Deanship of Scientific Research

Cognitive Abnormalities in Juveniles Suffering from Drug Abuse

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Abstract

Objectives: The study aimed to identify cognitive distortions among juvenile drug abusers in Jordan.

Methods: The sample consisted of (55) male juveniles in short-term detention at Al-Zohour Security Center, using the available method. The cognitive Distortions scale was applied to them after extracting its validity and reliability.

Results: The results indicated that the level of cognitive distortions was moderate and that cognitive distortion "minimization and maximization" came at a high level while "reading what was in the minds of others" came last at a low level. The results also showed no significant differences attributed to the effect of the family's monthly income in all areas except in excessive generalization" in favor of those with monthly income from 500 to 1000 JD. There were no significant differences due to the effect of birth order.

Conclusion: It was found that cognitive distortions exist among juveniles who are drug abusers to a moderate degree, and this means that these juveniles have a problem regarding the use of these cognitive distortions. These individuals need to know the reality of these distortions and the extent of their impact on its lives. The study recommends designing and implementing counseling programs to reduce these distortions thus reducing the use of drugs, and replacing them with effective coping strategies in dealing with life stressors.

Keywords: Cognitive distortions, juvenile drug users.

التشوهات المعرفية لدى الأحداث الذين يعانون من سوء استخدام العقاقير

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ملخّص

الأهداف: هدفت الدراسة إلى تعرُّف التشوهات المعرفية لدى الأحداث الذين يعانون من سوء استخدام العقاقير في الأردن. المنهجية: تكونت العينة من (55) حدثاً من الأحداث الموقوفين في النظارات باستخدام الطريقة المتيسرة. جرى تطبيق مقياس التشوهات المعرفية عليهم بعد استخلاص صدقه وثباته .

النتائج: أشارت النتائج إلى أن مستوى التشوهات المعرفية كان معتدلاً، حيث جاء التشوه المعرفي "التعظيم والتقليل" بمستوى عالٍ، بينما جاء التشوه المعرفي " قراءة ما في أذهان الآخرين" في المرتبة الأخيرة. كما أظهرت النتائج عدم وجود فروق ذات دلالة إحصائية تعزى لتأثير الدخل الشهري للأسرة في جميع المجالات ماعدا التشوه المعرفي " التعميم الزائد" لصالح ذوي المستوى الشهري من 500 إلى 1000 دينار، كما لم تظهر فروق ذات دلالة إحصائية تعزى لتأثير ترتيب الميلاد .

الخلاصة: تبين أن التشوهات المعرفية موجودة بدرجة متوسطة لدى الأحداث الذين يعانون من سوء استخدام العقاقير، وهذا يعني وجود مشكلة لدى هؤلاء الأحداث في التشوهات المعرفية، مما يعني أنهم بحاجة لمعرفة حقيقة هذه التشوهات وأثرها على حياتهم. لذلك توصي الدراسة بتصميم وتطبيق برامج إرشادية للتقليل من التشوهات وبالتالي تقليل اللجوء لاستخدام العقاقير، واستبدالها باستراتيجيات تكيفية فعالة للتعامل مع ضغوط الحياة.

الكلمات الدالة: التشوهات المعرفية، الأحداث الذين يعانون من سوء استخدام العقاقير.

Introduction:

Recent decades have witnessed many rapid developments in various fields of life. This development has been accompanied by many problems that have affected societies and individuals, and among the most important of these problems is drug abuse and drug addiction, which is a problem that threatens the whole world due to its increasing spread and leads to the destruction of the energies, capabilities, and values of youth. The youth's demand for drug abuse has increased, which is considered a recent problem in Jordan. It has begun to take new forms so that came necessary to study it and learn about its causes, motives, and methods of prevention (Banat, Shobaki & Amarin, 2019).

Substance abuse increases the risk of health-related problems such as the risk of sexually transmitted diseases, academic problems, and self-harm (Didarloo & Poural, 2016; Boys, Marsden & Strong, 2001), where it is estimated that there are a quarter of a billion people or an estimated (5%) of the world population have used drugs at least once in their lives (WHO, 2012). And that what is most alarming is that about (29.5) million drug users are adults and suffer from drug use disorders, which means that their drug use is very harmful. They may become drug-dependent and need prevention and treatment interventions (World Drug Report 2017).

