¹ Yongyin Huang

Research on the Impact of Internet Literature Protagonist Role Setting on Moral Education in Colleges and Universities Based on the Perspective of Big Data Technology



Abstract: - Throughout history, literary works have played a significant role in education, network literature has emerged as a prominent form of literature, captivating the interest of college students. The character portrayals in network literature have a profound impact on the formation of their personalities and their approach to daily life. However, it is essential to acknowledge that some network literature works are poorly crafted, resorting to incestuous and pornographic content for popularity, and plagiarism is rampant. Therefore, with the help of big data technology, we should use information collection, information integration, scientific prediction and other data methods to accurately identify and dialectically look at Internet literature, correctly analyze the setting of the protagonist's role in it, and think about the positive and negative impacts it has brought about. The correct guidance of college students in reading network literature should be carried out from the perspectives of the state, online platforms, and educational institutions. By doing so, network literature can become a catalyst for moral education in higher education.

Keywords: Big Data Technology, Network Literature, Protagonist, Character Portrayals, Moral Education In Higher Education.

I. INTRODUCTION

The twenty-first century is an era of rapid development of information, the generation and promotion of the application of big data technology has provided great convenience for all walks of life, and the same is true in the field of higher education, the traditional way of moral education has been unable to meet the diversified needs of students[1]. By integrating and analyzing the existing literature, it is found that domestic and foreign scholars hold positive views on the flexible application of big data technology in higher education, and the use of big data in university management is extremely convenient.

In China, regarding the characteristics of big data, scholars often believe that there are the following four: a huge volume of data; a wide variety of data types from diverse sources; and a rapid rate of data growth, acquisition and processing. Zhang Hui et al. pointed out that data governance in colleges and universities has a driving effect on the improvement of the educational operation mechanism, prompting it to shift from focusing on management to focusing on service, and from a passive service mode to an active service mode, forming a good ecological environment for education and teaching that focuses on the development of students[2]. Yang Xianmin and Zhao Ruibin believe that the formation of a new ecosystem of intelligent technology is closely related to the interaction of digital information technologies such as 5G communication, artificial intelligence, big data, Internet of Things, blockchain and so on, and that this interaction not only changes the traditional way of collecting educational information, but also provides a brand new concept for the fusion of "human, machine, object and environment" in the educational context[3].

In foreign studies, Hassna Ghazwan points out that big data-enabled colleges and universities have gained new momentum, helping them to reconfigure their internal operations and organizational interconnections using big data technologies[4]. Ashaari Mohamed Azlan, Singh Karpal Singh Dara et al argue that performance management in higher education institutions with the help of big data technology can help to promote the transformation of teaching and learning models and enhance educational data[5].

Although there are more related research results at home and abroad, the research on using the role setting of Internet literature protagonists to guide moral education in colleges and universities under the technical support of big data is still lacking and needs to be further improved. This paper, starting from the perspective of big data technology, summarizes and organizes the role setting of Internet literature under the support of data, clarifies the

¹ Guangdong College of Foreign Studies South China Business College, Guangzhou Guangdong, 510545, China.

^{*}Corresponding author: Yongyin Huang

advantages and disadvantages of the role setting of Internet literature for the moral education in colleges and universities, and puts forward the countermeasures and suggestions to enhance the effectiveness of the use of data.

The research purpose of this paper is to optimize moral education in colleges and universities based on the role of protagonist of network literature, using big data technology to collect and analyze college students' reading tendency, reading preference, reading style, combining with clustering analysis, time series, data insight and other means, which is of great significance in solving the solidification of the form of moral education in colleges and universities, and adopting research methods such as the literature research method, the comparative analysis method, the interdisciplinary research method, and so on.

