

Research on the Impact of Douyin Platform on the Leisure Patterns of Silver-Haired Groups

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Abstract. Against the dual backdrop of an aging society and pervasive digital media, Douyin has gradually become integrated into the daily leisure lives of silver-haired groups. This study focuses on the impact of the Douyin platform on the leisure patterns of silver-haired groups. Through literature analysis, it explores the reshaping effects of Douyin on the group's leisure-time allocation and social networks, as well as the differentiation in types and the shift in values of their leisure practices. The study argues that while Douyin expands the social and entertainment channels for silver-haired groups, it also brings new risks such as leisure addiction, narrowed cognitive horizons, and digital alienation. This study reveals the structural impact of Douyin on the leisure patterns of silver-haired groups and offers specific, actionable ideas to improve the media environment for older people.

Keywords: Douyin, Silver-Haired Groups, Leisure Patterns, Digital Inclusion, Active Aging

1. Introduction

As China enters a moderately aging society, the spiritual and cultural needs of older people and the quality of their leisure life have become core concerns of the active aging strategy. According to the Silver-Haired Population Insight Report released by QuestMobile, as of November 2025, the number of monthly active silver-haired users in China had reached 351 million, with short-video applications growing significantly among this group [1]. As a leading platform, Douyin has evolved from an entertainment tool into an important space for silver-haired people to perceive the world, participate in society, and spend leisure time.

Academic research on digital access among older people has shifted from the "digital divide" to "digital inclusion", and recent studies have begun to focus on behavioral patterns, emotional compensation, and addiction risks on short-video platforms. However, most studies start from specific social behaviors and have not yet systematically explored how Douyin structurally reshapes the leisure patterns of silver-haired groups from dimensions such as leisure time allocation, types of leisure practices, and leisure value orientations. Drawing upon multiple dimensions, including user behavior portraits, this study employs a literature review to analyze the multidimensional impact of Douyin on leisure life and to examine the attendant risks of alienation. This study aims to enrich the explanatory framework of digital gerontology in the field of leisure. Its practical significance lies in providing scientific guidance for age-appropriate platform transformation, intergenerational family communication, and digital literacy education for older people.

2. Overview of digital media use and changes in leisure patterns among silver-haired groups

Before the popularization of digital media, older adults' leisure activities, such as square dancing, chess, and neighborhood chats, were tied to physical spaces and social circles, offering face-to-face interaction but constrained by time, venue, and weather. Uneven distribution of cultural resources further restricted rural areas. Post-retirement role changes and shrinking social networks often led to loneliness, creating opportunities for digital media penetration [2, 3].

The transformation of social roles and the decline of physical functions after retirement lead to the breakdown of older people's original social connections and the narrowing of their activity radius. Since traditional leisure relies heavily on stable social circles, older adults who are separated from such circles are more prone to loneliness. Studies indicate that the proportion of rural older people in China who often feel lonely is higher than the national average [2]. This limitation provides space for the penetration of new digital media.

2.1. Transformation of leisure patterns among silver-haired groups in the digital context

The popularization of the mobile Internet, especially the rise of short-video applications, has laid the foundation for the transformation of older leisure patterns. Data shows that 80% of older netizens spend an average of 1.5 hours per day browsing short videos [1]. The ease of smartphone use, the decline in tariffs, and intergenerational digital feedback from family members have jointly facilitated Internet access for silver-haired groups [2].

This transformation is not a simple replacement of media, but a reshaping of core leisure patterns. Traditional leisure is embedded in physical spaces and acquaintance societies. In the digital environment, even when alone, older people can instantly access entertainment content across geographical boundaries and transform from passive content recipients to active creators. Existing studies show that some older people who are reticent in real life have gained social attention and recognition on Douyin by singing and showcasing their talents, a feat difficult to achieve in traditional leisure settings [2]. In addition, short videos provide virtual emotional companionship for elderly people in the empty nest, acting as an "emotional compensation" and becoming deeply embedded in their daily lives [4]. This shift from relying on external organizations to independent choice is the most fundamental change in older people's leisure patterns in the digital context.