The drug is a worldwide crisis associated with social and economic consequences, also physical and mental illness, such as stress, mood instability, personality characteristics, inadequate social skills, lack of assertiveness, and distress tolerance (Singh & Kaloiya, 2016). Young adults and adolescents are most at risk of drugs. (Banat, Al-Shobaki, and Al, -Ammari, 2019). While it is important to note that the majority of drug users never commit crimes, there is a significant correlation between crime and the use of drugs in a number of countries (Alagabia and Cawi, 2019).

The current study is concerned with the adolescents who use drugs and are juveniles; specifically, the juvenile drug users arrested in short-term detention Al-Zohour Security Center the subordinate to the Ministry of Social Development, in partnership with the Public Security Directorate for the year 2020 in Amman.

Many studies dealt with the category of juveniles in Jordan, but few of them dealt with the category of juvenile drug users, which is the subject of the current study (Abu Helal, 2020). A juvenile is every person under eighteen (Juvenile Law No. 32, 2014). The juvenile is the one who commits a misdemeanor and is arrested in the detention center and then at the Education House according to a decision issued by an official judicial authority. This study aims to identify the cognitive distortions among juveniles who suffer from drug abuse in Jordan

The importance of this study is evident through the role it plays in serving the individual and society, and the fact that the juvenile is a basic individual in society, he must have mental health that qualifies him to play his main role by being an effective and productive individual in society. According to the Department of Defense and Community Security statistics for Juvenile Drug Abusers, the number of juvenile drug users (12-17) reached 623 in the year 2018, and in 2019 the number reached 606. (Statistics of the Department of Defense and Community Security, Ministry of Social Development).

Studies have linked cognitive distortions to youth's externalizing behaviors during adolescence (Fischbach,2018). Adolescent drug users may have some thinking errors associated with the substances they use as a source of comfort or happiness or to get rid of the worries and stressors that may lead them to abuse and increase their likelihood to join delinquent peer groups (Shahzad and Yasmin, 2015) justifying their failure in their practical, family, or academic lives by using Cognitive distortions, which mean false ideas and beliefs that are characterized by their lack of objectivity, and are based on generalizations and expectations stemming from the self and on a mixture of conjecture, prediction, exaggeration, which are errors in processing information, practiced by individuals and causing them a feeling of distress and pain (Banat, 2013; Carr,2006; Beck, Freeman & Davis, 2004).

Cognition role is implicated across various disorders, including substance use. Beck (1979) explained common errors associated strongly with emotional and behavioral disorders, including substance abuse (Singh & Kaloiya, 2016). Cognitive factors can be referred to as cognitive vulnerability to predict many forms of mental illness, including disorders (Hollon et al., 1992). According to cognitive theories of emotional disorders, how information is processed plays a causal role in a person's emotional reactions to events; when individuals process information in a negative vision, the subsequent emotional and behavioral consequences can be quite maladaptive (Covino et al., 2011).

Adolescents and children represent the most vulnerable population for drug consumption and addiction. At this early stage in life, a crucial phase of the neurodevelopmental process, substance abuse can induce brain plasticity mechanisms that may produce long-lasting changes in neural circuitry and ultimately behavior. One of the consequences of these changes is the impairment of cognitive functions, with an academic negative impact on the acquisition of new knowledge (Juárez-Portilla, et al, 2017)

Distorted cognition is one of the most notable characteristics (Beck 1999). These are all or all-or-nothing, catastrophizing, mental filter, emotional reasoning, magnification/minimization, mind-reading, personalization, overgeneralization, and should and must statemented vision. These thoughts can become stuck in negative feedback loops of unhealthy thinking, leading to inaccurate perceptions of reality commonly associated with anxiety and depression (Shickel et al., 2019; Singh & Kaloiya, 2016). So Cognitive-behavioral treatments for juvenile offenders are designed to correct dysfunctional thinking and behaviors associated with delinquency, crime, and violence (Lipsey, Chapman, and Landenberger 2001). A study aimed to look at cognitive distortion and depression among juvenile delinquents in Malaysia, showed that there was a positive significant correlation between cognitive distortion and depression. And between cognitive distortion and all the five dimensions of cognitive distortion: self-critique, self-blame, helplessness, hopelessness, and preoccupation with danger (**Nasir**, et al, 2010).