II. THE BIRTH AND CURRENT STATUS OF NETWORK LITERATURE

Network literature, which initially received little attention, has now gained a massive readership within a relatively short span of around twenty years. In 1998, Taiwanese college student Cai Zhiheng (known as "jht") created his work The First Intimate Contact[6]. Though the writing may have appeared somewhat immature, it rode the wave of the internet and sparked a frenzy of network literature creation on both sides of the Taiwan Strait. Countless young online writers burst forth with vibrant creative passion, resulting in a plethora of network literature works being crafted, published, and even adapted into different forms. Today, an increasingly comprehensive industry chain has emerged from this creative explosion[7].

Moreover, with the accelerated pace of societal development and increasing pressures in learning and work, a fast-paced reading mode has become prevalent among college students. In addition, the rapid advancement of internet technology has made reading more convenient for students. They can access information anytime and anywhere through online searches and navigation[8]. With its diverse genres, varied storylines, convenience of access, and frequent moments of excitement, network literature has quickly captivated a loyal readership of college students. Through reading network literature, they can experience spiritual pleasure, detach themselves from the complexities of reality, and find temporary relaxation. To some extent, it helps alleviate the spiritual emptiness and confusion experienced by college students.

Undoubtedly, network literature has transformed the structure of literature in an undeniable manner, sparking lively discussions in academic circles and broader society[9]. It has also presented new challenges to moral education in higher education institutions. According to the 20th National Reading Survey conducted by the China Academy of Press and Publication, "In 2022, the exposure rate to digital reading methods (such as online reading, mobile reading, e-readers, and Pad reading) among the Chinese population reached 80.1%". The Research Report on the Development of Chinese Network literature in 2022, published by the Chinese Academy of Social Sciences, revealed that the market size of network literature in 2022 reached 38.93 billion yuan, achieving a remarkable 8.8% year-on-year growth. The user base reached 492 million, and the total number of Chinese network literature writers surpassed 22.78 million. Notably, the post-1990s and post-2000s generations have emerged as the backbone and driving force behind both the consumption and creation of network literature.

III. COMMON PROTAGONIST CHARACTER PORTRAYALS IN NETWORK LITERATURE

In the history of Chinese network literature development, when it comes to categorizing literature based on gender, male-oriented network literature emerged and developed first. Until the establishment of platforms such as Hongxiu Tianxiang (hongxiu.com), Xiaoxiang Shuyuan (xxsy.net), and Jinjiang Literature City (jjwxc.net), the scale and quantity of male-oriented network literature had far surpassed that of female-oriented network literature. It was only on the foundation laid by male-oriented web novels that female-oriented network literature gradually gained momentum[10]. In order to facilitate the analysis of the impact of protagonist character portrayals on moral education in higher education, this study categorizes common protagonist character portrayals in network literature into two types: male-oriented and female-oriented.

In male-oriented web novels, there are two common types of protagonist character portrayals:

1) Growing Male Characters: This type features a protagonist who starts off as a loser but gradually rises to greatness. It is a prevalent protagonist character portrayal in male-oriented web novels. In the beginning, the male lead lives an ordinary life due to family circumstances or physical limitations. However, a turning point occurs, leading to the revelation of astonishing abilities or the blessing of special powers. Step by step, the protagonist embarks on a path towards personal success and fulfillment. Examples of this character portrayal can be found in works such as Douluo Continent, Your Majesty, forgive me, Stellar Transformations, and Super Housekeeper. In the renowned novel Douluo Continent, the male protagonist Tang San, driven by unwavering determination, undertakes a fateful leap into the abyss only to find himself transported to a realm known as the

