

# Stress, Coping and Drug Abuse of High Achieving Students: The Role of Personality Traits

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## Introduction

The use and abuse of drugs by adolescents has become one of the most disturbing short and long-term health related phenomena in many parts of the world (Kaminer and Tarter 2004). Five-year trends are showing significant increases in past-year and past-month (current) marijuana use and stimulants across all three grades as well as increases in lifetime and daily marijuana use among 10th graders in the United States (National Institute on Drug Abuse 2013). By the time these adolescents become seniors, almost 70% of high school students will have tried alcohol, half will have taken an illegal drug, nearly 40% will have smoked a cigarette, and more than 20% will have used a prescription drug for a nonmedical purpose (National Institute on Drug Abuse 2014). Lifetime prevalence levels of cannabis use of between 13% and 25% are reported by 15 countries of the European Union (EMCDDA 2011). Collectively, one in every two European adolescents is engaged in maladaptive use of cannabis. Approximately 15% of youths between 15 and 17 years of age in Greece have used marijuana and 3% have tried other illegal drugs (EKTEPN 2014).

There is frequent evidence that school failure is a risk factor for the emergence of drug use problems, especially during the high school years (Anthony and Chen 2004; Luthar 2003; National Institute on Drug Abuse 2003; Zimmerman and Schmeelk-Cone 2003). However, significant problems of drug abuse have been seen at the other end of academic performance, among high achieving (Dalla, Matsa, Antoniou and Prapas 2012) and gifted students (Peairs, Eichen, Putallaz, Costanzo and Grimes 2010) or youth in wealthy, ultra-achievement oriented communities (Luthar and Barkin 2012). High alcohol use, binge drinking and marijuana use were found to be a common occurrence amongst youths in areas with mostly educated, high income, white, two-parent families.

These trends escalate through college, where full-time students were two and a half times more likely to meet diagnostic criteria of substance abuse or dependence (23% versus 9%) and

1 half of all full-time college students reported binge drinking and abuse of illegal or prescription 1  
2 drugs (Luthar, Barkin and Crossman 2013). Data collected in treatment settings by EKTEPN 2  
3 (2011) in Greece indicated that 9.1% of people affected by drug dependence have completed 3  
4 university or postgraduate studies. A clinical study in the Open Therapeutic Setting of 18 ANO 4  
5 at the State Psychiatry Hospital of Attica in Athens indicated that one in 10 drug abusers who 5  
6 came for treatment had university and post-university education. They admitted that their first 6  
7 experience of drugs was in adolescence. Good and high achievement in adolescence was one of 7  
8 the common characteristics of drug abusers (Dalla et al. 2012). 8

9 From a developmental perspective, the passage from adolescence into adulthood is 9  
10 considered a critical developmental transition that is related to new developmental tasks which 10  
11 all play critical roles in some experimentation with alcohol and drugs among young people 11  
12 (Masten, Faden, Zucker and Spear 2008; Schulenberg, O'Malley, Bachman and Johnston 2005). 12  
13 The experimentation can lead to drug abuse and dependence when people experience multiple 13  
14 transitions and developmental tasks that sometimes overwhelm coping capabilities. Alcohol and 14  
15 drug use may serve as an alternative coping strategy (Schulenberg and Maggs 2002) at the age of 15  
16 identity exploration in love and work (Arnett 2005), and also at the individualization stage when 16  
17 adolescents move away and separate from parent images (Blos 1967). It is the age of instability in 17  
18 terms of love partners, career and educational status; it is the age when adolescents experience 18  
19 the feeling of being 'in-between', of being neither adolescent nor adult; it is the age of possibilities 19  
20 in the sense that these young people have the opportunity to make dramatic changes in their 20  
21 lives; the expectations are so high that they may not recognize the negative consequences that 21  
22 can result from alcohol and drug use (Arnett 2005). 22