The current study aims to answer the following questions:

1. What are the most common cognitive distortions among juvenile drug users in Jordan?

2. Do cognitive distortions differ among juvenile drug users in Jordan according to family income and birth order variables?

The theoretical importance of the current study relates to the target group, who are juvenile drug abusers in Jordan. In addition, the topic being discussed related to cognitive distortions in juveniles is a very important topic because of the impact of these distortions on the possibility of juveniles' continued drug use. At the same time, the practical importance of this study lies in the results of this study that benefit researchers, specialists, and workers in this category. This study also provides a measure of cognitive distortions that interested and future researchers can use.

Literature Review:

Studies have linked cognitive distortions to youth's externalizing behaviors during adolescence. In recent years, it has been suggested that higher levels of cognitive autonomy, which develops during adolescence، may be a protective factor for youth's adjustment.

Wu, et al (2022) examined Illicit drug use and cognitive distortions confer significant risks to youth suicidal thoughts and behaviors. Suicidal homeless youth (N = 150) between the ages of 18 to 24 years were recruited from a drop-in center. Youth were randomly assigned to Cognitive Therapy for Suicide Prevention and treatment as usual or alone. Youth reported their illicit drug use, cognitive distortions, and suicidal ideation 4 times over 9 months. The results showed that higher illicit drug use at baseline predicted a slower reduction in cognitive distortions and suicidal ideation in the TAU group. These associations were not found in the CTSP + TAU group, suggesting an interruption of such risk from illicit drug use. Findings suggest that CTSP can reduce the risk of illicit drug use as a treatment barrier towards cognitive distortions and suicidal ideation among homeless youth.

The objective of Abu Helal (2020) was to investigate the patterns of emotional attachment and its relation to cognitive distortions among (28 0) students An-Najah National University students. It also aims to detect differences in emotional attachment patterns and cognitive distortions due to variables such: Gender, and birth order. The results indicated a positive correlation between the anxiety pattern and the cognitive distortions, and negative correlation between the safe and cognitive distortions, and the absence of a correlative relationship between the avoidance pattern and cognitive distortions. It also showed differences in cognitive distortions due to gender and the absence of differences in cognitive distortions due to the birth order of students.

Abbara, Rahal, & Musa (2018) study explored the level of cognitive distortion and symptoms of obsessive-compulsive personality disorder among adolescents. The study sample consisted of (389) students (189 males: and 200 females) in high school students. The results showed that the cognitive distortion level was high in general; the symptoms of obsessive-

compulsive personality disorder were also high in general.

Fischback's (2018) study tried to determine if cognitive autonomy moderated the relationship between cognitive distortions and externalizing behaviors among 146 adolescents. consistent with expectations, analyses revealed significant associations between cognitive distortions and externalizing behaviors. Inconsistent with expectations, aspects of cognitive autonomy were negatively linked to externalizing behaviors. Specifically, decision-making and evaluative thinking were negatively associated with externalizing behaviors. Furthermore, neither dimension of cognitive autonomy was found to moderate the relationship between cognitive distortions and externalizing behaviors.

D'Urso et al. (2018) investigated the individual and adolescent social characteristics, moral disengagement strategies, and cognitive distortions of 120 sex offenders detained in Italian jails. Results show important risk factors in the genesis of moral disengagement strategies in the offenders: substances and being institutionalized in their past. In addition, researchers noticed how education levels represent a negative predictor of cognitive distortions toward women and the blame to a positive predictor.