- "Douluo Continent". Enduring numerous trials, he establishes the formidable "Shrek Seven Devils" team, embarking on a journey of vanquishing monsters and advancing his martial soul. Through the unwavering augmentation of his innate strength and the external support of formidable martial souls like the "Sky Hammer" and the "Blue Silver Grass" spirit ring, he ultimately achieves triumphant revenge, ascending to become the mightiest presence in the Douluo Continent. Along this path, he also finds love, embodying the quintessential character progression from weakness to strength, where both body and spirit evolve in unison.
- 2) Lucky Hero: This type of protagonist character portrayal incorporates a significant element of "wish fulfillment". The protagonist encounters favorable circumstances, possesses extraordinary skills, and receives assistance from exceptional individuals. These settings allow readers to easily immerse themselves in the story, triggering a dopamine rush and creating a sense of gratification. Examples of this character portrayal can be found in works like Joy of Life, Battle Through the Heavens, The King's Avatar, and Royal Highness. Taking Joy of Life by Mao Ni as an example, the male protagonist, Fan Xian, is the illegitimate son of the emperor, born to a mother from a future world who possesses immense wealth and extensive connections. His adoptive father is the influential Minister of Revenue, and the Chief of the National Inspection Department is enamored with his mother. He is protected by the loyal and mighty Wuzhu, who is skilled in martial arts. From an early age of four, he begins studying the art of poison. At the age of sixteen, after entering the capital, he establishes a bookstore, forms a marital bond with a princess, resolves the crisis of the Northern Qi invasion, and successfully governs the Jiangnan region under the orders. With the aid of his modern knowledge, he quotes passages from Dream of the Red Chamber and utilizes the poetic works of renowned poets like Li Bai and Du Fu, garnering significant recognition in the literary world. With the assistance of his "golden finger (a term used in Chinese web novels to refer to the protagonist's fortunate encounters or special abilities that bring about extraordinary situations.)", the protagonist achieves a harmonious and fulfilling ending, where he attains both love and success in his career.

In female-oriented web novels, there are several common types of protagonist character portrayals:

- 1) "Sweet and Innocent" actress: This character portrayal was popular in the early days of female-oriented web literature and was heavily influenced by romance novels from Hong Kong and Taiwan. The female lead in this type is often portrayed as having a beautiful appearance and a humble background. She harbors a simple and pure heart, yearning for romantic love and is willing to invest more energy and thoughts into love than the male lead does. Typically, she relies on a strong male protagonist for career and life guidance and advancement. Throughout their relationship, the couple faces various challenges such as accidents, amnesia, misunderstandings, and parental objections. Despite these obstacles, they strive to overcome them and ultimately live happily together. Examples of this character portrayal can be found in works such as Boss & Me, My Prince of Lanling, and Silent Separation. Taking Gu Man's Boss & Me as an example, the female lead, Xue Shanshan, a white-collar worker, coincidentally meets her CEO, Feng Teng, through a voluntary blood donation. Feng Teng is deeply influenced by Shanshan's innocence, positivity, and resilience, leading to a playful antagonistic relationship that gradually evolves into a deep affection. However, their disparate social status and economic levels face opposition from their parents. Eventually, Shanshan's charismatic personality wins over their parents, securing their acceptance of the couple's relationship.
- 2) "Empowered and Independent" actress: The emergence of this character portrayal reflects the awakening of female independence and the improved status of women in society. It is a commonly used character portrayal in current female-centric literature. The female lead in this type is often placed in a high position or possesses exceptional skills. Amid a challenging social environment, she forges her own path, earning respect, support, valuable friendships, and sometimes admiration and pursuit from the male lead due to her personal charm. Love is not the sole pursuit of this type of female lead. Examples of this character portrayal can be found in works such as Phoenix Over Heaven, Mulan Renewal, and Mingyue & Guanshan. In the novel Phoenix Over Heaven by Tian Xia Gui Yuan, the female lead, Tai Shilan, crosses into a fictional dynasty. Confronting an unjust system, she utilizes her outstanding martial arts skills to join the battlefield, leading underprivileged youths to challenge the existing authority, overthrow the old system, and establish a powerful and peaceful empire.

