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The characterisation problem of digital drug in the Iraqi criminal system

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Basing on the current laws in Iraq's criminal legislative system, this research addresses the issue of identifying a legal framework for characterising digital drugs and thereby establishing criminal culpability. We have tried to urge the Iraqi federal and Kurdistan regional legislators to synchronise the repercussions of the emerging cybercrime and predicate the future consequences of such crimes, based on the principle of protecting the security, stability, and safety of society by enacting modern laws to confront cybercrime, and not impunity for the perpetrators. Therefore, in order to understand the topics of the research, we divided the research into two sections: in the first topic, we studied what digital drugs are (the definition) by defining the mechanism of action of these drugs, in addition to studying the scientific and legal challenges of confronting digital drugs, while in the second topic, we studied the legal mechanism for characterising digital drugs through two approaches: in the first of them, we tried to characterise digital drugs as conventional drugs, while in the second approach, we tried to characterise this drug as a digital fraud. Hence, considering the digitization of drugs, aspects of their organisation and use are embodied in or derived from interconnected computerised systems and databases. This research examines how this development has changed the provision of legislative protection and thus the organisation of regulatory and professional structures as it reshapes the material character of drugs themselves. It draws on the concept of assemblage to provide a theory-based analysis that explores the ontological status of digital drugs, including how they embody utility and value. These are drugs that rely on and are largely composed of multiple digital representations and connections, the use and effectiveness of which are powerfully mediated through digital means. Whereas we still oppose the idea of digital drugs in favour of their non-digital or pre-digital counterparts, or the analogue version.

Keywords: digital drugs, conventional drugs, binaural beats, hallucinogen, delta waves, electroencephalogram, digital neural network, binaural reproduction.

1. Introduction

After the emergence of the digital neural network in its virtual form, embodied in the interactive processes of the users of the Internet socially, culturally, and economically, another type of interaction emerged between the users of this open network, represented by the deliberation of a special type of musical tone with infra-audio frequencies for the human ear (Binaural Beats). It affects the electrical waves of the brain when listening to these tones, and therefore, these waves generate a disturbance in the brain, causing a state of virtual anaesthesia that mimics in its effect on the brain conventional drugs such as opium, heroin, and other narcotic substances.

Therefore, as a proactive step based on the principles of predictive justice, we tried to develop an integrated criminal strategy in order to reach a legislative solution to the problem of characterising the digital drugs through two approaches. The first approach is to characterise them as conventional drugs within the legislative framework of the two laws: the federal law in Iraq for Narcotic Drugs and Psychotropic Substances No. 50 of 2017[1] and the Kurdistan Regional Law for Combating Narcotic Drugs and Psychotropic Substances No. 1 of 2020[2]. The second approach is to characterise them as digital fraud crimes within the legislative framework of Iraqi Penal Code No. 111 of 1969[3] and Federal Law No. 31 of 2013[4], which ratify the Arab Convention on Combating Information Technology Crimes.

Basing on the two legal principles (the principle of criminal legitimacy and the principle of criminal territoriality), and based on the Iraqi national laws (federal and regional), related to the subject of narcotics and psychotropic substances, and the law ratifying the Arab Convention on Combating Information Technology Crimes No. 31 of 2013, and because of the failure of the Iraqi Council of Representatives to complete the second and third readings for the Combating Digital Crime Law, after the first reading of the aforementioned law took place on July 27, 2011, federal Iraq and the Kurdistan Region remained in an empty legislative space to combat digital crimes, and thus the characterisation of digital drugs (the subject of our research) became difficult for the Iraqi criminal judge.

Therefore, we tried to find a legal mechanism for the problem of digital drugs in light of the existing criminal laws in the Iraqi criminal legislative space.

The importance of the research lies in the perspective of legislative insufficiency in the criminal system to criminalise digital drugs in two aspects: *the theoretical aspect* — the research is considered an analytical legal study in order to highlight the problem of the legal characterisation of digital drugs; *the practical aspect* — is an attempt to highlight the criminal legislative capacity of federal and regional laws (Kurdistan Region) to characterise digital drugs.

