Implications of ChatGPT Usage Policies at UK and US Universities for Library Adoption of ChatGPT

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Abstract

[Purpose/Significance] In the era of artificial intelligence, AI represented by ChatGPT embodies tremendous productivity and value, but also brings risks such as academic misconduct, privacy and security issues, and intellectual property concerns. Exploring and analyzing the ChatGPT usage regulations in British and American universities provides valuable references and lessons for the formulation of similar regulations in Chinese universities. [Method/Process] This study employs grounded theory methodology, utilizing NVivo 12.0 software to conduct coding analysis on eight policy texts concerning ChatGPT usage regulations from British and American universities, and preliminarily constructs a theoretical model for university ChatGPT usage regulations. [Results/Conclusion] The research findings reveal that university ChatGPT usage regulations encompass: general rules and scope definition, academic usage norms, and teaching usage norms. Among these, general rules and scope definition constitute the foundation of university ChatGPT usage regulations, academic usage norms serve as the safeguard, and teaching usage norms represent the fundamental aspect. Furthermore, based on the ChatGPT usage practices in British and American universities, this study reflects on the implications for introducing ChatGPT applications in Chinese university libraries and for organizing the formulation of ChatGPT usage regulations in Chinese universities.

Full Text

Implications of ChatGPT Usage Regulations in British and American Universities for Chinese University Libraries

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Abstract

[**Purpose/Significance**] In the era of artificial intelligence, AI technologies represented by ChatGPT embody tremendous productivity and value, yet simultaneously introduce risks such as academic misconduct, privacy breaches, and intellectual property concerns. Analyzing ChatGPT usage regulations in British and American universities offers valuable reference for Chinese universities in formulating their own policies. [**Methods/Process**] This study employs grounded theory methodology and NVivo 12.0 software to conduct coding analysis on eight policy texts regarding ChatGPT usage regulations from British and American universities, constructing a preliminary theoretical model of university ChatGPT usage regulations. [**Results/Conclusions**] The findings reveal that university ChatGPT usage regulations comprise three components: overall rules and scope definition, academic usage norms, and teaching usage norms. Among these, overall rules and scope definition form the foundation, academic usage norms provide the safeguard, and teaching usage norms constitute the fundamental basis of these regulations. Based on practical implementation in British and American universities, this paper reflects on the implications for introducing ChatGPT applications in Chinese university libraries and for organizing the development of institutional ChatGPT usage policies.

Keywords: Artificial Intelligence Generated Content, AIGC, ChatGPT, University Library, Smart Library

Since its launch in November 2022, ChatGPT and GPT technology applications have become a global phenomenon, driving transformation across industries and fostering new digital economy forms and industrial chains. As a leading representative of AI-generated content, the ChatGPT chatbot can generate essays, write code, compose poetry and fiction, answer questions, and support multi-turn conversations based on contextual understanding, making it highly popular among users. With continuous upgrades to GPT technology, the GPT-4.0 model offers larger scale, more coherent and accurate responses, and better comprehension of user intent, allowing users to obtain direct answers rather than sift through search results, thereby significantly improving retrieval efficiency and experience. This poses a major challenge to search engines. On March 16, 2023, Baidu launched its large language model "Wenxin Yiyan" [1]. On May 11, Google released its second-generation large language model PaLM2 and the upgraded generative AI Bard based on PaLM2, integrating generative AI into Google Search [2]. On May 24, Microsoft announced it would introduce ChatGPT plugin functionality into the new Bing search, making Bing the default search engine for ChatGPT Plus [3]. Both Baidu and Microsoft-Google are actively responding to this challenge to promote their own transformation and development.

However, the problems brought by ChatGPT cannot be ignored, including data bias, privacy leakage, intellectual property risks, and academic misconduct. A survey of 1,000 current university students in the United States showed that

nearly one-third reported using ChatGPT to complete university writing assignments, with nearly two-thirds stating they used it for 50% or more of their tasks [4]. Scholarly tests have even demonstrated that ChatGPT can pass law, medical, and business school exams, inevitably raising concerns about academic integrity and intellectual property risks. This has drawn significant attention and concern from educators and universities. In fact, worries about homework outsourcing and academic plagiarism have been fermenting since ChatGPT's emergence, as the popularization of AI technology has greatly increased the probability of academic misconduct [5]. Consequently, foreign universities have begun issuing ChatGPT usage guidelines or specialized policies to address faculty and student use of ChatGPT for coursework, examinations, assessments, academic creation, and disciplinary research, continuously updating these guidelines based on ChatGPT's development and institutional circumstances to provide the latest advice and guidance for all faculty and students.

