

Official review of the dissertation work by Halibiyati Halibati titled “Problems of legal liability of juveniles for offenses in the sphere of informatization and communication” , submitted for the degree of Doctor of Philosophy (PhD) under the educational program “8D04203 - Jurisprudence.”

WRITTEN REVIEW OF THE REVIEWER

No.	Criteria	Compliance with the criteria (cross out one of the answer options)	Justification of the official reviewer's position (comments should be indicated in italics)
1.	Correspondence of the dissertation topic, as of the date of approval, to the directions of scientific development and/or state programs	1.1 Compliance with the priority directions of scientific development and/or state programs: 1) The dissertation was carried out within the framework of a project or targeted program funded from the state budget (indicate the name and number of the project or program); 2) The dissertation was carried out within the framework of another state program (indicate the name of the program); 3) <u>The dissertation corresponds to a priority direction of scientific development approved by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan (indicate the direction).</u>	The dissertation by Halibiyati Halibati is directly integrated into the priority vectors of the state scientific and technological policy. The subject of the research is aligned with the section on the protection of juveniles from digital threats in the Concept of Digital Transformation (2023-2029), approved by Resolution No. 269 of the Government of the Republic of Kazakhstan dated March 28, 2023; with the ethical and legal principles of the Concept for the Development of Artificial Intelligence approved by the President of the Republic of Kazakhstan on September 24, 2024; and with the institutional directions of the “Cyber Shield of Kazakhstan” Concept (Government Resolution No. 407 of 2017).
2.	Significance for science	The work <u>makes</u> a significant contribution to science, and its significance <u>has</u> /has not been disclosed.	The research <u>makes</u> a twofold <u>contribution to science</u> . First, the category of digital delict has been

			integrated into domestic cyberlaw doctrine as a conceptual foundation and elevated to the level of an independent institutional category. Second, the category of digital maturity is an international-level legislative innovation based on neuropsychological empirical support (the Add Health dataset, n = 20,745). Such a comprehensive doctrinal synthesis is being proposed for the first time in Kazakhstani digital law science.
3.	Principle of independent authorship	Level of independent authorship:	High. An objective indicator of independent scientific reasoning is the co-authored publication by Halibiyati H., Aratuly K., Serikhan A., and colleagues in an internationally ranked journal (Scopus Q1). In the dissertation text, the authors concepts are formed independently, and the authors position is clear, consistent, and well substantiated.
		1) high;	
		2) medium;	
		3) low;	
		4) not written independently.	
4.	Principle of internal unity	4.1 Justification of the relevance of the dissertation:	Justified. The relevance of the topic is confirmed by statistical data linked to indicators of digital economy
		1) justified;	

		2) partially justified;	development, namely the 2019-2025 monitoring of the Committee on Legal Statistics and Special Accounts under the Prosecutor Generals Office of the Republic of Kazakhstan (growth of Internet fraud from 7,700 to 22,870 cases, with 56% of dropper subjects aged 16-24). These indicators clearly demonstrate the impact of Kazakhstan's digital transformation on juveniles.
		3) not justified.	
		4.2 The content of the dissertation reveals the dissertation topic:	It <u>reveals</u> it. The content of the research covers four logical levels: (a) the theoretical and legal characteristics of juvenile offenses in the ICT sphere; (b) analysis of the current norms of the Criminal Code and the Code of Administrative Offenses of the Republic of Kazakhstan; (c) comparison of foreign experience according to the principle of differentiated reception; and (d) the authors institutional and normative architecture. This structure accurately reveals all aspects of the topic.
		1) <u>reveals;</u>	
		2) partially reveals;	
		3) does not reveal.	
		4.3. The aim and objectives correspond to the dissertation topic:	They <u>correspond</u> . The eight objectives constitute an operational decomposition of the dissertations aim. Each objective is addressed in the relevant chapter or section, and the results are crystallized in eight statements. No semantic gap is observed between the aim and the
		1) <u>correspond;</u>	
		2) partially correspond;	
		3) do not correspond.	

