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Fetal Alcohol Syndrome as a Cause of Blame-Exclusion: A Criminological Analysis in Spain

This research analyses the criminological and legal-criminal consequences of fetal alcohol spectrum disorder (FASD) on the criminal responsibility of people who commit a crime according to the Spanish penal system. FASD is a neurodevelopmental disorder caused by prenatal exposure to alcohol that results in alterations in a person's cognitive capacity, which in the future can affect the ability to understand the wrongfulness of their actions and even regulate their behaviour. Articles 20 and 21 of the Spanish Penal Code regulate the conditions under which a person may be exempted from criminal responsibility for mental disorders or cognitive impairments. This research aims to provide an interdisciplinary view of FASD in the context of Spanish criminal law, analysing whether it can constitute a reason for total or partial exoneration from criminal responsibility. To this end, a qualitative analysis of case law is carried out. The article explains how the courts have interpreted the disorder in relation to an element of the crime called culpability, highlighting the distinction between total exoneration and mitigating circumstances. While some people with FASD may lack full awareness of the illegality of their actions, others may retain partial responsibility. This study contributes, in turn, to the debate on FASD and criminal responsibility, emphasising the need for interdisciplinary collaboration between legal professionals, forensic experts and mental health professionals to ensure fair and evidence-based judicial decisions.

Keywords: Criminal Responsibility, Culpability, Exemption, Fetal Alcohol Syndrome (FAS), Mitigating Circumstance

Fetales Alkoholsyndrom als Grund für Schuldunfähigkeit: Eine kriminologische Analyse in Spanien

Dieser Artikel analysiert die kriminologischen und strafrechtlichen Folgen von Fetaler Alkoholspektrumstörung (FASD) für die strafrechtliche Verantwortlichkeit von Personen, die nach dem spanischen Strafrecht eine Straftat begehen. FASD ist eine neurologische Entwicklungsstörung, die durch pränatalen Alkoholkonsum verursacht wird und zu Veränderungen der kognitiven Fähigkeiten einer Person führt, was sich später auf die Fähigkeit auswirken kann, das Unrecht ihrer Handlungen zu erkennen und ihr Verhalten zu steuern.

Die Artikel 20 und 21 des spanischen Strafgesetzbuches regeln die Voraussetzungen, unter denen eine Person aufgrund psychischer Störungen oder kognitiver Beeinträchtigungen von der strafrechtlichen Verantwortlichkeit befreit werden kann. Ziel dieser Untersuchung ist es, eine interdisziplinäre Perspektive auf FASD im Kontext des spanischen Strafrechts zu bieten und zu analysieren, ob FASD einen Grund für eine vollständige oder teilweise Schuldausschließung darstellen kann. Zu diesem Zweck wird eine qualitative Analyse der Rechtsprechung durchgeführt.

Der Beitrag erläutert, wie die Gerichte die Störung im Zusammenhang mit dem strafrechtlichen Element der Schuld interpretiert haben und hebt die Unterscheidung zwischen vollständiger Schuldunfähigkeit und strafmildernden Umständen hervor. Während manche Personen mit FASD möglicherweise nicht

vollständig in der Lage sind, die Rechtswidrigkeit ihrer Handlungen zu erkennen, kann bei anderen eine teilweise Verantwortlichkeit bestehen bleiben.

Diese Studie leistet zugleich einen Beitrag zur Debatte über FASD und strafrechtliche Verantwortlichkeit, indem sie die Notwendigkeit interdisziplinärer Zusammenarbeit zwischen Jurist:innen, forensischen Expert:innen und Fachleuten aus dem Bereich der psychischen Gesundheit betont – mit dem Ziel, gerechte und evidenzbasierte gerichtliche Entscheidungen zu gewährleisten.

Schlagwörter: Fetales Alkoholsyndrom (FAS), Schuldausschließungsgrund, Schuld, Strafmilderung, Strafrechtliche Verantwortlichkeit

1. Introduction

This research was made possible thanks to the initial work carried out by the interns of the Legal and Criminological Clinic of the Universitat Jaume I, which is published in the university's repository. This work, carried out thanks in part to the Association of Families Affected by fetal Alcohol Syndrome (AFASAF), was designed to analyse fetal alcohol spectrum disorder (FASD), specifically fetal alcohol syndrome (FAS), from a multidisciplinary perspective, ensuring a comprehensive understanding of its implications.

The main objective is to examine FASD from multiple disciplinary perspectives, with special attention to the social, psychological, educational and legal fields. A secondary objective is to analyse whether FAS can be classified as a possible cause of exclusion of culpability in the Spanish criminal justice system. To achieve this, the research incorporates an in-depth analysis of the impact of the disorder in these areas, evaluating whether people diagnosed with FASD, despite engaging in criminal behaviour, could be considered not criminally responsible under Spanish law (Fast & Conry, 2009; Brown et al., 2024). In this way, the research also has the following specific objectives:

- (a) to conduct a comprehensive analysis of FAS to determine whether, depending on the results of the study, it could serve as a basis for excluding culpability in criminal cases involving individuals diagnosed with FAS;
- (b) to define the practical application of the modifications of criminal responsibility in cases involving FAS;
- (c) to examine the relevant case law to evaluate the judicial treatment of FAS;
- (d) analyse the theoretical framework and scientific literature that address FAS in a criminological and legal context

In this sense, the research addresses the following key questions:

- (RQ1) Can FAS be considered a cause for exclusion of guilt under the Spanish Penal Code?
- (RQ2) Could it be considered a circumstance modifying criminal responsibility in Spain?

These questions are of great legal and ethical importance, as in certain circumstances there is the possibility that fundamental rights such as personal freedom may be affected. FAS can hinder a person's ability to act differently, understand the criminal nature of their actions or exercise control over their behaviour (Streissguth et al., 1991). Furthermore, recent studies highlight that people with FASD often have neurodevelopmental impairments that affect impulse control, an issue of particular interest as it is essential for assessing criminal responsibility

(Brown et al., 2024). For this reason, one of the possibilities is that it could be configured as a ground for criminal exoneration due to the possible overlap with the principle of unexigibility, in particular if the individual's cognitive and behavioural impairments make their conduct excusable (Fast & Conry, 2009). The methodology implemented is considered to be mixed, using both qualitative and quantitative approaches. Firstly, a qualitative analysis by means of a bibliographic review, where doctrinal and scientific articles were selected and analysed and, secondly, judicial decisions related to FASD/FAS. Case law databases such as Aranzadi and Tirant, which specialise in judicial precedents and doctrinal commentaries, were consulted, as well as Google Scholar, using the search term "Fetal Alcohol Syndrome". Having a multidisciplinary approach, a selection of the theoretical framework has been made according to this approach, with a selected bibliography that includes recent studies from various disciplines, such as health sciences, social sciences and psychology, in order to guarantee this comprehensive perspective, especially when defining and explaining what this disorder consists of.

