Construction of a Criminal Legal Framework for Brushing and Credit Manipulation in the Context of Data Crimes

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Abstract: This paper focuses on constructing a criminal law regulatory framework for brushing and credit manipulation behaviors from the perspective of data crimes, conducting multidimensional analysis of such activities. Firstly, it elaborates on the research background, pointing out that brushing and credit manipulation behaviors hinder the healthy development of e-commerce, while existing civil and administrative regulatory mechanisms face implementation challenges and criminal legislation lags behind. These activities infringe upon the legitimate rights and interests of consumers, business operators, and e-commerce platforms, while also undermining fair competition order.Subsequently, the paper analyzes the constitutive elements and social harms of brushing and credit manipulation, exploring controversies surrounding criminal law intervention. The identified contributing factors include inadequate supervision by e-commerce platforms, complexities in applying criminal law to different entities, discrepancies in judicial rulings, and ambiguity in the definition of criminal offenses. To address these issues, this paper proposes constructing a criminal law regulatory framework for brushing and credit manipulation from the perspective of data crime. It puts forward solutions including strengthening supervision of e-commerce platforms, clarifying legal responsibilities of all entities, unifying judicial adjudication standards , and improving the application of relevant criminal charges. The objective is to effectively curb brushing and credit manipulation, thereby safeguarding the fair competition order in the e-commerce market and protecting the legitimate rights and interests of consumers.

Keywords: brushing and credit manipulation, data crimes, criminal law regulation, the principle of criminal law modesty, judicial decision

1. Introduction

1.1. Research background

With the vigorous development of the digital economy, e-commerce has become a crucial engine for global economic growth. However, alongside the expansion of platform economies and innovations in business models, "brushing and credit manipulation" has emerged as a persistent issue undermining the healthy development of the industry. These practices involve fabricating transaction data, falsifying user reviews, and artificially creating false market signals, which distort the authenticity of supply-demand relationships and pose systemic threats to market fairness, consumer rights, and platform credibility mechanisms.

The harm of brushing and credit manipulation has transcended individual rights infringement, evolving into systemic risks that erode the foundations of the digital economy. First, consumer rights suffer threefold infringement: 1) Misleading purchase decisions through false transaction data violate the right to information. 2) Fabricated product evaluations undermine quality assessment systems, damaging the right to fair dealing. 3) Some brushing activities combine with online fraud, directly causing financial losses. Second, legitimate interests of competitors face systematic deprivation: Malicious order brushing to boost search rankings forces honest operators into a vicious cycle of "traffic devaluation - sales decline - operational cost escalation", driving SMEs out of the market. Third, the credibility mechanism of e-commerce platforms faces erosion: The credit system based on user evaluations and transaction volumes — a core component of the digital economy — becomes corrupted by data pollution, ultimately weakening platform competitiveness. Fourth, market fairness confronts deconstruction risks: When "bad money drives out good" becomes an industry norm, it fundamentally undermines business ethics based on integrity and exacerbates resource allocation distortions.

1.2. Research significance

This study holds three theoretical contributions: First, by systematically analyzing the essence of legal interest infringement in brushing and credit manipulation activities, it proposes a criminal law regulatory framework aligned with digital economy development needs, addressing judicial inconsistencies in "divergent rulings on similar cases". Second, through typological analysis of criminal liabilities across brushing industry chain participants, it advances criminal law theory innovation in data-driven crimes. Third, adopting a comparative law perspective, it draws on legislative experiences from Japan and Korea regarding obstruction of business offenses to construct a three-dimensional governance system encompassing preemptive prevention, real-time supervision, and post-factum accountability, establishing a paradigm for regulating emerging cybercrimes.