IV. INFLUENCE OF PROTAGONIST'S CHARACTER PORTRAYAL ON COLLEGE STUDENTS' IDEOLOGICAL AND POLITICAL EDUCATION

A. Positive Influence

1) Providing new ideas and channels: Traditional college moral education primarily relies on classroom teaching, where teachers impart moral theories to students who take notes during class. However, the utilization

of science and technology is not fully explored, and there is a lack of innovative approaches in keeping with the times. The singular and rigid nature of moral education becomes more prominent, failing to align with the psychological characteristics and inner needs of the "Z generation" college students. As a result, moral education in higher education is facing a bottleneck period.

The emergence of network literature and its portrayal of protagonist character portrayals has offered a new approach for moral education in colleges, particularly for the "Z generation" of students. Network literature and its protagonist character portrayals are widely popular among the youth, boasting a broad readership and a solid foundation. By integrating network literature and protagonist character portrayals into moral education, abstract moral theories can be transformed into engaging, easily digestible content for students, garnering their support and enthusiasm[11]. This integration is propelling the effectiveness of moral education in colleges towards new heights.

2) Creating a vast platform for showcasing the personality traits and emotional communication of college students: With its inherent openness and confidentiality, network literature has garnered enthusiastic attention, providing a utopian realm where college students can immerse themselves as protagonists and fulfill their unattainable dreams in reality, such as engaging in battles, seeking power, and experiencing love. It serves as an outlet for students to release their inner frustrations, satisfying their spiritual yearnings, and offering a clandestine space where desires can be expressed[12]. By absorbing strength and encouragement from reading network literature works, students are motivated to confront life with resilience. It instills the belief that despite numerous hardships in reality, perseverance and dedication will eventually yield fruitful results.

Additionally, within the realm of network literature platforms, college students have the opportunity to engage in direct communication with authors through online comments, express their own perspectives, and find like-minded friends. Moreover, they can freely articulate their ideal pursuits and navigate intimate relationships that might be difficult to express verbally in their day-to-day lives, seeking acceptance and resonance through the medium of the internet and keyboards[13].

3) Positive characterizations of protagonists promoting the formation of positive life values and character traits in college students: The success of network literature owes much to the innovative characterization of its protagonists. The positive depiction of protagonist roles exerts a subtle yet profound influence on college students who immerse themselves in reading network literature works.

Among the acclaimed works listed in the "Top 100 Chinese Network literature Works of the Decade in the New Era", selected by the Network Literature Committee of the China Writers Association, the characters portrayed are closely intertwined with contemporary society. Many readers have been inspired by these characters and embarked on new paths in life. For instance, in the novel Douluo Continent, the male protagonist Tang San, after crossing over to the world of Douluo Continent, initially possesses no particular talent and is often ridiculed and bullied by his peers. However, he never gives up on self-improvement. With a determination to continuously strive for progress and innovative fusion of martial souls, he combines his knowledge of martial souls from his previous life with the secret techniques of the Tang Sect to carve out his own path in the world filled with formidable warriors. This proactive characterization provides spiritual support to bewildered college students, attracting them to learn from the protagonist, break free from their confusion, and courageously embrace new challenges.

Another example can be found in the novel Mulan Renewal, where the female protagonist He Mulan, originally a dedicated forensic doctor in modern society, finds herself transported back in time as the disarmed Mulan. After adapting to life in ancient times, He Mulan is deeply moved by the warm family atmosphere and sincere friendships among her comrades. She returns to the battlefield, fighting side by side with her companions for the survival of their country. Through her courageous and sincere demeanor and her dedication to both her family and her nation, He Mulan cultivates a sense of patriotic devotion and nurtures qualities of mutual assistance, trust, respect for the elderly, and care for the young, which have a positive influence on college students.

B. Negative Influence

The vast quantity of network literature works, coupled with the openness and anonymity of the internet, inevitably leads to a mixed bag of outcomes. Some works are hastily produced, solely focused on providing instant gratification, and contain content and plotlines that can have negative influences, hindering the cultivation of students' life values and beliefs.