In China, many students currently use ChatGPT to complete coursework, thesis writing, and questionnaire generation. Numerous publishing institutions have introduced corresponding AI policies to address academic misconduct issues such as authors using generative AI to produce entire or partial papers or listing AI as a co-author. Examples include the *Journal of Tianjin Normal University (Elementary Education Edition)* [6], *Jinan Journal (Philosophy and Social Sciences Edition)* [7], and *Library and Information Service* in the library and information science field [8]. Overall, however, Chinese universities have not yet issued ChatGPT usage policies. On May 23, 2023, China's Cyberspace Administration passed the *Interim Measures for the Management of Generative AI Services*, which encourages innovative applications of generative AI across industries and fields while clarifying norms for healthy use of generative AI [9]. This provides legal and policy guidance for Chinese universities to formulate ChatGPT usage regulations and offers macro-level orientation for university library ChatGPT research.

Since ChatGPT's explosive popularity, all industries have begun application research, with the library and information science field being no exception. Current research on ChatGPT in university libraries by scholars in this field mainly focuses on ChatGPT's impact on smart libraries and its applications, predominantly theoretical studies. Li Shuning et al. (2023) analyzed opportunities and challenges for the library industry from ChatGPT by examining domestic and international library responses, covering library management, resource organization, information literacy, intelligent consultation, and knowledge services [10]. Zhou Xu (2023) analyzed the possibilities of ChatGPT application in libraries from opportunity and challenge perspectives, proposing mechanisms, models, and safeguard systems to promote scientific and standardized ChatGPT use in libraries [11]. Chen (2023) suggested that ChatGPT could integrate with library system platforms, allowing users to query library catalogs and locate specific books through ChatGPT [12]. Leo S. Lo (2023) argued that integrating the CLEAR framework into information literacy instruction could empower academic librarians to equip students with critical thinking skills in the Chat-

GPT era and adapt to the rapidly evolving AI environment in higher education [13]. Zhang Zhixiong et al. (2023) proposed exploring innovative practices for smart library ChatGPT applications across six dimensions: intelligent management systems, intelligent retrieval systems, intelligent recommendation systems, intelligent Q&A systems, and intelligent search engines [14]. Guo Yajun et al. (2023) explored application scenarios and pathways for ChatGPT empowering library smart services [15], library virtual digital humans [16], and library knowledge services [17]. Wu Ruohang et al. (2023) proposed that libraries should plan development strategies to address the ChatGPT wave from perspectives of service concept transformation, service team building, service mechanism optimization, and service security safeguards [18]. However, libraries must consider technological limitations and security risks when applying ChatGPT and adopt preventive measures [19]. In empirical research, some scholars have compared AI-generated and scholar-written Chinese paper abstracts in library science, finding that AI-generated abstracts show high homogeneity, strong logical writing structure, and habitual use of academic discourse systems like induction and summary, while scholar-written abstracts exhibit significant personalized differences, more collocations highlighting practical meanings, and frequent use of terms closely related to national policies [20]. It is evident that research on ChatGPT's impact and applications in smart libraries has yielded fruitful results, though the research subjects are mostly "smart libraries" rather than "university libraries" specifically. Therefore, this paper focuses on university libraries, investigating ChatGPT usage regulations in British and American universities, collecting relevant guidelines and specialized policies, and employing grounded theory with NVivo 12.0 software to conduct qualitative analysis of the texts, aiming to provide reference and direction for Chinese university libraries introducing ChatGPT and participating in guideline development.