Chinese academic circles have conducted multifaceted studies on the criminal regulation of brushing and credit manipulation. Firstly, regarding criminalization, scholars generally recognize that such conduct violates fair market competition order and entails social harmfulness, warranting inclusion within the scope of criminal law regulation. Zhenyu Deng emphasizes that false trading in e-commerce disrupts fair competition mechanisms, yet the absence of direct regulatory legislation underscores the necessity of criminal law intervention [1]. Secondly, in exploring applicable charges, Dongyan Lao critically examines the overbroad application of the Crime of Illegal Business Operation, strictly defining its constitutive elements while emphasizing the construction of decriminalization mechanisms. Her work provides an in-depth analysis of the common characteristics of "business operations" under this charge and pathways for exculpation [2]. Thirdly, regarding governance approaches, Liangfang Ye advocates collaborative governance as the optimal strategy, stressing the management responsibilities of e-commerce platforms and encouraging proactive civil remedies, the formulation of reasonable industry regulations, and the elimination of social factors inducing merchant misconduct [3].

However, existing research exhibits notable deficiencies. First, overemphasis on single-charge analyses without constructing a comprehensive criminal regulatory framework. Second, insufficient exploration of unified judicial adjudication standards and precise delineation of legal liabilities among different actors, failing to adequately address practical judicial needs.

2. Analysis of the hazards and necessity of criminal regulation of brushing and credit manipulation

Building upon the established understanding of the erosive impact of brushing and credit manipulation on the digital economy ecosystem and the theoretical necessity for regulation, this chapter systematically examines the essential elements, harmful manifestations, and justifications for criminal regulation of such conduct. By deconstructing behavioral subjects, modality classifications, and harm gradations, this section demonstrates the necessity and feasibility of criminal law intervention, thereby laying the logical foundation for constructing a multi-dimensional regulatory framework.

2.1. Constituent elements and hazards of brushing and credit manipulation

2.1.1. Constituent elements

The subjects involved in brushing and credit manipulation encompass e-commerce merchants, brushing intermediaries, and brushing operatives. E-commerce merchants serve as initiators and primary beneficiaries. To enhance store rankings, credit ratings, and product sales, they exhibit strong incentives to organize or commission such activities. By fabricating transaction data to create false impressions of product popularity, merchants mislead consumer decisions and undermine fair market competition. Brushing intermediaries act as organizers and coordinators. They establish brushing platforms or utilize social media groups to recruit operatives and interface with merchants. These intermediaries develop operational rules, processes, and remuneration standards while managing operatives to ensure efficacy. Their commission-based profit model facilitates organized, large-scale manipulation. Brushing operatives execute specific fraudulent transactions. Hired by merchants or intermediaries, they perform predetermined actions including page views, orders, payments, order confirmations, and positive reviews [4].

2.1.2. Modality classifications

Brushing and credit manipulation manifests in two primary forms.

- Positive brushing and credit manipulation: Merchants artificially inflate store credibility and sales through orchestrated fake transactions and favorable reviews. Recruitment occurs via social networks or specialized groups, with operatives reimbursed through digital transfers after completing simulated purchases. This modality distorts market data and disrupts fair competition.
- Negative brushing and credit manipulation: Competitors sabotage target stores through malicious orders and negative reviews. Operatives may place bulk orders followed by fraudulent refund claims, tying up capital and damaging credit ratings. False negative evaluations further erode consumer trust. This modality exhibits targeted malice, severely disrupting business operations and market confidence.

2.1.3. Hazards

- Consumer rights: Violates rights to informed decision-making, fair trading, and property protection. Fabricated data prevents accurate product assessments, leading to substandard purchases.
- Business environment: Destroys fair competition by forcing legitimate operators into manipulation to avoid market elimination, thereby increasing operational costs and compromising business ethics.

- Platform integrity: Undermines core credibility mechanisms essential to e-commerce competitiveness. Distorted data impairs marketing precision and operational efficiency, driving consumer migration to rival platforms.

2.2. Necessity and feasibility of criminal intervention

2.2.1. Necessity

Brushing and credit manipulation exhibit severe social harmfulness, necessitating criminal law intervention. Ying Dai and Jiayi Wu point out that in the internet era, such practices disrupt market competition order and undermine fair business environments. By creating fictitious transactions and fabricated positive reviews, dishonest merchants marginalize competitors who operate with integrity, thereby hindering the healthy development of the market [5].