For instance, certain works feature protagonists with omnipotent "golden fingers", using these shortcuts to engage in morally ambiguous actions and behaviors. The plotlines are haphazardly constructed, and through the reliance on these cheat codes, the protagonists effortlessly amass immense wealth and attain elevated positions, perpetuating a flawed concept of lack of effort and personal growth. When students read such works, they are easily misguided, often placing their hopes on an imaginary "golden fingers" to assist them when faced with difficulties. This hinders them from fully utilizing their subjective agency, gradually leading to a loss of life goals and motivation[14]. Additionally, there are works that violate ethical and moral boundaries, depicting protagonists engaging in multiple romantic relationships, incestuous encounters, and featuring explicit content that runs counter to social norms. These elements distort college students' understanding of love, weakening their moral and sense of responsibility.

According to current data, the primary readers and creators of network literature are from the "post-1990s" and "post-2000s" generations. Authors cater specifically to readers' preferences, and readers enjoy these genres and characterizations in novels. When students encounter network literature works they enjoy, they often become immersed in them, sometimes even missing class time or losing focus during lectures, resulting in excessive indulgence in reading network literature. This leads to instances of absenteeism, staying up late, and academic failure. Consequently, the frequency of interactions and communication with teachers and classmates decreases, hindering students' normal social interactions and overall physical and mental well-being[15].

V. REFLECTIONS AND RESPONSES TO MORAL EDUCATION IN THE WAVE OF NETWORK LITERATURE IN COLLEGES

A. Establishing and Improving Regulatory Systems Specifically for Network Literature by the State to Promote the Classification and Regulation of Network Literature Works

Currently, various network literature platforms have emerged, with notable ones including Qidian.com, Jinjiang Literature City, Zongheng.com, Tomato Novel, and Qimao.com. These platforms cover a range of mediums such as apps, WeChat, and Weibo, which have contributed to the flourishing development of network literature. However, with the large volume of works available, both high-quality and low-quality works coexist, providing an opportunity for works with negative influence to spread online.

The relevant national departments should adopt a macroscopic perspective, with cultural confidence as a premise and bottom-line thinking as a guide, in order to safeguard the healthy development of network literature through institutional measures. This should include establishing access thresholds for the creation and dissemination of network literature works, rejecting texts that violate social ethics (Once such content is discovered, immediate measures should be taken to remove and penalize it)[16]. Websites and platforms that fail to effectively regulate or violate national regulations should be promptly closed and banned. Regular inspections of network literature platforms should be carried out, accompanied by strict enforcement. Support should be provided to works with high writing standards and engagement levels, further expanding their influence and promoting the exportation of outstanding network literature works to enhance the international influence of Chinese culture. The positive aspects of network literature works should be fully utilized to create a favorable environment for the creation and dissemination of network literature[17].

B. Strengthening the Review and Management of Network Literature Platforms

Network literature dissemination platforms have a crucial responsibility in ensuring the quality of published works. To maintain a high standard of network literature, a meticulous and comprehensive approach should be adopted, consisting of a dual inspection system of "pre-publication review" and "post-publication examination". This entails establishing a dedicated team of editors who carry out thorough checks before works are made available on the platform, thereby preventing the dissemination of texts that violate national laws or stray from social and ethical norms. By focusing on the source, the editorial team can effectively curb the presence of explicit sexual content, violent plotlines that deviate from the narrative's progression, and distorted representations of China's rich cultural heritage that infringe upon legal boundaries. Any such works should be promptly retracted and their authors required to make appropriate revisions. For authors who persist in disregarding these guidelines, their works should be prohibited from inclusion and publication, while they themselves are placed on the platform's blacklist.

Furthermore, it is imperative for network literature platforms to develop a heightened sense of responsibility. This involves establishing stricter text review mechanisms based on national legal frameworks. These measures should be implemented diligently and consistently, leaving no room for superficial or perfunctory inspections.