23 The motivational theories look to drinking motives, such as coping, conformity, enhancement 23  
24 and social motives (Read, Wood, Kahler, Maddock and Palfai 2003) as major components in the 24  
25 establishment and continuation of substance abuse through which different distal factors such as 25  
26 personality traits operate and exert their influence (Tragesser, Sher, Trull and Park 2007). Coping 26  
27 motives involve drinking to ameliorate or to reduce the experience of negative emotions, such 27  
28 as depression, anxiety and dysphoria (Stewart and Devine 2000). Characteristically, deficiencies 28  
29 in coping skills lead people to use alcohol and drugs as a coping device to avoid negative states 29  
30 (Read et al. 2003). 30

31 Conformity motives involve drinking as a result of implicit or explicit social pressure 31  
32 (Neighbors, Larimer, Geisner and Knee 2004), while enhancement motives are driven by beliefs 32  
33 that alcohol and drug use can induce, increase or maintain positive effect (MacLachy-Gaudet and 33  
34 Stewart 2001). Enhancement motives are linked to impulsivity, sensation and enjoyment seeking 34  
35 that reflects a dispositional need for a high level of stimulation and reward seeking (Read et al. 35  
36 2003). Among people with enhancement motives, there may be great expectations of positive 36  
37 consequences and low expectations regarding negative consequences of heavy drinking (Katz, 37  
38 Fromme and D'Amico 2000). Social motives involve drinking to achieve positive social outcomes 38  
39 for fulfilling affiliate needs and the desire of socialization in different situations (Stewart and 39  
40 Devine 2000). Most people desire social contact for reducing uncertainty and receiving emotional 40  
41 support, other are concerned with the desire to obtain attention from others or to be stimulated 41  
42 by social interaction. Some studies indicated that high social goals among first-year students was 42  
43 associated with increased alcohol use while high academic/occupational goals was related to 43  
44 reduced alcohol use (Rhoades and Maggs 2006). 44

45 Stress theories study the relationship between external demands named stressors, bodily 45  
46 processes and coping as the cognitive and behavioural efforts made by people to master, tolerate 46  
47 or reduce external and internal demands and conflicts (Lazarus 1966). Clinical data suggest that 47  
48 stressful events and chronically stressful conditions increase alcohol and drug intake and 48  
49 the risk of relapse by enhancing craving (Soderpalm and De 2002). In such conditions drugs may be 49

1 used as self-medication for stress-related disorders such as anxiety (Zimmerman et al. 2003). 1  
2 The longitudinal study of adolescents and young adults showed that those with certain anxiety 2  
3 disorders (social phobia and panic attacks) were more likely to develop substance abuse or 3  
4 dependence prospectively over four years. 4

5 Findings regarding the cumulative stress–alcohol relationship indicated that drinkers who had 5  
6 six or more stressful events reported a daily alcohol intake and frequency of drinking three times 6  
7 that of those respondents who endorsed no stressful events (Dawson, Grant and Ruan 2005). 7  
8 Stressors experienced early in life may also have a bearing on alcohol and drug use: reports of 8  
9 death of parents or relatives, parental divorce, parents with mental health issues and being bullied 9  
10 at school are associated with heavy drinking in early adulthood among men (Kestila, Rahkonen, 10  
11 Martelin, Lahti-Koski and Koskinen 2009). A significant positive relationship is reported, across 11  
12 time, between the number of cumulative adversities and risk for alcohol and drug dependence 12  
13 after a lapse of over two years (Dawson et al. 2005). 13

14 The stress model focuses on the presence of negative effect as a precipitant of alcohol and 14  
15 drug use; however, recent psychological theories focus on coping as the cognitive and behavioural 15  
16 efforts made by individuals to master, tolerate or reduce external and internal demands and 16  
17 conflicts (Lazarus and Folkman 1984). People who use a problem-focused approach of coping tend 17  
18 to change a stressful situation or the cause of the stress, cognitively or behaviourally, by dealing 18  
19 directly with it using different strategies such as planning, seeking information about possible 19  
20 choices, social support, positive cognitive restructuring of the situation, acceptance, seeking 20  
21 emotional social support, and focusing on and venting of emotions (Lazarus and Folkman 1984). 21