Current civil and administrative regulations are insufficient to address brushing and credit manipulation. Civil litigation involves complex procedures and high costs, failing to deter malicious actors effectively. Administrative penalties, with their limited financial sanctions and low legal costs, cannot fundamentally curb the proliferation of these practices. For instance, under China's Anti-Unfair Competition Law, the maximum administrative fine for false transactions is CNY 2 million (approximately USD 280,000), which is negligible compared to the illicit profits generated by large-scale brushing operations. Additionally, platforms often resort to temporary measures like store closures, but perpetrators easily evade penalties by registering new accounts.

The principle of criminal law modesty emphasizes that criminal law should serve as a last resort when other legal mechanisms fail. This principle is particularly relevant in regulating brushing and credit manipulation. Criminal intervention is justified only when such acts cause substantial harm — such as significant consumer financial losses or severe distortion of market fairness — and when civil or administrative remedies prove ineffective. Ying Dai and Jiayi Wu caution against overreliance on criminal law in regulating internet finance, highlighting the need for precision in determining the threshold for intervention to balance market order and legal restraint.

2.2.2. Feasibility

According to risk society theory, modern society witnesses the continuous emergence of various new risks, necessitating legal preemptive intervention for risk prevention. As an emerging issue in e-commerce, brushing and credit manipulation carries substantial potential risks. Shen Zhenfu observes that modern biotechnology poses risks with enormous and irreversible consequences due to uncertainty [6]. By analogy, brushing and credit manipulation similarly exhibits such indeterminate risks. This practice undermines the fair competition environment of the market, making it difficult for consumers to make accurate purchasing decisions based on authentic data, thereby infringing consumer rights.

Simultaneously, brushing and credit manipulation may trigger a trust crisis in the data market, jeopardizing the healthy development of the entire industry. It not only subverts market trust mechanisms but may also induce chain reactions affecting the sustainable growth of e-commerce. Incorporating such conduct into the scope of criminal law evaluation enables early regulation of risky behaviors to prevent harm escalation. Therefore, criminal law intervention in brushing and credit manipulation proves both reasonable and feasible.

3. Causes and analysis of brushing and credit manipulation

The proliferation of brushing and credit manipulation stems from multiple structural contradictions: the e-commerce platform regulatory system harbors three vulnerabilities — technological lag in

monitoring , oversights in internal management , and defects in credit evaluation mechanisms — providing opportunities for data fabrication. At the level of criminal law application , there exists a diversity of subjects and intersectionality of offenses , creating complexities in the concurrence of criminal liabilities among e-commerce store operators, brushing intermediaries, actual brushers, and trading platforms. Judicial practice is plagued by inconsistent adjudication standards , while ambiguity in offense definition pervades controversies over illegal business operations in "positive brushing" and overlapping charges in "reverse credit manipulation". The tension between legislative supply and judicial demand severely constrains the effectiveness of criminal law regulation, necessitating the establishment of a collaborative governance system that integrates technological governance and normative interpretation.

3.1. Inadequate regulatory oversight by e-commerce platforms

3.1.1. Insufficient monitoring and enforcement by e-commerce platforms

With the rapid development of e-commerce, brushing and credit manipulation tactics have grown increasingly covert and diversified. Brushing organizations employ advanced technical means, such as simulating genuine user behaviors and using false IP addresses , making it difficult for platforms to detect violations through conventional monitoring methods. Many platforms lack specialized technical personnel and cutting-edge monitoring equipment, failing to promptly identify and combat such activities. This regulatory vacuum allows malicious actors to engage in data fabrication with impunity, severely undermining market fairness and competition [7].

3.1.2. Loopholes in internal management of e-commerce platforms

Collusion between internal employees and brushing organizations is not uncommon. Employees may abuse their authority to facilitate brushing schemes by leaking monitoring rules or providing fabricated transaction data. Weak internal control mechanisms and insufficient oversight further enable such misconduct to evade detection and accountability.