In order to carry out the proposed legal analysis, it is necessary to first examine the concept of grounds for exclusion of culpability, which falls within the broader framework of criminal justification. As Perron (1988) pointed out, these legal constructs invite reflection on aspects related to culpability and wrongfulness, which are essential elements in the classification of a criminal act: typicity, wrongfulness and culpability. This study focuses specifically on culpability, as the Spanish Penal Code includes justifications that affect this element in Article 20, particularly in its first three sections, which will be analysed in the following sections of this paper.

2. Fetal Alcohol Syndrome (FAS) – A Comprehensive, Integrated Examination

The condition known as fetal alcohol syndrome (FAS) was first identified by Kenneth Lyons Jones and David W. Smith, in 1973, two specialists in medicine in congenital malformations at the University of Washington (Jones & Smith, 1973). This syndrome presents clinical manifestations in the embryo or fetus during gestation, and it does so as a result of prenatal exposure to alcohol. This leads us to conclude that it is a direct result of maternal alcohol consumption during pregnancy. It is important to emphasise that there is no period during pregnancy that is free of risk with regard to alcohol consumption, as any intake carries a certain risk for fetal development (May & Gossage, 2011). Likewise, some studies have shown that alcohol easily crosses the placental and blood-brain barriers, reaching the fetus directly through the umbilical cord. This is an essential issue as a factor has been identified that increases the likelihood of miscarriage, intrauterine growth restriction, congenital malformations and even neurological impairment (Fast & Conry, 2009). In addition, the excretion of alcohol in breast milk poses an additional risk to the newborn (Jones et al., 2010).

2.1 Alcohol as a Key Teratogen

Fetal Alcohol Syndrome (FAS) is defined by the presence of mental, physical, behavioural and neurological impairments resulting from alcohol consumption during pregnancy. Ethanol, the principal component of alcoholic beverages, is the agent responsible for these effects and is the

most widely consumed addictive substance in the world (May & Gossage, 2011). A study conducted in Spain by the Ministry of Health of the Government of Catalonia on the occasion of the International Day for the Prevention of fetal Alcohol Spectrum Disorders revealed that 17 % of women consume alcohol during the last trimester of pregnancy, while 40 % consume alcohol during the first trimester (Maya-Enero et al., 2021; Heraldo Saludable, 2016).

Since 1973, alcohol has been recognised as a teratogen, defined as a substance that can cause birth defects when present during fetal development (Jones & Smith, 1973). Teratogens encompass a range of substances, including drugs, medications, infectious agents and metabolic factors, which exert an influence on the intrauterine environment by affecting the mother and crossing the placental barrier, thereby adversely affecting fetal development (Sampson et al., 1997). The effects of alcohol consumption vary according to the stage of pregnancy. During the first trimester, the risk is mainly associated with physical defects. In contrast, during the second and third trimesters, the effects are manifested in functional, sensory, growth and cognitive impairments (Ahumada et al., 2021; Sokol et al., 2003; Fast & Conry, 2009).

Some research has shown how the stages of embryonic and foetal development are very sensitive to exposure to teratogens, such as alcohol, which can also produce significant structural abnormalities (Moore et al., 2015). There are certain periods considered critical where developing tissues and organs are very susceptible to external influences, increasing the risk of congenital malformations that can affect both the functionality and the structure of the organism. While some defects caused by teratogenic exposure are serious and permanent, others can be more subtle, mainly affecting the physiological and functional aspects of development. These variations show and highlight the importance of understanding the timing and degree of exposure to harmful substances throughout pregnancy. Even minor alterations can have long-term implications for the health of an individual and the fetus (Moore et al., 2015; Moore & Persaud, 1993).

It should be noted that susceptibility to teratogens is not the same throughout the developmental phase but may vary during the developmental phase, and may also depend on the dose or duration of exposure. In addition, other factors ranging from maternal and foetal genetics, nutrition or general health status may influence the extent of teratogenic effects (Sadler, 2022). It is therefore imperative to identify these critical periods in order to develop effective preventive strategies and reduce the incidence of congenital malformations.

2.2 Clinical diagnosis

Fetal Alcohol Spectrum Disorders (FASD) are classified according to medical criteria and it is therefore necessary to refer to the means that allow such classification. In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), they are included as 'Neurode-velopmental Disorder Associated with Prenatal Alcohol Exposure'. In the International Classification of Diseases, Eleventh Revision (ICD-11), these disorders are included in LD2F.00 ('Fetal Alcohol Syndrome'), and are described as a malformation disorder caused by maternal alcohol consumption during pregnancy (WHO, 2025). The impact of prenatal exposure to alcohol clearly affects cognitive, behavioural and neurodevelopmental capacity. In view of the above, we focus on these two pathology classification systems (Ahumada et al., 2021):

- In the DSM-5, this disorder is classified in the section called 'Other specified neurodevelopmental disorders' and is listed when the symptoms cause impairment but do not fully meet the criteria for a specific neurodevelopmental disorder. When there is insufficient data for an accurate diagnosis, such as in emergency situations or when a complete medical history is not available, it is included in this group (Shah et al., 2018). Some studies have suggested that it may differ from this classification, leading to a lack of a distinct category for FASD in the DSM-5, which has led researchers to advocate for clearer diagnostic criteria (Fast & Conry, 2009).

- ICD-11 provides a more structured classification, listing FAS in LD2F.00 ('Fetal Alcohol Syndrome') and grouping it with 'Embryofetopathies related to toxic substances or drugs' (LD2F.0). This is a classification that covers this type of disorder in such a way that ICD-11 describes it as characterised by prenatal or postnatal growth deficiencies, distinctive minor facial abnormalities (short palpebral fissures, smooth and flat nasolabial folds, and a thin upper lip), microcephaly and neurodevelopmental deficits affecting cognition, learning and social behaviour (Sessa et al., 2022; WHO, 2025).

