An Investigation Into the Social Profiles of Drug-Addicted Adolescents in Turkey

Tansu Okudan Soyal[1] · **Gökçen Aydın**[1]

Abstract

Purpose of Review The study aims to examine the relationship between crime rates among drug-addicted adolescents and personal, social, and familial factors as well as street and school factors. The participants included 713 male drug-addicted adolescents who had received residential treatment at a psychiatry clinic between 2013 and 2020. The "Patient Medical History Form" created by the experts of the clinic was used as a data collection tool. The binary logistic regression analysis was conducted to determine significant predictive variables increasing the probability of drug-addicted adolescents to be included in the categories of living on the street, committing crimes, school dropout, suicide attempt, and self-harm behavior.
Recent Findings The findings showed that age, father-adolescent relationship, school dropout, and having an employment history significantly predicted the factor of living on the street; age, school dropout, street life history, drug use in the extended family, and having a criminal history in the extended family significantly predicted the factor of committing crimes; and having an employment history, drug use in the extended family, and having a criminal history significantly predicted the school dropout factor. Besides, suicidal ideation and self-harm behavior significantly predicted the factor of attempting suicide; similarly, age, street life, and having a prison history significantly predicted the possibility of self-harm behavior of the adolescents.
Summary The results showed that personal, social, and familial factors, as well as street and school factors, and crime rates were associated with addictive behavior among drug-addicted adolescents.

Keywords Drug addiction · Adolescent · Family · School · Street · Crime

Introduction

Drug abuse and drug addiction are increasingly becoming a serious problem in this globalized world. The disease of addiction, which is especially common among young adults, adolescents, and children, has become one of the most serious diseases faced by modern societies [15]. This disease is often a cause of deterioration in the mental and physical health of the addicted person, as well as in economic, in familial, and in other social relations. While addiction used to be considered

as being a moral failing, it later started to be seen as a manifestation of a personality weakness during the twentieth century [6]. However, it is now generally accepted that this disease is a distinct clinical syndrome and is not actually caused by a personality disorder. This new understanding has led to an increase in the number of studies on addiction [6].

Addiction can be defined as a person's loss of control over the use of a substance, an irresistible desire for the substance that can be considered as being under the control of an exterior will, experiencing pleasurable effects while under the influence of the substance, or a desire to use the substance to avoid the discomfort that occurs when it is not being used [46]. Addiction, which develops gradually in the person, is also defined as a brain disease that accompanies the person throughout his/her life. It cannot be cured, but it can be treated [34].

According to the World Drug Report published in 2018, there are globally 31 million drug addicts, which is a substantial increase from the 29.5 million people recorded in 2016. In the same report, it is stated that the number of

✉ Tansu Okudan Soyal
okudantansu@gmail.com

Gökçen Aydın
gokcenaydn@gmail.com

1 Hasan Kalyoncu Universitesi, Gaziantep, Türkiye

people using drugs is 275 million people globally. While, according to the report, 250 million people tried drugs in 2016, the number of people who tried drugs in the following 2 years increased by 25 million [48]. The 2019 report of the UN Office on Drugs and Crime also suggests that overall drug use is increasing. According to the report, 585,000 people died globally due to drug use in 2018, with 347 of these people being in Turkey [44]. The report goes on to directly link 232 deaths to drug use in 2013, with a 114% increase to 497 people in 2014, a 19% increase to 590 people in 2015, a 56% increase to 920 people in 2016, and a 2.3% increase to 941 people in 2017. It was indicated that the lowest number of deaths due to drug use in the last 3 years occurred in 2018. It has been estimated that the number of deaths that occurred due to drug use decreased to 657 persons by 30.2% compared to the previous year [45]. On the other hand, it has been shown that while 208 million people globally were using drugs in 2006, this number increased to 247 million in 2014. When compared in terms of substance types, it is seen in the report that the most commonly used substance by individuals (182.5 million) is cannabis [4].

Addiction can often rapidly develop after an individual begins to use drugs. According to a Turkish Statistical Institute (TÜİK) report published in 2016, the total number of children (0–14) and adolescents (15–24) in Turkey is 31,914,824. As it has been established that drug use is increasing among adolescents and young adults globally and that Turkey has a predominantly young population, it is clear that taking precautions to protect young people must be a high priority [4].

