

Adolescent Students And Drug Use Within The School Environment: Causes And Motivations An Exploratory Field Study On A Sample Of Students From Khaldi Tahar And Bilal Ak Amellal Secondary Schools In The Municipality Of Tamenghest

Djamila Slimani PhD student, University of Kasdi Merbah, Ouargla, Faculty of Social and Human Sciences (Algeria). djamilaslimani10@gmail.com

Dr. Djamila Ben Zaf University of Kasdi Merbah, Ouargla (Algeria). jamola07@yahoo.fr

Received: 30/09/2024 accepted: 09/01/2025 published: 15/02/2025

Abstract:

This research paper aims to identify the various reasons and motivations related to drug use among students in the school environment, focusing on personal, family and school-related factors. The study was conducted at the secondary level in Khaldi Tahar Secondary School and Bilal A. Amellal School in the municipality of Tamenghest, involving a sample of 51 individuals. A descriptive methodology was used, using questionnaires and simple observation. Following the field study, the results indicated that the prevalence of drug use in schools is associated with several personal factors related to the personality of the students, in addition to family factors that they experience and a school environment that contributes to and facilitates the recurrence of drug use within their educational institutions. Finally, some solutions were proposed to help mitigate the recurrence of drug use behaviors in the school setting.

Keywords: Reasons and motivations, school-age adolescents, drug use.

Introduction and Research Problem:

The issue of drug use is one of the most significant problems that countries and governments have sought to address with either permanent or temporary solutions. The phenomenon of drug use represents a humanitarian crisis that affects societies at all levels, whether developed or developing, and threatens their security and stability. Arab countries are suffering from this plight, which is increasingly infiltrating their communities and targeting the most important demographic group: young people and adolescents. This group represents the largest percentage of the population, estimated at over 90% compared to other age groups. The United Nations Human Development Report 2007 states that the majority of the population in the Arab world is under the age of 18 (Al-Ghussein, 2008, p. 9). In Algeria, drug use is particularly prevalent among adolescents, especially students. The National Agency for Health Promotion and Research 215 | Djamila Slimani **Adolescent Students And Drug Use Within The** School Environment: Causes And Motivations An Exploratory Field Study On A Sample Of Students From Khaldi Tahar And Bilal Ak Amellal Secondary Schools In The Municipality Of Tamenghest

Development (FORAM), headed by Professor Mustafa Khiyati, which monitors various aspects of children's lives, conducted a field survey on the phenomenon of smoking and drug use in Algerian schools. The results were alarming. Originality/value This research provides a new contribution to the understanding of the new institutional oversight framework for promoting transparency and combating corruption under the 2020 constitutional amendment. It presents the legal evolution of the Transparency Authority and outlines its working strategy, which is a political document par excellence and the first of its kind, reflecting the political will of the public authorities to eradicate corruption and eliminate its roots, with the aim of creating a political, economic and social environment opposed to corruption and building a state of law that enshrines the principles of integrity, transparency and accountability.

This field study involved 25 physicians in March 2015, covering a sample of students in schools in the eastern municipalities of Algiers, for a total of 8,645 students, 47% of whom were male and 53% female. Of these, 3,419 students were in secondary school, aged between 15 and 22 years, while the remaining 5,226 students were in junior high school, aged between 12 and 16 years. The results of this field research showed that 2.2% of female middle school students and 3.8% of males in the same category smoke. In high school, 3.6% of female students smoke compared to 23.2% of males. In addition, 21.6% of male secondary school students use drugs, compared with 8.8% of females. In secondary education, the percentage of males using drugs was 26.4%, while the percentage of females was 18.6%, with daily use reported. The report indicates that both the school environment and peer groups have a significant influence on students' drug use (ttp://zedni.com).

Many studies have highlighted the nature and characteristics of adolescence, which is considered a challenging period in human life. This stage is surrounded by numerous problems, including drug use and addiction. Adolescents are particularly susceptible to manipulation, which makes it easier to influence their minds and promote substances among them. They often try to assert their independence and demonstrate their maturity and ability to make their own decisions. They also have a strong sense of exploration, curiosity, and adventure, often disregarding the consequences of their actions. This makes them vulnerable targets for drug dealers, even within educational institutions, which are supposed to be safe havens where they acquire knowledge and experiences that protect them from various societal dangers. As mentioned earlier, adolescents are a vulnerable demographic because they are the primary and easiest target for such problems.

This reality has led many educators and specialists to seek clear answers to the numerous problems that arise in this context, with the aim of uncovering the hidden reasons that lead school-age adolescents to willingly engage in drug use. In this regard, psychologist Rachel Casada Loman addresses this issue in an article entitled "Six Reasons That Drive Teens to Drug Addiction.

At some point, both boys and girls decide to use drugs, but the impact of such a decision is often underestimated. Some teens can resist, while others cannot resist the temptation and succumb. The question arises: What makes one young person more resistant than another? What factors lead one youth to reject drugs while another embraces them? Are more confident youth better prepared to face challenges?

In her article, Loman lists the reasons she believes contribute to adolescent drug use, including: temptations from dealers, a short-term escape from reality, self-medication for relief, the need for acceptance from others, rebellion against family and society, and finally, curiosity.

(https://www.ida2at.com/6-reasons-teens-turn-drugs/)

The observer of the issue of drug abuse clearly sees the various effects and harms it causes, particularly among students. Specialists confirm that drugs have negative effects that begin with the user, impacting their psychological, mental, and physical aspects, and extending to their surroundings, affecting their social relationships. This is often noticeable in educational institutions, where teachers observe changes in students' behavior and academic performance, making them susceptible to disciplinary actions that can lead to referral or expulsion due to worsening substance abuse.

Despite this, students often experiment with drugs, typically starting with smoking and stimulants, eventually escalating to more dangerous substances. This raises questions about the underlying reasons for this behavior, prompting the need for this exploratory field study to investigate the causes that lead students to engage in drug use within their institutions. This leads to the following research question:

What are the causes and motivations that lead students to use drugs at school?

To answer this question, several sub-questions emerged: 1. What are the causes and motivations related to the student's personality that lead them to use drugs at school?

2. What are the causes and motivations related to the student's family that influence the student's use of drugs at school?

3. What environmental factors within the school contribute to the student's drug use?

Study Hypotheses:

-General Hypothesis:

There are student-related and school environment-related causes and motivations that lead students to use tobacco and certain drugs in the school setting.