Despite these classifications, FASD is not recognised as a distinct category in either DSM-5 or ICD-11. Current frameworks only provide partial diagnostic recognition, making it difficult to identify and treat the full spectrum of impairments associated with prenatal alcohol exposure. To address this issue, Hoyme et al. (2016) developed a comprehensive diagnostic framework that classifies FASD into four main subtypes:

- Fetal Alcohol Syndrome (FAS): the most severe form, characterised by distinctive facial features, growth deficiency and central nervous system abnormalities.
- Partial Fetal Alcohol Syndrome (pFAS): includes some, but not all, of the characteristics of FAS, often with impaired neurological development.
- Alcohol-Related Neurodevelopmental Disorder (ARND): characterised by cognitive and behavioural deficits without the distinctive facial features of FAS.
- Alcohol-related birth defects (ARBD): these involve structural anomalies in organ systems (e. g. cardiovascular, renal, skeletal, ocular, auditory) linked to prenatal exposure to alcohol (Hoyme et al., 2016; Mattson et al., 2019).

Better diagnostic equipment is needed, for example, diagnostic tools such as neuroimaging, genetic markers and standardised neurocognitive assessments. This would be a substantial improvement by increasing the accuracy of diagnosis, especially in cases without obvious facial dysmorphology (Fast & Conry, 2009; Brown et al., 2024). Investment in diagnosis is necessary because advances in techniques such as magnetic resonance imaging and functional brain imaging have demonstrated the identification of structural and connectivity abnormalities in people with FASD, which supports its classification as a neurodevelopmental disorder (Mattson et al., 2019).

Genetic diagnosis may also be a tool to be considered in early diagnosis. Biomarkers of prenatal alcohol exposure are currently being explored to provide objective measures for diagnosis, addressing the limitations of self-reported maternal alcohol consumption (Brown et al., 2024). These developments reinforce the need for standardised clinical criteria to improve the recognition and intervention of affected individuals.

2.3 Socio-Legal Consequences

Children and teenagers with fetal Alcohol Spectrum Disorder (FASD) face difficulties, including complying with established legal and social norms. These are not voluntary, but are linked

to a dysfunction directly derived from their condition, especially in the brain connectivity caused by prenatal exposure to alcohol, which affects executive functions such as impulse control, memory and even behaviour (Mattson et al., 2019; Brown et al., 2024). In the educational sphere, they also face higher rates of school failure, problems with social adaptation and, in some cases – the most serious – criminal behaviour derived from the vulnerability that all this conditions them with. They also have difficulty retaining information and even following instructions due to memory deficits, especially in the short term. This limitation can interfere with their learning and development, which will affect their academic performance and also their social life (Riley et al., 2011). Another aspect to consider is the difference between their actual age and their cognitive and emotional development, which leads to their behaviour being misinterpreted. Instead of receiving the necessary resources adapted to their conditions, these minors are often subject to disciplinary sanctions, which reinforces their social and school exclusion (Fast & Conry, 2009).

As indicated, the social interaction of these individuals is another aspect to consider in the TEAF. Many of these minors have problems interpreting non-verbal signals, which can lead to misunderstandings and a lack of connection with their peers and the rest of the school population. Impulsivity and social cognition deficits increase the risk of isolation, frustration and victimisation, including bullying (Riley et al., 2011; Brown et al., 2024), the latter being of great interest to criminology. Children with this type of disorder have an inability to properly manage social interactions and this can lead to them being perceived as disruptive or uncooperative, which will further affect their integration. As we have seen, this is a major problem for the school community and therefore resources are needed to provide a comprehensive education. It is especially important to obtain resources because we must emphasise that difficulties are identified in the understanding of some concepts, mainly abstract ones, and this will have repercussions in impulsive or irresponsible behaviour, for example, in economic management (Sampson et al., 1997). These difficulties can generate a vicious circle of dependence and exclusion since, without adequate support, those affected by FASD may have difficulties in finding and keeping a stable job.

Finally, we would like to highlight one aspect that we consider to be of particular importance: children with FASD can also be easily suggestible due to their lack of capacities as described above. This increases the likelihood of them being victimised in certain situations and thus adds to their vulnerability. This is a matter of concern, especially for the law and the law, as in criminal proceedings, for example, they may have difficulty remembering events accurately and even have a tendency to fill in gaps in their memory, which can lead to complications and inaccuracies in their statements (Brown et al., 2024). The lack of understanding of their cognitive particularities by the legal system may further aggravate their situation.

In the educational sphere, minors with FASD face greater obstacles than others, mainly due to their attention deficits, their sensitivity to sensory stimuli and their resistance to changes in routine. For these reasons, most require specialised educational strategies to address their learning difficulties, slow information processing and propensity to mental fatigue (Sessa et al., 2022; Fast & Conry, 2009). These youngsters showed impaired school performance without these adaptations, which in addition, can result in school dropout, increased rates of school failure, expulsions and disruptive behaviour (Brown et al., 2024; Maya-Enero et al., 2021). These children often have difficulties with abstract reasoning and problem solving, making traditional educational approaches ineffective for them. It has been shown that the implemen-

tation of personalised learning plans, small groups and structured support programmes significantly improves their academic performance and their capacity for social integration (Sessa et al., 2022; Fast & Conry, 2009). It is essential that teachers receive training on the specific challenges of FASD in order to adapt their methodologies and offer a more inclusive learning environment (Brown et al., 2024).

Below are some data that reinforce these arguments. 61 % of adolescents and adults with FASD have had irregular schooling, 29 % have been expelled and 25 % have dropped out of school (Maya-Enero et al., 2021). These figures demonstrate and reinforce some of the arguments described above, especially the lack of resources in the education system and the need for early intervention strategies to detect and address the difficulties faced by these children before they have more serious consequences in adulthood. Early diagnosis is a key aspect that can help mitigate the effects of FASD on the lives of affected children. Early identification allows the implementation of intervention strategies adapted to their specific needs, both educationally and socially (Sessa et al., 2022). Raising awareness among judges, prosecutors and lawyers about the particularities of FASD is crucial to avoid judicial decisions that do not take into account their cognitive limitations (Brown et al., 2024).