Living on the streets is among the factors that can lead to adolescents and children being involved in illegal drug use, begging, and other criminal activities [35]. The longer a child is homeless, the greater the risk that they will become involved in crime and illegal substances. This is because the child is more likely to regularly use such substances to cope with the conditions of street life [16]. Drug abuse is also known to have detrimental effects on family and school life, as described by Yaman [47]. It is often the case that young people who abuse drugs live in households that are over-crowded. This leads to a significant decrease in intra-family communication and often to children being forced into part-time employment by their families from an early age, with a consequential increase in absenteeism from school. Adolescents' living on the street also causes their family relations to deteriorate to the extent that they cannot express their emotions openly and they experience communication problems [25]. Ögel [35] revealed that adolescents living on the street are at risk in terms of staying in detention centers or being sent to prison and attempting suicide.

Due to the obvious negative effects of drug abuse, it is of paramount importance to protect societies from it

and decrease the rate of existing drug abuse by obtaining more comprehensive information regarding psychological, social, and economic factors [32]. Determination of the role of the factors involved is important because while a factor may have a protective quality for some individuals, the same situation may be a risk factor for others. For instance, while the family is a risk factor for individuals who have some family members (such as the father or an older brother) abusing drugs, it is a protective factor for those who do not carry out drug abuse in the family [40].

Considering the literature, risky behaviors generally appear in adolescence and young adulthood, and the rate has increased in recent years. The fact that it may cause problems with an increasing frequency in the future requires more studies on drug addiction problem [19]. Adolescents who abuse drugs face some risks, such as living on the street, encouraging friends who do not abuse drugs to do so, moving away from the family, losing the motivation and desire to go to school, and eventually dropping out of school. Moreover, Bülbül and Doğan [12] mentioned the role of risky behaviors on criminal behaviors of adolescents. This research, which is a case study of drug-addicted adolescents, is important in terms of examining the issues of being involved in crime and the effects of school life and street life.

The current study investigates the social profile of drug-addicted adolescents in Turkey and the relationship between personal, social, street, family, and school factors as well as how these factors affect these adolescents. It also considers crime rates related to drug addiction. The aim of the study is to produce comprehensive results regarding the concepts that affect the life of an addicted person by examining both the risk and the protective factors related to drug addiction. The study, therefore, refers to other studies related to measures to be taken against drug addiction to help reveal the general situation of adolescents in Turkey regarding drug addiction. A more specific description of the aim of this study is to examine the relationship between certain factors (personal, social, community, and school) and rates of crime among drug-addicted adolescents. The following questions are considered in this study:

1. a) What are the personal characteristics of drug-addicted adolescents (e.g., age, self-harm behaviors)?
   b) What are the common features of drug-addicted adolescents' family structure (e.g., intra-family relations, drug use, suicidal attempt, or criminal behaviors within family)?
   c) What are the common features of drug-addicted adolescents' school life (e.g., success and failure in class, drug use at school, reasons for school dropout)?

d) What are the common features of drug-addicted adolescents' criminal record (e.g., type of crime, prison history)?

e) What are the common features of time spent living on the streets by drug-addicted adolescents?

2. Are age, time spent on the streets, employment history, school attendance, and drug use record in the extended family predictors of drug-addicted adolescents having a criminal record?

3. Are parent-adolescent relationships, school attendance, a criminal record in the extended family, the adolescent's own criminal record, and a history of drug use in the extended family predictors of the likelihood of drug-addicted adolescents having lived on the streets?

4. Are having a history of drug abuse and a criminal record in the extended family, as well as the employment history of the adolescent, predictors of the likelihood of drug-addicted adolescents' school dropouts?

5. Are self-harm behavior, the relationship between the parents, the parent-adolescent relationship, and suicidal attempt in the extended family predictors of the likelihood of suicidal thoughts and attempts by drug-addicted adolescents?

6. Are time spent on the streets, age, preference of drug type, and prison history predictors of the likelihood of self-harm behavior of drug-addicted adolescents?

Methodology

This research adopted the quantitative research method of correlational design as it allows the examination of the relationship between two or more variables without any intervention on the variables [13]. In this study, the correlational method was used to explore the relationship between drug addiction among adolescents and family structure, personal factors, school life, and crime rates.

Participants

The participants of the study consisted of a total of 713 drug-addicted adolescents who were treated between 2010 and 2019 at the Oya Bahadır Yüksel Psychiatry Clinic, which is affiliated with İnayet Topçuoğlu Hospital in Gaziantep, Turkey. All of the participants were male because the psychiatry clinic accepted only males for residential treatment and females for daily but not residental treatment. In line with the purpose of the study, only residential treatment patients were included in the study. The age ranged between 13 and 17 with a mean of 15.88. Detailed information about descriptive findings is presented in Table 1. The purposive sampling method used to select the participants was the

Table 1 Descriptive analysis of personal and family-related factors of drug-addicted adolescents