- Sub-hypotheses:

1. There are personal causes and motivations that lead the student to use drugs at school.

2. There are family-related causes and motivations that influence the student's use of drugs at school.

3. The school environment plays a role in promoting the student's drug use within the educational setting.

Study Objectives:

This exploratory field study aims to identify the underlying reasons for students' drug use within their educational institutions, which are supposed to be safe havens for education and knowledge acquisition. It seeks to determine whether the reasons are related to the students themselves and their families, or whether there are environmental factors within the school that contribute to their drug use. This paper seeks to address these issues.

Significance of the Study:

The current study is significant because it attempts to clarify the various causes and motivations behind students' drug use despite their awareness of the dangers involved. It highlights aspects of deviant behavior that hinder the proper functioning of educational institutions in protecting generations and imparting educational and scientific experiences. Conducting such studies can help concerned parties to effectively fulfill their roles, especially those involved in the educational process in schools, as well as researchers focused on educational issues.

Basic Concepts of the Study:

Drug Abuse:

It is defined as an unnatural desire exhibited by some individuals towards drugs or toxic substances, which they may knowingly or unknowingly experience for their sedative, narcotic, stimulant, or energizing effects. This leads to addiction and harms the individual physically, psychologically, and socially (Rashad Abdel-Latif, 1992, p. 40). The term "drug abuse" refers to the ingestion of narcotic substances into the body by any means, affecting the body's systems (Al-Humaidi, 2008, p. 10).

Definition of Drug Abuse:

The National Center for Criminal Research in Egypt defines drug abuse as "the use of any narcotic drug in any form known in a society to achieve a specific psychological or mental state" (Abdel-Latif, 1992, p. 42).

Causes and Motivations:

A cause is defined as that which leads to the occurrence of an event or result (https://ontology.birzeit.edu/). Meanwhile, motivations are described in the Al-Maany dictionary as the driving force behind actions, which can be emotional and subconscious,

whereas the impulse is rational and conscious (http://www.uobabylon.edu). Psychologists define motivations as factors that energize behavior and direct it toward a specific goal, adhering to the principle that "every behavior has a motivation" (https://www.almaany.com/).

School-aged adolescents:

Adolescence is a transitional period from childhood to adulthood (Hamed Abdel-Salam Zahran, Developmental Psychology, Dar Al-Ma'arif, Egypt, 1986, p. 289). It encompasses a series of changes in physical, mental, psychological, and social growth. It is the period when an adolescent becomes a man or a woman (Abdul-Rahman Al-Essawi, The Psychology of Contemporary Muslim Adolescents, Dar Al-Watha'iq, Kuwait, 1987, p. 11).

Definition of adolescence:

It is a stage of life development that occurs between childhood and the completion of adulthood, characterized by physical growth beginning with sexual maturity, which varies widely among individuals, typically spanning about five years between early and late maturers. Adolescence differs among cultures and ethnic groups and is influenced by climatic and environmental factors (Ziyoush, p. 7).

Operational definition of the subject:

The causes and motivations related to the personality of the student, his family and the educational environment in which he studies, through which a student may consume any form of prohibited or forbidden drugs, whether by eating, drinking, smoking, sniffing or injecting, thus affecting his physical, psychological and social condition within the school environment.

Theoretical Framework and Previous Studies:

*Theoretical Framework: Numerous studies and scientific research emphasize the escalating phenomenon of smoking and drug use among adolescents, particularly those engaged in formal education. These practices create a challenging reality that undermines the effectiveness of the educational process within educational institutions. This age group is targeted due to its characteristics and features, which make it difficult to manage, as it represents a transitional phase from childhood to youth and maturity in an individual's life. Adolescence is defined as the age period extending from fifteen to twenty-one years, though it may vary. This stage is one of the most difficult and tumultuous phases in human life, serving as the first test of an individual's personality and morals. A person's future and the civilization of their nation are significantly influenced by the choices made during adolescence. It is regarded as one of the most critical stages, marked by continuous changes and advancements toward human perfection. The danger in this phase lies in the various developmental changes (physical, physiological, mental, social,

emotional, religious, and moral), during which individuals face multiple internal and external conflicts (Al-Attawi, 2018, p. 5).

Many researchers claim that the reasons why adolescents turn to drugs or smoking stem from several aspects, which can be summarized as follows:

Psychological reasons:

Curiosity and the desire to experience the new or unknown are intrinsic to human nature, especially during adolescence. This trait significantly influences the behavior of adolescents due to their limited life experience and heightened enthusiasm for exploring new things. This is one of the most powerful psychological reasons for adolescent drug use.

The psychological nature of adolescents is characterized by rebellion against authority and prevailing laws. In this context, adolescents find in drug use a form of rebellion against their society and families, which acts as a driving force that directs their behavior toward drug use.

Weakness of character and will, coupled with an inability to make decisions or refuse, often leads adolescents to accept drugs when first offered, driven by shame, social politeness, or fear of appearing cowardly in front of peers or influential figures.

Certain psychological or emotional disorders can weaken willpower, such as low selfesteem in situations that provoke sadness or depression, leading them to use substances as an escape from these discouraging circumstances.

Adolescents may imitate a favorite figure they admire and see as a role model, whether a family member or a celebrity from movies or television.

Joy:

It is a misconception that drugs do not provide happiness and pleasure; however, the problem is that this pleasure is fleeting and requires increased doses each time to achieve the same effect.

Family reasons:

These revolve around the breakdown of the family. The absence of a nurturing family environment, often due to the parents' work commitments, fosters feelings of isolation within the family, leading the child to create a private world. In such cases, the collective identity gradually diminishes, forcing the individual to navigate life according to personal needs and psychological comfort, ultimately leading to psychological and social distress, which drives adolescents towards substance use (Mohamed Al-Arabi Jayli, 2016). The breakdown of family ties and the lack of mutual support among family members can lower morale, making them susceptible to external pressures and thus seeking escape through drug use.

The presence of role models within the family who use drugs, such as parents or siblings, is a significant factor in adolescents imitating their drug use. In addition, the availability of money and wealth within the family facilitates the adolescent's ability to obtain and purchase drugs (Al-Rumaih, 2004, p. 3).

The family's failure to teach children how to effectively use their free time and engage in beneficial activities pushes them to seek out forbidden and unusual activities to fill their free time amidst weak family supervision, thus increasing their exposure to drug use.