To improve the quality of life of people with FASD, it is necessary to improve interdisciplinary collaboration to enable comprehensive adaptation, so that educators, health professionals and social services can substantially improve the living conditions of these people. A multidisciplinary approach can ensure that these children receive the support they need to develop their full potential and avoid facing situations of vulnerability (Fast & Conry, 2009).

3. Legal Analysis of Fetal Alcohol Spectrum Disorder (TEAF)

3.1 Article 14 of the Spanish Constitution and the Principle of Equality

Article 14 of the Spanish Constitution introduces us to a fundamental right, equality, which establishes that all citizens are equal before the law, prohibiting any form of discrimination based on birth, race, sex, religion, opinion or any other personal or social condition. This principle of equality, derived from other international legal instruments, also extends to criminal responsibility, guaranteeing that people should be judged according to their capacity to understand and comply with the law. Article 20 of the Spanish Penal Code recognises and includes circumstances that exempt people from criminal responsibility. In particular, we want to address cases in which mental anomalies or alterations prevent a person from understanding the wrongfulness of their acts (Orts-Berenguer & González-Cussac, 2023).

To do this, we need to make a distinction in criminal law between the causes of unaccountability, which eliminate the conviction of guilt, and the causes of justification, which eliminate the unlawfulness of the act. The so-called causes of justification, such as legitimate self-defence or state of necessity, eliminate the unlawfulness of the act, transforming the same conduct into lawful conduct. Finally, non-imputability exempts persons from criminal liability due to their inability to understand the nature of their acts or to control their behaviour, for example. This distinction has important implications, especially with regard to civil liability and the possible involvement of third parties in a crime (Orts-Berenguer & González-Cussac, 2023).

In the Spanish legal system, imputation refers to attribution, which is equivalent to identifying a typical and unlawful act committed by an individual. Consequently, we can define imputability as the capacity to understand, evaluate and act, which means that a person must be aware of their actions, recognise their wrongfulness and have control over their behaviour. If an individual cannot fulfil these qualities, we can say that they lack imputability and cannot be considered criminally guilty. One characteristic to highlight of the Spanish legal system is that it does not expressly define the concept of imputability; instead, it specifies certain behaviours that are called specific causes of non-imputability, which are detailed in the Penal Code.

3.2 Article 20 of the Penal Code: exonerations of criminal responsibility

Article 20 of the Spanish Penal Code describes several factors that will exonerate a person from criminal responsibility for the acts committed:

- Psychological abnormalities or alterations. A person is exempt from criminal responsibility if, at the time of committing the crime, they suffered from a mental abnormality or psychiatric disorder that prevented them from understanding the wrongfulness of their conduct or acting in accordance with that understanding. However, this situation does not apply if the mental disorder was deliberately induced to facilitate the commission of the crime.
- Intoxication or withdrawal syndrome. If a person commits a crime while completely intoxicated by alcohol or drugs, they may be exempt from liability, provided that the intoxication was not deliberately induced to commit the crime. The same applies to withdrawal syndromes that significantly affect cognitive function.
- Disturbances of perception. People who, from birth or in early childhood, suffer serious disturbances of perception and consciousness that affect their ability to differentiate reality can also be declared unaccountable and, therefore, exempt from criminal responsibility.

These exonerating circumstances, as established in Article 20 of the Penal Code, must be interpreted with caution, especially when evaluating the degree of disability that affects the person's legal responsibility. Furthermore, Article 118 of the Penal Code introduces relevant considerations regarding civil liability: even if a person is exempt from criminal liability due to non-responsibility, they may be subject to civil liability, in some cases sharing financial responsibility with their legal guardians or carers (Código Penal, 1995).

3.3 Relevance of Fetal Alcohol Spectrum Disorder (FAS) in Criminal Liability

The debate on Foetal Alcohol Spectrum Disorder (FASD) and criminal responsibility is particularly relevant in the context of Article 20 of the Penal Code, as affected individuals may exhibit deficits in neuronal development that can affect their ability to regulate or understand their actions. Some studies have suggested that people with severe executive and cognitive dysfunction due to prenatal alcohol exposure may experience difficulties in impulse control, moral reasoning and understanding the legal consequences of their behaviour (Fast & Conry, 2009;

Brown et al., 2024). In this sense, the invisibility of FASD in the justice system can contribute to the lack of adequate accommodations for defendants with this condition, and this can foster disparity in access to a fair defence and in the judicial interpretation of their criminal responsibility (Choate et al., 2024).

3.4 Incapacity and Exonerating Factors Applied to Fetal Spectrum Disorder (FASD)

In this analysis, where we focus on the application of these disorders in criminal law, people with FASD who have cognitive and behavioural difficulties may have an impaired capacity to understand the wrongfulness of their actions. This issue raises the possibility of considering the exemption from criminal responsibility set out in Article 20.1 of the Penal Code. Evidence has shown us how this disorder can affect different cognitive abilities: memory, executive function, emotional regulation, among others. All of them directly affect the capacity and responsibility for rational decision-making and even, in some cases, the ability to control impulses. However, the heterogeneity of FASD is considered a challenge for the application of this type of exculpatory circumstance. This is possible because some people with the disorder, with the right support and necessary resources, can develop a partial understanding of legal and social norms (Mattson et al., 2019). In fact, it has been documented that the deficits associated with FASD are often misinterpreted as disinterest, lack of cooperation or irresponsibility, rather than being recognised as a consequence of their neurocognitive limitations (Choate et al., 2024).

Therefore, the application of total exemption from criminal responsibility for people with FASD may not always be appropriate, which reinforces the need for an individualised assessment in each case. In cases where a total exemption is not recognised, the application of a partial exemption in accordance with Article 21 of the Penal Code may constitute a more appropriate alternative. This approach considers that, although neurocognitive impairment does not completely nullify the capacity to understand the wrongfulness of actions, it may have partially affected the capacity for self-determination, which justifies a reduction in the penalty.

3.5 Assessment and Evidence in Cases of Non-Responsibility

For a court to apply a mental disorder defence based on an assessment of FASD, it is not enough for the defendant or his defence to make a request; it is necessary to present objective and scientific evidence to show that the person could not understand the wrongfulness of his behaviour at the time of the events, which requires the existence of a causal relationship, in some form. The evidence must include expert reports from mental health specialists who assess the neurological, psychological and psychiatric state of the accused, indicating their capacity to make rational decisions.