Personal and family-related factors	Category	N	%
Age	13	2	0.3
	14	79	11.1
	15	154	21.6
	16	248	34.8
	17	230	32.3
Employment history	Yes	692	97.1
	No	21	4.1
Self-harm behavior	Yes	491	68.9
	No	222	31.1
Suicidal ideation	Yes	423	59.3
	No	290	40.7
Suicide attempt	Yes	153	21.5
	No	559	78.4
Self/stepparents	Self	637	89.3
	Step	76	10.7
Mother alive	Alive	684	95.9
	Died	29	4.1
Father alive	Alive	657	92.1
	Died	56	7.9
Parents' living together	Together	689	96.6
	Divorced	24	3.4
Parent relationship	Good	166	23.3
	Bad	323	45.3
	Adequate	224	31.4
Adolescent-mother relationship	Good	223	31.3
	Bad	238	33.4
	Adequate	252	35.33
Adolescent-father relationship	Good	68	9.5
	Bad	503	70.5
	Adequate	142	19.9
Adolescent-sibling relationship	Good	240	33.7
	Bad	210	29.4
	Adequate	263	36.9
Crime history of family	Yes	353	49.5
	No	360	50.5
Suicide within family	Yes	119	16.7
	No	594	83.3

criterion sampling method, which meant that the participants were chosen according to their suitability for the study problem [13]. The essential aspect that the participants of this study had in common was that they were all adolescents who abused drugs and received residential treatment at the clinic.

Data Collection Tools

The Patient Medical History Form, which was used to gather information on the patients during the application to the

clinic, was applied as the data collection tool. This form was prepared by the clinic's specialists working in the field of psychiatry and was later revised in 2015. The Patient Medical History Form is not a standardized data collection tool but covers the following areas: the patient's personal information, employment, family, drug use status, withdrawal and intoxication process, remission process, time spent on the streets, history of suicide, school, criminal record, physical examination status, medical history, psychiatric examination, and treatment motivation. More specifically, the form asks for the following information:

- Personal information: the patient's age, gender, social security status, etc.
- Employment: previous employment status and employment history
- Family: parents' health in terms of mental and physical illnesses, parents' marital status, any drug use history in the family, etc.
- Drug use: drug preference, frequency of use, and when last used
- Withdrawal and intoxication process: the effects of the drug used and the symptoms that occur when the drug is not used
- Time spent on the streets: the first and the last time the patients lived on the streets, as well as the duration of, and the reason for, their stay on the streets
- School: whether the patient attended school or not, and if not, when and why the patient dropped out
- History of suicide: if the patient has ever attempted suicide, and if so, when and how
- Physical examination and medical history: if there are any incision marks on the patient's body, whether they have ever had an accident, and whether they have any physical impairments
- Psychiatric examination: notes from the examination, such as where, when, and by whom the examination was carried out, as well as impressions of the intelligence and memory status of the patient
- The patient's treatment motivation

All the information in the form can be accessed both in the previous versions of the form and in the current final version. Both forms contain the above-mentioned sections; however, some sub-information was added to the titles of psychiatric examination and physical examination in the revised form. While the titles of perception, intelligence level, cognitive functions, and reliability were added to the psychiatric examination section of the form, the question "Do you have any physical impairments?" was added to the physical examination section. However, only the data included in both old and new versions were included in the data analysis process.

Data Collection Procedures and Analysis

Before the data was gathered through the Patient Medical History Form, written permission for conducting the study was obtained from the Ethical Committee of Social and Human Sciences Institute, Hasan Kalyoncu University, as well as from the Chief Physician of İnayet Topçuoğlu Hospital affiliated to Gaziantep Metropolitan Municipality. The therapists at the institution obtained information from the patients by asking the questions on the form.

The data of the research was analyzed comparatively, and there was no secondary data collection process within the scope of this study. Analysis of the previously collected data was conducted using the SPSS 25 program. Data analysis consisted of two stages. In the first stage, a descriptive statistical analysis was conducted to show the frequency-percentage values of the information in terms of personal-social and familial factors, school life, health status, time spent on the streets, criminal record, and history of suicide of drug-addicted adolescents. In the second stage of the analysis, a binary logistic regression analysis was used to determine the significant predictive variables that affected the probability of drug-addicted adolescents being included in the categories of time spent on the streets, criminal record, dropping out of school, suicide attempts, and self-harm behavior.

Results

The findings of descriptive analysis indicated that 96.6% of drug-addicted adolescents were living with their families, and 45.3% had bad relationships with parents, while adolescent-father relationship was the worst relationship among all. It was revealed that 97.1% of drug-addicted adolescents had an employment history before, and 94% of them dropped out of school, while 54.8% of them had poor academic success. Besides, it was found that 42.5% of them used drugs at school, and the highest dropout level was seen at the primary education level with the rate of 58.8%. Of all the participants, 29.3% dropped out of school due to drug use, and 68.9% had self-harm behavior. As for suicidal ideation or suicide attempt of the drug-addicted adolescents, 59.3% of the adolescents had thought of suicide attempts at least once in their life while 21.5% of them attempted suicide at least once before. Further descriptive findings related to personal, family, and school factors are presented in Tables 1 and 2.