The analytical inductive approach was relied upon in our research in an attempt to find a legal mechanism for characterising digital drugs based on the criminal legislative reality currently available in the Iraqi criminal judicial system.

2. Basic research

2.1. The nature of digital drugs

In order to deal with the phenomenon of digital drugs as a social phenomenon developed in the virtual space through the open Internet network to its users, the terminological concept of digital drugs must be clarified, and this is what we will address in the first requirement, and in the second requirement, we will discuss the mechanism of action of digital drugs.

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[1] Narcotic Drugs and Psychotropic Substances Law No. 50 of 2017. Accessed March 18, 2025. https://www.moj.gov.iq/upload/pdf/4446.pdf. (In Arabic)

[2] Narcotics and Psychotropic Substances Control Law No. 1 of 2020 in the Kurdistan Region — Iraq. Accessed May 28, 2024. https://www.parliament.krd/media/14221/pkyj1-2020pdf2255-1.pdf. (In Kurdish)

[3] Iraq: Penal Code. Accessed March 19, 2025. https://www.refworld.org/legal/legislation/natlegbod/1969/en/103522.

[4] Law No. 31 of 2013 ratifying the Arab Convention to Combat Crimes of Information Technology. Accessed March 19, 2025. https://natlex.ilo.org/dyn/natlex2/r/natlex/fe/details?p3_isn=96895.

2.2. The definition of digital drugs

After human life has been digitised by combining the physical and digital (virtual) dimensions of things, and thus the entry of Artificial Intelligence (AI) by simulating human intelligence in the field of interactive operations between users of the open Internet, one of the interactions of this simulation is the digitisation of the narcotic substance, transforming it from its conventional physical form (solid, liquid, or gaseous) to its new digital (virtual) form, packed in digital containers (electronic files) as a narcotic dose, simulating in its effect the use of conventional drugs. Therefore, *Digital Drugs*: they are stereophonic audio files, which were produced by audio programmers (musical tone specialists) in order to simulate the state of euphoria accompanying when using conventional drugs (Aldridge, Rebecca 2016), and thus attempting to move the listener (the digital user) from a state of consciousness to an unconscious state associated with a loss of psychological and physical balance, all of this would happen due to the programmed effect of these musical (sound) infra-audio (audio below a frequency of 20 Hz) tones of the human ear, called White Noise, after these tones were combined with a group of tones with simple rhythms in order not to feel the disturbing effect of these sub-tones audio through the Binaural Beats technology.

Therefore, drugs in general, from a legal perspective, cannot be defined in a comprehensive manner, mainly due to the diversity of their sources[5]. Traditionally, there are three sources: 1) natural (vegetative) source, such as hashish extracted from the hemp flower (cannabin); 2) synthetic (chemical) source, that is, materials made entirely from chemical substances and compounds, such as many sedatives, stimulants, and hallucinogens; 3) semi-synthetic source, that is, the materials resulting from a chemical reaction between the first source and the second source, such as the process of extracting heroin (semi-synthetic) from natural morphine.

Similar to the traditional classification of drugs, the manufacturers of digital drugs simulate the names of the frequencies that produce each type, such as cocaine, methamphetamine, known as crystal meth, and many others. They claim that some of them produce hallucinations in the user, others a relaxation, others a concentration and so on, depending on the degree of frequency (resource). Thus, digital drugs, despite the unresolved medical controversy so far regarding the possibility of adding them to the list of drugs, are based on the opinion that they are just sound effects, that is, audio recordings (files) (Müller, Schumann 2011) that dealt in the digital environment (virtual) via the open Internet, camouflaging the recipient of these audio files as drugs (digital anaesthetic doses), and that is what we would address in the framework of our research (the second topic, the second requirement), as an approach for characterizing digital drugs as an electronic fraud crime (Aldridge, Rebecca 2017).

