

The Dangers of Digital Drugs on Society: A Sociological Reading of the Phenomenon

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Received:18./11/2025

Accepted: 02./01/2026

Published:26./01/2026

Abstract:

This article examines a newly emerging social problem resulting from digital and technological development. It has become one of the most recent forms of social deviance. At first glance, one might think that the discussion concerns traditional narcotics; however, the issue has evolved into something more serious that threatens the safety of society, particularly among teenagers and youth.

This danger arises from the use of websites, which unexpectedly turn users into addicts to certain sound frequencies. The psychological and social effects of these frequencies may even surpass those of conventional drugs. The challenge lies in the difficulty of materially proving their existence as narcotics, given the changing patterns of consumption and addiction.

Furthermore, confronting this phenomenon legally remains problematic, as there are no explicit legal provisions criminalizing the use of digital drugs as an offense causing harm to individuals and society.

Keywords: digital drugs ; society ; digital addiction .

1. INTRODUCTION

The tremendous technological and digital development that has impacted all aspects of society has played an undeniably positive role in advancing intellectual, scientific, and service-oriented dimensions. Yet, the negative

side of digitalization has also emerged through its misuse in committing cybercrimes.

One manifestation of this misuse is what is known as the promotion and consumption of audio-based narcotics, commonly referred to as “**digital drugs**”. Most young people today use music for relaxation, study sessions, or completing assignments. However, a segment of them use it for self-therapy without medical supervision, which may turn into a form of digital addiction.

Listening to loud or stimulating music can induce a physiological numbness similar to the chemical effects of traditional drugs. These sound files often contain mono or binaural tones that cause the brain to enter a trance-like state of sensory dissociation, mimicking the euphoric impact of psychoactive substances.

2. Defining the Key Concepts of the Article :

2.1 The Concept of Digital Drugs :

Digital drugs are a type of narcotic, yet fundamentally different in method of consumption. This form of “drug” infiltrates the body through the ears, as it consists of an audio file or tone listened to through headphones in both ears. The process involves transmitting a specific frequency into the right ear and a lower frequency into the left ear; the brain then harmonizes the two frequencies (Al-Khalidy, 2019, p. 261).

Brigitte Forgo, an American expert in neuropsychological effects, elaborates on this mechanism by explaining that digital drugs use a technique relying on introducing two similar sounds at different frequencies into the ears. This frequency disparity pushes the brain to produce slow waves (such as alpha waves associated with relaxation) and fast waves (such as beta waves linked to alertness and concentration). Users often report feelings of detachment from reality, hallucinations, and a loss of physical, psychological, and mental balance (Jaloul & Farhat, 2020, p. 69).

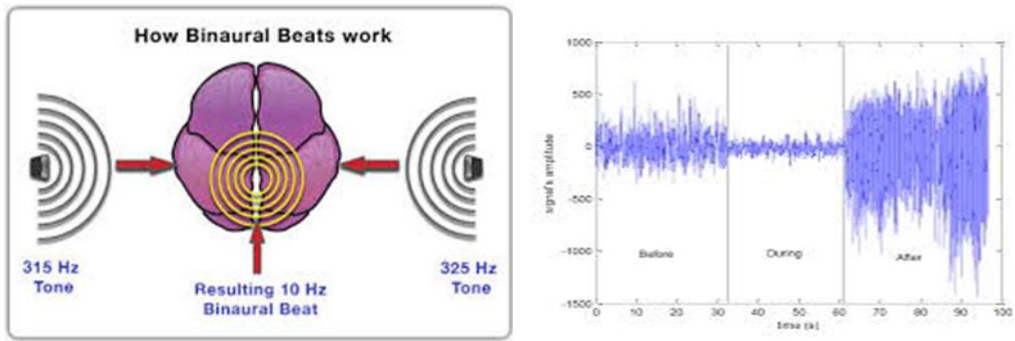


Figure 1. Mechanism of digital drug functioning.

