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Generative AI and the Reconfiguration of Creative Works in Short-Form Video Production: A Scoping Review

Fangye Yu

Beijing Jiaotong University, Weihai, China
24724033@bjtu.edu.cn

Abstract. Generative AI is changing how short videos are created and is affecting the production, editing and collaboration of content. Existing research is scattered across various fields, such as technology application, creator practice and governance issues, and thus has not achieved all-round coverage of how generative artificial intelligence is changing the creative process and the human-computer relationship. This scoping review examined the prospects, problems and future directions of generative AI in short-video creation. According to the PRISMA-ScR guidelines, four databases (ACM Digital Library, IEEE Xplore, Scopus, Google Scholar and Web of Science) were used to systematically identify 13 studies published between 2020 and 2026. Based on the above analysis, generative AI is now used in short-video creation to achieve a joint effort between people and artificial intelligence for generation, selection, verification and modification. Generative AI has improved the efficiency of creation and expanded the scope of creative exploration, but new responsibilities have arisen to assess the authenticity of generated works and establish regulations for them. The current evidence mainly consists of the creator's use experience and specific application scenarios; therefore, more long-term studies, experiments and cross-platform research need to be conducted in the future to better understand the long-term effects of generative artificial intelligence on creative practice.

Keywords: Generative AI, Short-Form Video Creation, Human–AI Collaboration, AI-assisted Creativity, Platform Governance

1. Introduction

Recently, with the development of large language models (LLMs), multimodal generative models and text-to-video technology, generative AI has gradually been used to create digital content. Content creators have been using these technologies to generate ideas, write scripts, create audio-visual content, edit videos and optimise content [1-3]. At the same time, with an increasing demand for frequently updated and continuously innovative content on platforms such as TikTok, Douyin and YouTube Shorts, creators have also begun using generative AI in the planning, production and post-production of short-form videos [4]. According to the above research, most creators view these tools as necessary resources that can reduce the time needed for some production work and increase the scope of creativity. However, with the integration of generative artificial intelligence, the division of labour between creators and technology has also changed; thus, creators now bear more

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responsibility for evaluating the content generated by AI, ensuring the quality of that content, and determining who is responsible [5].

Although there have been increasing research results at the intersection of generative artificial intelligence and short video creation, the existing evidence is still scattered across the three main research directions. The first study investigates the use of artificial intelligence-based tools to assist in some production tasks and enhance perception efficiency, such as video generation and automated editing tools [2]. The second is about creators' adoption and use experience of human-AI collaboration in creative work [6]. The third is the problem of AI-generated content, specifically authenticity, copyright, platform regulation and accountability [7, 8]. Although these studies have shown the many functions of generative artificial intelligence, most of them have discussed technology application, creative practice and governance issues separately. As a result, an all-encompassing view that links the three dimensions of short-form video creation is still lacking. Based on the research gaps identified above, this paper will conduct a scoping review of studies on the application of generative AI in short-form video creation published from 2020 to 2026. The contents of this paper include changes in creative workflows, human-AI collaboration, creative support, and problems with AI-generated works and platform environments. Specifically, this paper studies the following three research questions:

RQ1: How has generative AI changed the creative workflow and collaboration mode of creators in the production of short-form videos?

RQ2: How have prior studies investigated the effect of generative AI on creative efficiency, creative support and creators' practices?

RQ3: What problems do the applications of generative AI present for authenticity, accountability and platform governance in short-form video creation?

This review system has collected existing research on generative artificial intelligence in the field of short video creation, summarised the main laws and differences in the current research, and explored how generative artificial intelligence can change the creative process, human-computer collaboration, authenticity and platform governance. The research results provide theoretical support and a reference for the following studies.

2. Method

2.1. Search strategy

This scoping review followed the PRISMA-ScR guidelines [9] and shows the study selection process in the PRISMA 2020 flow chart [10]. The five electronic databases used for a systematic search were ACM Digital Library, IEEE Xplore, Scopus, Google Scholar and Web of Science. The three concept groups in the search strategy were: (1) AI Tools and Generative Capabilities, (2) Short-form Video Creator Context, and (3) Creative Workflow and Human–AI Co-creation. Based on the above keywords, database-specific Boolean search strings were built and then adjusted according to the syntax and requirements of each database. Restrict the search results to papers published between 2020 and 2026, and add any database restrictions on publication type, language or subject area as necessary. All the complete search strings, search fields, filter conditions and restrictions, and their corresponding search dates for each database have been included in the supplementary materials to ensure the transparency and reproducibility of the research.