Al-Assar's study (2015) aimed to identify the level of cognitive distortions and the meaning of life among adolescents in the Gaza Strip and study the relationship between cognitive distortions and the meaning of life. The sample consisted of 662 high school and university students aged between 15-22 years. The results indicated that the level of cognitive distortions is low in general and the meaning of life is high in general. The results also showed a statistically significant inverse relationship between cognitive distortions and the meaning of life among adolescents in the Gaza Strip.

Shahzad and Yasmin (2015) explored the role of aggression in developing delinquency and drug abuse in adolescents. The study's total sample comprised adolescents, out of which 101 were juvenile delinquents, and 105 were non-delinquents of 12 to 18 years belonging to a low socioeconomic status. The sample (delinquents) of the study was selected from the central jail of Karachi, and non-delinquents were selected from various public sector schools in Karachi by using random sampling techniques. The results show significant differences in variables of aggression between delinquent and non-delinquent adolescents. Delinquents are found to exhibit a high level of aggression, as depicted by their mean scores on the aggression questionnaire. No significant difference is found between delinquents and non-delinquents in the anger subtype. Similarly, those who use drugs have a high level of aggression than those who do not use drugs.

Methodology and procedures

Study methodology

The descriptive and analytical approach was used, which is consistent with the objectives of the study.

Study population

The study population consisted of all the juvenile drug users arrested at Al-Zohour Security Center of the Ministry of Social Development as an available sample, whose ages ranged between (12-18) years, during the year 2020.

Study limitation: the juvenile drug users arrested at Al-Zohour Security Center, males. (12-18) years.

Study sample:

The study sample consisted of (55) juveniles detained in short-term detention at Al-Zohour Security Center of the Ministry of Social Development in Amman, Jordan, in 2020, who were chosen in an available way. Table No. (1) shows the distribution of the study sample according to its variables.

Table 1. Frequencies and percentages according to the study variables

Variable	Categories	Repetition	The ratio
monthly income	Less than 500	38	69.1
	1000 – 500	17	30.9
Birth order	First	18	32.7
	Middle	19	34.5
	the last one	18	32.7
	Total	55	100.0

Study tool:

The researchers developed a scale of cognitive distortions based on Beck's cognitive theory, (Sharf, 2012; Covino, et al 2011; Beck, 1999). which focused on cognitive distortions, and the tool included 9 cognitive distortions of 3 items for each dimension, and thus the scale consists of (27) items.

Construction validation: To extract the indications of the validity of the construction of the scale, the correlation coefficients of the paragraphs of the scale with the total score and between each paragraph and their correlation with the field to which they belong, in an exploratory sample from outside the study sample consisted of (20) of the abusive juveniles, and the coefficients of correlation of the paragraphs with the tool as a whole ranged between (0.37-0.82), and with the field (0.44-0.88). All correlation coefficients were of acceptable scores and statistically significant, and therefore none of these paragraphs were omitted.

Stability of the study tool: The reliability coefficient was calculated using the internal consistency method according to the Cronbach alpha equation. The internal consistency factor was the Cronbach alpha of the tool as a whole(.84) , which was considered appropriate for this study's purposes.

Results:

The first question: What are the most common cognitive distortions among juvenile drug

users in Jordan?

Means and standard deviations were extracted for the most common cognitive distortions among juvenile drug users in Jordan; the table below illustrates that

Table .2 Means and standard deviations for the cognitive distortions among juvenile drug users in Jordan

Rank	No	Field	Means	standard deviation	Level
1	5	Underestimating and minimizing it	3.84	1.147	High
2	9	Attribution methods	3.79	1.134	High
3	8	Bipolar	3.47	1.194	Average
4	2	Personalization	3.33	1.192	Average
5	6	Selective attention	3.16	. 801	Average
6	4	Exaggeration and exaggeration	2.92	1.034	Average
7	7	Expectations	2.76	1.398	Average
8	1	Overgeneralization	2.39	1.167	Average
9	3	Read what is in the minds of others	2.24	1.114	Low
		The whole scale	3.10	662	Average

Table 2 shows that the averages ranged between (2.24-3.84), where the field of reducing the matter and minimizing it came in first place with the highest arithmetic average of (3.84), while the field of reading something in the minds of others came in the last place with a mean of (2.24). The mean of the tool as a whole is (3.10) with a moderate level; this result differs from Al-Assar's study (2015) indicated that the level of cognitive distortions is low in general.