Social reasons:

The availability of drugs is an important factor, as easy access to substances contributes significantly to continued use. An adolescent who uses various means to acquire these poisons, facilitated by sources that make them readily available, is at their mercy, leading to habitual use (Abdul Maati, 2004, pp. 162-163).

Theoretical framework and previous studies:

Theoretical Framework:

Many studies and scientific research confirm the exacerbation of the phenomenon of smoking and drug use among adolescents, especially those engaged in formal education. These practices create a challenging reality that weakens the educational process within educational institutions. This age group is targeted because of its characteristics and traits that complicate interactions, as it represents a transitional phase from childhood to adolescence and maturity. Adolescence is defined as the period between the ages of fifteen and twenty-one, although it can vary. This period is one of the most difficult and volatile in human life and serves as the first test of a person's character and ethics. The future of individuals and the progress of their societies are significantly influenced by the choices made during adolescence. It is also considered one of the most critical stages of human development, characterized by constant change and progress toward human perfection. The danger during this phase, which transitions individuals from childhood to adulthood, lies in the various developmental changes (physical, physiological, mental, social, emotional, religious, and moral) that individuals experience. They are exposed to multiple internal and external conflicts (Al-Otwi, 2018, p. 5).

Many researchers claim that the reasons why adolescents turn to drugs or smoking fall into several categories, which can be summarized as follows:

Psychological Causes: Curiosity and the desire to experience anything new or unknown are human traits, especially during adolescence. This trait significantly influences adolescent behavior due to their limited life experience and heightened enthusiasm for exploring the new. This is considered to be one of the most influential psychological factors contributing to various forms of drug use among adolescents.

The psychological nature of adolescents is characterized by rebellion against authority and prevailing laws. Adolescents often view drug use or smoking as a form of rebellion against their community and family, which serves as a motivation to direct their behavior toward substance use.

Weak character and willpower, along with an inability to make decisions or refuse, may lead adolescents to try drugs for the first time. They may feel unable to refuse substances because of embarrassment or a desire to avoid appearing cowardly in front of peers or people who might have an interest in the situation.

Certain psychological or emotional disorders can weaken adolescents' willpower, such as low self-esteem in situations that cause sadness and depression, leading them to seek escape through substance use.

Adolescents may also imitate admired figures, such as older people in their environment or characters from movies and television.

Pleasure: It is a misconception that drugs do not induce happiness and pleasure; however, the problem is that this pleasure is fleeting due to the need for increasing doses to achieve the same effect.

Familial Causes: These revolve around family disintegration. The absence of a supportive family environment can foster feelings of isolation, prompting the adolescent to create a personal world. In this context, the collective identity gradually fades, leading the individual to navigate their life and meet their needs independently. This results in psychological and social distress, pushing the adolescent toward drug use (Mohamed Al-Arabi Jaily, 2016). Additionally, the breakdown of family bonds and the lack of mutual support decrease morale among family members, making them susceptible to external pressures and seeking escape through drugs.

The presence of role models who use drugs, such as parents or siblings, is one of the primary reasons adolescents may imitate their drug use.

Moreover, having financial resources and luxury from the family facilitates adolescents' access to drugs.

The family's failure to teach children how to use their free time productively leads them to seek out forbidden and unusual activities, especially in the absence of parental supervision, making them vulnerable to drug use.

Social causes: These include the availability of drugs. The ease of obtaining drugs is one of the main reasons for continued use. A youth who uses various means to obtain these substances from sources that contribute to their availability is often under their influence.

Peer pressure: At certain stages of adolescence, individuals prioritize peer relationships over family and often feel compelled to prove loyalty to their group. This can lead to

challenges, often involving drug use. Here, the adolescent's character plays a role in accepting or rejecting peer challenges, and while they may have decision-making skills, they often succumb to peer pressure and begin using drugs.

Environmental and residential factors: The environment in which adolescents live has a significant impact on their drug use. For example, the presence of drug dealers or living in unsanitary and socially inappropriate conditions can lead adolescents to engage in unacceptable behaviors.

Social Interactions:Social gatherings and parties often provide opportunities for drug use and experimentation with prohibited substances. These gatherings are frequently characterized by boasting and, at times, engaging in socially unacceptable behaviors like consuming alcohol and drugs, placing adolescents at risk.

School-Related Causes: The school serves as a second home for children, playing a crucial role in protecting their psychological, mental, and social capabilities. However, it can sometimes pose risks, such as the emergence of negative behaviors like violence and social issues, including drug use and smoking. Among the causes identified by specialists leading to drug use within educational institutions are:

- Academic failure, accompanied by feelings of frustration and dissatisfaction among adolescents, which can lead to school dropout.

- The presence of role models who smoke, especially teachers or school staff.

- Peer pressure from classmates urging experimentation with drugs to project an image of maturity and responsibility.

- Availability of locations within schools conducive to drug use, such as restrooms and hallways.

- The absence of recreational and educational programs within schools that allow students to utilize their time beneficially, especially activities or competitions with other educational institutions.

- Poor treatment from educators, such as comparisons or derogatory remarks that undermine a student's dignity.

Theories Explaining Drug Use Behavior: Numerous studies have attempted to provide theoretical explanations for the reasons behind drug use and addiction, ranging from individual factors to environmental influences, and relying on repeated social experiments to justify their findings. Some of these theories include:

1. Biological Theory (Genetic Theory): This theory explains addiction as a hereditary phenomenon, suggesting that the trait of addiction is passed from parents to children, similar to other genetic traits. It suggests that various biological factors may contribute to how an individual becomes addicted. This approach views drug addiction as a genetic 223 | Djamila Slimani Adolescent Students And Drug Use Within The School Environment: Causes And Motivations An Exploratory Field Study On A Sample Of Students From Khaldi Tahar And Bilal Ak Amellal Secondary Schools In The Municipality Of Tamenghest

process. Studies of twins have shown that identical twins have more in common in their drug use habits than non-identical twins. Research focusing on adoption shows that children born to non-addicted parents but adopted by addicted parents do not have higher rates of addiction. In contrast, children born to addicted parents and adopted by non-addicted parents have addiction rates four to five times higher than those born to non-addicted parents (Maki, 2016, p. 48).