2.1.1 Physical Definition of Digital Drugs :

Digital drugs are MP3 audio files encoded in a special format developed by commercial websites using open-source technology. They are marketed under the label “digital drugs”. Each file typically ranges from 30 to 40 minutes in length and can be downloaded and played through a dedicated application for iOS and Android devices. They can also be accessed through personal computers.

According to Al-Najem (2014), these files are described by their developers as capable of simulating cognitive states associated with brainwave patterns known as alpha, beta, theta, and delta waves, using what are referred to as binaural beats. (Al-Najem.S.2014).

Digital drugs consist of audio files with mono or binaural tones that influence the brain to reach a state of numbness similar to the effects of real drugs or at least as their promoters claim. These files are designed to simulate hallucinations and the euphoric sensations associated with drug consumption, by influencing the subconscious mind through non-audible sound waves known as “white noise,” overlaid with simple rhythmic patterns to mask their disturbing frequencies (Abou Douh, 2016, p. 7).

2.2 The Concept of Addiction :

Addiction is described as an “illusory escape from reality”, a condition that arises from an individual’s inability to endure the reality before them, prompting the person to seek to dissolve this reality through

addictive behavior (Nabulsi, 2004, p. 137).

The World Health Organization (1973) defines addiction as a psychological; and at times physiological; state resulting from the interaction between an organism and a substance. It is characterized by behavioral responses that always include a strong desire to engage in the activity or consume the substance either continuously or periodically, to experience its psychological effects or to avoid the discomfort resulting from its absence. A person may also become addicted to more than one substance (Abdel-Moati, 2004, p. 146).

2.3 Digital Addiction :

The first to discuss digital addiction or internet addiction was the American psychiatrist Ivan Goldberg in 1995. After coining the concept, reactions were divided between supporters and critics.

Shapira, Krueger, and Goldsmith define digital addiction as the individual's inability to control their internet use, which may lead to psychological disturbances (Miqdadi, 2008, p. 16).

2.4 Society ;

Society is defined as a human group living within a specific territory for a certain period of time, during which stable relationships develop, forming a social system through which individuals achieve collective purposes (Khaled Hamed, 2008, p. 14).

2.5 Audio Files :

Audio files represent the digital transformation of composed tones and sounds from their traditional, instrument-based origins into electronic material readable by automated computer systems through binary encoding (bits). This conversion enables the transfer and distribution of these files across the global information network (Khalid Mohammed Abu Al Najah Shaaban, n.d.).

2.5.1 Binaural Beats (Ear Tapping) Technique :

Binaural beats refer to a set of sounds and tones believed to induce certain brain responses that may alter or suppress consciousness in a manner similar to traditional drug consumption (Khaled Kazem Abou Douh, 2016, p. 5).

3. Origin of Digital Drugs :

The technique of ear tapping was first introduced by the German physicist Heinrich Wilhelm Dove in 1893. Initially, it was used to treat depression, based on the idea that listening to this type of music increases dopamine secretion by stimulating the body's pituitary gland (Nour Al-Maliki, 2022, p. 200).

In the 1970s, the binaural beats theory was applied for the first time to treat certain patients suffering from depression, with the goal of stimulating the secretion of happiness-inducing chemicals such as dopamine. In 1973, Gerald Oster published his article "Auditory Beats in the Brain", explaining that the neurological effect results from an acoustic imbalance between what the right ear and the left ear perceive. For example, if the right ear receives a frequency of 200 MHz and the left receives 230 MHz, the brain detects a 30 MHz auditory discrepancy, triggering neural vibrations that may lead to tremors, relaxation, or other symptoms depending on the individual and the frequency range involved (Al-Saadi, 2019, p. 223).

4 The Difference Between Digital Drugs and Traditional Drugs & Methods of Consumption :

4.1 The Difference Between Digital Drugs and Traditional Drugs :

Digital drugs differ significantly from traditional narcotics, both in substance and effect. Traditional drugs affect all organs of the body, whereas digital drugs have not yet been scientifically proven to produce comparable physiological effects. However, they are known to induce drowsiness, mild euphoria, and temporary psychological relief.