2.11 Research Methods and Approach

Qualitative research is a methodology that collects various qualitative materials in natural settings, employing phenomenological and hermeneutic theories and methods to conduct holistic exploration of social phenomena and construct theory through induction and deduction [21]. Grounded theory is a scientific qualitative research method capable of extracting core concepts from data, establishing theory through conceptual relationships, and thereby revealing certain phenomena [22]. In recent years, grounded theory has been widely applied in library and information science research and proven to be a reliable and effective data processing and analysis method [23]. Given that relatively few universities domestically and internationally have issued ChatGPT usage regulations and no scholars have systematically organized and analyzed them to construct theory, this study's use of grounded theory to construct a theoretical framework for British and American university ChatGPT usage regulations is both appropriate and necessary. Using NVivo 12.0 software, we conducted coding analysis on 12 collected policy texts from British and American universities, randomly retaining 4 for theoretical saturation testing. The main research ap-

proach involves conducting open coding, axial coding, and selective coding on the policy texts to explore common and unique factors in British and American university ChatGPT regulations, construct a theoretical model, and reflect on implications for Chinese university libraries introducing ChatGPT and developing usage regulations. The specific research process follows: coding analysis → preliminary theory establishment → theoretical saturation testing → theoretical model construction → implications for Chinese university libraries.

2.12 Data Collection and Processing

The author searched Bing for the latest ChatGPT usage regulations issued by universities, visited official university websites to retrieve and download original texts, carefully read and translated each text into Chinese while repeatedly proofreading to prevent missing important information points, then organized them into documents by institution and verified for completeness. The search revealed that foreign university ChatGPT regulations are concentrated in British and American institutions, while other universities mostly release attitudes and suggestions toward ChatGPT use through news, emails, and blogs. Moreover, British and American universities generally issued their regulations earlier. Therefore, this study focuses on British and American universities. A total of 17 documents were retrieved (5 from the UK, 10 from the US). Based on the 2023 U.S. News World University Rankings [24], lower-ranked institutions were excluded. Considering policy accuracy and relevance, some weakly related policy texts were also excluded, resulting in a final dataset of 12 documents.

2.21 Open Coding

Coding is a critical link between data collection and theory generation. Through line-by-line and sentence-by-sentence coding of raw materials, conceptual categories can be discovered, named, integrated, and their attributes and dimensions determined, laying the foundation for subsequent theory construction [37]. This study randomly selected 8 documents from the 12 raw materials, imported them into NVivo 12.0 software, and conducted concept extraction and summarization from top to bottom, word by word, without any preconceptions, completing material conceptualization and categorization. Through repeated reading, classification, comparison, and merging of coded materials, ensuring no text was overlooked, open coding yielded 162 initial concepts, 18 basic categories, and 194 reference points. Due to space limitations, only partial open coding processes are shown, with complete results displayed in Table 2 and Table 3 .

2.22 Axial Coding

The purpose of axial coding is to discover and establish relationships among conceptual categories and basic categories, identifying main categories from basic categories to clarify various relationships in the raw materials [38]. Based on hierarchical relationships and semantic associations among initial concepts

and basic categories, cluster analysis was performed on the 18 basic categories obtained from open coding, ultimately forming 3 main categories: overall rules and scope definition, academic usage norms, and teaching usage norms. See Table 4 for details.

2.23 Selective Coding

Selective coding primarily involves forming relationships among categories, identifying logical relationships among main categories from a relational perspective [38]. This ultimately constructs the theoretical framework model for university ChatGPT usage regulations. Through repeated analysis and comparison of the 3 main categories, this study extracted their relationships: overall rules and scope definition constitute the foundation of university ChatGPT usage regulations, academic usage norms provide the safeguard, and teaching usage norms form the fundamental basis. Accordingly, this paper constructs a theoretical framework model for university ChatGPT usage regulations, as shown in Figure 1 [Figure 1: see original paper]. The relationships among main categories are shown in Table 5 .

[Figure 1: see original paper]

2.24 Theoretical Saturation Testing

After completing three-level coding in grounded theory, theoretical saturation testing is required. It is generally believed that when raw materials can no longer provide new categories and relationships, verifying with 3 or more additional documents that still yield no new categories or relationships indicates theoretical saturation [39]. This study applied theoretical saturation testing to the 4 randomly reserved raw materials, during which no new main categories or basic categories emerged, suggesting the constructed theory is saturated.

3 Research Findings and Analysis

Through three-level coding analysis of raw materials, we obtained 162 initial concepts, 18 basic categories, 3 main categories, and 194 reference points. By systematically 梳理 and summarizing relationships among categories, the theoretical framework for university ChatGPT usage regulations is revealed, focusing on three areas: overall rules and scope definition, academic usage norms, and teaching usage norms, with teaching usage norms being the most critical. Overall, British and American universities advocate limited, reasonable, and appropriate ChatGPT use rather than outright prohibition or unconditional embrace, primarily targeting faculty and students. The investigation also found that British and American university websites typically aggregate all ChatGPT-related resources into a single module with links to source materials.