In this context, the United Nations General Assembly stated in its Resolution A/RES/55/65 from the year 2000 (Recognizing that the use of the Internet poses new opportunities and challenges to international cooperation in countering drug abuse and illicit production and trafficking, and recognizing also the need for increased cooperation among States and the exchange of information, including with reference to national

[5] "Drug-Related Deaths in Scotland in 2018". *National Records of Scotland.* 2019. Accessed March 18, 2025. https://webarchive.nrscotland.gov.uk/20210316220901/https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/drug-related-deaths-in-scotland/2018.

experiences, on how to counter the promotion of drug abuse and illicit drug trafficking through this instrument and on ways to use the Internet for information concerning drug demand reduction)[6], and later the United Nations Medical Committee confirmed that digital drugs (the binaural beats method) lead to a state of mental wandering and their repeated use leads to the destruction of brain cells. And the process (binaural beats) was defined by the Arab Organization for Information Communication: They are sound vibrations whose waves range from cloudy beta and theta waves to delta waves. When you listen to them over a long period of time, they cause various feelings such as drowsiness, extreme alertness, dizziness, sluggishness, epilepsy, discomfort and sluggishness of mind. The consultant of the United Nations Medical Committee, neurologist Dr. Raji Al-Omda, also believes that these vibrations and sound waves at the level of brain electricity lead to a bad effect on the user, as they not only make the receiver happy, but also cause the so-called mental wandering, which is one of the most dangerous moments one can experience. For the brain, it leads to a disconnection from reality and a sharp drop in concentration. Al-Omda warns that this change in the electrical wave differences in the brain and their repetition, in addition to the moments of distraction, lead to seizures in the person.

On a judicial level (as a precautionary measure), we recall the request of the Lebanese Minister of Justice, Major General Ashraf Rifi, to the Cassation Prosecutor, Judge Samir Hammoud, to take the necessary legal measures to combat the phenomenon of digital drugs and block websites that promote this type of drugs, as they pose a danger to Lebanese youth and threaten social security for all Lebanese. Although this precautionary measure is not strictly in line with (Lebanese) Law No. 673 of March 16, 1998 on narcotics, psychotropic substances and precursors[7], as the law does not define digital drugs as substances that affect the mind, the first article of this law states (Anything related to narcotics in the broad sense, psychotropic substances and precursors is subject to the provisions of this law). Saudi Arabia is also considered the first country in our regional setting to counter the spread of this phenomenon by mandating the National Committee for Drug Control, the General Directorate for Drug Control and the Communications Authority to take the necessary legal measures to prevent users (recipient browsers) from accessing the websites it advertises. The deputy director of the Sharjah Academy of Police Sciences, Dr. Sarhan Al-Muaini, also called for treating the phenomenon of binaural beats like hallucinogenic pills or cannabis, although it has not been scientifically proven that this phenomenon is addictive.

2.3. The mechanism of action of digital drugs

It is obvious that the human being by nature has been affected by auditory waves since ancient times, starting with his heartbeat and the acoustic waves emanating from the environment in which he lives. Sub-cognitively and sometimes in order to reach a state of ecstasy or hallucinations, such as the rituals performed by the American Indians within the so-called rain dance and the Zar dance among the ancient Arabs, which are used for

[6] United Nations Office on Drugs and Crime report, Executive Summary Policy Implication, World Drug Report, 2021. Accessed March 18, 2025. https://www.unodc.org/res/wdr2021/field/WDR21_Booklet_1.pdf.

[7] Law No. 673, issued on March 16, 1998, related to narcotic drugs, psychotropic substances and precursors. Accessed March 18, 2025. https://www.moph.gov.lb/en/Pages/3/4771/narcotics-.

rehabilitative purposes in order to treat cases of psychological disorder by performing unconscious rhythmic dances, and the popular Liwa dance of African origin in many countries of the Persian Gulf, whose musical rhythms change the mood of its audience, coupled with show dances (Aldridge, Décary-Hétu 2014; Denton, O'Malley 1999).

In this regard, the Pharaonic physician Imhotep (2600–2655 BC) was considered the first to initiate the use of musical frequencies in his medical institute for therapeutic purposes by hearing patients sound frequencies affecting their brains and thus anaesthetising them psychologically and physically in order to reach a state of psychological relaxation, or anaesthesia (according to the type and the range of the Braine Wave frequencies) as a sedative for physical pain resulting from the body secreting secretions after they have been stimulated by the brain under the influence of these auditory frequencies, all by stimulating the vital glands of the patient in order to secrete antibiotics sedative, after his brain cells were stimulated by listening to sound frequencies in order to stimulate these physical glands by brain cells (Galenianos, Pacula, Persico 2012).