Regarding the drug types used, it was found that 32.3% of drug-addicted adolescents preferred substances with a stimulating effect, 48.2% of them preferred substances with a sedative effect, 14% of them preferred substances with hallucinogenic effects, and 5.5% of them preferred synthetic cannabinoids. Regarding the drug use history of parents of the drug-addicted adolescents, it was found that 2.7% of

Table 2 Descriptive findings regarding the school-related factors of drug-addicted adolescents

School-related factors	Category	N	%
School attendance	Yes	43	6.0
	No	670	94.0
Academic success	Good	51	7.2
	Bad	391	54.8
	Adequate	271	38.0
Drug use within school	Yes	303	42.5
	No	410	57.5
Reason for school dropout	Drug use	209	29.3
	Problems in school	296	41.5
	Family problems	40	5.6
	Social problems	125	17.4
	No dropout	43	6.0
Grade of school dropout	Primary level	420	58.8
	Secondary level	247	34.7
	No dropout	46	6.5

Table 4 Descriptive findings on street and crime-related factors of drug-addicted adolescents

Street and crime-related factors	Category	N	%
Crime history	Yes	468	65.6
	No	245	34.4
Type of crime	Theft	284	39.8
	Extortion-looting	99	13.9
	Injury	195	27.3
	Bagging	58	8.1
	Fighting	53	7.4
Living on the street	Yes	578	81.1
	No	135	18.9
Prison history	Yes	111	15.6
	No	602	84.4

significant ($\chi^2_{(\text{sd}=7, n=713)} = 33{,}683$, $p < 0.05$). The accurate classification rate of the model tested in the study is 99.1% for those who have street life experience, while the accurate classification rate for those who do not is 3.7%.

Among the independent variables of the model, father-adolescent relationship status, school attendance status, employment history, and age are significant predictors of street life history (see Table 5). Considering the relative importance of the other independent variables in the regression model, the variable with the highest predictive power on the street life history of drug-addicted adolescents is employment history, followed by school attendance, age, and father-adolescent relationship.

The regression model, emerged through the binary logistic regression analysis which was conducted to examine the predictive power of the variables of school attendance status, street life history, employment history, age, criminal history in the extended family, and drug use in the extended family on *the criminal history of drug-addicted adolescents*, was found as statistically significant ($\chi^2_{(\text{sd}=6, n=713)} = 93.054$, $p < 0.05$). While the accurate classification rate of the model tested in the study is 90.4% for those who have a criminal history, it is 31.4% for those who do not.

Among the independent variables of the model, school attendance status ($p < 0.05$), street life history, age, criminal history in the extended family, and drug use in the extended family are significant predictors of the criminal history (see Table 6). Regarding the relative order of importance of the other independent variables in the regression model, the variable with the highest predictive power on the criminal history of drug-addicted adolescents is school attendance, followed by street life history, criminal history in the extended family, drug use in the extended family, and age.

The binary logistic regression analysis, conducted to examine the predictive power of the variables of age, employment history, drug use in the extended family, and

their mothers and 24.4% of their fathers used drugs (see Table 3).

As for the crime and street life history of drug-addicted adolescents (see Table 4), it was found that 65.6% of them had committed a crime before and 81.1% had lived on the street at least once in their life. Considering the socio-demographic information regarding the familial factors of the drug-addicted adolescents, it was revealed that 89.3% of both parents of the adolescents were alive while the rate of drug use in the extended family was 68.3%.

The regression model, emerged as a result of the binary logistic regression analysis which was performed to examine the predictive power of father-adolescent relationship status, mother-adolescent relationship status, school attendance status, employment history, and age on *the street life history of drug-addicted adolescents*, was found to be statistically

Table 3 Descriptive findings on drug-use related factors of drug-addicted adolescents

Drug use-related factors	Category	N	%
Drug used	Stimulants	230	32.3
	Sedatives	344	48.2
	Hallucinogens	100	14.0
	Synthetic cannabinoids	39	5.5
Mother drug use	Yes	19	2.7
	No	694	97.3
Father drug use	Yes	174	24.4
	No	539	75.6
Drug use in extended family	Yes	487	68.3
	No	226	21.7

criminal history in the extended family on *the school attendance status of drug-addicted adolescents*, was determined to be statistically significant (χ^2 $_{(sd = 4, n = 713)} = 36.058$, $p < 0.05$). While the accurate classification rate of the model tested in the study for those who attend school is 99.7%, the accurate classification rate of the model for those who do not attend school is 9.3%.