3.1 Overall Rules and Scope Definition

In the AI era, universal application of AI tools like ChatGPT across industries has become an irreversible trend. ChatGPT's powerful information retrieval and integration capabilities have identified breakthrough points for improving productivity in various fields including education [40]. Students can effortlessly use ChatGPT to write essays, complete coursework, and even take exams, potentially causing academic integrity and intellectual property issues. Over-reliance on AI generation tools may also erode fundamental writing skills and creative thinking. Therefore, establishing overall rules and scope definition for AI generation tools like ChatGPT is particularly necessary. This category forms the foundation of university ChatGPT usage regulations and the prerequisite for open, transparent, and reasonable ChatGPT use by all faculty and students. It primarily covers four aspects: definition, advantages, limitations, and precautions.

Definition explains what ChatGPT is, its operating principles, and functions—crucial for deeply understanding the nature of AI generation tools like ChatGPT. Advantages and limitations refer to ChatGPT's inherent strengths and weaknesses. Coding analysis revealed that basic introductions appeared in 8 raw documents, while advantages and limitations appeared in 4 and 6 documents respectively, reflecting the importance of basic ChatGPT introduction. For example: AI models are powerful and can effectively support learning by checking writing quality, generating new ideas, or creating simple explanations for complex topics; they help improve grammar and writing structure. However, training data is not current—knowledge of world events after a certain timepoint is limited or restricted (e.g., ChatGPT only includes data up to 2021). They generate false citations and references and contain hidden plagiarism, meaning they use human authors' words and ideas without attribution, which constitutes plagiarism. While AI generation tools have many advantages and enormous potential for future educational applications, we must clearly understand their limitations to ensure scientific and reasonable use. Precautions refer to what users need to know or consider when using ChatGPT, such as: recognizing AI model potential while understanding system limitations; verifying factual accuracy of generated content; not relying primarily on AI-generated content as an information source but combining it with other sources; and fundamentally, excessive dependence on these tools will diminish opportunities to develop writing, critical thinking, and evaluation skills—key academic and professional competencies needed for learning and future careers.

3.2 Academic Usage Norms

Academic usage norms establish rules for how faculty and students should scientifically use, cite, and avoid academic misconduct with ChatGPT in academic activities, providing the safeguard for university ChatGPT usage regulations. For all faculty and students, these norms serve as the measure and criterion for effective ChatGPT use, ensuring transparent, appropriate, and responsible

utilization of AI generation tools. This main category encompasses: acknowledgment instructions, usage instructions, citation instructions, academic misconduct definition, situations constituting academic misconduct, and academic misconduct handling. Notably, this category only covers rules for use, citation, and academic misconduct, excluding other norms for review, research, publication, or management. Analysis of raw materials showed that "situations constituting academic misconduct" had the most reference points (11), followed by citation instructions (9), usage instructions (6), acknowledgment instructions (5), and academic misconduct handling (4), indicating that situations constituting academic misconduct and citation instructions are the most emphasized components.

Situations constituting academic misconduct include: using ChatGPT to generate all or part of work or assignments; submitting ChatGPT-generated content; failing to acknowledge use; failing to cite; inaccurate source citation; and listing AI as an academic author. For example: while AI tools may be helpful, they should not be used to generate all or part of assessments you submit as your own work, as this violates institutional academic conduct policies. Plagiarism includes copying and pasting answers provided by tools and running materials through multiple AI generators to avoid detection. Lack of proper source citation is also problematic. Citation instructions specify formats, requirements, and examples for citing AI tools like ChatGPT. Compared to acknowledgment and usage instructions, citation instructions include more requirements, plus examples and introductions to different citation styles. For instance: if chat logs can be saved, shared, or retrieved, cite computer software following APA guidelines, using the company as author rather than the tool name. Include a brief description of the prompt in brackets; it may be worthwhile to include chat logs as project appendices. Format: Author. (Chat date) [Description of chat and prompt]. URL. Example: OpenAI. (February 17, 2023) [ChatGPT response to a prompt about examples of harm reduction initiatives]. https://chat.openai.com/.