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Table 1. Search string components for identifying relevant studies

Component	Keywords
1) AI Tools and Generative Capabilities	"generative AI" OR generative AI OR AIGC OR "large language model" OR LLM OR "AI tools" OR "AI-assisted video creation" OR "AI video generation" OR "text-to-video" OR "automated video editing" OR "AI script generation"
2) Short-form Video Creator Context	"short-form video" OR "short video" OR TikTok OR Douyin OR "YouTube Shorts" OR "content creator*" OR "video creator*" OR "digital creator*" OR UGC OR "user-generated content"
3) Creative Workflow and Human-AI Co-creation	"video production process" OR "creative workflow" OR "content production" OR "work practices" OR "human-AI co-creation" OR "human-AI collaboration" OR "creator agency"

2.2. Eligibility criteria and screening process

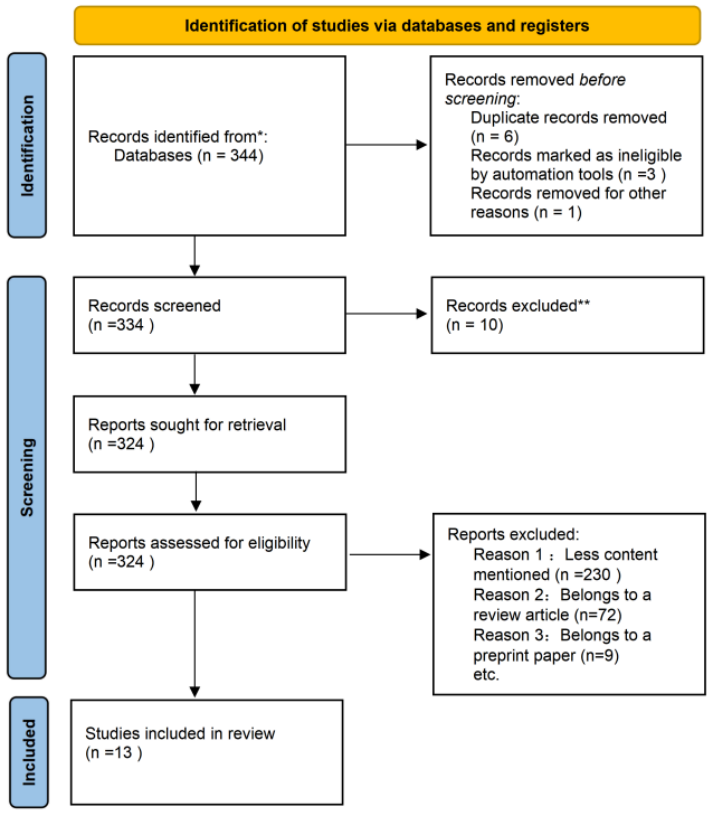

Figure 1. PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources [10]

The search was restricted to peer-reviewed, English-language studies published from January 2020 to the final search date in 2026. Studies were eligible if they examined AI-generated or AI-assisted short-form video creation from a creator- or user-facing perspective and reported findings

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concerning creative workflows, opportunities, limitations, challenges, perceptions, trust, acceptance, or user experience. Studies focused solely on algorithms or model architectures were excluded, as were reviews, editorials, book chapters, opinion articles, preprints, records without accessible full text, and studies that mentioned the topic only tangentially. The database searches yielded 344records, of which 338 remained after 6 duplicates were removed. The title and abstract are screened according to the preset inclusion criteria, and then the full-text evaluation of the potential relevant literature is carried out. Reasons for exclusion at the full-text stage were documented, including insufficient relevance to short-form video creation, focus on technical or algorithmic development, ineligible publication type, and lack of accessible full text. After the screening and eligibility assessment, 13 studies met all inclusion criteria and were included in the review.

2.3. Data extraction and analysis

A standardised form was used to collect data, which included authors, year, venue, country, video type, AI tool, target users, method, the role of AI in the creative process, opportunities, limitations and challenges for creators, and key findings. Then, the selected studies were subjected to thematic content analysis, and the extracted results were organised into recurring themes and described to find the general trends in the literature.

3. Results

3.1. Perceived efficiency gains and creative support

In the research included, efficiency improvement and support for creative exploration are the two main advantages mentioned more consistently [1, 4, 11, 12]. Generative AI is mainly used in specific links of video production, such as script drafting, content generation, video editing and content organisation. These applications can reduce the workload required for repetitive production tasks and lower some technical thresholds in video creation, making it easier for creators with different production experiences to participate in it [1, 11]. At the same time, AI can also generate different content ideas, visual directions and expressions, providing creators with more choices that can be compared, modified and further developed in the creative conception stage [4, 12]. Therefore, existing research is more inclined to believe that generative AI does not directly replace the creative process, but expands the possibility of creative exploration by creators while supporting specific production work.