In the modern era, the German scientist (physicist) Heinrich Wilhelm Dove (1803–1879) is considered the first to discover the effect of musical tones (musical frequencies) on the human brain, using the Binaural Beats technique in 1839. In 1973, for the first time, this technique was used clinically by the American scientist (physicist) Gerald Oster, after he wrote his famous research entitled "Auditory Beats in the Brain"[8] and then approved the use of this technique as a psychological treatment for patients. Those who refuse drug treatment (chemotherapy), and in this technique, electromagnetic frequencies were used in order to stimulate brain cells (nerves) to secrete substances that stimulate the patient's mood.

What is currently happening with the use of digital drugs is the use of the same technology (Binaural Beats) but with different sound frequencies, which are listened to using high-quality headphones (stereo quality) for both ears, so the mechanism is done by broadcasting frequencies to a certain degree in the right ear (for example, tone's with the 325 Hz) and frequencies to a lesser degree in the left ear (for example, tone's with the 315 Hz) see Fig. 1.

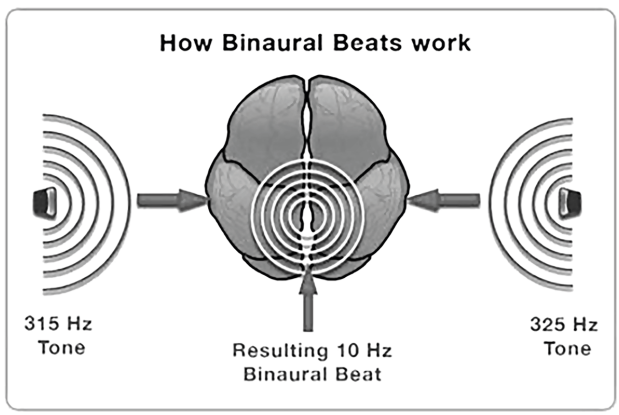

Fig. 1. Diagram illustrating the operation of a binaural beat (Abadin et al., 2021)

[8] See the original copy of the research. Accessed March 18, 2025. https://ia904500.us.archive.org/8/items/magazine-article-1973-scientific-american-auditory-beats-in-the-brain-gerald-oster/Magazine Article 1973 (Scientific American) — Auditory Beats in the Brain — Gerald Oster _text.pdf

The difference between the two frequencies as a resulting frequency (Brain Wave Frequencies) is accurately calculated according to the desired condition (degree of anaesthesia) (Jacques et al. 2016) to reach it (see Fig. 2). The actual effect lies in this frequency difference between the two frequencies (see table 1) that are broadcast in the right and left ears, and after listening for a long time (accurately calculated) for these two sound frequencies, the brain cells through the response mechanism follow the sound frequencies (this response can be observed through Electroencephalography, EEG) by issuing a third frequency, and this third frequency has been formed as a harmonic frequency between the two frequencies that have previously been broadcast in the right and left ears, and thus this third frequency (harmonic) in turn forms an electromagnetic wave that stimulates neurons in the brain, in order to secrete substances that stimulate human mood, simulating the (unconscious) mood when using conventional drugs (such as morphine, cocaine, etc.) (Caulkins, Reuter 1998).