C. Adopting A Nuanced Approach Towards the Influence of Network Literature and Avoiding A "One-Size-Fits-All" Approach

In the construction of campus cultural environment, colleges should take "holistic education" as a starting point and support and encourage college students to engage in the exploration and inheritance of China's excellent culture[18]. By showcasing representative works from the past five millennia through campus showcases, scrolling screens, and club activities, colleges can effectively communicate these cultural treasures to every student. This will enhance students' judgment and aesthetic abilities, enabling them to discern right from wrong and reject poorly crafted and harmful texts when reading network literature.

In the college classroom, instructors can introduce outstanding works of network literature, such as Mulang Renewal by Qidaojun, from the "Top 100 Chinese Network literature Works of the Decade in the New Era"[19]. By integrating the characters, plots, and content of these works with the curriculum, instructors can guide students to perceive the changes in social sentiments and the cultural confidence conveyed through network literature "going global". This approach adds interest and vitality to moral education courses, increasing students' sense of participation and enthusiasm. As a result, moral education can silently and indirectly influence students, cultivating their sound character[20].

As frontline workers in the moral education field, counselors should innovate the form and content of class meetings. By organizing salons, book sharing sessions, recitations of plotlines, and reenactments in various forms, counselors can choose outstanding works of network literature as entry points for daily moral education[21]. They can guide students to read and share their thoughts on the works, and after reading, facilitate in-depth discussions on the writing characteristics and underlying social sentiments depicted in the works, encouraging students to draw inspiration from the positive elements contained within.

By using engaging and vivid examples, clear comparisons between works of different qualities, and by enhancing students' aesthetic standards and cultural literacy, we can enable them to discern the quality of network literature and develop awareness of societal development[22]. Simultaneously, it is crucial to emphasize the dangers of vulgar and content that violates national laws and regulations in network literature. Students should be encouraged to boldly report such works to the platforms, preventing harm to more readers, and contributing their part to promoting a healthy and wholesome online environment.

In addition to internal efforts within colleges, it is crucial to establish communication and collaboration between colleges and families, forming a united front to enhance parents' accurate understanding of education and fully leverage the efficacy of joint efforts. Many parents may view network literature as a "rampaging beast". To address this perception, colleges should engage in clear explanations with parents through activities such as parent-teacher open days and phone communications, elucidating both the positive and negative aspects of network literature[23]. Concurrently, colleges should strive to understand students' motivations and experiences when reading network literature works, fostering a balanced perspective among parents and guiding students towards reading positive and uplifting network literature. If signs of addiction emerge, timely correction should be provided to promote mutual understanding between students and parents.

VI. CONCLUSIONS

In conclusion, as the network literature market evolves into a period of reform, regulatory bodies are gradually steering it towards standardized development. The era of unrestrained growth and unbridled topics is now behind us. It's crucial to recognize that character portrayals in network literature wield a significantly positive impact on moral education within higher education settings, far outweighing any negative effects. By approaching this issue from the perspectives of the nation, platforms, and colleges, and by integrating outstanding network literature works and representative character roles into the classroom, we can seamlessly infuse these elements into students' lives. This integration will effectively harness the positive character portrayals, thereby fully realizing their educational function and facilitating the smooth implementation of moral education in higher education institutions.

ACKNOWLEDGMENT

This work was supported by the School-level Research and Innovation Team of Guangdong College of Foreign Studies South China Business College(SCBC)——Research Team on Classical Inheritance and Literary Education.