2. Psychoanalytic Theory:

The psychoanalytic school views the problem of addiction or substance use as rooted in the individual user's personality structure or psychological makeup and the level of maturity they have achieved. This level determines their coping strategies in life and how they interact with others in society. The psychoanalytic perspective suggests that an individual who turns to drug use has a predisposition to do so even before recognizing the drug's sedative effects. When a user turns to drugs, they seek safety and reassurance, as drugs provide protection against painful psychological states such as depression. Additionally, drug use satisfies other internal psychological needs, and understanding the act of using drugs necessitates understanding the nature of the satisfaction achieved through substance use in each case.

3. Behavioral Theory:

Behavioral explanations of drug addiction are based on the principle that people repeat behaviors that have been reinforced. Addiction is viewed as a learned behavior; for example, a person suffering from anxiety who uses a drug to feel calm associates that feeling with positive reinforcement for future drug use. With repeated use, the individual learns to rely on the drug to alleviate withdrawal symptoms, leading to continued substance use due to external influences, namely the drugs themselves (Fayed, 1994, p. 170).

4. Social Contract Theory:

This theory interprets deviance as a social phenomenon resulting from poverty, oppression, and domination exercised by individuals over others. Poverty, for example, breeds a rejection of social values and ethics upheld by members of society, reflecting social injustice. Deviance leads to an imbalance between an individual's goals and the means used to achieve them. Emile Durkheim, a proponent of this theory, posited that drug use and addiction are learned behaviors transmitted through peer groups. Peer pressure plays a significant role in the process of addiction, which often occurs not through dealers but through friends. Additionally, addiction is linked to rapid societal changes and the disruption of values that fail to adapt to social transformations. The conflict between society and individuals' ability to coexist results in addiction, particularly when adults fail to instill values in youth, who are more susceptible to peer influence.

5. Social Learning Theory:

Prominent figures in social learning theory include Albert Bandura and Gabriel Tarde. This theory asserts that human behaviors are learned from others through interaction and imitation. It explains drug use and addiction as learned behaviors resulting from an individual's interactions with their reference group, which reinforces this behavior and fosters a sense of belonging among users (Hassan Miftah, p. 10).

Commentary on the theories:

The theories discussed regarding the reasons why individuals resort to drug use or addiction emphasize the biological theory's focus on genetic factors, suggesting that an individual may have a hereditary predisposition to substance use. Psychoanalytic theory emphasizes individual psychological factors, suggesting that the user's weak personality traits lead them to addiction because of their inability to cope with external circumstances. Behavioral theory reinforces this by asserting that repeated drug use is driven by the pleasure and relief that drugs provide, which encourages continued use. Social contract theory emphasizes that external pressures, particularly from peer groups, contribute to drug use, while the failure of adults to effectively communicate social values affects adolescents. Finally, social learning theory asserts that an individual's drug use is influenced by his or her social environment, including family and social circles, suggesting that the social context plays a significant role in drug use behavior.

Previous Studies:

Study One:

Titled "Reasons for Students' Drug Use in the School Environment," this field study was conducted by researchers Farida Bourabi and Kahina Rabit. The study aimed to identify the reasons for drug use among middle and high school students. It was conducted at Aït Aqouacha Middle School and Abdel Rahman El Ailouli High School in Wednesday Nath Irathen, Tizi Ouzou Province, involving a sample of 60 students. The descriptive analytical method was used, and a questionnaire was employed to collect information. The results indicated that among the main reasons driving students to use drugs in the school environment were peer pressure and the desire to gain their friends' trust, relief from stress and anxiety, a desire to forget problems, curiosity, family issues, academic challenges, association with bad companions, the need for group acceptance, boredom, feelings of emptiness, a desire for challenge, seeking distinction and maturity, and the need to alleviate fatigue and find happiness.

Study Two:

An exploratory study on the issue of drugs in the school environment, conducted by researcher Fatima Debrassou. This study is part of an awareness campaign carried out by the Listening and Prevention Cells affiliated to the Youth Information and Activation

Center in the province of Biskra. It is an annual initiative linked to a pre-established program by specialists. The campaign lasted for a week in high schools and vocational training centers and included a photo exhibition on the impact of this issue from all angles, lectures by specialists followed by discussions with students. Brochures were distributed with detailed explanations and clarifications about drugs and their psychological, health and social dangers. Finally, questionnaires were distributed to both sexes for analysis and evaluation of the results. The survey was conducted among both male and female students between the ages of 13 and 18, with a random sample of 345 students. The study concluded that students are aware of the dangers of social problems, including drug abuse. The level of contact with users was seen as a serious indicator of the increased likelihood of getting involved in drug use and the prevalence of this problem in schools. Family problems were identified as one of the main direct causes driving students to use drugs, often as an escape from their problems. The most commonly used drug was marijuana (hashish), due to its widespread availability and its perception as a gateway to more dangerous substances. It was also found that almost half of the users in this study were at the stage of addiction, highlighting the need for increased efforts to raise awareness of the dangers of drugs. The ease of access to drugs and their use in educational institutions indicates a serious situation, and attempts by some users to quit without the help of professionals and guardians have led to their failure and relapse.

Commentary on previous studies:

By examining these two studies, it is clear that the issue of drug use in education and training environments is of great importance. The first study showed that the most important reasons that lead students to use drugs are external factors rather than personal or psychological characteristics, mainly influenced by peer pressure and family problems. Conversely, the second study emphasized that the phenomenon of drug use in educational settings represents a growing danger, which underscores the need to intensify efforts to curb and mitigate it. This is especially critical when it comes to the adolescent student population, which is vital to society and should be in institutions that promote positive and beneficial behaviors.

Methodological Procedures of the Study Research Method:

This research paper used a descriptive method, which allowed the researcher to describe various reasons related to student drug use in the school environment.

Study Population and Sample:

The study population consisted of secondary school students from Khalidi Tahar Secondary School in Tahgaret West neighborhood and Bilal Agamal Secondary School in Kattat Wadi neighborhood in Tamanrasset. The sample included 51 students selected through a stratified random sampling method to ensure representation from each grade level (first, second, and third) in both schools.

Data Collection Tools:

The study relied on a questionnaire distributed to a sample of students, along with simple observation to assess the school environment and its relationship to drug use.

Statistical Methods Used in the Study:

The study used a five-point Likert scale in the second and third sections, and the arithmetic mean to analyze respondents' answers to various questions, along with percentage calculations and frequency counts.

Presentation and Analysis of Study Results:

1. Presentation and analysis of the results of the first section concerning the personal data of the sample

Gender	Frequency	Percentage
Male	25	49,01 %
Female	26	50,99 %
Total	51	100 %

- Table 1 shows the distribution of respondents by gender.