		objectives.
	4.4. All sections and provisions of the dissertation are logically connected:	Fully connected. Chapter 1 establishes the doctrinal premises, Chapter 2 tests them from the standpoint of the legislation of the Republic of Kazakhstan, Chapter 3 determines the limits of differentiated reception through international experience, and Chapter 4 synthesizes Statements 1-7 into a unified architecture. There is no logical break.
	1) fully connected;	
	2) partially connected;	
	3) no connection.	
	4.5 The new solutions proposed by the author (principles, methods) have been substantiated and evaluated in comparison with previously known solutions:	Critical analysis is present. The author substantiates the concept by comparing domestic doctrine (Zh.B. Karipbayev, E. Begaliyev, A.A. Nukusheva, K. Aratuly, Zh.O. Kulzhabayeva) with foreign scholarly works, including the neuropsychological and legal studies of Beaver K.M., Halibiyati H., and others. The quality of the critical assessment is high.
	1) critical analysis is present;	
	2) analysis has been conducted partially;	
	3) the analysis is based not on the authors own opinion but on references to other authors;	
	4) no analysis.	
5.	Principle of scientific novelty	
	5.1 Are the scientific results and provisions new?	Completely new. The categories of digital delict, digital maturity, restorative digital justice, counterpart obligations, and differentiated reception are core concepts that had not previously been formulated in domestic digital law doctrine in this way. Taken together, they constitute a doctrinal innovation for Kazakhstani
	1) completely new;	
	2) partially new (25-75% new);	
	3) not new (less than 25% new).	

			cyberlaw science.
		5.2 Are the conclusions of the dissertation new?	<u>Completely new.</u> The conclusions combine an approach to implementing neuropsychological empirical data (Add Health, n = 20,745) into the criminal law doctrine of the Republic of Kazakhstan and the substantiation of a three-dimensional legal regime for complicity in crime under conditions of artificial intelligence. This is a scientific novelty at the level of internationally ranked research.
		1) <u>completely new;</u>	
		2) partially new (25-75% new);	
		3) not new (less than 25% new).	
		5.3 Are the technical, technological, economic, or managerial solutions new and substantiated?	<u>Completely new.</u> The proposed legislative norms are drafted down to specific articles: adding Section 7-1 (Article 213-1) to the Criminal Code of the Republic of Kazakhstan and supplementing Articles 80, 84, 79, and 210; supplementing Article 271 of the Criminal Procedure Code with neuropsychological examination; and updating Articles 65 and 57 of the Code of Administrative Offenses. From the standpoint of legislative technique, the proposals are properly formulated.
		1) <u>completely new;</u>	
		2) partially new (25-75% new);	
		3) not new (less than 25% new).	
6.	Validity of the main conclusions	All main conclusions <u>are</u> /are not scientifically based on extensive evidence (for qualitative research and training areas in the arts and humanities).	All conclusions <u>are based</u> on a comprehensive evidentiary foundation. The doctrinal conclusions are confirmed by international legal foundations (UN Convention A/RES/79/243, EU AI Act Regulation 2024/1689, GDPR, DSA,

			CRC/C/GC/25), empirical data (the Committee on Legal Statistics and Special Accounts, the Anti-Fraud Center), and comparative legal analysis (the Russian Federation, Belarus, Ukraine, the Baltic states, and the PRC).
7.	Main provisions submitted for defense	For each provision, the following questions must be answered separately:	Statement 1: Recognizing the information and psychological security of a juvenile as an independent object of criminal law protection is a current legislative demand in the context of the development of the digital economy and platform services. The statement expands the protected object of Chapter 7 of the Criminal Code of the Republic of Kazakhstan ("criminal offenses in the sphere of informatization and communication") from the concept of "computer information" to the mental integrity of the person, which corresponds to the modern direction of development of digital law. The Section 7-1 (Article 213-1) proposed by the author is a structural response aimed against cyberbullying, deepfake materials, illegal profiling, and suicidal content.
		7.1 Is the provision substantiated?	7.1 substantiated
		1) substantiated;	7.2 no
		2) approximately substantiated;	7.3 yes
		3) approximately not substantiated;	
		4) not substantiated;	
		5) it is not possible to verify the substantiation of the provision in this statement.	
		7.2 Is it trivial?	
		1) yes;	
		2) no;	
		3) it is not possible to verify whether the provision is trivial in this statement.	