22 The emotion-focused approach includes passive coping strategies that contribute to 22  
23 evasiveness, trying to avoid thinking about or confronting a stressful situation. Such strategies 23  
24 are behavioural distancing, self-distraction, self-blame, humour and escape/avoidance. Given 24  
25 the relation between coping style and alcohol use and abuse, researchers have proposed that 25  
26 coping styles may moderate the relations between stressors and negative effect and drug use and 26  
27 abuse is strongly related to passive strategies of coping such as avoidance and denial of stressful 27  
28 situations (Cooper, Frone, Russell and Mudar 1995). Emotion-focused coping tends to be related 28  
29 to deficits in the ability to organize, integrate the interplay among emotions and thoughts (Hien 29  
30 and Miele 2003). 30

31 The socioecological theory indicates the changes that the adolescent period has experienced 31  
32 over the past 50 years, encountering many revolutions in education, family and the advent of 32  
33 the home computer, etc. (Luthar and Sexton 2004). Cohort comparison of personal aspirations 33  
34 between new generations (coming of age during the 1990s and 2000s) and earlier generations 34  
35 indicated significant differences. The development of a meaningful philosophy of life was rated by 35  
36 college students as an essential life goal by 86% of respondents in 1967 versus 42% in 2004. To 36  
37 be financially secure and independent was rated by 45% of students in 1967 versus 74% in 2004. 37  
38 ‘Having a lots of money’ was rated as very important by twice as many in 1990 versus 1970, 38  
39 and expectations of attaining prestigious, professional jobs changed from 42% to 70% across 39  
40 the decades (Twenge 2006, cited in Luthar et al. 2013). Generation shifts are found regarding 40  
41 internalizing symptoms, when the average college student in the 1990s was more anxious and 41  
42 overwhelmed than in the previous decades. Furthermore, feelings of narcissism and externalizing 42  
43 problems increased in 2006 compared to the 1980s. External locus of control beliefs has risen 43  
44 as well, with youth seeing their success as depending largely on luck, rather than effort. Believing 44  
45 that success is determined by luck indicates despair or helplessness, and is also associated with 45  
46 impulsive actions. 46

47 Regarding coping strategies, there is an increasing tendency of parents to solve the problems 47  
48 of their children exclusively which does not allow them to acquire and practice everyday life 48  
49 and coping skills. The lack of coping skills is associated with uncertainty, fear and anxiety among 49

1 college students. Worries were less about academic achievement than about how they handle 1  
 2 everyday life problems, such as dealing with a difficult roommate or providing food, for example 2  
 3 (Luthar et al. 2013). There are new trends in connecting with friends. New technologies have 3  
 4 enabled connections with friends online, when in fact they are disconnecting from friends in real 4  
 5 life (Akhtar 2011). The problems of initiation, use, abuse and drug dependence by many high- 5  
 6 achieving students are a cause for concern, because drug abuse is also widely assumed to be 6  
 7 problem of low achievement and school-related variables such as grades, low school motivation, 7  
 8 and leaving school before graduation (Bergena, Martina, Roegerb and Allisonb 2005; Zimmerman 8  
 9 and Schmeelk-Cone 2003). 9

10 The purpose of this study is the understanding of the issue of substance abuse among 10  
 11 academically achieving people. The first part of the study presents information about the 11  
 12 prevalence of illicit drug abuse among academically achieving students that have graduate or 12  
 13 postgraduate education compared to that of low-achievers. The data collection method used in 13  
 14 this study involved structured interviews with the subjects, incorporating procedures that would 14  
 15 be likely to increase respondents' cooperation and willingness to report honestly about their illicit 15  
 16 drug use behaviour. The interviews considered personal and demographic information regarding 16  
 17 age, education in years, living status (stable or unstable accommodation), employment status, 17  
 18 health status (HIV/AIDS), criminal and deviant behaviours, as well as information relating to a 18  
 19 lifetime's use of illicit substances. The interviews were conducted following the subject's decision 19  
 20 to participate in the programme of drug rehabilitation. 20