Among the independent variables of the model, employment history in the extended family and drug use in the extended family are significant predictors of school attendance status (see Table 7). Besides, it was found that the variable with the highest predictive power of school attendance status of drug-addicted adolescents is employment history, followed by drug use in the extended family and criminal history in the extended family.

The regression model, emerged in the binary logistic regression analysis which was conducted to examine the predictive power of age, suicidal ideation, suicidal history in the extended family, self-harm behavior, and prison history on *the suicide attempt of drug-addicted adolescents*, is found to be statistically significant (χ^2 $_{(sd = 5, n = 713)} = 175.792$,

$p < 0.05$). While the accurate rate of classification of the model tested in the study is 0% for those who have attempted suicide in their real life, it is 100% for those who have not done so.

Among the independent variables of the model, suicidal ideation and self-harm behavior are significant predictors of suicide attempts (see Table 8). Furthermore, the variable with the highest predictive power of suicide attempts of drug-addicted adolescents is suicidal ideation, followed by self-harm behavior.

The regression model, emerged in the binary logistic regression analysis conducted to examine the predictive power of age, street life, and prison history on *the self-harm behavior of drug-addicted adolescents*, was found to be statistically significant (χ^2 $_{(sd = 3, n = 713)} = 54.500$, $p < 0.05$). While the accurate rate of classification of the model tested in the study is 93.1% for those who have self-harm behaviors, the rate for those who have not physically harmed their bodies is 25.2%.

Street life history, age, and prison history among the independent variables of the model are significant predictors of

Table 5 Findings of binary logistic regression analysis on the street life history of drug-addicted adolescents

Variables	B	Standard error	Wald	sd	p	Exp (B)
Age	0.197	0.096	4.189	1	0.041	1.217
Father-adolescent relationship (poor)	−0.307	0.381	0.650	1	0.420	0.735
Father-adolescent relationship (moderate)	−0.820	0.412	3.967	1	0.046	0.441
Mother-adolescent relationship (poor)	0.479	0.261	3.352	1	0.067	1.614
Mother-adolescent relationship (moderate)	0.133	0.235	0.320	1	0.571	1.143
School attendance	0.931	0.347	7.191	1	0.007	2.537
Employment history	1.080	0.479	5.087	1	0.024	2.945
Fixed	−3.340	1.585	4.443	1	0.035	0.035

Table 6 Findings of binary logistic regression analysis on the criminal history of drug-addicted adolescents

Variables	B	Standard error	Wald	sd	p	Exp (B)
Age	0.216	0.085	6.502	1	0.011	1.241
School attendance	1.346	0.381	12.492	1	0.000	3.841
Employment history	0.760	0.552	1.896	1	0.169	2.138
Street life history	0.926	0.207	19.988	1	0.000	2.523
Drug use within extended family	0.483	0.189	6.538	1	0.011	1.621
Criminal history within extended family	0.577	0.183	9.990	1	0.002	1.781
Fixed	−6.088	1.453	17.568	1	0.000	0.002

Table 7 Findings of binary logistic regression analysis on the school attendance status of drug-addicted adolescents

Variables	B	Standard error	Wald	sd	p	Exp (B)
Age	0.260	0.155	2.832	1	0.092	1.297
Criminal history within extended family	0.661	0.390	2.878	1	0.090	1.937
Employment history	2.217	0.513	18.669	1	0.000	9.181
Drug use within extended family	0.767	0.360	4.542	1	0.033	2.153
Fixed	−4.089	2.427	2.839	1	0.092	0.017

Table 8 Findings of binary logistic regression analysis on the suicide attempt of drug-addicted adolescents

Variables	B	Standard error	Wald	sd	p	Exp (B)
Age	−0.031	0.104	0.091	1	0.0763	1.241
Suicidal ideation	4.312	0.718	36.045	1	0.000	3.841
Self-harm behavior	0.573	0.261	4.830	1	0.028	2.138
Suicide history within extended family	−0.175	0.253	0.481	1	0.488	2.523
Prison history	0.342	0.263	1.692	1	0.193	1.621
Fixed	−4.869	1.794	7.367	1	0.007	0.002

self-harm behavior (see Table 9). Moreover, the variable with the highest predictive power of self-harm behavior of drug-addicted adolescents is prison history, followed by street life and age.

Discussion

This section discusses findings from related national and international literature on the relationship between the personal, social, and family factors of drug-addicted adolescents and performance at school, criminal record, and any history of time spent on the streets.