However, the conclusions of these evidence still need to be viewed with caution. Today's research relies on the self-reporting of creators, including subjective feelings about reduced workload, tool usefulness and creative exploration opportunities. There are relatively few studies on directly measuring long-term productivity or the objective quality of the final work. In addition, the content generated by AI usually still requires creators to review, modify and reorganise according to their own creative goals. Therefore, the actual value brought by generative AI also depends on the quality of the generated content, the controllability of the tools, the editorial ability of the creator and the specific creative situation [5]. Therefore, the current evidence supports that generative AI is regarded as a tool to assist specific production and creative conception tasks, but it is not enough to prove that it can continuously improve the overall creative efficiency or the final content quality.

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3.2. Authenticity labour, responsibility allocation, and platform governance

With the increasing production of generative AI short videos, some studies have begun to pay attention to how creators can verify, modify and present the content generated by AI. In a creative environment that emphasises human authenticity, creators may reduce the active disclosure of the use of AI, while meeting the expectations of the audience through fact-checking and modifying the content generated by AI. This forms a kind of "authenticity labour", that is, although AI reduces some content generation work, it also increases the workload of creators in verification and modification [13]. In addition, these practises are also affected by platform policies and audience expectations, making creators need to take on more responsibilities, including evaluating AI-generated content, maintaining the credibility of content, and managing AI's participation in the creative process [13, 14].

The platform environment will also affect how creators adopt and present AI-assisted content. Research shows that recommendation algorithms, content competition and commercial pressure will enable creators to improve productivity while also taking into account issues such as audience expectations, platform rules and whether to disclose AI usage [5]. Therefore, the governance issues that existing research institutes are concerned about are not only how to identify AI-generated content, but also how to allocate responsibilities such as content verification, AI use disclosure and risk management between creators and platforms. In this process, authenticity is not determined by a single factor, but the result of the joint role of creator practice, platform governance and audience trust.

4. Discussion

4.1. From task automation to the redistribution of creative labour and responsibility

Based on the overall analysis of the included materials, generative artificial intelligence will not only reduce creative labour but also shift the form of this labour to the level of supervision, evaluation and accountability. Although artificial intelligence can take over some of the production work, it cannot be assumed that the total amount of work for creators will decrease. At the same time, the degree to which artificial intelligence can be used effectively by creators in the creation process and what final creative and moral responsibility is taken will also affect its value [4, 13]. This can help explain why an increase in the efficiency of the report does not necessarily lead to a reduction in creative input; some productive work may have been automated, and new forms of supervision and responsibility have also arisen. Therefore, the contribution of generative AI to short-form video creation should not be viewed merely as labour displacement but as a change in the form and distribution of creative labour.

The above results also show an inherent contradiction in the process of human-computer cooperation. On the one hand, generative AI has lowered the technical barrier for some creative works, and now people without professional production experience can also create short videos [12]. At the same time, a low technical barrier does not necessarily mean that more creators have joined. As AI-generated content has increasingly been used in the creative process, creators are now required to evaluate the results of AI generation, integrate them into a cohesive story, and ensure that the final work is high-quality and suitable [13]. Therefore, human-computer collaboration should not be seen as the transfer of creative tasks from people to AI, but rather as the distribution of responsibilities at all links, such as content creation, supervision and decision-making. At the same

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time, the creators' responsibilities have also extended to cover creative planning, content editing, final approval and accountability.

In addition, problems of authenticity, copyright and platform governance should not be considered external factors that occur after the content has been posted. Based on the general analysis of inclusion studies, these problems have been incorporated into the daily work of creators and now affect their choices in terms of tool selection, content revision and publishing strategy [15]. Generative artificial intelligence is being used to create works, so creators need to consider how to achieve creative efficiency while ensuring the accuracy and reliability of the content generated by AI; at the same time, they must comply with the rules of the platform and determine whether disclosure of AI use is required. Based on the above research results, generative artificial intelligence is changing how short-video content is created and distributed, and the concept of creative responsibility has also shifted. Therefore, governance is no longer limited to the evaluation of the final results; instead, it has been incorporated at all times in the life cycle of the content, such as content creation and verification, disclosure and dissemination.