21 The second part of the study examines the nature of drug abuse among achieving students 21  
 22 based on data from clinical records of focus groups and current literature. 22  
 23 23  
 24 24

## 25 **Drug Abuse among High and Low Achievers:** 25 26 **Experience from 18 ANO** 26 27 27

28 The 18 ANO Dependent Treatment Unit of Psychiatric Hospital of Attica in Athens operates 28  
 29 under the auspices of the Ministry of Health and implements programmes of internal residence and 29  
 30 external supervision for a general adult population in drug-free abuse treatment. It has developed 30  
 31 and integrated a psychosocial therapeutic model consisting of sensitization (0–3 months), 31  
 32 psychological recovery (main treatment about 6–8 months) and social reintegration (8–12 32  
 33 months) of drug dependent people. The therapeutic team consists of specialized personnel such as 33  
 34 psychologists, psychiatrists, social workers and nurses, for instance who, through psychoanalytic 34  
 35 and behavioural approaches, psychodrama and educational activities, support rehabilitation and 35  
 36 recovery process of people seeking admission to the 18 ANO Dependence Unit. 36

37 This study presents information on the prevalence of illicit drug use among 117 males and 37  
 38 23 females aged 19 or older ( $M=34.37$ ,  $S.D.=7.97$ ). Most people were high school graduates 38  
 39 (59.3%), followed by primary or lower secondary education graduates (22.9%), and university and 39  
 40 postgraduates accounted for 17.9%. Estimates for drug abusers are based on data collected during 40  
 41 the period 2013–2014 from adults on the Open Supervision Program of the Drug Dependence 41  
 42 Unit-State 18 ANO Psychiatry Hospital of Attica. 42  
 43 43  
 44 44

### 45 **HOW DIFFERENT ARE HIGH-ACHIEVING DRUG ABUSERS?** 45 46 46

47 *Age at first substance use and length of involvement in substance abuse.* There are no significant 47  
 48 differences between groups regarding affiliation with drug using and the length of involvement 48  
 49 with drug abuse (Table 13.1). The age of initiation into drug using ranged from 15.4 to 17.3 years 49

of age. The length of involvement in drug using was from 16.5 (primary or secondary education) to 13.5 (high achievers) years.

**Table 13.1 Means and standard deviation of age at first substance use and length of involvement in substance use and dependence**

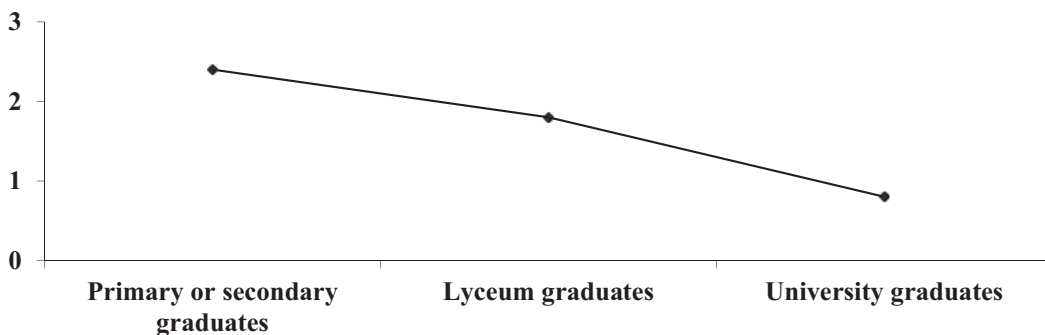
|                               | Target Group                   |             |             |             |   |             |
|-------------------------------|--------------------------------|-------------|-------------|-------------|---|-------------|
|                               | Primary or secondary education |             | High school |             | High achievers – university or postgraduate education |             |
|                               | <i>M</i>                       | <i>S.D.</i> | <i>M</i>    | <i>S.D.</i> | <i>M</i>  | <i>S.D.</i> |
| Age at first development      | 15.4                           | 3.1         | 16.5        | 3.8         | 17.3  | 2.1         |
| Length of involvement – years | 16.7                           | 9.9         | 13.2        | 6.8         | 13.5  | 7.8         |

*The path to drug addiction.* The path to drug addiction begins with the act of taking hashish or marijuana for about 80.7% of the responders. About 4.3% of responders began by using alcohol, 3.6% by using heroin and the rest by other types of substances. There were no significant differences between groups.