The Effects of Family-Related Concepts on Drug-Addicted Adolescents

A significant relationship was found using binary logistic regression analysis in the examination of the relationship between personal variables, such as possibly dropping out of school, father-adolescent relationship status, employment history and age, and any history of having lived on the streets. Of these factors, it was seen that employment history was the best predictor of drug-addicted adolescents having spent time on the streets, although a significant relationship was also found in the relationship between the family relationship of drug-addicted adolescents and time spent on the streets. Namely, it was seen that drug-addicted adolescents who had a poor relationship with their parents were more likely to have spent time living on the streets than those who had a good parental relationship. This finding of the study is supported by many other studies available in the literature [7, 25, 37].

On the other hand, no significant association was found in the relationship between drug-addicted adolescents' having spent time on the streets and their relationship with siblings, and their parents' relationships with each other. It can therefore be summarized that any communication problems between the parents of the patients in the study were not at a level that caused the adolescents to be forced into living on the streets.

The Effects of School Life-Related Concepts on Drug-Addicted Adolescents

Significant relations were found in the current study between the variables of employment history and any instance of a criminal record or history of drug use in the family, with an adolescent having dropped out of school. It was also seen that there was a marked correlation between a drug-addicted adolescent having dropped out of school or having a criminal record. In other words, drug-addicted adolescents who drop out of school for whatever reason are more likely to commit a crime than those who do not. The most predictive variable of a drug-addicted adolescent having dropped out of school was employment history. Similar results can be found in the literature that support the findings of this research [14, 28, 42, 47]. Studies conducted on juvenile crime in Turkey show that going to school is a significant preventative factor [42].

One identified risk factor in adolescents using drugs was there being another drug user in the family [30]. Further evidence of this finding in terms of role modeling and social learning can be found in the literature [8, 9, 30]. This study also showed a significant relationship between the school dropout status of drug-addicted adolescents and any drug abuse in the extended family. It can, therefore, be stated that any history of drug abuse in the family is a clear influence

Table 9 Findings of binary logistic regression analysis on the self-harm behavior of drug-addicted adolescents

Variables	B	Standard error	Wald	sd	p	Exp (B)
Age	0.189	0.083	5.131	1	0.024	1.208
Prison history	1.080	0.296	13.338	1	0.000	2.944
Street life history	1.020	0.200	26.040	1	0.000	2.773
Fixed	−3.125	1.317	5.626	1	0.018	0.044

on the possibility of the adolescent using drugs or dropping out of school.

Another significant result in the study was revealed through the relationship between the school dropout and employment history of drug-addicted adolescents. In other words, the school dropout rates of drug-addicted adolescents who must work for various reasons are higher than those of drug-addicted adolescents who are not currently working or have not worked before. The process of dropping out of school is negatively affected by adolescents working in a part-time job, which results in a decrease in school attendance, and an increasing tendency towards school dropout [27]. In the literature, it is asserted that having a higher number of siblings, the inadequacy of the physical conditions of the house in which the family lives, and the financial difficulties of the parents are among the familial factors [24, 28]. Given the findings of the study and the literature, it is likely to be deduced that the employment status of adolescents negatively affects their school dropout status.

Being in the streets affects children and adolescents' involvement in crime negatively. Their use of drugs also negatively affects school success, and the rates of school dropout increase [14, 27, 28, 47]. The findings of the study showed that academic success and parental relationship status of drug-addicted adolescents were examined in terms of the relationship between mother-adolescent and father-adolescent relationship status and were not found to be significant. In addition, the relationship between the school dropout status of drug-addicted adolescents and the drug use of their parents was not determined as significant in the study. Regarding this, it could be deduced that parental relationship style and drug use status of parents indirectly affect the school life of drug-addicted adolescents, but do not have a direct effect on their school life.

The Effects of Crime-Related Concepts on Drug-Addicted Adolescents

In the literature, it has been stated that drug use, living on the street, and criminal behaviors are positively related to one another [1, 23, 25]. The findings of the study have revealed that the strongest predictor variable for the committing crime status of drug-addicted adolescents was school attendance status. The findings of the study and the studies in the literature have shown that the level and form of the relationship that adolescents establish with their families, the presence of drug use and criminal history in the family, the status of dropping out of school, and the presence or absence of street life can all negatively affect the crime life status of drug-addicted adolescents.

In this study, the relationship between the status of living on the street and committing crime behaviors of drug-addicted adolescents was examined and found to be significant. The crime life status of drug-addicted adolescents who have street life experience is more commonly seen than those who do not. Ögel [35] highlights that drug abuse is more prevalent among young people living on the street and having a prison history. In addition, in the literature, it is stated that young people living on the street beg or commit crimes to survive. As the duration of the street life experiences of adolescents increases, the risk of drug abuse and involvement in crime also increases [16].