The table shows that the sample included 25 people (49.01%) of the male gender and 26 people (50.99%) of the female gender. On the one hand, this close ratio demonstrates the random distribution of the questionnaire, and on the other hand, it suggests that those who follow the issue of drug abuse in the school environment may believe that the majority of users are male. However, the exploratory study showed that females are not exempt from entering the world of drug abuse in its various forms, especially pills and tablets, which are considered by students as sedatives and painkillers that initially help to concentrate in studies, but later show their narcotic effects on both sexes.

Educational level	Frequency	Percentage
First year of secondary school	25	49,01 %
Second year of secondary school	11	21,57 %
Third year of secondary school	15	29,42 %

Total	51	100 %

The table illustrates the educational levels of the study sample, where the percentage of first year students is 49.01%, the percentage of second year students is 21.57%, and the percentage of third year students is 29.42%. Although these percentages are close, the first-year percentage is higher due to the larger number of students, as first-year classes tend to have an increase in enrollment. As students progress through the years, the percentage decreases, although this varies from institution to institution. The table also shows that the sample includes all levels of education.

Academic Streams	Frequency	Percentage
Literature and Philosophy	19	37.25 %
Literature and Languages	05	9.81 %
Experimental Sciences	18	35.29 %
Management and Economics	08	15.69 %
Mechanical Engineering	01	1.96 %
Total	51	100 %

Table 3 shows the distribution of participants by field of study.

The table illustrates the different fields of secondary education within the surveyed institutions. The highest percentage is for the Literature and Philosophy stream with 37.25%, followed by the Experimental Sciences stream with 35.29%. Next is the Management and Economics stream with 15.69%, then the Literature and Languages stream with 9.81%, and finally the Mechanical Engineering stream with 1.96%. The sample includes most of the streams in secondary education.

table 4 shows the distribution of the respondents' answers to the fourth question, which refers to the perception of the problem of drug abuse in the school environment.

Alternative	Frequency	Percentage
Yes	18	35.29 %
No	19	37.25 %

Sometimes	14	27.46 %
Total	51	100 %

The table illustrates the different fields of secondary education within the surveyed institutions. The highest percentage is for the Literature and Philosophy stream with 37.25%, followed by the Experimental Sciences stream with 35.29%. Next is the Management and Economics stream with 15.69%, then the Literature and Languages stream with 9.81%, and finally the Mechanical Engineering stream with 1.96%. The sample includes most of the streams in secondary education.

Table 5 shows the distribution of the respondents' answers to the fourth question, which refers to the perception of the problem of drug abuse in the school environment.

Alternative	Frequency	Percentage
Yes	5	9.81 %
No	46	90.19 %
Total	51	100 %

The table above shows the respondents' responses to the question about their acceptance of the surrounding community describing their schools as a hotspot for drug abuse. The percentage of "No" responses was 90.19%, indicating that while students are aware that drug abuse occurs in their school environment, they do not support the community labeling their school as a prevalent site for various types of drug abuse.

Table 6 shows the distribution of respondents' responses regarding the types of drugs present in their school.

Alternative	Frequency	Percentage
Smoking	19	37.25 %
Powdered pills	32	62.75 %
Total	51	100 %

The table above illustrates the respondents' responses regarding the types of drugs circulating in their school environment. The majority of respondents indicated that most of the alternatives available to them include smoking, with a significant presence of both hallucinogenic and stimulant pills, as well as powdered drugs (commonly referred to as "ghabra") found within their institution.

Table 7 shows the distribution of respondents' answers regarding who provides drugs to students, whether from inside or outside the school.

Alternatives	Frequency	Percentage
Peers within the institution	7	13.73 %
Promoters outside the institution	44	86.27 %
Total	51	100 %

Table 7 shows respondents' answers to the question of who contributes to the supply of drugs to students within their school: whether it is an internal source from peers or an external source from dealers outside the school. The responses indicated a higher percentage for external dealers at 86.27% compared to 13.73% for internal sources. This highlights the significant role that the external environment plays in reinforcing negative behaviors within the school, which can inadvertently have a negative impact on the school climate.

Presentation and discussion of the results of the hypotheses

Table 8 presents the results of the respondents' answers related to the first hypothesis: the personal reasons related to the students that contribute to drug abuse within the school environment.

Reason	Strongl y agree	Agre e	Neutra l	Disagre e	Strongl y	Mean	Percenta ge	Ques tion Rank
					Disagre e			
Curiosity, love for imitation, and experimentation	18	15	7	9	2	74.8	3.74	2
Weak personality and lack of awareness and understanding of one's actions	21	14	3	8	5	74.8	3.74	3

Escaping worries and stress	18	10	6	10	7	68.2	3.43	8
Weak faith- based deterrents	21	11	9	2	8	73.6	3.68	4
Escaping pressures and problems	14	16	9	9	3	71.2	3.56	7
Seeking distinction, maturity, and proving responsibility	16	12	7	8	8	67.8	3.39	10
Alleviating pressure and fatigue	10	15	8	12	6	64.2	3.21	13
Seeking pleasure and happiness	22	12	8	7	2	77.6	3.88	1
Relieving tension and anxiety	11	18	5	7	10	65	3.25	11
Meeting group desires and the need for belonging.	11	12	17	9	2	68.2	3.41	9
Filling free time	14	10	11	7	9	65	3.25	12
Desire for challenge and trying new things	16	19	3	8	5	72.8	3.64	5
Poor academic performance	10	6	8	13	14	52.4	2.62	15
Feelings of inferiority and self-esteem issues	8	14	7	12	10	59.2	2.96	14

Lack of	18	15	5	6	7	72	3.6	6
awareness								
regarding the								
dangers and								
consequences of								
drug use.								

As shown in the table above, which represents the respondents' answers regarding the main personal reasons related to students that drive them to drug abuse within the school environment, it is evident that the response to question 8, which refers to the pursuit of pleasure and the feeling of happiness, received the highest percentage of 77.6%. This indicates that the primary motivation is the internal sense of pleasure and happiness. This characteristic is one of the most important needs fulfilled by various drugs, as users initially feel a state of pleasure and happiness when using them. However, this feeling can eventually turn into negative effects depending on the state of the user. In this regard, psychoanalytic theory confirms that individuals who turn to drug use tend to do so before they fully understand the effects of the drug, regardless of its type. When users turn to drugs, they seek security and reassurance.