*Drug-related crimes.* Mean of drug law offences (prior arrest, imprisonment, etc.) accompanying the dependence seemed to be higher among primary or secondary graduates ( $M=2.4$ ) and lower among high achievers ( $M=0.8$ ). The mean of high school graduates was lower than the mean of high achievers but higher compared to primary or secondary graduates ( $M=1.8$ )  $F(2,139)=4.26$ ,  $p<0.05$  (see Figure 13.1).

*Infectious diseases.* Overall HIV prevalence among all the sample was 4.4% while Hepatitis virus prevalence was 24.4%. Furthermore, about 10% of drug abusers have no information about AIDS and Hepatitis infection. There were no significant differences between the groups.

*Mental disorders associated with drug abuse.* Some common disorders associated with drug abuse are, for example, generalized anxiety and mood disorders, temporary psychotic states, suicidal ideation. According to crosstab analysis, anxiety disorders are found to co-occur in 40.4% of cases, depression in 37.2% of cases, psychotic states in 20.6% of cases and suicidal ideation in 19.7% of cases. The relationship between mental health and educational status is not significant (Table 13.2).



**Figure 13.1 Mean of drug-related crimes according to education status**

**Table 13.2 Disorders associated with chronic drug abuse according to educational status**

|                            | Target group                   |      |             |      |   |    |
|----------------------------|--------------------------------|------|-------------|------|---|----|
|                            | Primary or secondary education |      | High school |      | High achievers – university or postgraduate education |    |
|                            | <i>f</i>                       | %    | <i>f</i>    | %    | <i>f</i>  | %  |
| Anxiety disorders          | 14                             | 48.3 | 33          | 40.2 | 8   | 32 |
| Mood disorders             | 13                             | 44.8 | 30          | 36.1 | 8   | 32 |
| Temporary psychotic states | 6                              | 20.7 | 16          | 19.5 | 6   | 24 |
| Suicidal ideation          | 8                              | 27.6 | 13          | 15.7 | 6   | 24 |

On balance, the results suggest that not only low-achieving students are at risk of using drugs. Increasingly, significant problems of drug abuse are occurring at the other end of the educational spectrum, among youths who qualify as high achievers. These are adolescents distinguished by high achievement, high scores that approach university and post-university standards in study. The age at first substance use indicates that adolescence is the critical period when the use of drugs is first recognized among all groups, including high-achieving students. The path to drug addiction, the length of involvement in substance use and dependence is the same for all groups of people. A number of infectious diseases and psychiatric disorders are commonly associated with substance abuse among all groups.

The main difference among high-achievement and low-achievement groups is the deviant and crime related behaviour. Substance use refers to two very different profiles of adolescent substance users (Peairs et al. 2010). The first group consists of sociable and self-confident individuals, whereas the other group consists of aggressive and emotionally insecure young people, who are more involved in deviant risk behaviour. High-achieving and gifted adolescents who try and finally use drugs seem to fit the first group and, as such, may be less at risk of the negative crime related behaviour associated with using substances. However, it is important for future research to focus on these differences between groups.

### WHY MIGHT HIGH-ACHIEVING ADOLESCENTS BE TROUBLED AND ENGAGE IN DRUG ABUSE?

In exploring pathways to drug abuse in high-achieving students, we considered case studies and clinical reports of some drug abusers in the previous study. The intention is to provide an overview for some personality and interpersonal (family and peer groups) factors associated with initiation of substance abuse of high-achieving students in adolescence. *Individual factors* included personality traits such as poor self-concept, loneliness and coping behaviour. The first case study encompasses *personality factors*, feelings of being inadequate, and coping strategies associated with the drug abuse, although she has been identified as an excellent student in primary school through high school. The second case study includes *interpersonal factors* such as relationship with parents, and the academic pressure brought to bear in this respect.