The researchers explain the emergence of an average level of cognitive distortions among juvenile drug users that this category of individuals may live in families that enhance the presence of cognitive abnormalities, or in which these distortions prevail, which made them carry those distortions and interact with others and explain what is happening in their lives based on them. The conditions of life that they may experience and the quality of the friends they deal with are also thinking the same way, they use in their lives wrong ways of thinking and distortions that may be the reason for their slipping into abuse, as they are juveniles arrested in short-term tension, especially since the adolescence period is one of the ages in which friends have a great influence On the life of the teenager and the study sample, they pass through that age. Adolescents are influenced by their friends' ideas, opinions, and behavior greatly (Banat and Ghaith, 2014).

Perhaps the negative experiences that those events went through in their lives, such as low achievement, parental

divorce, family disintegration, and poverty conditions, prompted them to think in a distorted and wrong way, through their generalization of those negative experiences that they had, or personalizing them to those events and linking them to themselves, or minimizing something They do or what they have accomplished.

The media may have a major role in promoting cognitive distortions in individuals, especially adolescents affected by artistic, sports, and media models. The ideas, opinions, and beliefs emanating from these models about life and people are matters of great value to adolescents, who are the current study sample. In addition to the fact that the content of many series and programs that discuss the subject of abuse depicts this group of society as a group less fortunate than others in living conditions and has many weaknesses, which makes them feel low self-esteem, which thus leads to the individual adopting a method that leads him to get rid of that severe conditions by resorting to abuse (Banat, Shobaki & Amarin, 2019).

The researchers explain that there is a high level of cognitive distortion related to reducing the matter and minimizing it and achieving the highest rank that the study sample is from the adolescent group and this category in which the individual seeks to search for his identity and either reach a successful identity formation or go through an identity crisis as Erikson's mechanism indicated that in the stages of psychosocial development (Sharf, 2012). And the abusive juvenile sees himself as having little value and having no positives; even if he has positives, he does not see them and does not stop at them. He sees anything about him as ridiculous and unworthy of respect, especially since he is a drug addict and arrested in the glasses, so how can he positively see things or focus on his strengths? The researchers believe that if the abusive event had paid attention to his gains and advantages, he would not have been in such a situation.

Attribution methods: He attributes the emergence of a high level of attribution methods related to blaming the responsibility for what is happening with the abusive juvenile on the family or others and not attributing this to matters related to him in this situation. Thus, they reduce their role and the self-related factors associated with them, such as lack of motivation for success or achievement, and their negative thinking about themselves and their abilities, which is very important in the life of the abused juvenile, as it is not always problems or pressures that come from others or the family, so they may stem from the individual, and when the individual attributes his lack of success or achievement to others or external circumstances, ignoring personal matters, then he will remain the same and will not seek change, assuming that what he is living is something outside his control, which he emphasized (Beck 1999; Banat & Ghaith 2014).

As for cognitive distortion: reading what is in the minds of others came to the last place and at a low level, and this can be attributed to the fact that the abusive juvenile remains preoccupied with how he obtains the substance that he abuses, how to secure it, and the friends he spends his time with, and he rarely cares about what others may say. Or what's on other people's minds about him. In addition to seeing others hate and be hostile towards him, he does not need to read what is in their minds.

The second question: Are cognitive distortions among juvenile drug users in Jordan different according to family income and birth order variables?

To answer this question, the means and standard deviations of the most common cognitive distortions among juvenile drug users in Jordan were extracted according to family income and birth order variables, and the table below shows that.