The percentage gradually decreases for the remaining questions, with question 1, which states that curiosity, imitation and experimentation are among the main reasons for drug use, at 74.8%. Similarly, the percentage for question 2, which states that weak personality and lack of awareness and understanding of one's own actions are driving factors for drug abuse within the institution, is the same as that for question 1. Many specialists argue that entering the world of drug use requires a weak personality that is easily persuaded, often referred to in sociology as vulnerable groups, which drug dealers and traffickers exploit to increase their trade and promote drugs in society. A weak and unaware personality is more susceptible to falling into the trap of drug abuse, especially among the adolescent students in this study.

The percentage for the reason that a weak moral and religious deterrent contributes to student drug abuse was estimated at 73.6%. The response to question 12, which confirms that the desire for challenge and experimentation with new things is a motivating factor for drug use in the school environment, was 72.8%. This is one of the most important characteristics influencing the behavior of adolescents due to their limited life experience and excessive enthusiasm for exploring everything new, including drugs.

In addition, some 72% of respondents indicated that a lack of awareness of the dangers and consequences of drug use contributes to students' willingness to experiment with drugs, often without caution or understanding of the potential negative consequences that could lead to drug abuse. The exploratory study revealed that students tend to use 232 | Djamila Slimani Adolescent Students And Drug Use Within The School Environment: Causes And Motivations An Exploratory Field Study On A Sample Of Students From Khaldi Tahar And Bilal Ak Amellal Secondary Schools In The Municipality Of Tamenghest certain stimulant pills that initially help them concentrate without realizing the risks of addiction, and eventually find themselves trapped in drug abuse.

In addition, 71.2% of respondents considered escaping from stress and problems as a reason for students to use drugs of any kind, mainly due to psychological problems resulting from the physiological and psychological changes of adolescence, together with daily pressures from school or family. Some respondents noted that one reason students turn to drugs is to forget their various psychological burdens, which accounted for 68.2%. This is consistent with responses indicating that the need for social acceptance and belonging, especially among peers and classmates with prior drug experience, is a driving factor.

Moderate percentages reflect that some individuals in the sample cited the search for distinction, maturity, and the desire to prove responsibility as factors motivating drug use, estimated at 67.8%. The percentage for question 11, which indicated that relieving stress and anxiety contributes to student drug use, was 65%, which is the same percentage of respondents who indicated that drug use helps to fill the free time that students may experience, providing a solution when they find nothing else to do. At the same time, students may use drugs to relieve pressure and fatigue, represented by a percentage of 64.2%. Finally, the question about feelings of contempt and inferiority leading to drug use received a low response of 59.2%, while the question about poor academic performance contributing to drug use received an even lower percentage of 52.4%. However, both factors play a role in the propensity to use drugs. The table also shows, by averaging the results of the different questions, that the majority of respondents affirm that most of the reasons identified in this section, related to personal factors influencing students, contribute to their drug use, ranging from smoking to the use of stimulants or hallucinogens in the school environment. Although the percentages vary, these factors, individually or collectively, play a role in student drug use in the school setting.

Table 9 presents the results of the respondents' answers related to the second hypothesis: the family reasons that contribute to students' drug abuse within the school environment.

Question	Strongl	Agree	Neutr	Disagre	Strongl	Mea	Percenta	Question
Numbers and	y agree		al	е	У	n	ge	Rank
Reasons for Drug Abuse					Disagre			
					e			

	r	r	r		r	r		,
12_Neglect and indifference from family members	20	14	6	8	3	3.78	75.68	1
5_Lack of communicatio n within the family	21	11	8	6	5	3.72	74.50	2
2_Frequent family problems and conflicts between parents and siblings	19	17	4	3	8	3.70	74.11	3
3_Lack of attention from family members, especially parents	23	9	5	7	7	3.66	73.33	4
4_Harsh treatment from family members	19	13	6	7	6	3.62	72.54	5
6_Living in a broken family; parents are separated	19	10	9	6	7	3.54	70.98	6
10_Excessive indulgence; the family provides everything he	21	(F	11	0	2.41	(0.32	7
asks for	21	6	5	11	8	3.41	68.23	7

1_Presence of a role model for drug use among family members, especially parents and older siblings	15	13	7	8	8	3.37	67.45	8
8_Living with uncles due to family problems or inability of his family to care for him	14	14	2	11	10	3.21	64.31	9
9_Living with aunts due to family problems or inability of his family to care for him	11	17	6	6	11	3.21	64.31	10
7-One or both parents are deceased.	12	13	3	10	13	3.01	60.39	11
11_Deprivatio n and failure to provide educational needs	8	9	7	15	12	2.72 549 02	54.50	12

Table 9 illustrates the respondents' answers regarding the main family-related reasons that contribute to students' drug abuse within the school environment. The highest percentage was for question 12, which states that neglect and indifference from family members contribute to students' drug use, reaching 75.68%. The family is considered a safe environment where individuals can achieve stability; therefore, when neglect and indifference prevail, the individual's condition deteriorates. One of the main reasons why students enter the world of drug use is the neglect they experience from their families,

which leads them to seek solace in drug use with peers who provide the attention fulfilled by drugs.

Following this, the reason that highlights the lack of communication within the student's family is identified as one of the main factors contributing to drug use, with a percentage of 74.50%. Indifference leads to a lack of dialogue between the student and his/her family regarding various needs and concerns. The responses then decrease, with question 2 ranking third with 74.11%, indicating that frequent family problems and conflicts between parents or siblings are significant reasons for students' drug use at school. An emotionally charged family environment creates pressures that students seek to escape through drug use.

In the same context, the percentage for question 3, which states that a reason for students' drug abuse is lack of attention from family members, especially parents, was 73.33%. These family-related reasons seem to be interrelated, ranging from neglect to lack of communication to lack of interest. The reason related to the harsh treatment students receive from their family members, which contributes to drug use, was noted by 72.54%. The percentages then began to moderate in comparison to the previous responses. One of the identified reasons is that the student may be living in a broken family, such as when parents are separated, which may contribute to their drug use. The percentage of responses to this question was 70.98%. Question 7 received 68.23%, which indicates that excessive indulgence from the family by providing everything the student wants is a reason that leads them to drug use. Educators point out that indulgence and excessive satisfaction of needs, often including luxuries that can be postponed or not satisfied at all, can lead to a lack of responsibility in the individual. They do not appreciate the value of the services provided to them, which can lead to neglect and a lack of awareness of their actions. Often, their peers may take advantage of them to satisfy their own drug-related desires, all of which stem from the family's excessive indulgence.