3.1.3. Flaws in credit evaluation mechanisms of e-commerce platforms

Current credit evaluation systems overly rely on user reviews and transactional data, which are easily manipulated through brushing and credit manipulation. Unscrupulous merchants artificially inflate credit ratings and sales rankings to attract consumers, while legitimate businesses adhering to ethical operations are disadvantaged. Consumers, relying on these distorted metrics, face heightened risks of misleading purchasing decisions.

3.2. Complexity in the application of criminal law to different entities

3.2.1. Online store operators

Online store operators actively organize or participate in brushing and credit manipulation to boost sales and credibility. Their primary motive is unfair competition for economic gain. In criminal law application, this may constitute the crime of disrupting production and business operations and the crime of false advertising.

3.2.2. Brushing intermediaries

Brushing intermediaries serve as organizers and planners of brushing and credit manipulation, often possessing specialized techniques and organizational capabilities. Their activities may fall under the

crime of illegal business operation, which functions as a "pocket offense" covering unauthorized commercial activities that disrupt market order.

3.2.3. Actual brushers

Actual brushers are typically ordinary internet users who implement brushing and credit manipulation, often for minor financial rewards. Given their lower subjective culpability, their behavior is not suitable for criminal law regulation and should be addressed through administrative penalties instead.

3.3. Disparities in judicial decisions and their causes

Significant inconsistencies exist in judicial rulings on brushing and credit manipulation, with courts rendering divergent judgments in similar cases. This phenomenon of inconsistent judgments in similar cases challenges legal authority and predictability. Key contributing factors include:

3.3.1. Disciplinary perspectives

- Criminology focuses on social harm assessment, analyzing the root causes and societal impacts of misconduct [8].
- Criminal Jurisprudence strictly follows statutory requirements to determine criminal liability and sentencing.
- Judges emphasizing different disciplinary frameworks may reach conflicting conclusions on the same conduct.

3.3.2. Behavioral complexity

- Multi-party involvement (brushers, merchants, platforms) complicates liability attribution.
- Evolving internet technologies enable new behavioral patterns (e.g., AI-driven fake reviews, blockchain-based manipulation) that outpace existing legal frameworks.
- Statutory ambiguity in terms like "serious circumstances" and "market order disruption" grants excessive judicial discretion.

3.4. Ambiguity in offense qualification

Within the framework of data crimes, the criminal regulation system for brushing and credit manipulation exhibits significant ambiguity in offense qualification. Positive brushing and credit manipulation typically involves merchants organizing "click farms" to conduct sham transactions and fabricate positive reviews to enhance store reputation and product sales. Conversely, negative brushing and credit manipulation employs fake transactions to maliciously disparage competitors, thereby undermining their commercial credibility.

3.4.1. Positive brushing and credit manipulation

The criminal classification of positive brushing and credit manipulation remains contentious. Some scholars argue that it should be classified as the Crime of Illegal Business Operation, as intermediaries organizing click farms disrupt market order, aligning with the "other seriously market-disrupting illegal business activities" under Article 225 of the Criminal Law [9]. However, opposing views contend that brushing activities fundamentally differ from traditional business operations, rendering such classification overly tenuous. Bokun Lou noted that the interpretation of criminal conduct varies across disciplines, further complicating the legal characterization of brushing and credit manipulation.

3.4.2. Negative brushing and credit manipulation

Negative brushing and credit manipulation similarly lacks clear legal categorization. Certain academics advocate for the Crime of Damaging Business Credit or Commodity Reputation, given its intent to harm competitors' commercial standing. However, this charge requires proof of "significant losses" or "serious circumstances", which are notoriously difficult to quantify in practice. Alternative proposals suggest the Crime of Disrupting Production and Operation, but debates persist over whether malicious reviews constitute "destruction of production tools" under its statutory elements.