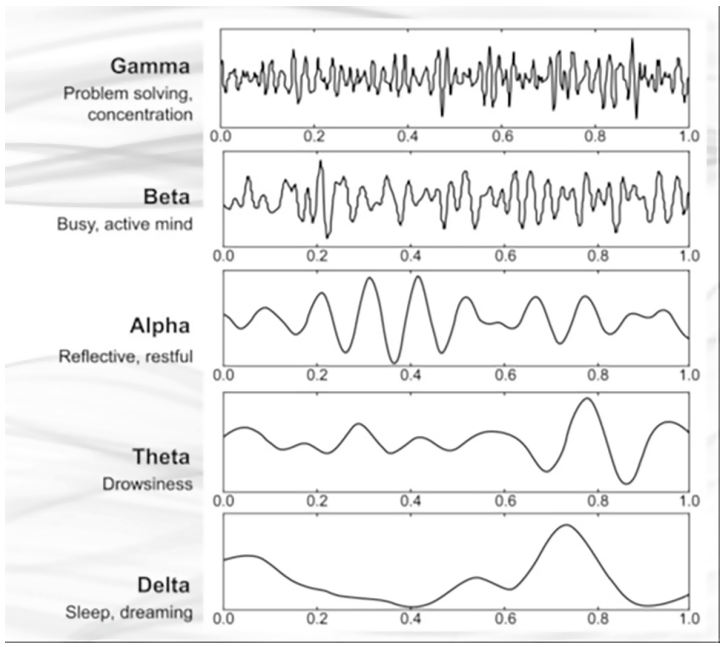

Fig. 2. The five types of brain waves that affect binaural beats (Abhang, Gawali, Mehrotra 2016)

Table 1. Five basic brain wave characteristics

Frequency band	Frequency, Hz	Brain states
Gamma (γ)	>35	Concentration
Beta (β)	12–35	Anxiety dominant, active, external attention, relaxed
Alpha (α)	8–12	Very relaxed, passive attention
Theta (θ)	4–8	Deeply relaxed, inward focused
Delta (δ)	0,5–4	Sleep

Source: (Abhang, Gawali, Mehrotra 2016).

2.4. Legal and scientific challenges to counter digital drugs

In light of the scientific difference (research and scientific studies) regarding the impact and effectiveness of digital drugs, in the end a legal difference is born to confront digital drugs, that is, to prevent the existence of clear legislation, neither at the international level nor at the local and regional levels, in order to address this type of drug as a preventive measure to protect the safety, security, and stability of society. The World Health Organisation, in its annual report for the year 2016, confirmed that the drug problem of all kinds is still one of the main sources of concern facing the organisation (Al-Rifai, Zina 2022), including its categorical affirmation that the abuse and addiction of digital and traditional drugs have begun to occupy a disturbing position in international and regional public opinion by indicating that digital drug addiction It is a case of epidemiological use of the open Internet, and with emphasis on the legislative necessity to address this type of drug, the World Drug Report 2017 urged the importance of training and developing the skills of professional and legal staff in the field of combating traditional and digital drugs, in other words, developing investigative skills and collecting digital evidence in digital space (cyberspace), all in order to achieve the complex awareness represented by raising social awareness, reinforced by a deterrent legislative framework.

Despite the fact that electronic addiction was added to the list of diseases in 2018 by the World Health Organisation, there is still no clear legislation at the international level to allow digital drugs to be added to the lists of narcotic substances included in the Single Convention on Narcotic Drugs of 1961 or in its amended form, the Protocol of 1972[9].

The danger of digital drugs will remain without a legislative response unless it overcomes the scientific challenges represented by the following trends.

The first trend is the complete denial of the existence of danger in the use of digital drugs, and therefore, taking this approach that completely denies that digital drugs have an anaesthetic effect similar to conventional drugs on the brain cells of the recipient of these audio files, the mechanism of action of digital drugs requires that there be three parties: The first party is *the producer* of these digital files (audio and visual), the second party is *the promoter* of these files, and the third party is *the recipient* of these files, and since the first and second parties claim that these digital files have an effect that simulates the effect of conventional drugs, all this is in order to cause illusion in the third party (the recipient), and thus obtaining money from him, in our opinion, in this case we are facing a crime of fraud based on Art. 456 of the Iraqi Penal Code No. 111 of 1969, and since this fraud takes place in cyberspace and was committed by electronic means, we are thus facing the crime of electronic fraud Based on Art. 11 of Law No. 31 of 2013[10], the Law Ratifying the Arab Convention on Combating Information Technology Crimes, this is what we will discuss later.

[9] Single Convention on Narcotic Drugs, 1961. As amended by the 1972 Protocol amending the Single Convention on Narcotic Drugs, 1961. Accessed March 18, 2025. https://www.unodc.org/pdf/convention_1961_en.pdf.