REFERENCES

- [1] Qushem Umar Bin, Christopoulos Athanasios, Oyelere Solomon Sunday, Ogata Hiroaki, Laakso Mikko Jussi. Multimodal Technologies in Precision Education: Providing New Opportunities or Adding More Challenges. Education Sciences, 2021, 11(7):338.
- [2] Zhang Hui, Li Jianming, Yang Qiang. Research and practice of data governance system in universities under the perspective of big data. China Higher Education, 2022(Z2): 16-18.
- [3] Yang Xianmin, Zhao Ruibin. Intelligent technology ecology drives future education development. Modern Distance Education Research, 2021, 33(02):13-21.
- [4] Hassna Ghazwan Big Data and Analytics to transform higher education: a value chain perspective. Perspectives: Policy and Practice in Higher Education, 2023, 27(04)160-168.
- [5] Ashaari Mohamed Azlan, Singh Karpal Singh Dara, Abbasi Ghazanfar Ali et al. Big data analytics capability for improved performance of higher education institutions in the Era of IR 4.0: A multi-analytical SEM & ANN perspective. Technological Forecasting & Social Change, 2021, 173:121119.
- [6] Tian Yanhua, Wang Lirong. Analysis of the impact of online novels on the ideological and political education of college students and countermeasures. Journal of Southeast College, 2015(17): 168-170.
- [7] Xu Miaomiao. The Internet Literature: The Interaction and Counterbalance between Driving Forces. Journal of Xiamen College (Philosophy and Social Sciences Edition), 2015(02): 22-28.
- [8] Cao Shengqiang. Reflection on the cross-cultural communication of Chinese network literature in the new media era. The Border Economy and Culture, 2020(04): 98-100.
- [9] Stephen J. H. Yang. Guest Editorial: Precision Education A New Challenge for AI in Education. Educational Technology & Society, 2021, 24 (1):105-108.
- [10] Christopher C. Y. Yang, Irene Y. L. Chen, Hiroaki Ogata 3. Toward Precision Education: Educational Data Mining and Learning Analytics for Identifying Students' Learning Patterns with Ebook Systems. Educational Technology & Society, 2021, 24 (1):152-163.
- [11] Tong Zhiqiang: Research on upcountry youth campus films since the new century. Hubei: Hubei Normal University, 2017.
- [12] Harviainen J. Tuomas, Melkko Runo Organizational information creation through a design game: A sensemaking perspective. Library and Information Science Research, 2022, 44(3):101172.
- [13] Miles Prue Innovation through co-creation: lessons from an Australian broadcaster and teachers' collaboration in designing engaging multiplatform education resources. Media Practice and Education, 2022, 23(01):1-19.
- [14] Su Xiaofang. On online novels. Beijing: China Ancient Books Publishing House, 2008.
- [15] Herberholz Lars, Wigger Berthold U. Efficiency of European universities: A comparison of peers. Research Policy, 2021, 50(9):104314.
- [16] MILIĆEVIĆ Violeta, DENIĆ Nebojša, MILIĆEVIĆ Zoran et al. E-learning perspectives in higher education institutions. Technological Forecasting & Social Change, 2021, 166:120618.
- [17] Amjad O, Bagherzadeh M J. Opinion Mining Using Enriched Joint Sentiment-Topic Model. International Journal of Information Technology & Decision Making, 2023, 22(01):313-375.
- [18] Wu Yansheng. The evolution of the spiritual values of the college campus: coping with the construction of mainstream campus culture—thoughts on the development of college campus culture brought by college campus novels. Anhui Literature (second half of the month), 2018(01): 140-141.
- [19] Xie Jiayu. A brief analysis of the popularity reasons of recent youth campus web dramas. Appreciation of Literary Masterpieces, 2018(21): 175-176.
- [20] Hao Liya: Research on the impact of network literature works on the ideological and moral education of teenagers and its countermeasures. Inner Mongolia: Inner Mongolia University of Science & Technology, 2011.
- [21] Shao Yanjun. Liberation of "sexual productivity" based on media change: a rethinking of the development motives of Chinese network literature. Literature and Art Studies, 2020(10): 63-76.
- [22] Zhang Xiaojing. On the popular characteristics of online novels. Art and Literature for the Masses, 2017(12): 28.
- [23] Xiao Yingxuan, Ye Xuqiao, Zhu Hang, et al. Report on the survival status of Chinese online writers. Appreciation of Literary Masterpieces, 2015(31): 60-67.