3.4.3. Application of other related offenses

Additional disputes arise over the applicability of ancillary charges. For instance, using forged identity documents during brushing may implicate the Crime of Forging, Altering, Buying, or Selling Official Documents, Certificates, or Seals of State Organs. Yet, the causal link between such acts and brushing and credit manipulation remains legally ambiguous. These definitional uncertainties create substantial challenges for judicial practice and hinder the effective construction of a criminal regulatory framework for brushing and credit manipulation.

4. Construction of a criminal legal framework for brushing and credit manipulation in the context of data crimes

Under the perspective of data crimes, the construction of a criminal law regulatory system for brushing and credit manipulation should focus on safeguarding the order of online transactions and protecting consumer rights as core objectives. This requires establishing a "multi-stakeholder collaborative governance" framework, which integrates government supervision, platform self-regulation, and judicial regulation into an organic mechanism.

At the judicial level, refined judicial interpretations must be formulated to establish a sentencing standard system centered on the scale of brushing, technical methods, subjective malicious intent, and market harm consequences. By differentiating the logic between positive brushing (crime of disrupting production and operation or false advertising crime) and negative brushing (crime of damaging commercial reputation), the administrative and criminal justice linkage mechanismcan be improved.

Ultimately, a three-dimensional regulatory path encompassing "technological governance — legal definition — application of criminal charges — unified adjudication" should be established. This framework aims to accurately combat data crimes while achieving a dynamic balance between maintaining e-commerce market order and fostering innovation in the digital economy.

4.1. Strengthening regulatory oversight on e-commerce platforms

4.1.1. Enhancing self-regulation of e-commerce platforms

In addressing brushing and credit manipulation under the context of data crimes, strengthening self-regulation constitutes a critical component of the criminal law regulatory framework. To refine the credit evaluation system, e-commerce platforms must optimize their algorithms to avoid relying solely on simplistic metrics such as sales volume and positive ratings. Instead, they should comprehensively integrate multidimensional factors including product quality, logistics efficiency, and after-sales service. For instance, mature big data analytics technologies could be adopted to conduct in-depth mining and verification of user reviews, effectively filtering out fake evaluations to ensure authenticity and objectivity of ratings.

4.1.2. Strengthening government regulatory measures

Market regulatory authorities should leverage data monitoring technologies to conduct real-time surveillance of e-commerce platform transaction data, identify abnormal trading behaviors, and promptly investigate data crimes involving brushing and credit manipulation. Cyberspace administration departments must intensify management of online platforms, compelling them to fulfill regulatory obligations by improving internal monitoring mechanisms to swiftly detect and address illegal activities related to brushing and credit manipulation.

Simultaneously, establishing a cross-departmental joint law enforcement mechanism is imperative.

4.2. Clarifying legal liabilities of various subjects

In constructing a criminal law regulatory framework for brushing and credit manipulation from the perspective of data crimes, it is imperative to clarify the legal responsibilities of different actors.

4.2.1. Online store operators

As initiators of brushing and credit manipulation, online merchants shall bear corresponding criminal liability if their brushing activities severely disrupt market order and harm consumer interests or those of other operators . Pursuant to relevant laws, acts constituting false advertising , illegal business operations , or other crimes shall be prosecuted under specific statutory provisions. For instance, if the scale of brushing is substantial and severely undermines fair market competition, it may be adjudicated under the crime of illegal business operations [10].

4.2.2. Brushing intermediaries

Intermediaries play pivotal roles in the brushing and credit manipulation industrial chain by organizing and facilitating such activities. From dual perspectives of criminology and criminal law doctrine, their conduct shall incur criminal liability if it satisfies statutory elements of crime. When intermediaries manipulate data to provide brushing services for multiple merchants, causing significant societal harm, such acts may be deemed joint crimes, with penalties determined by their functional roles in the offenses.