[10] Law No. 31 of 2013 Ratifying the Arab Convention to Combat Crimes of Information Technology. Accessed March 18, 2025. https://www.moj.gov.iq/uploaded/4292.pdf. (In Arabic)

The second trend is partial denial of the existence of a danger in the use of digital drugs, given that until now it has not been confirmed scientifically that these drugs have an effect on the recipient. In light of this trend, its supporters see that the effect of digital drugs on the chemistry of brain cells is an exaggerated subject due to the lack of scientific studies confirming the validity of the negative effect of these drugs, and therefore they see that the psychological engagement of the recipient to these files (the digital addict) is the result of his imagining that what he is using is simulating conventional drugs, and in our opinion, this psychological delusion of the recipient can develop in the future in its advanced stages into a real interaction and start using conventional drugs.

The third trend is calling for more scientific research into this modern digital phenomenon in order to measure the real changes in the activities of the body in general. For this, the United Nations Office on Drugs and Crime is working to issue its periodic reports to address this phenomenon, and according to its latest reports, it confirms that the world is still suffering from a lack of scientific research regarding the phenomenon of digital drugs (audio and visual), and therefore this shortcoming is reflected in the local, regional, and international legislative reality.

2.5. Characterising digital drugs in Iraqi legislation

Proceeding from the principle of criminal legality (there is no crime or punishment except by law), as one of the pillars of criminal legislation adopted by the Iraqi constitution of 2005 in its nineteenth article[11], the second paragraph, and embodied in the first article of the Iraqi Penal Code No. 111 of 1969[12], Since it is well known that the principle is permissibility, except for what the criminal legislator specified, whether in action or omission, by explicitly criminalising it in a legal text.

Thus, in order for the individual to be subject to criminal culpability, two elements must be fulfilled: the physical element, that is, committing a criminal behaviour represented by committing an act that is criminalised by law or refraining from doing an act ordered by the law (Art. 28 of the Iraqi Penal Code No. 111 of 1969), and the moral element: that is, the criminal intent is to direct the perpetrator's will to commit the act constituting the crime with the aim of achieving a criminal result that occurred or achieving any other criminal result (Art. 33 of the Iraqi Penal Code No. 111 of 1969) (Aldridge, Décary-Hétu 2016).

Therefore, in order for an individual to be criminally culpable for the production, circulation, abuse, or promotion of digital drugs, criminal legislators (the Iraqi federal and regional Kurdistan) should initiate the criminalisation of drugs in the form of criminal behaviour associated with a penalty or precautionary measure.

Based on the criminal philosophy of criminalisation and punishment, in order to maintain the security, stability, and safety of society, we will initiate our predicting research through two approaches based on the criminalisation and punishment texts available in the Iraqi criminal system. In our first approach, we will deal with characterising

[11] Iraqi constitution of 2005. Accessed March 18, 2025. https://iq.parliament.iq/en/wp-content/uploads/2022/01/Iraqi-Constitution.pdf.

[12] Ibid., 2.

digital drugs to traditional drugs. This is what we will discuss in the first requirement, and in the second, we will address the approach of characterising digital drugs as an electronic fraud crime (Barratt 2011, 159–168).

2.5.1. The approach of characterising digital drugs as conventional drugs

In this approach, we tried to urge the Iraqi federal criminal legislator to amend the Narcotic Drugs and Psychotropic Substances Law No. (50) of 2017 and the Kurdistan Regional Criminal Legislator to amend the Narcotic Drugs and Psychotropic Substances Law in the Kurdistan Region of Iraq No. (1) of 2020, based on the opinion that digital drugs simulate in their effect on the listener (the digital addict) conventional drugs. By inviting the Supreme National Commission for Narcotic Drugs and Psychotropic Substances Affairs to update the tables attached to Law No. (50) of 2017 mentioned above, this is at the level of the federal Iraq and Kurdistan region of Iraq as well. We tried to invite the Supreme Committee for Combating Narcotic Drugs and Psychotropic Substances to update the tables attached to Law No. 1 of 2020 mentioned above.

All this, so that the digital drugs are criminalised in the form of digital behaviours, represented by the creation of websites aimed at producing software (electronic audio files) and promoting them by promoters in agreement with programmers, in order to sell and trade them as an emerging digital drug, which is circulated in cyberspace.