Case law in Spain emphasises the importance of expert witnesses and the issuing of expert reports, which is especially important for the assessment of criminal liability. It should also be mentioned that these reports are not binding and judges may not consider them if they have sufficient justification (Sansó-Rubert Pascual et al., 2024). However, the lack of specialised knowledge about the TEAF among legal operators can be a problem in the criminal justice

system, which can also lead to inappropriate decisions (Choate et al., 2024). The complexity of FASD diagnosis and the overlap of its symptoms with other neurodevelopmental disorders make the forensic assessment of legal incapacity a considerable challenge.

Mental disorders, in general, already pose challenges in the assessment of criminal responsibility. FASD presents greater difficulties in its analysis due to its invisibility in the justice system and even in the social and health sector, where there is still much to be done, especially in terms of specialised training. Although the cognitive alterations of FASD make it possible to justify extenuating or exonerating circumstances, the lack of knowledge and training in this area limits the application of these measures. It is essential to promote greater awareness and increase resources in order to improve legal training on FASD and its implications for neurodevelopment. The objective of all of the above is to guarantee a fairer assessment that is more in line with the reality of defendants with this condition (Fast & Conry, 2009; Flannigan et al., 2018; Brown et al., 2024; Choate et al., 2024).

A parallel search was conducted in the Judicial Documentation Centre of the General Council of the Judiciary (CENDOJ). Using the same search term within the criminal jurisdiction, only two of the decisions in Table 1 were found. Below, we analyze the key aspects of these cases where FASD played a role in legal proceedings.

3.6 Analysis of Criminal Cases Related to the TEAF

3.6.1. First Case: Criminal Appeal on Non-Liability (ECLI: ES:APB:2022:8903)

The first case refers to an appeal against a conviction by Barcelona Criminal Court No. 23 for robbery with violence using a dangerous instrument, as defined in articles 242.1 and 242.3 of the Spanish Penal Code, in the degree of attempt¹. In this first court decision, the existence of an incomplete exculpatory circumstance is recognised in the first instance (first judicial body to hear the case) by virtue of Article 21.1, in relation to Articles 20.1 and 20.2 of the Penal Code. For these reasons, it was determined that the subject, diagnosed with FASD, had diminished culpability due to a severe cognitive and behavioural disorder. The person was sentenced to 18 months in prison and a security measure of confinement in a specialised treatment centre for mental disorders and rehabilitation from alcohol addiction for the same period. The analysed resolution that was lodged as an appeal does not question the existence of FASD as a mitigating factor. In this case, the court indicated that the perpetrator suffered from a dual

¹ An attempt is an imperfect form of committing a crime in which the subject initiates the execution of the crime, carrying out all or part of the acts that should lead to the criminal result, but that result does not occur due to circumstances beyond their control. Essential elements of an attempt according to the Spanish Penal Code: a) Commencement of execution: the subject begins to carry out the crime through external acts, either in whole or in part. b) Lack of consummation: the crime is not completed for reasons beyond the will of the perpetrator. c) Punishability: the attempt is punished because it reflects a clear criminal intent, even if the result has not been achieved. According to Article 16.1 of the Penal Code, if the offender voluntarily desists from continuing the execution or prevents the production of the result, he is exempt from criminal responsibility for the attempt, although he could be held responsible for other acts already carried out. From an objective point of view, the attempt is penalised because the subject has begun to carry out the crime. However, the penalty is less than that for the completed crime, as the final damage has not occurred. From a subjective point of view, the sanction is justified by the dangerousness of the perpetrator and the degree of intent demonstrated, which shows their criminal predisposition, even if the final result has not taken place.

condition, on the one hand a serious alcohol addiction and, on the other hand, serious cognitive impairments which directly affected his decision-making capacity and even his personality. However, the appeal lodged was dismissed and, in this case, the original sentence was upheld with the application of a reduction in the sentence. This sentence demonstrates that Spanish courts can consider FASD as a disorder that allows for a lower degree of criminal responsibility, especially when neurodevelopmental alterations affect moral reasoning and impulse control.

4. Jurisprudential Analysis of Fetal Alcohol Syndrome (FASD) in Criminal Proceedings

4.1 Study of Case Law Related to Fetal Alcohol Syndrome

A search was conducted in the Aranzadi Instituciones database using the term "fetal alcohol syndrome". Out of a total of 17 judicial decisions, only two were related to criminal proceedings, as detailed in Table 1.

Table 1: "Study of case law on 'fetal alcohol syndrome' in different jurisdictions."

ECLI/ROJ	SUBJECT	RESOLUTION	RESULT
ECLI: ES:APM:2022:20006	Marriage. Divorce. Alimony.	Sentence	Partial Esti- mation
ECLI: ES:TSJAND:2012:504	Disability. Degree of Disability.	Sentence	Estimation
ECLI: ES:TS:2022:11031A	Modification of measures. Aliment. Children.	Court Order	Not Admitted
ECLI: ES:TSJCAT:2020:3561	Social Security. Dispatch.	Sentence	Dismissal
ECLI: ES:APPO:2023:83	Adoption. Guardianship and foster care.	Sentence	Rejection
ECLI: ES:APT:2018:1911	Sexual Abuse.	Sentence	Convicted
ECLI: ES:TSJICAN:2010:2207	Orphans's Benefit.	Sentence	Rejection
ECLI: ES:APPO:2012:2393	Foster Care.	Sentence	Rejection
ECLI: ES:APB:2015:8065	Marriage. Divorce. Food.	Sentence	Partial Esti- mation
ST 00722/2021. de 29 Nov. 2021, Proc. 637/2021	Foster Care.	Sentence	Rejection
ECLI: ES:APPO:2010:1773	Tutorship.	Sentence	Rejection
ECLI: ES:APT:2019:750	Tutorship.	Sentence	Rejection
ECLI: ES:APB:2022:8903	Crimes Against Property.	Sentence	Rejection
Auto de 14 Abr. 2000, Rec. 941/1999. APB. Secc.18	Foster care.	Court Order	Rejection
ECLI: ES:APIB:2018:443	Guardianship and foster care. Dismissal.	Sentence	Rejection
ST 00322/2003. de 14 Nov. 2003, Rec. 188/2003. APNA	Adoption. Guardianship and foster care.	Sentence	Rejection
ECLI: ES:APB:2024:7441A	Appeal Pre-trial detention.	Court Order	Estimation

Source: Aranzadi Instituciones. Own elaboration, 2024.