In addition, the presence of a role model for drug use among family members, especially parents and older siblings, was noted in 67.45%. Adolescents tend to imitate discreetly, often unbeknownst to their parents, in order to assert their maturity and ability to engage in behaviors such as smoking or drug use, influenced by poor role models within the family.

Another reason that may lead students to use drugs is living with relatives, such as uncles or aunts, due to family problems or the inability of their family to care for them. Regardless of the conditions and care provided by these families, the student often does not feel a sense of belonging, which may expose them to drug use. The percentages of responses to these questions were equal at 64.31%.

In addition, 60.39% of respondents indicated that the loss of one or both parents to death could force the student to use drugs to forget their feelings of loss. Finally, the percentage

for the question regarding deprivation and failure to meet the student's academic needs that could contribute to drug use was 54.50%.

Overall, this section highlights that the student's family can be a significant factor leading to drug abuse within the school environment, whether through neglect, excessive attention, or various other reasons mentioned.

Table 10 presents the results of the respondents' answers regarding the third hypothesis: the environmental reasons related to the school that contribute to the students' drug abuse in the school environment.

Question	Strongly	Agree	Neutral	Disagree	Strongly	Mean	Percentage	Question
Numbers and	agree				Disagree			Rank
Reasons for								-
Drug Abuse								
Some peers	29	10	5	4	3	4.13	82.74	1
within the								
institution use								
drugs								
Imitating	30	8	5	5	3	4.11	82.35	2
friends to gain								
their trust and								
approval								
Ease of	20	17	7	4	3	3.92	78.43	3
obtaining								
drugs within								
the school								
Poor treatment								
from teachers								
within the								
classroom	21	12	8	8	2	3.82	76.47	4
Poor treatment								
from peers	17	17	8	6	3	3.76	75.29	5
Lack of								
opportunities								
to pursue								
hobbies within								
the school	21	12	8	3	7	3.72	74.50	6

Weakness and scarcity of recreational and educational activities in								
school clubs.	21	8	8	7	7	3.56	71.37	7
Poor treatment from administrators, especially the general supervisor and their assistants	18	11	8	8	6	3.52	70.58	8
Weak monitoring within the school allows students to smoke and use								
drugs	19	9	8	8	7	3.49	69.80	9
Intensive academic programs	13	9	14	7	8	3.23	64.70	10
The presence of a teacher who smokes within the classroom or institution	15	10	7	10	9	3.23	64.70	11
Comparison and differentiation between students by teachers	8	15	14	6	8	3.17	63.52	12
Weakness in methods,	17	4	7	11	12	3.05	61.17	13

		1	I	I	I	1	I	і I
means, and								
activities for								
raising								
awareness								
about the								
dangers of								
drug abuse								
within the								
institution.								
Lack of								
participation								
in awareness								
activities about								
the dangers of								
drugs within								
the school.	7	16	7	11	10	2.98	59.60	14
Absence of								
field visits to								
centers or								
organizations								
active in								
combating								
drug abuse	10	8	10	16	7	2.96	59.21	15
Existence of								
places within								
the institution								
that facilitate								
drug use	10	4	11	18	8	2.80	56.07	16

Table 10 summarizes the respondents' answers regarding the main school-related reasons that directly or indirectly contribute to students' drug use in the school environment. The highest percentage was for question 16, which emphasizes that the presence of places within educational institutions - such as other courtyards, corners, and even toilets - that facilitate drug use reached 82.74%. It may come as a surprise to observers that the school environment itself can contribute to student drug use by providing suitable places to engage in such deviant behaviors. According to the exploratory study, administrators and educational assistants confirmed that students use appropriate areas within the school to use drugs and smoke, particularly bathrooms, which provide ample opportunities for drug use whenever the opportunity arises.

In addition, the lack of supervision in schools, which allows students to smoke and use drugs, was noted in 82.35% of cases. The combination of available spaces and lack of supervision contributes significantly to drug use in schools.

Next, the percentage for question 1, which states that friends and classmates who use drugs within the institution play a role in the student's drug use, was 78.43%. As the saying goes, "a friend is a friend," especially in an environment where friendships are binding. Students often have to choose between conforming to their peers or standing out, with the majority choosing to imitate their group through peer pressure and seductive methods. Thus, peer groups are the most significant influence on drug use in the school setting.

The response to the question about the absence of field visits to centers or organizations active in the fight against drug use was 76.47%. In this context, educators such as Dr. Mustafa Saad, an international trainer and family counselor, emphasize that the more diverse the educational and pedagogical media, the more effective education will be. When educational institutions strive to achieve their educational goals through various means, they can minimize behaviors that harm the school environment, such as drug use. Field trips to organizations dedicated to the fight against drug abuse can increase students' awareness of this issue and help them avoid falling into its trap.

Finally, the percentage for the question regarding the influence of trying to imitate friends to gain their trust and approval, which contributes to students' drug use, was 75.29%.

Among the reasons contributing to students' drug use is the lack of participation in awareness activities about the dangers of drugs within the school, either due to their scarcity or absence, with a response rate of 74.50%. Another factor identified by some respondents is the intensive academic programs, with a response rate of 71.37%. This pressure from school assignments and the lack of recreational aspects lead students to desire the use of illicit substances to escape their academic burdens, resulting in their engagement in drug abuse.

Additionally, the absence of opportunities to pursue personal hobbies within the school was noted, with a response rate of 70.58%. The weak and limited recreational and educational activities in school clubs also contribute to drug use, with a response rate of 69.80%. The exploratory study indicated that there is a deficiency in recreational and educational activities within school clubs, leaving students without a healthy outlet for their hobbies, which may lead them to consider using drugs.

Another school-related reason is the presence of a teacher who smokes within the classroom or institution, and the tendency to compare and differentiate between students. The response rates for these two questions were equal at 64.70%. Such a teacher may indirectly influence students' drug use, as they observe their role model **240 | Djamila Slimani** Adolescent Students And Drug Use Within The School Environment: Causes And Motivations An Exploratory Field Study On A Sample Of Students From Khaldi Tahar And Bilal Ak Amellal Secondary Schools In The Municipality Of Tamenghest

smoking, which normalizes the behavior and makes imitation seem acceptable. Despite strict school regulations, these practices persist and contribute to the recurrence of drug use among students .