In this approach, we tried to take into account the opinion of criminal jurisprudence regarding the concept of digital crime (cybercrime), which says that digital crime is a conventional crime that is committed in the digital age by electronic means (Moore 2008). Thus, this expanding concept of cybercrime requires the criminal legislator to keep pace with information technology in its negative (criminal) use through punitive legislation represented by penalties and precautionary measures.

There are generally three schools of thought about what constitutes cybercrime. *The first school* states that electronic crime is a new crime that uses cyberspace as a crime scene and therefore requires the legislation of specific legal texts for this crime. *The second school* this school refers to the medium (computer and other electronic means) rather than the place (cyberspace) when it assumes in its broad concept that cybercrime is the crime committed by electronic means. *The third school* in line with the two previous schools, this school considers cybercrime to be crimes that can only be committed in cyberspace, including traditional crimes whose commission requires the use of electronic technologies.

2.5.2. The approach of characterising digital drugs as digital fraud

In this approach, we tried to characterise digital drugs as a crime of digital fraud based on Art. 456 of the Iraqi Penal Code No. 111 of 1969, basing on an opinion that digital drugs do not have a similar effect on the listener (the digital addict) as conventional drugs, meaning that the producer and promoter of these audio files reached the delivery or transfer of possession of money (the amount of cash in most cases) owned by the recipient of these files in a fraudulent way, by reporting (the producer and the promoter) a false matter about a specific incident (claiming an effect similar to conventional drugs), and thus creating an illusion in the mind of the recipient in order to

made him hand over money to them (the producer and the promoter) in exchange for digital drugs, under the illusion that he would have the effect of conventional drugs when listening to these audio files.

Although the object of the crime (the object of fraud) is an illegitimate benefit, the criminal culpability according to Art. 456 of the Iraqi Penal Code does not address that the object of fraud should be a legitimate legal possession. And because this digital crime is committed in the digital space, it is by nature a new crime that differs from the conventional crime of fraud. So in this regard, we tried in our approach to rely on Law No. 31 of 2013, the Law of Ratification of the Arab Convention for Combating Information Technology Crimes (Art. 11), on the grounds that the producer and promoter cause harm to the beneficiaries and users intentionally and unjustly, with the intention of fraud to achieve interests and benefits in a manner illegally, by inserting music data into the information network (internet) (Knezevic et al. 2011).

We believe that the basis of this crime is the specific criminal intent[13], i. e. the association of the website creator's action in relation to the purpose of setting up this website and its management tools with the promoter. By this we mean the connection of their fraudulent actions (producer and promoter) with the purpose of production for the purpose of trading and promoting these digital drugs. In other words, there is no criminal intent when a person creates a website for a legitimate purpose (e. g. scientific, cultural, etc.) or when another person uses it (the product) without their knowledge for the purpose of trafficking and promoting digital drugs, because in this case we are dealing with ignorance, which negates criminal intent.

By adopting this approach, Iraq and the Kurdistan region would be practically organised to the regional initiative to combat digital drugs, which is supervised by the Council of Arab Ministers of Justice of the League of Arab States, in order to control the use of technology in the field of digital addiction, which causes negative effects on the human brain and causes auditory, visual, and psychological damage to the listener (the digital addict), which is calling Digital Addiction Disorders.

3. Conclusions

After we discussed in our study the problem of characterising digital drugs in terms of establishing criminal culpability through the two approaches based on the Iraqi criminal legal system, in the conclusion, we reached a number of results and recommendations that we addressed to the Iraqi federal and regional Kurdistan criminal legislators.

3.1. Results

Basing on the criminal philosophy adopted by the Iraqi criminal legislator, represented in criminalisation and punishment in the event of acts that threaten the security of society and pose a threat to its stability, the criminal legislator takes the initiative to impose

[13] The connection between the materiality of the crime and the criminal's psychology is known as the special criminal intent which is a component of the moral element of the crime and is represented by knowledge and will. It also serves as a tool to connect the criminal's actions to his criminal thinking. In certain crimes, the existence of this intent is a prerequisite for criminality, regardless of its appearance.

punishment or a precautionary measure, so the results that we reached are represented in the following.