Table .3 Mean and standard deviations for the cognitive distortions among juvenile drug users In Jordan, family income and birth order

	Monthly family income				Birth order					
	Less than 500 dinars		From - 500 1000		the first		Middle		the last one	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Overgeneralization	2.18	1.112	2.70	1.303	2.07	.997	2.43	1.165	2.88	1.172
Personalization	3.14	1.307	3.15	1.074	3.21	1.366	3.63	1.114	3.75	.759
Read what is in the minds of others	2.14	1.138	2.43	1.089	2.09	1.226	2.20	1.049	2.45	1.060

| | Monthly family income | | | | Birth order | | | | | |
| | Less than 500 dinars | | From - 500 1000 | | the first | | Middle | | the last one | |
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Exaggeration and exaggeration	2.82	1.030	2.74	1.218	2.77	896	3.26	940	3.16	1.035
Underestimating and minimizing it	3.75	1.214	3.93	933	3.58	1.392	4.02	1.069	4.04	985
Selective attention	3.12	. 878	3.37	. 816	3.02	. 871	3.09	703	3.24	610
Expectations	2.61	1.430	2.72	1.401	2.93	1.542	2.63	1.293	3.10	1.300
Bipolar	3.48	1.237	3.24	1.246	3.68	1.331	3.48	998	3.45	1.130
Attribution methods	3.73	1.085	3.67	1.097	3.77	1.160	3.93	1.191	3.92	1.261
The whole score	3.00	667	3.10	524	3.01	. 810	3.19	. 636	3.33	606

Table 3 shows an apparent variation in the means and standard deviations of the most common cognitive distortions among juvenile drug users in Jordan due to the different family income variables and birth order categories.

To demonstrate the significance of the statistical differences between the means, MANOVA on the domains table shows that.

Table 4. MANOVA analysis of the effect of family income and birth order on the areas of cognitive distortions

The source of the contrast	Domains	Sum of squares	Degrees of freedom	Average of squares	PH value	Statistical significance
Monthly family income	Overgeneralization	5.416	1	5.416	4.288	043
	Personalization	3.261	1	3.261	2.341	132
Hoteling= . 147	Read what is in the minds of others	1.128	1	1.128	. 887	351
H= 702	Exaggeration and exaggeration	700	1	700	661	420
	Underestimating and minimizing it	590	1	590	440	510
	Selective attention	159	1	159	.245	623
	Expectations	3.539	1	3.539	1.786	. 187
	Bipolar	.001	1	.001	.001	975
	Attribution methods	.301	1	.301	. 224	.638
Birth order	Overgeneralization	3.284	2	1.642	1.300	281
Wilkes= 709	Personalization	1.447	2	724	520	598
H= . 585	Read what is in the minds of others	1.081	2	.540	.425	.656
	Exaggeration and exaggeration	2.400	2	1.200	1.133	.330
	Underestimating and minimizing it	1.579	2	.789	. 588	.559
	Selective attention	1.274	2	. 637	979	.383
	Expectations	1.666	2	. 833	420	.659

The source of the contrast	Domains	Sum of squares	Degrees of freedom	Average of squares	PH value	Statistical significance
	Bipolar	1.810	2	905	613	.545
	Attribution methods	. 474	2	. 237	176	. 839
The error	Overgeneralization	64.422	51	1.263		
	Personalization	71.033	51	1.393		
	Read what is in the minds of others	64.825	51	1.271		
	Exaggeration and exaggeration	54.003	51	1.059		
	Underestimating and minimizing it	68.492	51	1.343		
	Selective attention	33.211	51	651		
	Expectations	101.065	51	1.982		
	Bipolar	75.221	51	1.475		
	Attribution methods	68.500	51	1.343		
Macro	Overgeneralization	73.576	54			
	Personalization	76.776	54			
	Read what is in the minds of others	67.038	54			
	Exaggeration and exaggeration	57.770	54			
	Underestimating and minimizing it	71.083	54			
	Selective attention	34.634	54			
	Expectations	105.483	54			
	Bipolar	77.042	54			
	Attribution methods	69.414	54			

It can be seen in Table .4 The following:

-lack of presence of statistically significant differences (α = 0.05) attributed to the effect of the family income in all areas except in the area of excessive generalization ,and the differences came in favor of.1000 - 500

Lack of presence of statistically significant differences (α = 0.05) due to birth order effect in all areas.