		7.3 Is it new?	<u>7.4 broad</u>
		1) <u>yes;</u>	<u>7.5 yes</u>
		2) no;	Statement 2:
		3) it is not possible to verify the novelty of the provision in this statement.	Introducing the category of digital maturity as an independent subject of procedural assessment is an indicator of the adaptation of criminal law qualification to the technological era. The distinguishing feature of the statement is its empirical grounding: reliance on the neuropsychological data of the Add Health dataset (n = 20,745) from the co-authored study by Halibiyati H. et al. (Journal of Criminal Justice, 2024, Scopus Q1, IF 4.3) provides an evidentiary base at the level of internationally ranked research. The proposal is refined in legislative technique for incorporation into Article 80 of the Criminal Code and Article 271 of the Criminal Procedure Code of the Republic of Kazakhstan.
		7.4 Scope of application:	
		1) narrow;	
		2) medium;	
		3) <u>broad</u>	
		4) it is not possible to verify the scope of application of the provision in this statement.	
		7.5 Is it substantiated in the article?	
		1) <u>yes;</u>	<u>7.1 substantiated</u>
		2) no	<u>7.2 no</u>
		3) it is not possible to verify the substantiation of the provision in the article in this statement.	<u>7.3 yes</u>
			<u>7.4 broad</u>
			<u>7.5 yes</u>
			Statement 3:
			Establishing the definitional field of violence in the digital environment at the legislative level is a necessary step for ensuring terminological