4.2. Implications for creators, AI tool developers and platform management

It is often difficult for AI tool developers to meet the actual needs of creative work by only increasing the speed and automation of generation. According to the above research, creators are most concerned about how to keep control over the output content generated by AI, make iterative modifications to this content, and maintain their own style and creative autonomy [1]. The research results show that future AI tools should focus on controllability, transparency and flexible manual intervention rather than full automation; thus, they will support creators' creative decisions based on sufficient information and not replace them.

With the development of artificial intelligence-generated content on short-video platforms, the focus of content regulation has moved from traditional content supervision to problems such as authenticity, disclosure of AI use, copyright protection and responsibility attribution. In order to meet the audience's demand for the authenticity of the content, some creators will intentionally reduce the visibility of AI participation through fact-checking, language polishing and narrative reconstruction [13]. At the same time, recommendation algorithms, commercial incentives and content visibility also affect whether creators will choose to use or disclose AI-assisted production [5]. Therefore, the platform needs to establish an explicit and feasible AI information disclosure and responsibility attribution system that also considers the extra workload this requirement may impose on content creators. Although there is no single governance model at present, all of the evidence so far consistently shows that effective platform governance should balance content transparency, the workload of content creators, and the feasibility of regulatory measures.

4.3. Limitations of existing evidence and future research directions

First of all, the existing evidence is limited by the measurement method of the research results. At present, the conclusions on efficiency improvement, workflow changes and creative support mainly come from creators' self-reports or research on specific AI tools. In contrast, there are few studies that directly compare the differences between artificial intelligence-assisted creation and traditional creation processes in terms of task completion time, number of modifications, content quality and long-term productivity. Therefore, the subjective feeling of improving efficiency should not be regarded as objective evidence of improved productivity or higher quality of creative results. Future research should combine controlled experiments, process-based data and longitudinal research

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design to distinguish between perceived benefits and quantifiable results; at the same time, explore how the continuous use of artificial intelligence affects the skills, dynam and dependence on artificial intelligence of creators over time.

Secondly, most of the existing research focuses on what creative tasks can be achieved by generative artificial intelligence, and little attention has been paid to the new labour force created after task automation. Future research will explore creativity by analysing how tasks are distributed between creators and artificial intelligence, such as which routine production tasks have been reduced, and whether artificial intelligence has added new work related to output evaluation, fact-checking, content revision, AI use disclosure and responsibility management simultaneously. Changes in Workflow. Such analyses would offer a more complete picture of AI's general effect on creators' workload and would not be limited to generation speed as a measure of creative efficiency.

Finally, there are differences in the study population, artificial intelligence tools, platform environment and assessment standards that limit the horizontal comparison of these studies. Different recommended algorithms, business models and platform policies for artificial intelligence-generated content may result in various applications and disclosure modes of artificial intelligence. Therefore, future research will conduct cross-platform comparisons and study the impact of policy changes on AI labelling requirements, recommendation systems and accountability mechanisms on AI adoption, content performance and user trust. This will help to build an all-encompassing human-AI cooperation system that combines technological power with creator practices and platform rules.

4.4. Limitations of this review

This review searched five academic databases and included only peer-reviewed studies published in English between January 2020 and the final search date in 2026. Consequently, relevant studies published in other languages, grey literature, preprints, or publications not indexed in the selected databases may have been excluded. In view of the rapid development of generative AI technology and platform policies, the evidence synthesised in this review also reflects a rapidly changing research environment, so it should be interpreted in combination with its time background.

In addition, The number of eligible empirical studies is still relatively limited, and there are certain differences in the definition of short video creators, AI-assisted creation and generative AI tools. Such heterogeneity restricts direct comparisons across studies and precludes meaningful estimation of a common effect size. Accordingly, this review is intended to map the existing evidence, synthesise current knowledge, and identify research gaps, rather than to draw definitive conclusions regarding the long-term effects, causal impacts, or cross-platform generalisability of generative AI in short-form video creation.

5. Conclusion

Based on the above analysis, generative AI has changed the model of short-video production from a linear process to an iterative human-computer collaboration model. Therefore, there has been an increase in the efficiency of content creation and dissemination, a change in the position of creators, a division of creative labour, and expanded responsibilities for platforms. The extent to which generative AI is employed in creation varies according to many factors, such as the technical level, the degree of control over tools, the creator's wish, the originality of the work, and platform policies. In the future, a vertical research design will be adopted to conduct experiments and cross-platform studies on how generative artificial intelligence affects long-term creative efficiency, content quality

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and the division of human-computer labour in more depth, providing a foundation for responsible tool design and effective platform governance.

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