Discussing the results of the second question :First, concerning the variable of family income, the researchers attribute the absence of differences to the cognitive distortions attributed to the variable of family income on all dimensions except in the area of over-generalization that the study sample is from the category of the most recent abusers who live in somewhat similar conditions and that what the individual has of cognitive distortions related to his way of thinking and not to family income, and this way of thinking may be similar when the sample is homogeneous, as the current study sample .Also, this category of society may have lived similar family conditions, such as family disintegration and low education, and this may contribute to the formation of cognitive distortions for them .Abusive individuals have cognitive distortions related to the negative perception of the self, that others are responsible for falling prey to abuse, and that they harbor this and do not accept them (Scharf ,2012). As for the cognitive distortion of excessive generalization, differences appeared in favor of juvenile abusers with family incomes ,1000-00and this can be attributed to the fact that these individuals, because of their somewhat high income, may have become accustomed to meeting their needs and getting what they want easily. Thus, their

passage of failures or Failure experiences will make them more likely to give up and generalize more about upcoming experiences, as they will be failed or be frustrated.

Second :As for the birth order, the researchers explain that there are no differences in cognitive distortions among the juveniles due to the birth order variable because these juveniles pass through the same age stage, and they live in similar living conditions, and that is what they may have from cognitive distortions is not related to their birth order, whether the event is he is the first, middle, or last child in his family, for the family that neglects attention to its children and where problems prevail, family divergence and omission to meet the needs of its members will contribute to the formation of similar cognitive distortions for the beautiful children in the family, regardless of their birth order, which is what (Kafafi ,2009) emphasized when he talked about the effects of family spacing may result in the emergence of problems with the children in the family, such as the appearance of deviations in behavior and abuse. this result is agree with Abu Helal's study (2020), that showed the absence of differences in cognitive distortions due to the birth order of students.

Table .5 Analysis of variance duo of the impact of family income and birth order on the cognitive distortions of Juvenile drug users in Jordan

The source of the contrast	Sum of squares	Degrees of freedom	Average of squares	PH value	Statistical significance
Monthly family income	1.136	1	1.136	2.605	113
Birth order	090	2	045	103	902
The error	22.237	51	. 436		
Macro	23.646	54			

The table shows the followings:

The absence of statistically significant differences ($\alpha = 0.05$) attributed to the effect of the family's monthly income where the value of P .2.605 Statistical significance amounted to 0.113. The absence of statistically significant differences ($\alpha = 0.05$) attributed to the effect of birth order, where the p-value was ,0.103 and statistical terms reached.0.902

Conclusion:

It was found that cognitive distortions exist among juveniles who are drug abusers to a moderate degree, and this means that these juveniles have a problem regarding the use of these distortions, the most prominent of which is maximization and minimization, and the least of which is reading what is in the minds of others. This means that these individuals need to know the reality of these distortions and the extent of their impact on their lives. The presence of such distortions may be the reason for their drug abuse, as a means of escaping from the pressures of life, and perhaps family problems. It was also found that there were no differences in cognitive distortions in the study sample due to the variable of birth order and family income, except for the presence of differences in the cognitive distortion "excess generalization" among individuals with incomes (500-1000), which means that cognitive distortions are present in the study sample regardless of These variables may be related to the developmental stage they are going through, as well as to the nature of the problem they suffer from. Considering these results, researchers focus on the need to pay attention to this category from a psychological and cognitive point of view and work on designing and implementing specialized counseling programs in order to raise their awareness and help them learn adaptive skills to reach the maximum levels of mental health and social responsibility.

Recommendations:

- The necessity of joining efforts of everyone, including individuals, civil society organizations, and public institutions, in combating drug abuse with all the means they possess due to their negative impact on all aspects of life.
- Raising family awareness and providing it with the skills of family dialogue, especially with adolescents and youth ,and providing family counseling programs for parents on dealing with children and providing a supportive family atmosphere.

- The mass media's role is to educate youth and citizens about the dangers of drug abuse on the individual, society, and the state by organizing awareness and counseling programs for all segments of society.

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