			consistency. The value of the statement lies in identifying that the current definition of “child harassment (bullying)” does not cover the technical characteristics of the digital environment (anonymous mode, viral dissemination, automated profiling) and in supplementing it within the framework of Article 8 of the GDPR and the recommendations of CRC/C/GC/25 (2021). <u>7.1 substantiated</u> <u>7.2 no</u> <u>7.3 yes</u> <u>7.4 broad</u> <u>7.5 yes</u> Statement 4: Introducing the institution of digital delicts as an independent doctrinal category is a foundational decision in the institutional formation of domestic cyberlaw. The definition of a digital delict reveals the substance of encroachment on information security in the digital environment, while the juveniles three role statuses (victim/offender/instrument) serve as a practical mechanism for legislative differentiation. The proposals to improve Articles 84 and 79 of the Criminal Code and Articles 65 and 57 of the Code of Administrative Offenses of the Republic of
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			Kazakhstan are substantiated down to specific articles. <u>7.1 substantiated</u> <u>7.2 no</u> <u>7.3 yes</u> <u>7.4 broad</u> <u>7.5 yes</u> Statement 5: The qualification concept combining digital maturity and the state of artificial intelligence is a methodological foundation for integrating domestic criminal law doctrine into the context of technological trends. The international basis of the statement is the reception of the EU AI Act (Regulation 2024/1689) and the PRCs 2023 measures for regulating generative AI; at the national level, it is harmonized with the Concept for the Development of Artificial Intelligence approved by the President of the Republic of Kazakhstan on September 24, 2024. <u>7.1 substantiated</u> <u>7.2 no</u> <u>7.3 yes</u> <u>7.4 broad</u> <u>7.5 yes</u> Statement 6: The three-dimensional legal regime for complicity in crime under AI conditions is a structural response for
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		determining the role of generative algorithms and synthetic technologies in criminal circulation. Supplementing Article 210 of the Criminal Code of the Republic of Kazakhstan with elements involving the production of phishing content and the creation of deepfake materials using generative AI is a reception within the framework of Articles 7-11 of the UN Convention A/RES/79/243; expanding Articles 28, 53, and 54 of the Criminal Code is a mechanism for qualifying adults psychological coercive influence on juveniles through AI. <u>7.1 substantiated</u> <u>7.2 no</u> <u>7.3 yes</u> <u>7.4 broad</u> <u>7.5 yes</u> Statement 7: The tripartite institutional and legal model "State - Platform - Legal Representative" is a modern concept of platform responsibility for ensuring childrens digital security. The structural foundation of the model is the "duty of care" in Article 28 of the EU DSA Regulation (2022/2065), which is implemented into domestic legislation as the institution of "counterpart obligations." Designating a cyber squad and a digital
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		ombudsman as specialized subjects is a practical mechanism for renewing the regulatory system. UNICEF's 2024 data (only 38% parental awareness and 12% active use of control tools) objectively substantiates the relevance of the proposal. <u>7.1 substantiated</u> <u>7.2 no</u> <u>7.3 yes</u> <u>7.4 broad</u> <u>7.5 yes</u> Statement 8: The four-pillar institutional and normative architecture is the authors construct that unites Statements 1-7 into a single doctrinal system. The architecture displays five innovative qualities: (a) in the regulatory-platform pillar, national implementation of the DSA model; (b) in the institutional-subject pillar, structural consolidation of the tripartite model; (c) in the response-educational pillar, consolidation of digital education measures; and (d) in the systematization-codification pillar, an enhanced protection regime for juveniles personal data. The architecture forms specific implementation mechanisms in the context of the Law of the Republic of Kazakhstan "On the Prevention of
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			Offenses” dated December 30, 2025. <u>7.1 substantiated</u> <u>7.2 no</u> <u>7.3 yes</u> <u>7.4 broad</u> <u>7.5 yes</u>
8.	Principle of reliability.	8.1 The choice of methodology is justified or the methodology is clearly described:	<u>Yes.</u> The methodological complex, including general scientific methods (dialectical, systemic-structural, historical, formal-logical) and special legal methods (comparative legal, normative-dogmatic, statistical, and content analysis), was consistently selected in accordance with the subject of the research.
	Reliability of sources and submitted information	<u>1) yes;</u>	
		2) no.	<u>Yes.</u> Modern legal-analytical tools were used for comprehensive processing of digital databases (the Committee on Legal Statistics and Special Accounts, Anti-Fraud Center reports) and international documents (EU regulations, UN documents).
		8.2 The results of the dissertation were obtained using modern methods of scientific research and methods of data processing and interpretation with the use of computer technologies:	
		<u>1) yes;</u>	
		2) no.	
		8.3 Theoretical conclusions, models, identified interrelations, and patterns are substantiated and confirmed by experimental studies (for training areas in pedagogical sciences, results are substantiated on the basis of a pedagogical experiment):	<u>Yes.</u> The empirical basis of the category of digital maturity is substantiated by neuropsychological data from the Add Health longitudinal dataset (n = 20,745). This is an objective indicator of reliability at the level of internationally ranked research.
		<u>1) yes;</u>	
		2) no.	

		8.4 Important statements are confirmed / partially confirmed / not confirmed by references to specific and reliable scientific literature.	Confirmed. Important statements are confirmed by specific bibliographic references to international sources (Scopus journals, UN resolutions, EU regulations), domestic scholarly works, and regulatory legal acts of the Republic of Kazakhstan.
		8.5 The list of references used is sufficient /insufficient for the literature review.	Sufficient. The list comprehensively covers modern Kazakhstani and international legal scholarship, legislation of the Republic of Kazakhstan, and international legal documents (AI Act 2024/1689, GDPR, DSA, A/RES/79/243, CRC/C/GC/25, the Lanzarote Convention).
9	Principle of practical value	9.1 The theoretical significance of the dissertation:	Present. The work introduces five new core categories into domestic cyberlaw, information law, and criminal law doctrine and lays the foundation for the formation of the institution of digital delict as an independent doctrinal category.
		1) present;	
		2) no.	Yes. The developed proposed norms may be directly used in the legislative activities of the committees of the Mazhilis and Senate of the Parliament of the Republic of Kazakhstan, in the
		9.2 The dissertation has practical significance and the possibility of applying the obtained results in practice is high:	
		1) yes;	