Acknowledgment instructions require not only declaring ChatGPT use but also following specific formats and requirements. For example: please include in your statement content reflecting your AI tool use: "I acknowledge using [insert AI tool name and link] for background research and generation of independent learning materials. I confirm that no AI-generated content is presented as my own work." Or: "I acknowledge using [insert AI tool name and link] to generate material that I have adapted and included in my final assessment. I confirm that no AI-generated content is presented as my own work." Usage instructions require declaring the AI tool used, describing how it was used, and indicating the date of use, plus describing the usage process. For example: you should declare the AI tool used, describe how you used it, and indicate the date of use. Regarding usage and citation instructions, some foreign journals have already clarified policy requirements. *Nature* requires authors to disclose large language model use in methods or acknowledgments sections [41]. The Committee on Publication Ethics (COPE) statement on "Authorship and AI Tools"

states that AI tools cannot be authors; creators must explicitly disclose tool types and specific usage methods in materials and methods sections [42]. Academic misconduct handling refers to institutional attitudes toward or strategies for addressing academic misconduct caused by ChatGPT use, including: strict prohibition of academic misconduct, prohibition of using AI tools to generate complete texts, investigation of academic misconduct, and assessment of unfair advantage behaviors. For example: if teaching staff suspect you of attempting to submit AI-generated output as your own work, regulations from the Academic Handbook (9.2.1 g, h, and m) apply. You will likely be invited to an investigative interview to explore authorship of your work.

3.3 Teaching Usage Norms

Teaching usage norms constitute the fundamental basis of university ChatGPT usage regulations. Deep integration of AI generation tools with educational elements to drive educational transformation represents the future development trend. Mastering technology reasonably and applying it to social development has become an urgent priority for successful digital transformation in education [43]. Teaching usage norms establish teaching rules for faculty regarding student ChatGPT use and guidelines for faculty's reasonable ChatGPT use in teaching. This study categorizes teaching usage norms into eight basic categories: syllabus, course structure, assessment design, student training, disciplinary contribution, privacy security, equitable access, and trial reflection, with reference points of 24, 2, 48, 1, 2, 4, 2, and 9 respectively. This indicates assessment design is the most important component, followed by syllabus and trial reflection.

Assessment design involves redesigning examination, assignment, and writing assessment content, requirements, and scope, plus understanding and reasonable application of AI detection tools. For example: incentivize process rather than just final written products by including steps and thinking habits related to deep learning and critical thinking in assignments. Require students to cite materials specific to your course, such as class discussions, LATTE discussions, or other unique materials. Integrate peer review of drafts and require students to write reflective paragraphs describing how they used peer feedback to complete papers. Familiarize yourself with available AI software in your discipline, its advantages and disadvantages, which assessment types it can address, and whether your assessments are vulnerable. Consider this technology's impact on exam integrity for remote exams or "bring your own device" situations and how to control these scenarios. While emerging tools aim to detect AI-generated content (including Hugging Face, GPT Zero, Cross Plag, and Turnitin), we do not recommend relying solely on them because these tools are imperfect.

The syllabus refers to clarifying ChatGPT usage degree, requirements, and scope in courses based on learning objectives, especially when instructors permit student ChatGPT use in disciplines, requiring clear specification of usage methods and extent. For example: consider how ChatGPT intersects with your course objectives. Explore opportunities to adopt AI models to enhance educational

experiences. Use AI as a tool for formative feedback. Different instructors will have different expectations for whether and how students may use AI tools, so transparency about your expectations is essential. As an instructor, you must be extremely clear about the extent to which students may use AI tools (if at all) and explicitly require students to clearly indicate their use. All submitted assessment work should be your own original work. Seize opportunities to emphasize the importance of critical thinking and digital literacy. Students will have opportunities to break cycles of misinformation, unethical journalism, and improve accurate and factual research and scholarship. Emphasize the importance of digital literacy, research, and writing skills, connecting students to library resources for research and writing. As educators, we have a responsibility to help guide students in mastering many types of literacy, including digital media and AI literacy.

Trial reflection involves instructors personally trying ChatGPT and reconsidering course objectives, content, requirements, assessment design, and ChatGPT usage degree and policies based on output results. For example: faculty can register for free ChatGPT (or GPT-4) accounts on the OpenAI platform. Ask ChatGPT to synthesize text from large documents. For instance, input a 3,500-word essay as a prompt and ask ChatGPT to create an 18-slide PowerPoint presentation with titles and bullet points to illustrate a persuasive case for action.