The ease of obtaining drugs at school was noted, with a response rate of 63.52%. Each time the authorities become aware of different methods of promoting drugs in schools - especially through school supplies - it becomes easier for students to access drugs in simpler forms, leading them to seek out more complex types. Some respondents indicated that poor treatment by administrators, especially the principal and his or her assistants, contributes to their initiation into drug use, even with the simplest substances such as stimulants, with a response rate of 61.17%.

In addition, poor treatment by peers can also lead to drug use, with a response rate of 59.60%. Many students feel pressured to defend themselves and assert their identities among their peers, especially when they face ridicule or teasing. The lowest response rate was for the question about the weakness of methods and activities to raise awareness about the dangers of drug use within the institution, with a response rate of 59.21%. Finally, the response rate to the question about poor treatment by teachers contributing to thoughts of drug use was 56.07%.

Overall, educational institutions can contribute in a certain way to the use of drugs by students in an environment that should ideally promote education and positive behaviors, potentially becoming a setting for the spread of different types of drug use.

General conclusion:

This exploratory study on the reasons for drug abuse among secondary school students identified a number of factors that varied between personal reasons related to the student, family related factors and those related to the school environment. These can be summarized as follows:

The main personal reasons related to the student include

- The pursuit of pleasure and feelings of happiness.
- Weak personality and lack of awareness and understanding of their actions.
- Weak faith-based deterrents.
- Curiosity, desire to imitate and experiment.
- Filling of free time.
- Relief from anxiety and tension.
- The desire to meet peer group expectations and the need to belong.

The main family-related reasons are:

- Neglect and indifference from family members.
- Lack of communication within the student's family.
- Frequent family problems and conflicts between parents or siblings.
- Lack of attention from family members, especially parents.
- Harsh treatment by family members.
- Living in a dysfunctional family, such as separated parents.
- Excessive indulgence from family.

- The presence of a role model for drug use among family members, especially parents and older siblings.

- Loss of one or both parents through death.

The main factors related to the school environment include:

- The existence of places within the educational institution that facilitate drug use.
- Weak supervision within the school.
- The influence of friends and peers who use drugs.
- Lack of field trips to centers or organizations active in the fight against drug abuse.

- Insufficient participation of students in activities to raise awareness of the dangers of drugs.

- Lack of opportunities for students to pursue their personal hobbies within the school.
- Weakness and lack of recreational and educational activities in school clubs.
- Easy access to drugs within the school.
- Poor treatment of students by their peers.
- Weakness of methods, means and activities to raise awareness about the dangers of drug abuse within the educational institution.

Conclusion:

In general, the topic of drug abuse within the school environment encompasses a range of causes and motivations that transform schools from being safe havens for education and various activities—through which students can adapt to society—into environments that may contribute to the spread of negative behaviors within the surrounding community. Schools can become breeding grounds for various forms of drug use. Despite the aforementioned reasons discussed in this paper, the responsibility to combat these issues lies primarily with educational institutions themselves. This requires the collaborative **242 | Djamila Slimani** Adolescent Students And Drug Use Within The School Environment: Causes And Motivations An Exploratory Field Study On A Sample Of Students From Khaldi Tahar And Bilal Ak Amellal Secondary Schools In The Municipality Of Tamenghest

efforts of various social institutions, which play a supportive role in activating and implementing preventive measures to protect schools, enabling them to fulfill their educational mission effectively and as expected by society.

Recommendations and Suggestions:

Based on the findings of this study, we can propose several therapeutic and preventive measures that could help alleviate the problem of drug abuse among students within the school environment:

1. Strengthening the psychological aspects: Strengthen the psychological relationship between students and their self-image as well as their school environment.

2. Activation of Leisure and Sports Activities: Integrate various recreational and sports activities into daily programs rather than limiting them to specific times.

3. Establish anti-drug clubs: Establish anti-drug clubs in schools with the support of active civil society organizations, enabling educational institutions to work effectively with the community.

4. Implementation of Awareness Programs: Develop and apply awareness programs on the dangers of drug use, involving all educational stakeholders and ensuring strict and collective implementation.

5. Coordinate prevention and treatment efforts: Promote collaborative efforts to prevent and treat identified cases of drug use within educational institutions.

6. Understand institution-specific causes: Recognize the unique reasons associated with each institution in order to find root solutions for preventing recurring drug use behaviors while benefiting from the successful experiences of other institutions in their anti-drug efforts.

References:

Books and Articles:

1. Abdel Latif Rashad: The Social Effects of Drug Abuse, Egyptian Modern Office, Cairo, 1992.

2. Abdel Salam Zahran: Developmental Psychology, Dar Al-Ma'arif, Egypt, 1986.

3. Abdel Rahman Al-Eisawi: The Psychology of the Contemporary Muslim Adolescent, Dar Al-Watha'iq, Kuwait, 1987.

4. Said Ziyoush: The Impact of Drugs on Social Relationships among Adolescents, University of Hassiba Ben Bouali, Chlef.

5. Haya Mohammed Massad Al-Ittawi:*I Learned from Adolescents, King Fahd National Library, 2018.

6. Saleh bin Rami Al-Rami: The Family and Its Role in Preventing Drug Abuse, Scientific Symposium, The Impact of Drugs on Social Cohesion, University of Riyadh, 2004.

7. Hassan Miftah: A Sociological Reading of the Phenomenon of Addiction to Drugs and Psychoactive Substances, University of Algiers 2.

8. Maestrachi Nicola: Translated by Zeina Maghrebil: Drugs, King Fahd National Library, Saudi Arabia, 2014.

9. Mohammed Tawfiq Al-Junaidi: Addiction to Drugs, King Fahd National Library, Saudi Arabia, 2020.

10. Samara Aziz, Al-Nimer Issam, Al-Hassan Hicham: Psychology of Childhood, Dar Al-Fikr, Amman, Jordan, 1999.

11. Abdullah Rashid Al-Azmi: The Problem of Drug Abuse and the Role of Educational Institutions in Preventing Its Risks, 1st edition, Al-Muhamid Printing Company, Kuwait, 2006.

Websites:

12. Mohammed Al-Arabi Jayli: *Causes of Drug Abuse in the School Environment*, 2016. Retrieved from

[www.almothaquf.com/qadaya2016/904008.htm](http://www.almothaquf.com/qaday a2016/904008.htm)

13. https://ontology.birzeit.edu

14. http://www.uobabylon.edu

15. https://www.almaany.com