Traditional drugs cause genuine physiological anesthesia, whereas digital drugs remain primarily psychological and auditory stimuli rather than physical chemical agents.

Excessive exposure to digital drugs can lead to the destruction of neural

and brain cells, in addition to negative consequences related to concentration, cognition, auditory processing, and overall neurological function.

Another critical concern is that digital drugs may act as a gateway for children, adolescents, and youth, potentially facilitating later consumption of traditional drugs. (Shetwan .S, 2021 , p.43)

4.2 Methods of Consumption :

Consumption of digital drugs is not random; rather, it follows specific rituals and practices. Producers and promoters of this form of digital narcotic have developed cultural consumption practices, guiding users step-by-step during purchase. The files usually come with detailed manuals outlining usage rituals and instructions necessary for achieving the expected euphoric effect (Khaled Kazem Abou Douh, 2016, p. 14).

Digital drugs are available on specialized websites at varying prices and doses, depending on the type of sensation or “experience” the user seeks. The digital doses simulate experiences comparable to consuming narcotics in the physical world. Many sites also offer free audio samples, after which users are encouraged to purchase full doses (Muhammed Habash, 2014).

4.3 Types and Classifications of Digital Drugs :

Digital drugs are classified similarly to traditional narcotics and often carry the same names, such as “marijuana” or “cocaine”. However, digital drugs have also developed more extreme titles such as “Gates of Hell” or “Heavenly Pleasure”.

Some specialists categorize digital drugs into two primary types :

4.3.1 Crystal Myth (The Crystal Legend) :

A type of calm, soothing tone that induces relaxation and mild euphoria through triggering painful memories or immersive daydreaming. This type generates a pleasurable sense of emotional drift and internal calm.

4.3.2 Heavy Metal (High Wave) :

This type consists of intense, loud rhythmic tones that stimulate every cell of the body and mind, significantly heightening overall physiological arousal. Specialized psychiatric hospitals have categorized other types of audio tracks

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designed to simulate the effects of psychoactive substances. These include :

- **Alcohol Waves:** Induce relaxation similar to the effect of alcohol consumption.
 - **Opium Waves:** Trigger sensations of euphoria, happiness, and drowsiness.
 - **Marijuana Waves:** Create calming physiological effects similar to smoking marijuana, along with sensations of dissociation and serenity.
 - **Entertainment Waves:** Provide enjoyable, uplifting sensations, producing feelings of satisfaction, joy, and a sense of empowerment and contentment.
- (Yamina Belghoul, 2022, p. 89 p .90)

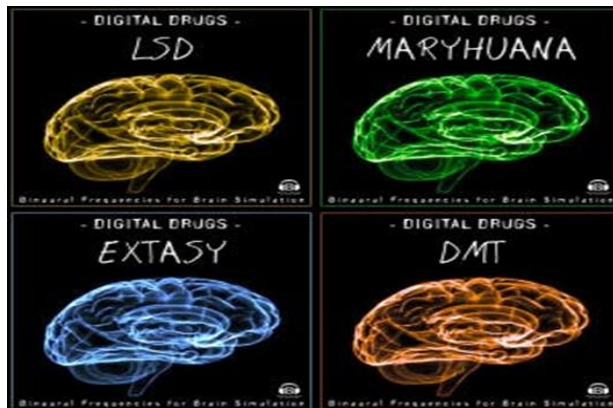


Figure 2: Classification of digital drugs and their neurological effects.

5. Factors Leading to Digital Drug Addiction :

Digital drug addiction emerges from a complex set of motives and socio-psychological conditions. The following factors are considered among the most influential:

• Globalization of Rights and Access to Information :

The digital space is increasingly framed as a fourth-generation human right, reinforcing unrestricted access to information networks. While this promotes

openness, it also inadvertently allows the global spread of digital drug markets under the justification of protecting freedoms.