4 Implications for Chinese University Libraries

The introduction of ChatGPT usage regulations in British and American universities provides clear guidance for faculty and student use and offers reference for policy development in Chinese universities. Currently, no Chinese universities have issued ChatGPT usage policies. Against the backdrop of Education 4.0, digital transformation in education has become an irreversible trend. Facing rapid AI technology development, especially the enormous potential and value of ChatGPT-like AI, the education sector should actively utilize AI technology to drive digital educational transformation. In the 2023 work priorities, the Higher Education Department of the Ministry of Education explicitly proposed exploring future learning center pilots, leveraging library advantages, integrating various learning resources, and using new-generation information technology to create new types of grassroots learning organizations that support learning method transformation [44]. As providers of knowledge services and learning environments within universities, university libraries are important components of universities. Participating in and assisting AI technology application and policy development represents positive practice by university libraries in responding to "future learning center" construction and "Education 4.0," as well as an inevitable requirement for smart library development. Based on the above grounded theory analysis and British and American university practices, the following implications emerge.

4.1 Enhance Information Literacy Education Systems to Support Teaching Usage Norm Development

Rapid AI technology development places higher demands on university library information literacy education systems. Existing information literacy education must be optimized and enhanced; focusing solely on traditional information literacy such as information retrieval and organization is no longer fully adequate for social and technological development [45]. Future information literacy education needs to integrate AI literacy education, emphasizing code writing, AI technology usage, and AI awareness [46]. As important components of universities, university libraries shoulder the mission and responsibility of information literacy education for all faculty and students. ChatGPT, as an important information tool, is also core content of information literacy education. Therefore, enhancing information literacy education systems has become urgent for university libraries. This also provides foundational support for developing university ChatGPT teaching usage norms, ensuring faculty and students critically acquire, analyze, utilize, and evaluate ChatGPT for autonomous learning. This requires university libraries to improve librarians' digital and AI literacy, strengthen AI literacy training, and perfect information literacy education curricula. First, empower librarians through AI literacy education training, focusing on enhancing AI awareness and usage skills to ensure librarians can comprehensively understand and flexibly use ChatGPT-like AI tools. Specifically, librarians must comprehensively understand frontier AI topics, operating principles, advantages and disadvantages, latest policies, and impacts on education and library users; maintain critical and innovative thinking toward ChatGPT-like tools; learn and master how to use ChatGPT-like tools, how to integrate them into information literacy education and teaching, how to solve current university library problems, how to innovate university library knowledge services, and how to meet user teaching needs. Second, perfect information literacy curricula by collaborating with disciplinary faculty to discuss specific ChatGPT application degrees and methods in various disciplines, effectively integrating ChatGPT's standardized use into information literacy education courses.

4.2 Strengthen Academic Usage Norm Construction to Guide Scientific ChatGPT Use

Behind universities', institutions', and research institutes' prohibitions on student ChatGPT use for thesis writing and coursework lies distrust of technology misuse [47]. Rather than completely banning ChatGPT, it is better to actively embrace it with restricted use, emphasizing expectations for original work, risks of generative AI, and acknowledging AI use. Most importantly, AI technology development powerfully enables scientific research activities; prohibiting AI tool use not only hinders research innovation in the intelligent era but also affects progress in a country's AI technology, potentially placing it at a disadvantage in international competition [48]. British and American universities generally maintain attitudes of appropriate, limited, and responsible

ChatGPT use rather than complete prohibition. On July 1, 2023, China's new national standard *Rules for Academic Paper Writing* (GB/T 7713.2-2022) was implemented. Compared with the old standard, it includes structural adjustments, editorial changes, and technical changes that provide important reference value for researchers [49] and macro-level guidance for developing Chinese university ChatGPT academic usage norms. As providers of knowledge services and learning environments, university libraries are indispensable components of university education systems and important carriers of knowledge innovation, shouldering the mission of academic inheritance and service. Strengthening academic usage norm construction is an inevitable requirement for university libraries to better provide academic services to faculty and students. University libraries should incorporate ChatGPT academic usage norms into library academic services and scientifically guide users to be open and transparent when using ChatGPT in academic work, study, or other tasks, strictly following university ChatGPT academic usage norms by acknowledging and describing usage content and processes, including usage dates, and especially in academic work, referencing citation formats, content, and examples for standardized citation. This demonstrates responsibility toward one's own academic achievements and readers. University libraries can also integrate ChatGPT academic usage norms into academic literacy education to further enhance user understanding of AI tools and gradually master AI tool usage skills and scientific, standardized application.