After the interaction of individuals became electronic in most areas of life, this cyberspace has become a place and a means for illegal actions, in what is known as cybercrime, and thus digital drugs are considered one of the negative interactions of users of this cyberspace.

The effect of digital drugs on the listener (the digital addict), recent studies in this regard were divided into two opinions. *The first opinion* is that it is seen that digital drugs, in terms of their effect on the nervous system of the listener, simulate to a large extent the effect of conventional drugs on the user, but with a modern digital mechanism (the binaural beats technique). *The second opinion* is that the digital drugs do not have an effect similar to conventional drugs on the listener, and therefore this opinion denies naming drugs after this technique (the binaural beats technique), and that what the producers and promoters of this technique are doing by calling this technique digital drugs falls within attempts to disguise the recipient listeners of this technique (fraudulence).

Just as it was the duty of the Iraqi federal and regional Kurdistan legislators to ensure the safety of dealing with narcotic drugs, psychotropic substances, and chemical precursors for medical, scientific, and industrial purposes, we believe in the same way that legislators must ensure the safety of dealing with digital drugs. According to the binaural beats technique, specific areas in the basal ganglia part of the human brain are targeted in order to treat Alzheimer's and Parkinson's cases (see Fig. 3). It may have an effect on the cognitive function and memory of a human being.

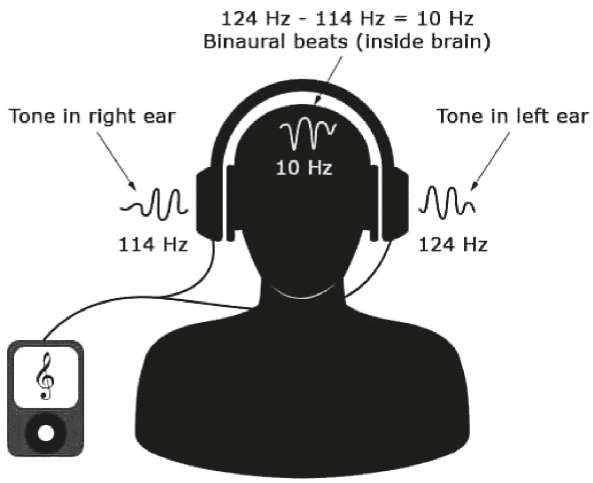

Fig. 3. Auditory healing by the binaural beats technique (Aly et al. 2022)

Therefore, we tried, through our approaches to characterising digital drugs, to address the impunity of the producer and the (illegal) promoter of the binaural beats technique, especially when the two camouflaged the recipient in the name of drugs and, in many cases, in order to lure this recipient into the environment of real conventional drugs.

3.2. Recommendations

Basing on the results of our research in the two approaches to adapting digital drugs and in order to maintain the security, stability, and safety of society, we make the following recommendations to the Iraqi federal and Kurdistan regional legislators.

At the level of federal Iraq, we call on the Supreme National Commission for Narcotic Drugs and Psychotropic Substances Affairs within the Ministry of Health to convene a special meeting in order to develop a comprehensive national strategy to combat the misuse of binaural beats technique (digital drugs), and at the regional Kurdistan level, we call on the Supreme Committee for Combating Narcotic Drugs and Psychotropic Substances within the Ministry of Health in the region to convene a special meeting in order to develop a strategy at the regional level in order to ensure the safety of dealing with binaural beats technique (digital drugs).

Notifying the Iraqi Council of Representatives of the need to complete the second and third readings of the Anti-Cybercrime Law, which is necessary in order to develop a solid strategy regarding cybercrime in general and digital drugs in particular.

In order to process legally the impunity of producers and promoters of binaural beats techniques in their claim that digital drugs have a similar effect to traditional drugs (according to the approach of characterising digital drugs as digital fraud), we recommend that the Iraqi federal and regional Kurdistan legislators adopt the punitive methodology contained in Art. 456 of the Iraqi Penal Code No. 111 of the year 1969 in order to categorise digital drugs, pending the enactment of the Anti-Cyber crime Law, which follows the adoption of a stable punitive methodology regarding digital drugs.

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* The product of the Meta company, whose activities are recognized as extremist in the Russian Federation.