Restricting access is often interpreted as an infringement on public liberties. This creates challenges for governments attempting to block harmful content, including digital drugs, pornography, extremist propaganda, and other risks. Effective protection therefore requires preventive societal immunity, particularly for youth.

- **Lack of Religious and Moral Guidance :**

Religious and moral principles strongly influence individual behavior. A morally grounded person typically avoids behaviors that damage the mind or senses. For devout individuals, the distinction between righteousness and wrongdoing is clear and non-negotiable. This moral clarity often prevents them from consuming digital drugs. (Yassin Jubairi, 2015, p. 581)

- **Associating with Bad Company :**

Peer influence plays a decisive role in shaping youth behavior. Some adolescents purposefully encourage their friends to try digital drugs, measuring their own social success by the number of peers they influence. Psychological and sociological studies confirm that curiosity and peer pressure are major motivators for initial experimentation, often framed as a shared emotional experience among friends. (Yassin Jubairi, 2015, p. 583)

- **Use of Digital Drugs for Entertainment :**

Recreational use of digital drugs has become part of Western youth culture. Despite the illegality of many substances, societal norms sometimes normalize the practice, creating a disconnect between legal frameworks and cultural acceptance (Al-Hajjar, 1998, p. 182).

- **Feeling of Emptiness and Lack of Purpose :**

Many adolescents who suffer from boredom, absence of meaningful activity, or a lack of time management become vulnerable to addiction. This psychological void creates fertile ground for experimenting with substances, including digital drugs (Yassin Jubairi, 2015, p. 583).

- **Travel and Exposure to Foreign Environments :**

Travel exposes youth to new cultures, lifestyles, and recreational behaviors. In unsupervised contexts, digital drugs may be more accessible, especially in private gatherings or entertainment venues.

- **Availability of Excessive Money :**

Financial abundance may lead to reckless spending on entertainment and experimental experiences. Easy financial access fuels curiosity-driven consumption of digital drugs (Yassin Jubairi, 2015, p. 584).

- **Personal and Family Social Problems :**

Family instability; marital discord, divorce, emotional neglect, or constant conflict; encourages youth to escape into alternative digital worlds. In such cases, digital drugs become a coping mechanism to fill emotional voids.

- **Desire to Imitate Others :**

In an attempt to assert maturity or masculinity, some youth mimic adult behaviors or Westernized lifestyles, including experimenting with digital drugs.

- **Spread of False Ideas About Digital Drugs :**

Misconceptions play a major role. Some believe that digital drugs bring joy or pleasure, while evidence shows they often produce long-term distress, social withdrawal, and poor academic or professional functioning. Promoters of digital drugs exploit these misconceptions to attract new users. (Yassin Jubairi, 2015, p. 585)

- **Emotional Deprivation :**

Individuals deprived of emotional support or affection from family often seek refuge online. Digital drugs offer an escape from reality when emotional containment is missing.

- **Ease of Access to Online Promotion Sites :**

The digital world is vast and largely unregulated. Cybercrimes such as privacy invasion and system hacking are hard to detect or prove, creating a false sense of safety.

Weak enforcement mechanisms and gaps in digital legislation make it difficult for authorities to block harmful sites before damage occurs (Yassin Jubairi, 2015, p. 586).

- **Family Factors :**

Family disintegration, parental conflict, and frequent household tensions push children and adolescents to escape into alternative digital environments, including consumption of digital drugs.

6. The Risks Resulting from Digital Drug Addiction on Society :

Recent studies indicate that digital drugs pose significant dangers that extend across all dimensions of the user's life; psychological, social, economic, functional, and sensory. Accordingly, raising awareness and implementing preventive measures is crucial. The main risks are summarized as follows:

6.1 Psychological Risks :

- **Isolation and the Pursuit of False Happiness :**

Digital drugs draw users away from the real world, offering an illusory sense of happiness. This often leads to the neglect of family and social relationships and increases feelings of loneliness and withdrawal.

- **Laziness and Lethargy :**

Consumption of digital drugs produces lethargy and inactivity, diminishing the user's motivation to exert any effort. This reduction in drive negatively affects productivity, academic performance, and work efficiency.