4.2.3. Brushing participants

Individuals knowingly participating in brushing and credit manipulation activities shall face legal consequences when reaching thresholds of material harm. Those involved in large-scale, organized brushing operations may be treated as accessories under criminal law. Notably, even if acting under employment contracts, their awareness of the illegal nature of brushing negates defenses of good faith. By precisely delineating liabilities across these actors, the criminal law framework for combating brushing and credit manipulation can be systematically strengthened.

4.3. Unification of judicial adjudication standards

To unify judicial adjudication standards, it is necessary to formulate detailed judicial interpretations to clarify the criteria for conviction and sentencing of brushing and credit manipulation. As Zhang Kuiying pointed out, the discrepancies in understanding the "scope of crime" between criminology and criminal law highlight the need for precise delineation of the criminal boundaries of brushing and credit manipulation in its criminal regulation.

Regarding conviction, judicial interpretations should specify the specific circumstances under which brushing and credit manipulation constitutes a crime. For instance, clarifying the scale (e.g.,

the number of fake transactions), methods (e.g., malicious technical means disrupting market order), and monetary thresholds (e.g., transaction amounts) that distinguish ordinary violations from criminal offenses.

In terms of sentencing standards, comprehensive consideration of multiple factors is required:

- Quantifiable harm: The degree of damage to consumer rights and market competition, such as financial losses or systemic trust erosion.
- Subjective intent: Whether the perpetrator acted intentionally, distinguishing first-time offenders, occasional offenders, and habitual offenders.
- Mitigating or aggravating factors: Voluntary cessation of illegal activities and efforts to mitigate losses may warrant leniency, while repeated violations or severe circumstances should incur harsher penalties.

Such detailed judicial interpretations provide clear guidelines for adjudicators, ensuring fair and reasonable judgments and strengthening the criminal regulatory framework for brushing and credit manipulation in the context of data crimes [11].

4.4. Refining the application of relevant criminal offenses

From the perspective of data crimes, improving the criminal legal regulatory system for brushing and credit manipulation requires precise application of relevant offenses. Within the dual perspectives of criminology and criminal law, the concept of "criminal conduct" lacks a unified meaning. The examination of criminal acts must be grounded in natural behavior, which provides theoretical guidance for clarifying the application of offenses related to brushing and credit manipulation.

Positive brushing and credit manipulation, typically aimed at enhancing the reputation of goods or stores, should be addressed through applicable offenses based on specific methods and consequences. If fabricated transaction data severely disrupt fair market competition, the crime of obstruction of business or crime of false advertising may apply. The application must strictly verify conditions such as actual losses and scope of impact [12].

Negative brushing and credit manipulation, intended to defame competitors through malicious negative reviews or similar means, should be prosecuted under the crime of damaging commercial reputation and commodity reputation when meeting statutory elements. Strict criteria must be established for subjective intent, severity of conduct, and measurable harm [13].

For related offenses such as the crime of illegal business operations and crime of fraud, their application must adhere to legal standards. Judicial authorities must avoid overextending or unduly narrowing the scope of these offenses to ensure accurate legal responses to brushing and credit manipulation, thereby safeguarding the integrity of e-commerce markets.

5. Conclusion

This article focuses on constructing a criminal law regulatory system for brushing and credit manipulation from the perspective of data crime, conducting a multidimensional analysis of such conduct.

First, it examines the constitutive elements, clarifying the roles of subjects including online store operators, brushing intermediaries, and individual brushers, as well as different methods such as self-benefiting brushing and credit manipulation and competitor-harming brushing and credit manipulation. Concurrently, it delves into the infringements of this conduct on consumer rights, legitimate interests of businesses, and e-commerce platforms, revealing its severe societal harm [14].

During the research process, controversies regarding criminal law intervention in brushing and credit manipulation are thoroughly discussed. On one hand, the necessity of criminal law intervention

is justified based on the conduct's significant harm and the inadequacy of other legal remedies. On the other hand, the timing and feasibility of intervention are explored in light of the principle of criminal law modesty and risk society theory. Furthermore, the article analyzes the underlying causes of challenges in criminal regulation, including regulatory loopholes in e-commerce platforms, complexities in applying criminal law to different subjects, disparities in judicial decisions, and ambiguity in statutory offense definitions. Through comprehensive analysis, the article clarifies the characteristics and harms of brushing and credit manipulation within the domain of data crime.