## 1 The Case of Maria

2  
3 Maria began treatment at the age of 28, after one month's hospitalization due to a psychotic 3  
4 state. She seemed a rather pleasant girl, but obviously shocked and silent. She described herself 4  
5 as a quiet child who followed the wishes of her mother. At school, she excelled in all classes. She 5  
6 referred to several incidents when, after finishing her allotted studies, her mother then asked her 6  
7 to continue studying to anticipate the workload of the next few days of the week. Her mother 7  
8 criticized Maria harshly; she was never satisfied with her daughter's performance which in all 8  
9 probability had implications concerning her low self-concept. At the same time, she attended 9  
10 language courses and ballet. She had particular girlfriends amongst a wider circle of friends, but 10  
11 she was jealous of them despite being an excellent student. Overall, she felt deficient. 11

12 Maria reported use of marijuana at the time as starting studies at university. At 19 she met 12  
13 Peter at a 'get-together'. She had difficulty making relationships and marijuana helped to reduce 13  
14 the stress. As she met more drug-using friends, the frequency of her drug use progressively 14  
15 increased. Upon completing her postgraduate studies she found the 'perfect partner' user, and 15  
16 they lived together for two years. These two years are characterized by the daily use of large 16  
17 quantities of hashish, and the onset of psychotic episodes which, as indicated by Maria, were 17  
18 witnessed by her friend who believed as well as she did that, in fact, she could 'fly'. 18

19 The etiology of Maria's substance abuse will be conceptualized from a developmental 19  
20 perspective of adolescence. Neurotic perfectionism (Nugent 2000), and pressures from her 20  
21 mother left Maria with feelings of never being good enough, of emptiness and dissatisfaction with 21  
22 herself. Maria believed that her parents, especially her mother disproportionately, valued success 22  
23 over receiving the filial love and respect of their daughter. For her, perceived parents' love rests 23  
24 largely on achieving and maintaining the status of high achievement. According to Luthar and 24  
25 Latendresse (2005), perceived parental criticism and disparaging words show stronger association 25  
26 with diverse adjustment as compared to family indices of positive attachment. 26

27 Furthermore, in the course of her identity exploration and establishing relationships with 27  
28 the opposite sex, marijuana was used as an alternative strategy for coping and reducing stress 28  
29 of embarrassment, for achieving harmony with other people (Stewart and Devine 2000). 29  
30 According to Muisener (1994), adolescent drug use includes either experimental use, wherein 30  
31 adolescents first experiment with the mood swing, or social use, wherein adolescents seek the 31  
32 mood swing in social contexts, or operational use, wherein adolescents are preoccupied with 32  
33 the mood swing whether it is to seek euphoria or to avoid pain. Furthermore, dependent use 33  
34 emerges wherein adolescents must resort to drugs to feel normal. Other researchers refer to 34  
35 conformity motives which consider drug abuse as a result of implicit or explicit social pressure 35  
36 (Neighbors et al. 2004). 36

37 The stress model theorists (Hien and Miele 2003) proposed that drug abuse is strongly 37  
38 related to passive strategies of coping such as avoidance and denial of stressful situations. 38  
39 Emotion-focused coping tends to be related to deficiencies in the ability to organize and integrate 39  
40 the interplay among emotions and thoughts. A consensus of opinion amongst other studies 40  
41 concluded that there are differences in individuals who use problem-focused strategies versus 41  
42 emotion-focused strategies. Compared with people with problem-focused strategies, people with 42  
43 problematic alcohol use practise avoidant coping because other more adaptive ways of coping 43  
44 are unavailable (Cooper et al. 1995). If an individual experiences negative effect and approaches 44  
45 a successful coping strategy, such as well-planned problem-solving and positive reappraisal, then 45  
46 he or she does not need to turn to drug abuse in response to negative effect. In contrast, if an 46  
47 individual uses avoidant styles or distancing to cope with the negative effect, he or she is more 47  
48 likely to use drugs in order to deal with the stressor. 48  
49