- **Repetitive Behavior and Compulsion :**

The user seeks to repeatedly reproduce the same euphoric sensation generated by the sound frequencies, leading to compulsive use and eventually addiction.

- **Mental Distraction and Loss of Focus :**

Digital drugs disrupt concentration and cognitive functioning. Users struggle to focus on tasks other than listening to the sounds, resulting in poor academic and professional achievement.

6.2 Social Risks :

• Ease of Access :

Digital drugs are easily accessible on the internet. This makes them available even to children and adolescents, increasing exposure among vulnerable groups.

• Low Cost :

Compared to traditional narcotics, digital drugs are inexpensive, making them more attractive and affordable.

• Lack of Visible Symptoms :

Unlike traditional drugs, digital drug users do not exhibit physiological symptoms such as weight loss, red eyes, or tremors. This invisibility complicates detection, diagnosis, and intervention.

• Accessibility Across All Age Groups :

The ease of online availability means that digital drugs are not restricted by age, adding to their danger.

6.3 Economic Risks :

• Decline in Productivity :

Digital addiction undermines motivation and reduces performance at work or school. This loss of productivity translates into economic loss.

• Cost of Addiction :

Although initially inexpensive, addiction leads users to purchase more files and subscriptions, resulting in growing financial burdens.

6.4 Functional Risks :

Weakening of Short-Term Memory :

Digital drugs impair short-term memory, making it difficult for users to retain and recall information.

• Depression :

Long-term exposure may lead to depression, feelings of hopelessness, and emotional instability.

6.5 Sensory Risks :

- **Damage to the Auditory System :**

To achieve the desired narcotic effect, users often raise the volume to dangerous levels, leading to hearing impairments and auditory fatigue. (Saif Diaa Dair , 2024 p.p 11-12)

Digital drugs are often considered more dangerous than traditional drugs for several reasons:

- They are easy to obtain via the internet.
- Their low cost makes them widely accessible.
- Parents struggle to detect them because there are no clear physical symptoms.
- They can be acquired without age restrictions.
- There is a lack of legislation enforcing penalties for their use.(Jubairi Y, 2015, p. 598)

7. Strategies for Combating Digital Drugs :

To confront this emerging digital threat, effective strategies must be put in place. The following preventive and strategic measures are recommended:

- **Monitoring and Blocking Harmful Websites :**

It is essential to detect and block websites and audio clips that promote digital drugs before they spread. Government agencies should coordinate closely to identify and prosecute the promoters of such content.

- **Developing Innovative Awareness Applications :**

Specialized psychological counseling committees should develop youth-oriented awareness applications. These should be targeted at schools and universities in coordination with their administrations.

- **Strengthening Family Awareness :**

Awareness must be spread within families through cooperation between school counselors, educational institutions, and parents. Families should be trained on methods to supervise and protect their children effectively.

- **Avoiding Computers in Children's Bedrooms :**

Computers should not be placed in private children's rooms. Instead, they should be located in open areas of the home to ensure parents can monitor their children's online activities.

- **Enacting Strict Legislation :**

There is a pressing need to establish strict laws criminalizing the use of digital drugs, given their growing prevalence and harmful effects. (Belghoul, 2022, p. 94)

8. CONCLUSION

Awareness is more important than treatment. Under the guise of freedom, happiness, enjoyment, and the pursuit of life's pleasures, individuals become prisoners of illusory euphoria.

Based on the analysis presented in this article, it becomes clear that digital drugs are a direct outcome of the negative and unregulated use of technology. This reality compels us to reconsider and update legal frameworks in alignment with the rapid technological advancements of the virtual world.

Proactive preventive measures must be enacted to address the dangers of this phenomenon and mitigate its impact. Additionally, academic and scientific engagement is essential; particularly by sociologists, psychologists, and medical specialists; to identify the underlying causes and consequences of this form of addiction and assess its physical, psychological, and social effects.

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