A significant relationship was also observed in the study between the presence of a criminal record of drug-addicted adolescents and a history of drug abuse in the extended family, with higher rates of involvement in crime among adolescents with drug abuse in their extended family compared to those without it. It can be seen that a drug abuse history in the extended family among relatives, parents, and siblings of young people constitute a risk factor on the drug use behavior of adolescents, both in terms of being a role model and genetic inheritance [30]. More specifically, Aysan and Siyez [7] point out that drug abuse in the family has a negative influence on the lives of adolescents in terms of crime and other risk factors. It can, therefore, be concluded that it is necessary to consider any drug abuse in the extended family when studying the illegal use of drugs, criminal offence, or any other risky behavior of adolescents.

Another aspect related to the fact that drug-addicted adolescents commit crimes is the presence of criminal history in the extended family of adolescents. There exist many studies in the literature that are directly and indirectly in line with this finding [1, 7, 9, 37, 47]. Young people follow their role models around them and copy many negative behaviors, such as drug abuse, crime, or other risky behaviors, as well as positive behaviors [8, 29•]. As supported in the literature, in the study, the relationship between the criminal history of drug-addicted adolescents and having a criminal history in the extended family was seen to be significant. Drug-addicted adolescents with a criminal history in their extended family are more likely to be involved in crime in their own lives than those without such a history. In the light of the findings of the study, it can be asserted that having a criminal history in the family of an adolescent increases the risk of being involved in crime in his/her own life.

Another issue related to the criminal life of drug-addicted adolescents is the fact that they often must work from a very young age. The literature points out that there is a relationship between a negative situation at home and the instance of committing a crime, as well as a link between criminal behavior and peer relationships in the neighborhood, at school, and in the peer environment where material and moral negative conditions prevail [43]. Similarly, according to research by Evren [21], the adoption of criminal behavior is often due to the negative living and working conditions in low- and middle-income neighborhoods. Other studies

support the notion of young people who must work in environmental conditions where they are detrimentally exposed to negative peer group influence, drug abuse, and criminal activity [1, 31, 41]. The findings of the current research support the findings in the literature mentioned above.

This study also looks at the relationship between crime and familial factors. While no significant relationship was found in this study between drug-addicted adolescents' relationships with their parents, their parents' relationships with each other, and any parental criminal record, the influence of these factors on adolescents is seen in other related studies. A study by Aysan and Siyez [7] points out that poor family relationships can often lead to problematic adolescent behavior. The lack of confirmatory findings in the present study may be explained by positive relations existing between drug-addicted adolescents and their parents due to continued parental support despite their child's criminal record.

The present study was also unable to determine any significant relationship between the criminal activities of drug-addicted adolescents and parental drug abuse although it was seen that illegal use of drugs by parents was a predictor of adolescent drug abuse. It was found that the effect of preferred substances and corresponding instance of risky behavior may vary according to the personalities of different drug-addicted adolescents. For example, in their study of adolescents in detention, Aksoy and Ögel [2] indicate that the risk of drug use of adolescents whose families used drugs (substances other than tobacco and alcohol) was 4.3 times higher than those of adolescents whose family members did not use them.

The Suicidal Attempts and Self-Harm Behaviors of Drug-Addicted Adolescents

When adolescents who abuse drugs are examined in terms of attempted suicide and self-harm behavior, it can be seen that these adolescents are at high risk [18, 26, 38, 39]. Moreover, some studies argue that the rate of suicide attempts among adolescents increases when there is drug addiction and drug abuse [11]. In this study, the relationship between suicidal ideation and self-harm behavior of adolescents, which was assumed to be associated with suicide attempts, was found to be significant. According to the results obtained, the variable with the strongest effect on the rate of suicide attempts of drug-addicted adolescents is suicidal ideation. Furthermore, drug-addicted adolescents who have previously attempted suicide are more likely to engage in self-harm behavior while under the influence of drugs than those who have not [17, 33]. In this study, a significant relationship was found in drug-addicted adolescents between attempting suicide and self-harm behavior.

Taking self-harm behavior of adolescents into account in the literature, the relationship between time spent by the adolescent on the streets or in prison was regarded as significant. Of these factors, having a prison record was the strongest predictor variable for self-harm behavior, and this result is confirmed by the literature [22]. Furthermore, the group that shows the highest rate of self-harm behavior is adolescents in detention or correctional facilities [22]. Self-harm, committing a crime, and living on the streets are among common and interrelated risky behaviors for drug-addicted adolescents [2, 10, 36]. The study also indicated that there is a significant relationship between the time drug-addicted adolescents spent on the streets and instances of physical self-harm. This finding is supported by the work of Aksoy and Ögel [3•], who examined the self-harm behavior of children living on the streets. Self-harm behavior is particularly prevelant in children who have lived on the streets for more than 4 years, or those who have a criminal history, compared to other adolescent groups.