4.1.1. Second Case: FASD as a Factor of Vulnerability of the Victim (ECLI: ES:APT:2018:1911)

Unlike the first case, the second sentence (561/2018 of December 11th, handed down by the Provincial Court of Tarragona, 2nd section) did not refer to the accused's FASD, but to that of the victim. It is an interesting case because it is not approached as a factor about the active subject or perpetrator of the crime. In this sentence we analyse a conviction for sexual abuse in which the victim was diagnosed with FASD, as well as mild mental retardation and borderline personality disorder. The court recognised that the victim's cognitive impairments made her particularly vulnerable to manipulation and abuse, as she lacked the ability to assess risks and recognise dangerous situations. The expert evidence was decisive in the analysis of the victim's cognitive processing that affects vulnerability, being identified as very deficient, they emphasise that she had difficulties with abstract thinking, emotional regulation and risk assessment. All these factors have been identified in this study as aspects that make these people highly vulnerable. In this criminal trial we see how the witness, an expert in psychology, points out that the victim could easily be influenced by people who offered her affection. This made the victim a target for abuse and coercion. This case highlights the importance of recognising FASD not only in defendants, but also in victims, guaranteeing adequate legal protection for people with neurodevelopmental vulnerabilities.

4.2 Implications for Criminal Responsibilty and Legal Protections

From this doctrinal and legal analysis, we must define and explain some of the concepts that we consider key with respect to the implications of foetal alcohol spectrum disorder (FASD) on criminal responsibility.

Firstly, FASD is recognised as a type of disorder that can directly affect criminal culpability, especially when cognitive disorders affect reasoning, impulse control and the ability to understand the consequences of one's actions. People with FASD also have impairments in executive functions, planning and even decision-making, which can diminish their ability to fully understand the illegality of their actions. For all these reasons, the criminal responsibility of people with this type of disorder should be assessed differently from that of neurotypical offenders (Brown et al., 2024).

The courts have recognised FASD as a circumstance that may lead to the mitigation of responsibility under Article 21 of the Spanish Penal Code, which allows for its consideration when cognitive deficits affect culpability, an essential element of the crime. Although this does not exempt people with FASD from responsibility, it does allow for the recognition that their ability to distinguish right from wrong and regulate their behaviour may be impaired, but not totally annulled, and this must be taken into account in the criminal process. Some studies (Flannigan et al., 2018) suggest that people with FASD are over-represented in some criminal justice systems, but they may not be identified, which would result in unfair sentences or criminal proceedings that cater to the neurocognitive deficits of these people.

On the other hand, the protection of victims with FASD requires greater effort, given their vulnerability. Cognitive and adaptive deficits make them very vulnerable to situations that can have legal consequences for them, such as manipulation, coercion or even abuse. People with FASD face a higher risk of victimisation and wrongful conviction, difficulties in understanding

procedures, or remembering and communicating with accuracy are just a few examples (Flannigan et al., 2018; Brown et al., 2024).

The role of court experts and, especially mental health specialists will be essential in these types of criminal proceedings. Their assessments provide objective information on how FASD-related impairments influence behaviour and culpability. However, judicial discretion remains a determining factor, meaning that expert reports are often considered alongside other evidence, which can lead to inconsistent legal outcomes. Research shows that many legal professionals lack adequate training on FASD, resulting in misinterpretation of neuropsychological findings and inadequate sentencing considerations (Flannigan et al., 2018; Fast & Conry, 2009).

Recognition of FASD as a factor that allows for a modification of criminal responsibility in Spanish jurisprudence is very underdeveloped. There is a need to increase resources, develop specialised legal training and establish screening protocols to identify people with FASD within the criminal justice system. Strengthening these measures will go a long way to achieving fair proceedings, informed decision-making and the protection of the rights of people affected by FASD (Brown et al., 2024; Flannigan et al., 2018; Fast & Conry, 2009).

5. Conclusions

Fetal alcohol syndrome (FAS) can be considered a cause for exclusion of culpability in the Spanish Penal Code, but its application will depend on the specific circumstances of the case and the severity of the disorder presented by the accused person, which will allow the judge or court to assess this circumstance. As indicated, expert reports (medical, psychological or psychiatric) will be fundamental in this process. Any circumstance modifying criminal responsibility must involve this expert evidence as it affects so-called culpability.

In the Spanish penal system, culpability refers to the capacity of a person who has committed a crime to understand the wrongfulness of their behaviour and act accordingly. Article 20 of the Penal Code regulates the causes for exemption from penal responsibility. These include mental abnormalities or disorders that prevent an individual from understanding the wrongfulness of an act or acting accordingly (Orts-Berenguer & González-Cussac, 2023). Given that FAS is a neurological disorder caused by prenatal exposure to alcohol and can cause alterations in cognitive functions, decision-making, impulse control and alter the understanding of reality, and even modify a person's ability to understand or control their behaviour, it is possible that it can be considered as one of these circumstances (Ahumada et al., 2021; Mattson et al., 2019).

5.1 Possibility of Applying Article 20.1. of the Penal Code: Complete or Incomplete Exculpatory Circumstance

Article 20.1 of the Penal Code establishes that persons who, due to a mental anomaly or alteration, are unable to understand the wrongfulness of the act or to act accordingly are exempt from criminal responsibility. The complete exemption may be applied in certain serious cases of FAS, but it requires proof that the accused suffers from cognitive and behavioural impairments that severely limit their capacity for judgement and reasoning. The mere fact of having

a FAS diagnosis will not be sufficient to exclude criminal responsibility; it must be demonstrated that, at the specific moment of the criminal behaviour, the person was incapable of understanding or controlling their actions.