|    |   |    |
|----|---|----|
| 1  | INTERPERSONAL FACTORS REFERRED TO FAMILY RELATIONSHIPS AND  | 1  |
| 2  | STRESS OF NEGATIVE LIFE EVENTS  | 2  |
| 3  |   | 3  |
| 4  | The case of Maria indicated that her poor self-concept of being less than adequate, in concert      | 4  |
| 5  | with conformity to both family pressure and social conformity, are associated with drug abuse       | 5  |
| 6  | and dependence. In the second case study, we intend to refer to interpersonal mechanisms of risk    | 6  |
| 7  | and vulnerability among high-achieving students. An important factor is academic pressure; the      | 7  |
| 8  | pressure to do well in school and earn a place at college.  | 8  |
| 9  |   | 9  |
| 10 |   | 10 |
| 11 | <b>The Case of Kosta</b>  | 11 |
| 12 |   | 12 |
| 13 | Kosta was 15 years old when he started to use drugs. He was an excellent student and his parents    | 13 |
| 14 | had high expectations of him. Indeed, his mother decided on the accelerated placement of her        | 14 |
| 15 | son, first through early entrance to school and later the whole-grade acceleration when he was      | 15 |
| 16 | 13 years old (Colangelo, Assouline and Gross 2004). At 15, Kosta was left at home alone for         | 16 |
| 17 | many hours each week, while his parents believed that this promoted self-sufficiency in their son.  | 17 |
| 18 | His parents worked hard and were preoccupied with their professional careers. Achievement           | 18 |
| 19 | pressure, low levels of parental monitoring and the negligible amount of time parents spent in the  | 19 |
| 20 | family home were risk factors as a source of loss of control, and led to the initiation into drug   | 20 |
| 21 | abuse which occurred when Kosta met up with some new acquaintances at a 'get-together' and          | 21 |
| 22 | joined in smoking marijuana.  | 22 |
| 23 | Studies indicate that high achievers when pressured to further excel became a risk factor           | 23 |
| 24 | related to drug abuse and which, in general, may have a negative influence in personal adjustment   | 24 |
| 25 | (Ansary and Luthar 2009). The sense of pressure, criticism and overly high expectations correlated  | 25 |
| 26 | with distress or loneliness and low connectedness with parents all play an important role in the    | 26 |
| 27 | onset of drug abuse. Academic pressure leads to high levels of academic anxiety and therefore       | 27 |
| 28 | drug abuse may be a mechanism to reduce apprehension of academic performance (Kieffer,              | 28 |
| 29 | Cronin and Gawet 2006). Emotional closeness to both parents together with a simple family           | 29 |
| 30 | routine was linked not only to positive adjustment in children, but also to their good performance  | 30 |
| 31 | at school (Luthar and Latendresse 2005).  | 31 |
| 32 | Pressure to excel and the commitment to high achievement leave little time to pursue rewards        | 32 |
| 33 | such as friendships and emotional intimacy which in adolescence is greater with friends than with   | 33 |
| 34 | parents. This remains or becomes stronger during emerging adulthood, especially for those who       | 34 |
| 35 | are isolated from their parents. Peer groups sometimes lead to greater involvement with alcohol     | 35 |
| 36 | through different mechanisms, such as social learning, peer group influence, modelling and social   | 36 |
| 37 | facilitation (Sher, Grekin and Williams 2005). It seems that sometimes friends may act as a source  | 37 |
| 38 | of loss of control, especially when young adults seek affiliation with peers who display similar    | 38 |
| 39 | patterns of substance use or deviant behaviour. It has been found that adolescents and emerging     | 39 |
| 40 | adults who have a proclivity for substance abuse tend to select their peers with respect to that    | 40 |
| 41 | very substance use (Arnett 2005).   | 41 |
| 42 |   | 42 |
| 43 |   | 43 |
| 44 | <b>The Case of Fani</b>   | 44 |
| 45 |   | 45 |
| 46 | Fani has an excellent degree and brilliant studies in the field of fine arts. He approached the     | 46 |
| 47 | treatment programme at the age of 40, after 24 years of using alcohol first and then cocaine and    | 47 |
| 48 | heroin. His responses to the structured diagnostic interview indicated that he met the criteria not | 48 |
| 49 | only for substance dependence, but also for major depressive disorder.                              | 49 |



