolis Psychiatric Hospital. *Menoufia Medical Journal*, 28:591–596
- [18]. Schweitzer R and Lawton P. (1989). Drug Abusers' Perceptions of their Parents. *British Journal of Addiction*, 84, 309-314.
- [19]. Anderson K., Grunwald I., Bekman N., Brown S., and Grant A. (2011). To drink or not to drink: Motives and expectancies for use and nonuse in adolescence. *Journal of Addictive Behaviors*. 36 (10), 972-979
- [20]. Mohamed N, Hammad S, El Hamrawy L, Rajab A, Mohamed S. El Bahy M and Soltan M. (2013). Dual diagnosis and psychosocial correlates in substance abuse in Menoufia, Egypt. *Menoufia Medical Journal*, 26:114–121
- [21]. EL-Sherbiny A. (2015). Drug abuse among patients of Tanta university hospital outpatient clinic, Gharbia governorate, Egypt. *Tanta Medical Journal*, 43(3):82–88
- [22]. Mahgoub R, El-Hadidy M, Abo El Hoda M, Atrouny M. (2016). A study of opioid dependence among Mansoura University Students. *Egyptian Journal of Psychiatry*, 37:174–179.
- [23]. Neppi. T., Dhalewadikar J., and Lohman B. (2015). Harsh Parenting, Deviant Peers, Adolescent Risky Behavior: Understanding the Meditational Effect of Attitudes and Intentions. *Journal of Research on Adolescence*, 26(3), 538–551
- [24]. Ford J. (2009). Nonmedical Prescription Drug Use among Adolescents: the Influence of Bonds to Family and School. *Journal of Youth & Society*, 40 (3), 336-352
- [25]. Johnson B., McBride D., Hopkins G. and Pepper S. (2011). An Examination of Parent-child Relationships and Teen Substance Use. *Andrews University*. <https://digitalcommons.andrews.edu>.
- [26]. Ickick R., Lauer S., Romod L, Dupuy G., Lépine J., and Vorspan F. (2013). Dysfunctional Parental Styles Perceived During Childhood in Outpatients with Substance Use Disorders. *Journal of Psychiatry Research*, 210, 522–528.
- [27]. Garcia C, Rania M, Aloï M and Palmieri A. (2015). Parental bonding in substance and alcohol abusers. *Journal of Heroin Addiction and Related Clinical Problems*.
- [28]. Medhat M. Bassiony M, Salah El-Deen G, Yousef U, Raya Y., Abdel-Ghani M, El-Gohari H, And Atwa S. (2015). Adolescent tramadol use and abuse in Egypt. *American Journal of Drug Alcohol Abuse*, 41(3): 206–211
- [29]. Smorti M. and Guarnieri S. (2015). The Parental Bond and Alcohol Use among Adolescents: The Mediating Role of Drinking Motives. *Journal of Substance Use & Misuse*, 50:1560–1570.
- [30]. Teter C., Pharm D, McCabe S., LaGrange K., Cranford J. and Boyd C. (2006). Illicit Use of Specific Prescription Stimulants among College Students: Prevalence, Motives, and Routes of Administration. *Journal of Pharmacotherapy Volume 26, Number 10*.
- [31]. LaBrie J. and Sessoms, A. (2012). Parents Still Matter: The Role of Parental Attachment in Risky Drinking among College Students. *Journal of Child & Adolescent Substance Abuse*, 21:91–104

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