For solutions, it proposes building a criminal law regulatory framework encompassing: strengthening e-commerce platform self-regulation, enhancing governmental oversight, promoting industry self-regulatory organizations, clarifying legal responsibilities for all subjects, strengthening judicial guidance and training, standardizing judicial decision-making criteria, refining the application of relevant offenses and integrating theoretical and practical approaches. These measures aim to effectively curb brushing and credit manipulation, safeguarding fair competition in e-commerce markets and protecting consumer rights.

References

[1] Deng Zhenyu. On the Legal Regulation of Brushing Orders in E-commerce[J]. Market Weekly, 2021, 34(04): 178-179+182.

[2] Lao Dongyan. Research on Business Activities in the Crime of Illegal Business Operation[J]. Modern Law Science, 2024, 46(05): 49-67.

[3] Ye Liangfang. Normative Analysis and Governance Paths of Brushing Orders and Credit Inflation Behaviors[J]. Law Science, 2018, (03): 177-191.

[4] Lou Bokun. Criminal acts in comparative perspective: Also on the birth of criminology of criminal acts [J]. Journal of Zhejiang Gongshang University, 2010, (01): 13-18. DOI: 10.14134/j.cnki.cn33-1337/c.2010.01.009.

[5] Dai Ying, Wu Jiayi. Challenges and pathways of criminal regulation on internet financial platforms [J]. Journal of Hebei Radio & TV University, 2021, 26(04): 73-76. DOI: 10.13559/j.cnki.hbgd.2021.04.017.

[6] Shen Zhenfu. On the criminal regulation of modern biotechnology risks: A concurrent commentary on Articles 38 and 39 of the Criminal Law Amendment (XI) [J]. Science Technology and Law (Chinese and English), 2021, (03): 65-73. DOI: 10.19685/j.cnki.cn11-2922/n.2021.03.004.

[7] Yu Li, Chen Zhijun. "Research on Criminal Regulation of Acts Endangering the Safety of Public Transport Vehicles". Policing Studies, 2020, 3(4): 96-122+124.

[8] Zhang Kuiying. "Analysis of the Concept of 'Crime': A Comparative Study of Criminal Law and Criminology Perspectives". Law and Society, 2010, (10): 8-8. DOI: 10.19387/j.cnki.1009-0592.2010.10.009.

[9] Bai Xueting. "Reconstruction of the Criminalization Mechanism for Online 'Click Farming and False Review' Behaviors". Shandong University, 2023. DOI: 10.27272/d.cnki.gshdu.2023.002004.

[10] Zhou Quan. "Criminal Regulation of Organized Click Farming and False Review Behaviors: An Analysis Based on the Crime of Illegal Business Operation". Journal of Changzhi University, 2018, 35(4): 16-19.

[11] Li Ran, Zheng Yan. "Criminalization and Comprehensive Governance of Positive Click Farming and False Review Behaviors". Journal of Guangxi Police College, 2019, 32(1): 24-29. DOI: 10.19736/j.cnki.gxjcxyxb.2019.01010.

[12] Ma Yongqiang. "Criminal Law Characterization and Administrative-Criminal Coordination of Positive Click Farming Behaviors". Journal of Law Application, 2020, (24): 63-78.

[13] Dong Rui. "Research on the Path of Criminal Regulation of Reverse Click Farming Behaviors". Shandong University of Political Science and Law, 2024. DOI: 10.27874/d.cnki.gsdzf.2024.000040.

[14] Wang Mu. "Criminological Research: Within and Beyond Criminal Law". China Legal Science, 2010, (6): 121-137. DOI: 10.14111/j.cnki.zgfx.2010.06.008.