In order to prove this, medical expert reports and additional evidence are required to establish how FAS affected the individual's mental capacities at the time of the offence. The courts are the ones that evaluate and determine the degree of impact of the disorder with respect to the decision-making that justifies the activation of the penal system. In view of the degree of affectation, they may evaluate the possible concurrence of an exculpatory circumstance, in cases of a total affectation to that capacity to decide. Otherwise, when there is a degree that does not affect this totality, considered moderate and not completely incapacitating, the so-called incomplete exemption can be applied (Article 21.1 of the Penal Code), which allows for a reduction of the penalty, but does not completely exclude the person's criminal responsibility. This possibility, as seen in case law, allows for the adduction of specific treatment criteria for each case when the impairment or affectation partially limits the subject in his or her capacity to make decisions.

5.2 Consideration on Culpability in People With FAS

As we have shown and evidenced, not all people with FAS will have the same degree of alteration of their capacities or affectation of them. In this analysis we have shown how FAS presents in different degrees, ranging from mild behavioural alterations to serious cognitive deficits. In less serious cases, in which people retain a basic understanding of wrongdoing but have difficulties controlling their impulses and regulating their behaviour, it may be more appropriate to apply mitigating factors than an exemption.

In this sense, Spanish doctrine and jurisprudence point out that mental or psychological anomalies that partially affect a person's ability to act in accordance with the law can be considered extenuating circumstances. Therefore, FAS could be classified as a modifying circumstance of criminal responsibility in Spain, especially in cases where extenuating circumstances or incomplete exemptions are present. However, it will be essential to analyse and prove the extent of the alteration and affectation of the disorder in each case and to demonstrate its direct impact on the individual's ability to understand and follow the law.

5.3 Application of Article 21 of the Penal Code to Cases of FAS

Article 21 of the Spanish Penal Code establishes, as we have noted, the modification of criminal responsibility, in this case as a mitigating factor, which allows for reductions in sentences. Some of these circumstances are relevant in cases of FAS, since the disorder can partially, but not completely, affect a person's capacity for understanding or self-control. There are three cases in which it could be applied to this disorder:

Incomplete mitigating circumstance (Article 21.1 of the Penal Code). This will be applied when not all the requirements for the application of an exemption are met (article 20 of the Penal Code), however, it does recognise the existence of a mental disorder and its influence on the subject's ability to act in accordance with the law. In cases of FAS, a person may be able to

discern right from wrong, but cognitive and impulse control deficits could justify the application of this mitigating factor.

Severe substance addiction (Article 21.2 of the Penal Code). The Penal Code considers substance addiction as a mitigating circumstance, especially for people acting under severe addiction to toxic substances, which can also be indirectly related to FAS. Although FAS is not an addiction, many people with FAS develop substance use disorders as a way of coping with their cognitive and emotional difficulties. For example, if a crime was committed under the influence of an addiction related to FAS-related impairments, it is possible that this mitigating factor may apply, but as indicated, each specific case and its circumstances must be analysed.

Mitigating circumstances due to outbursts or obsession (article 21.3 of the Penal Code). As we have indicated, people with FAS tend to have difficulties regulating their emotions and controlling their impulses. This instability can contribute to the appearance of impulsive or even aggressive behaviour that can be considered as a circumstance that mitigates their responsibility in certain cases. For example, emotional outbursts or even obsessive states can be recognised as conditions that affect decision-making in the same way as other neurological disorders.

5.4 Incomplete Extenuating Circumstances and FAS

Article 21.1 of the Penal Code includes the concept of incomplete extenuating circumstances, which allow for a modification of responsibility in certain cases: when a disorder affects decision-making, but does not completely eliminate the person's understanding or self-control. In cases of FAS, this provision can be very relevant as some people with FAS may experience cognitive deficits that influence their behaviour. Some of the impairments in executive function, impulse control and even emotional regulation that are common characteristics of FAS (Mattson et al., 2019) may even allow for the configuration of this circumstance.

As in the case of mitigating circumstances, the appreciation of incomplete extenuating circumstances can reduce the penalty applied to the perpetrator of a crime, recognising that the individual did not act with full capacity for self-determination, but was also not totally incapable of understanding their actions.

5.5 Final Considerations

This study demonstrates how FAS can play an important role in criminal responsibility assessments, although its application as a mitigating or exculpatory cause will depend on specific factors and therefore, we must analyse each case. Spanish case law increasingly recognises neurodevelopmental disorders, emphasising the need for individualised assessments and the need for expert evidence in legal proceedings. In any case, as considerations as a whole we can establish the following:

- The exemption of Article 20 of the Penal Code may be applied in serious cases in which the cognitive deterioration is extreme and, in any case, will require the demonstration and causality relationship between the disorder observed and the behaviour carried out.

- The incomplete exemption provided for in Article 21.1 of the Penal Code provides us with a way to adjust penalties in cases where some disorders such as FAS may partially affect criminal liability, but in a direct way.

This legal framework highlights the importance of expert evidence and case-by-case assessments to balance legal responsibility with the cognitive limitations associated with FAS.