		2) no.	methodological work of the Committee on Legal Statistics and Special Accounts under the Prosecutor Generals Office, and in the practice of the Ministry of Internal Affairs and the Office of the Commissioner for Childrens Rights.
		9.3 Are the practical recommendations new?	<u>Completely new.</u> The proposals to improve Articles 213-1, 80, 84, 79, and 210 of the Criminal Code, Article 271 of the Criminal Procedure Code, and Articles 65 and 57 of the Code of Administrative Offenses of the Republic of Kazakhstan are conclusions based on international experience that have not previously been proposed in domestic legal practice.
		1) <u>completely new;</u>	
		2) partially new (25-75% new);	
		3) not new (less than 25% new).	
10.	Quality of writing and formatting	Quality of academic writing:	<u>High.</u> The dissertation complies with modern standards of scientific and academic Kazakh legal terminology in the state language and is formatted at a level that fully satisfies the technical requirements of the Methodological Guidelines of the Ministry of Education and Science of the Republic of Kazakhstan.
		1) <u>high;</u>	
		2) medium;	
		3) below average;	
		4) low.	
11.	Comments on the dissertation		No significant shortcomings were identified in relation to the dissertation work. At the same time, there are recommendations of a technical and legal nature to which the doctoral candidate may pay attention. FIRST,

			the procedure for examining deepfake materials under the elements of Article 210 of the Criminal Code of the Republic of Kazakhstan in Statement 6 requires the existence of technical expert standards (for example, certified methods for assessing digital evidence); it would be advisable for the structure of these mechanisms to be disclosed in greater detail in the study. SECOND, if the definition of an artificial intelligence system in Statement 5 were harmonized with the conceptual apparatus of the Concept for the Development of Artificial Intelligence approved by the President of the Republic of Kazakhstan on September 24, 2024, the integration with national digital policy would be strengthened. These recommendations do not reduce the overall high scientific value of the dissertation and are advisory in nature.
12.	Scientific level of the doctoral students articles on the research topic (if the dissertation is defended in the form of a series of articles, the official reviewers examine the scientific level of each article of the doctoral student on the research topic)		The dissertation is not defended in the form of a series of articles. Nevertheless, the scientific level of the doctoral candidates publications on the research topic is high: an article by Halibiyati H. and colleagues was published in the Journal of Criminal Justice (Scopus Q1, IF 4.3), and an article by Kubanova N. and colleagues

			was published in Social & Legal Studios (Scopus).
13.	Decision of the official reviewer (in accordance with paragraph 28 of these Model Rules)		The dissertation work by Halibiyati Halibati on the topic "Problems of legal liability of juveniles for offenses in the sphere of informatization and communication", submitted for the degree of Doctor of Philosophy (PhD) under the educational program "8D04203 - Jurisprudence", meets all requirements for scientific works, and the conclusions and recommendations in the dissertation research are theoretically and practically substantiated. The work has been completed at a high level. I recommend that the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan award Halibiyati Halibati the degree of Doctor of Philosophy (PhD) in the specialty "8D04203 - Jurisprudence".

Official reviewer:
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 ТАЙМЫН/ЗАБЕРЯЮ
 (Қолы/подпись)
 Кадрлық әкімшілік бөлімінің бастығы/
 Кадрлық Отделінің кадрларды әкімдеу бөлімшесі