1 The first child of a single-parent family, Fani lived with his mother and his father died when 1  
 2 Fani was 20 years old. The ‘abandonment’ of the family by the father made their relations 2  
 3 difficult, a love–hate–dependence relationship associated with the need of the son for constant 3  
 4 confirmation. He ‘hated’ his father a lot when he left home. But later Fani realized that the 4  
 5 father was not to blame for the breakup. His father was, as Fani mentioned, a respected and 5  
 6 generous man. For his mother, Fani was “her son” with the “perfect” resume, who could 6  
 7 not find work despite his qualifications. She did everything to support him financially, while 7  
 8 expressing fears of his death or self-destruction, as he had already planned to commit suicide 8  
 9 during his studies. She called him five or six times a day, shaped her daily routine according 9  
 10 to the needs of her son over the weekend, shopping, cooking and packaging his meals for the 10  
 11 entire week. 11

12 The etiology of substance use and Fani’s depression will be conceptualized from the 12  
 13 perspective of parent–child conflict and negative family life events, although other personality 13  
 14 factors may have influenced his behaviour. Fani described himself as ‘novelty seeking’ or ‘sensation 14  
 15 seeking’, trying to engage in new experiences (Moss and Dyer 2010), seeking enjoyment that 15  
 16 reflects a dispositional need for a high level of stimulation and reward (Read et al. 2003). The 16  
 17 stress coping model suggests that some adolescents use drugs to cope with stressful life events 17  
 18 and as a way of self-regulating emotions (Hien and Miele 2003), such as anxiety, sadness or 18  
 19 loneliness (Woodward and Fergusson 2001). The substance abuse is considered as a kind of 19  
 20 self-medication (Reimuller, Shadur and Hussong 2011), especially when high levels of emotional 20  
 21 distress are associated with unsuccessful coping strategies, resulting in maladaptive outcomes 21  
 22 (Cooper, Wood, Orcutt and Albino 2003). 22

23 Parental divorce (Burt, Barnes, McGue and Iacono 2008) and negative bonding with family 23  
 24 can act as a risk factors, predicting delinquency and other externalizing behaviours during 24  
 25 childhood and adolescence. Stress theories indicate that such negative life events are out of 25  
 26 the control of children and adolescents, and divorce or the loss of parent has a negative effect 26  
 27 on development due to the loss of attachment to the parent. However, the post-disruption 27  
 28 trajectory is considered most important for producing delinquency and drug abuse among 28  
 29 children and adolescents (Farrington 2009). Although Fani did very well academically, he 29  
 30 engaged in drug abuse, because he didn’t feel attachment to important adults in his live. 30

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## 33 Conclusion 33

34

35 On the whole, high-achieving adolescents are not always found to be at low risk. In contrast to 35  
 36 the enhanced attention to low-achieving young people, there is no research concerning those 36  
 37 at the other end of the achievement status, that is to say, those with high achievement. Our 37  
 38 interest emerged from the work in I8 ANO Dependent Treatment Unit of Psychiatric Hospital 38  
 39 of Attica in Athens. These studies indicate some important personal and interpersonal factors 39  
 40 related to initiation into drug use and dependence. Striving for high achievement, valuing it 40  
 41 more than personal development in adolescents, passive coping skills, lack of parental emotional 41  
 42 closeness and relations with drug users are referred to as being some risk factors for future 42  
 43 research in the field of the psychology of addiction among high-achieving students. 43

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