Another concept related to suicide attempts among drug-addicted adolescents is the preferred substance. According to the literature, adolescents who use opioids and drugs with sedative properties are more likely to attempt suicide than those who use other substances [5, 30]. However, the findings of this study showed that substances preferred by adolescents did not have a significant effect on suicide attempts although this may be due to the low number of participants recorded in the study.

It has been emphasized in the literature that suicide is an acquired behavior like any other and that a history of suicide in the family increases the likelihood of adolescents attempting suicide themselves [8, 21]. However, no significant relationship was found in this study between the incidence of suicide attempts of drug-addicted adolescents and a history of suicide in the adolescents' extended families. Similarly, no significant relationship was found in the study with dysfunctional family relationships and suicide attempts. However, the literature does point to such a connection. For example, in a study by Dilsiz and Dilsiz [20] in which suicide attempts were investigated, the most common reason for suicide stated by the participants was conflicts within the family. One possible explanation for the non-significance of the history of suicide in the extended family and the lack of a strong relationship between parents and adolescents in this present study could be that drug-addicted adolescents are less likely to spend time with their families; therefore, they are exposed to less social learning for these undesired behaviors.

Conclusion

This study has demonstrated significant relationships between related variables (personal, social, family, school, crime, and street life) that affect the addictive behaviors

of adolescents. 81.1% of the drug-addicted adolescents considered in the study have experience of living on the streets, with the strongest predictor variable being having worked in the past. Other factors that are shown to have a strong relationship with a drug-addicted adolescent living on the street are school attendance, age, and poor relations with fathers. Regarding the school life status of drug-addicted adolescents, it is pointed out that 94% of them drop out of school for different reasons. The strongest predictive factor of a participant having dropped out of school is that the drug-addicted adolescent must work. As for the criminal life history of drug-addicted adolescents, it is revealed that 65.6% of them have committed a crime at least once before in their life. Regarding criminal history, the strongest predictor variable is the rate of school dropouts.

Other variables that are found to be significantly related to the criminal history of drug-addicted adolescents are a history of life on the streets, incidence of criminal activity or drug abuse in the extended family, and age. It is determined that the rate of suicidal ideation occurring at least once in the life of the participants is 59.3%, and the rate of attempting suicide is 21.1%. Another result of the study was that the strongest predictor variable of attempting suicide is the incidence of self-physical harm by drug-addicted adolescents: 68.8% of the drug-addicted adolescents considered having incision marks on their bodies. It has been established that physical self-harm in adolescents is significantly related to having lived on the streets or having been in prison.

In studies on drug addiction, it is crucial to determine the risk and protective factors in the lives of children and young people because the relationship that exists between these factors can affect the drug use of adolescents either positively or negatively. The findings of the results of the study indicate that it is necessary to examine the risk and protective factors of drug addiction disease in a holistic manner, rather than independently from each other.

Further research could be related to conducting the study with different male and female adolescents in different settings. More comprehensive results could be obtained by including the families, social environments, and previous schools of the adolescents participating in the study while obtaining detailed information about the adolescents. It is important for experts working in the field to consider that school and family factors are protective factors for these children and adolescents. Therefore, it would be helpful to plan activities and projects in order to strengthen family relations of these people, support them during their attendance at school, and arrange bonding events with relevant institutions and organizations. Also, awareness-raising events and seminars could be arranged in relation to the disease of drug addiction. Affected children can continue to attend school by obtaining peer support, with the risk of ending up living on the street and being involved in a crime being reduced through peer and teacher support.

This study needs to be considered in the light of some limitations. Firstly, as the psychiatric clinic had only male inpatient drug-addicted adolescents, the participants of the study consisted of only males; therefore, it lacked female drug-addicted adolescents' case. This should be taken into consideration while interpreting the data, and further comparison research should be done. Secondly, interviews with patients were conducted by different therapists in 8 years' period. Therefore, the information gathered by the therapists could include researcher's bias. Moreover, although the instrument (anamnesis form) used in the study was developed by experts in the field, its psychometric properties were not tested. Therefore, it may not be considered a reliable and valid measure. Although several therapists agreed on the items, there might be other important questions missing in the anamnesis form. Finally, the data was totally based on self-report, which needs to be extended by parents or other caregivers' observations about the adolescents' lives in future studies. These limitations notwithstanding, this is the first study known about the general profile of addictive adolescents in Turkey.

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