4.3 Leverage Library Foundational Advantages to Proactively Lead ChatGPT Regulation Development

University libraries are university literature and information resource centers, academic institutions serving talent cultivation and scientific research, important components of university information construction, and important bases for campus culture and social culture construction [50]. Facing the current era of rapid AI technology development, ChatGPT as the main representative of AI-generated content is also an important information tool. University libraries have the responsibility and obligation to assume ChatGPT's information and teaching functions. The investigation found that some university libraries even directly lead ChatGPT regulation development, including the University of Exeter [34], Northwestern University-St. Paul [27], Syracuse University [51], Loyola University Chicago [52], and Dakota Wesleyan University [53]. The University of Exeter Library considers ChatGPT usage rules from an academic work perspective for library users. Northwestern University-St. Paul Library and Dakota Wesleyan University approach it from an information literacy education perspective. Syracuse University and Loyola University Chicago provide relatively complete ChatGPT resource guide libraries from a literature resource center perspective, integrating all ChatGPT usage resources. Therefore, Chinese university ChatGPT regulation development can learn from British and American practices by fully leveraging library foundational advantages, with university libraries taking the lead while combining domestic generative AI-related laws,

regulations, and actual conditions to complete regulation development. Specifically, university libraries can actively introduce ChatGPT-like AI tools while effectively avoiding risks, exploring ChatGPT applications in information literacy education and academic usage norms through practice; leverage library resource advantages to aggregate all ChatGPT usage resources into a ChatGPT guide library for one-stop faculty and student access; and fully utilize library subject librarian advantages to analyze ChatGPT's teaching application characteristics across disciplines and summarize teaching usage norms for all faculty and students.

4.4 Strengthen AI Resource Integration to Create Unified Learning Platforms for ChatGPT-like AI

User-centeredness and meeting personalized user needs are core connotations of both smart libraries and future learning centers. AI technology, especially ChatGPT-like tools, will help university libraries better provide knowledge services and enhance user service experiences. The investigation found that British and American university websites typically aggregate ChatGPT-related policy guidance, academic papers, blogs, news, emails, video introductions, citation guides, academic misconduct regulations, and other resources into a single module with traceable source links. Examples include University College London, UCLA, Yale University, USC, Brandeis University, and Loyola University Chicago. Chinese university libraries can learn from this practice by integrating ChatGPT resources, aggregating Chinese AI-related laws and regulations such as the *Interim Measures for the Management of Generative AI Services*, domestic and international AI academic papers, institutional ChatGPT usage regulations, ChatGPT video introductions, latest AI news, other universities' ChatGPT policies or guidelines, and embedding ChatGPT into library knowledge service systems to form unified AI learning platforms. Note that when introducing ChatGPT-like tools, university libraries must ensure equitable access for all users. By logging into the library knowledge service system, users can one-stop access and utilize a full range of ChatGPT resources.

5 Conclusion

In the AI era, ChatGPT-like AI has greatly improved productivity, rapidly gaining universal application across industries and potentially leading a new round of scientific and industrial revolution. This presents new development opportunities and practical pathways for university libraries transitioning from intelligence to wisdom, while also forcing them to reconsider their positioning and actively engage in educational digital transformation to contribute to future learning center construction. This study employed qualitative analysis (grounded theory) and NVivo 12.0 software to conduct three-level coding analysis of British and American university ChatGPT usage policy texts, constructing a theoretical model of university ChatGPT usage regulations. Findings show that university ChatGPT usage regulations include overall rules and scope definition, academic

usage norms, and teaching usage norms, with overall rules as the foundation, academic norms as the safeguard, and teaching norms as the fundamental basis. Teaching usage norms are the most critical component, as evidenced by reference point counts. Combined with investigation findings, this study reflects on implications for Chinese university libraries introducing ChatGPT applications and developing usage regulations. However, this study has limitations: British and American university ChatGPT policy texts are relatively few, requiring expanded text volume to improve result accuracy; coding analysis results may contain subjectivity and limitations due to personal cognitive and knowledge constraints.

Author Contributions:
Chu Jiewang: Project guidance, manuscript revision.
Du Xiuxiu: Manuscript writing, finalization.

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Note: Figure translations are in progress. See original paper for figures.