References

- Ahumada, L.A., Anunziata, F., & Molina, J.C. (2021). Consumo de alcohol durante el embarazo. *Archivos Argentinos de Pediatría*, 119(1), 6-7. http://dx.doi.org/10.5546/aap.2021.6
- Brown, J., Schulte Lewis, D., Kivisalu, T., Wartnik, A. P., Carter, M. N., Harr, D., Jozan, A., & Gilbert, D. J. (2024). Fetal alcohol spectrum disorder (FASD) and the criminal justice system: A guide for legal professionals. International Journal of Law and Psychiatry, 97. https://doi.org/10.1016/j.ijlp.2024.102029
- Choate, P., Gromykin, R., & Northey, J. (2024). The Invisible Struggle: Parents with FASD, the Courts and the Child Intervention System. *Social Sciences*, 13(9), 497. https://doi.org/10.3390/socsci13090497
- Código Penal Español. (1995). Ley Orgánica 10/1995, de 23 de noviembre, del Código Penal. *Boletín Oficial del Estado*.
- Fast, D. K., & Conry, J. (2009). Fetal alcohol spectrum disorders and the criminal justice system. Developmental Disabilities Research Reviews, 15(3), 250–257. https://doi.org/10.1002/ddrr.64
- Flannigan, K., Pei, J., Stewart, M., & Johnson, A. (2018). Fetal Alcohol Spectrum Disorder and the criminal justice system: A systematic literature review. International Journal of Law and Psychiatry, 57, 42–52. https://doi.org/10.1016/j.ijlp.2017.12.008
- Heraldo Saludable. (2016). Consumo de alcohol durante el embarazo en España. *Heraldo de Aragón*. https://www.heraldo.es/noticias/salud/2016/11/09/dia-internacional-la-prevencion-lostrastornos-del-espectro-del-alcoholismo-fetal-1137352-2261131.html (2024, October 3rd)
- Hoyme, H. E., Kalberg, W. O., Elliott, A. J., Blankenship, J., Buckley, D., Marais, A. S., Manning, M. A., Robinson, L. K., Adam, M. P., Abdul-Rahman, O., and Jewett, T. (2016). Updated Clinical Guidelines for Diagnosing Fetal Alcohol Spectrum Disorders. *Pediatrics*, 138(2). https://10.1542/peds.2015-4256 (2024, October 3rd)
- Jones, K. L., and Smith, D. W. (1973). Recognition of the fetal alcohol syndrome in early infancy. *The Lancet*, 302(7836), 999-1001. https://doi.org/10.1016/S0140-6736(73)91092-1
- Jones, K.L., Hoyme, H.E., Robinson, L.K., del Campo, M., Manning, M.A., Prewitt, L.M., and Chambers, C.D. (2010). Fetal alcohol spectrum disorders: Extending the range of structural defects. *American Journal of Medical Genetics*, *152A*, 2731-2735. https://doi.org/10.1002/ajmg.a.33675
- Maya-Enero, S., Ramis-Fernández, S. M., Astals-Vizcaino, M., and García-Algar, Ó. (2021). Perfil neurocognitivo y conductual del trastorno del espectro alcohólico fetal. *Anales de Pediatría*, *95*(3), 208-e1. https://doi.org/10.1016/j.anpedi.2020.12.015
- Mattson, S. N., Bernes, G. A., and Doyle, L. R. (2019). Fetal Alcohol Spectrum Disorders: A Review of the Neurobehavioral Deficits Associated with Prenatal Alcohol Exposure. *Alcohol Clinical and Experimental Research*, *43*, 1046-1062. https://doi.org/10.1111/acer.14040
- May, P. A., and Gossage, J. P. (2011). Maternal risk factors for fetal alcohol spectrum disorders: not as simple as it might seem. *Alcohol research & health: the journal of the National Institute on Alcohol Abuse and Alcoholism*, 34(1), 15–26.
- Moore, K. L., & Persaud, T. V. N. (1993). *The developing human: Clinically oriented embryology* (5th ed.). W. B. Saunders.
- Moore, K. L., Persaud, T. V. N., & Torchia, M. G. (2015). *Before we are born: Essentials of embryology and birth defects* (9th ed.). Elsevier.

- Morelle-Hungría, E., Pérez Silvestre, A., & Giménez Ruíz, E. (2024). *Guía de actuación para fuerzas y cuerpos de seguridad ante situaciones con personas con Síndrome Alcohólico Fetal (SAF)*. Universitat Jaume I. Clínica Jurídica y Criminológica. https://repositori.uji.es/server/api/core/bitstreams/dbb2bcb2-4a6c-4f14-a6a5-ca7d1d3ebd4d/content (2024, October 3rd)
- World Health Organization. (2025). *International classification of diseases for mortality and morbidity statistics (ICD-11, version 2025-01)*. World Health Organization. https://icd.who.int/browse/2025-01/mms/en (2024, October 7th)
- Orts-Berenguer, E., and González-Cussac, J. L. (2023). *Derecho Penal y Trastornos Neuropsiquiátricos: Análisis y Perspectivas*. Tirant lo Blanch.
- Perron, W. (1988). Justificación y exclusión de la culpabilidad a la luz del Derecho comparado. *Anuario de Derecho Penal y Ciencias Penales*, 137-156. https://www.boe.es/biblioteca_juridica/anuarios_derecho/abrir_pdf.php?id=ANU-P-1988-10013700156 (2024, October 7th)
- Riley, E.P., Infante, M.A., and Warren, K.R. (2011). Fetal Alcohol Spectrum Disorders: An Overview. *Neuropsychology Review*, *21*, 73–80. https://doi.org/10.1007/s11065-011-9166-x
- Sadler, T. W. (2022). Langman. Embriología médica (15.ª ed.). Lippincott Williams & Wilkins.
- Sansó-Rubert Pascual, D., Andrés Molina, Ó., and Jiménez Bernal, M. (Eds.). (2024). *Clínica jurídica y competencias profesionales*. Dykinson.
- Shah, P. E., Shapiro, D., Milgrom, T., and Hoyme, H. E. (2018). Fetal alcohol spectrum disorders: Diagnostic considerations for children with a history of trauma. In J. M. Fogler & R. A. Phelps (Eds.), *Trauma*, *autism*, *and neurodevelopmental disorders: Integrating research*, *practice*, *and policy* (pp. 93–122). Springer Nature Switzerland AG. https://doi.org/10.1007/978-3-030-00503-0_6
- Sampson, P. D., Streissguth, A. P., Bookstein, F. L., Little, R. E., Clarren, S. K., Dehaene, P., Hanson, J. W., and Graham, J. M. Jr. (1997). Incidence of fetal alcohol syndrome and prevalence of alcohol-related neurodevelopmental disorder. *Teratology*, *56*(5), 317-326. https://doi.org/10.1002/(SICI)1096-9926(199711)56:5<317::AID-TERA5>3.0.CO;2-U
- Sessa, F., Salerno, M., Esposito, M., Di Nunno, N., Li Rosi, G., Roccuzzo, S., and Pomara, C. (2022). Understanding the Relationship between Fetal Alcohol Spectrum Disorder (FASD) and Criminal Justice: A Systematic Review. *Healthcare*, 10(1), 84. https://doi.org/10.3390/healthcare10010084
- Sokol, R. J., Delaney-Black, V., and Nordstrom, B. (2003). Fetal Alcohol Spectrum Disorder. *JAMA*, 290(22), 2996–2999. https://doi.org/10.1001/jama.290.22.2996
- Streissguth, A. P., Aase, J. M., Clarren, S. K., Randels, S. P., LaDue, R. A., and Smith, D. F. (1991). Fetal Alcohol Syndrome in Adolescents and Adults. *JAMA*, *265*(15), 1961–1967. https://doi.org/10.1001/jama.1991.03460150065025

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