3. Behavioral characteristics and leisure practices of silver-haired groups on the douyin platform

3.1. Prerequisites and usage scale of silver-haired groups accessing Douyin

Low access costs, intuitive interfaces, and a huge user base have enabled Douyin to rapidly penetrate all urban and rural tiers, attracting approximately 60% of older users, an estimated 43.2 million aged 60 and above [5]. Driven by smartphone penetration, age-friendly app design, peer influence, and family digital feedback, silver-haired groups have flocked to the platform [2, 4]. Psychologically, the desire to break age stereotypes and document retirement life further fuels participation. The combination of these internal and external factors has led to large-scale gatherings of silver-haired groups on Douyin.

3.2. Content preferences and behavioral characteristics of silver-haired groups using Douyin

Silver-haired users exhibit behavioral characteristics distinct from those of young users when using Douyin. Regarding content preferences, health and wellness, cultural entertainment, and life skills emerge as their three favorite themes. More than 77% of older users watch videos on health preservation and entertainment, reflecting their general concern for health and a desire for relaxed entertainment [5].

In terms of usage behavior, it is characterized by high-frequency interaction but limited creation. They have developed habits similar to those of TV viewers, mainly receiving content passively and rarely actively publishing or editing videos [4]. However, at the interaction level, their behavior is very active. Liking, commenting, and direct messaging are frequently used functions, especially within acquaintance social circles. Studies indicate that older adults often interpret "likes" as digital social etiquette, signaling either "I am paying attention to you" or "I have received recognition." This interaction provides them with a sense of ritualistic respect and validation [6].

Their usage time is relatively fixed, mostly concentrated in free periods at night and on weekends, but their stickiness is generally strong. About 40% of users use it for more than 3 hours a day [7]. This high-frequency, long-duration interaction model centered on acquaintances constitutes a unique leisure behavior for silver-haired users that integrates content consumption and social communication [8].

3.3. Type differentiation of leisure practices among silver-haired groups: from passive to active

The leisure practices of silver-haired users on Douyin are not monolithic, but show a continuous differentiation from deeply passive to highly active. Based on existing literature, this paper divides the Douyin leisure practices of silver-haired users into two ideal types: deeply passive and highly active [3]. Passive practice is the norm for most older people. The core driving force is the loneliness caused by the fading of social roles and the shrinking of social circles after retirement. Users mainly engage in watching as their primary behavior, passively receiving information flow, and rarely actively publish or edit content [4]. Some respondents stated that even when watching advertisements or useless information, they are unwilling to turn off their phones, "because not using a phone feels like a part of life is missing" [6]. Addictive designs such as algorithmic recommendations and auto-play further solidify user dependence.

Active practice mostly transforms from passive viewing. Driven by peer demonstration and the desire for self-expression, silver-haired users gradually shift from liking and commenting to content creation [4]. For older people with special skills, Douyin has become a platform for value reshaping. For example, intangible cultural heritage bamboo artisans have gained tens of millions of fans by showcasing their exquisite skills, giving new life to traditional crafts facing extinction [3]. This active shift in leisure behavior has empowered older adults to transition from mere recipients of digital content to co-builders of online culture.

4. Multi-dimensional impact of douyin use on the leisure patterns of silver-haired groups

Douyin has systematically changed the leisure patterns of silver-haired groups from three dimensions: time structure, social networks, and subjectivity.

4.1. Structural changes in leisure time: integration of Douyin and changes in life rhythm

The most direct impact of Douyin on silver-haired groups is reflected in their allocation of leisure time. As of September 2024, the average monthly Internet usage among the silver-haired demographic reached 129 hours, equivalent to over 4 hours daily, while fragmented short videos now consume a significant portion of their leisure time.

On the one hand, Douyin is seamlessly embedded in the daily lives of older people. It fills gaps in daily life, such as before and after meals and waiting times, blurring the boundary between rest and daily affairs, and also affecting older people's originally relatively complete and regular life rhythm. Studies indicate that some older adults experience disrupted eating schedules due to short-video addiction, leading to a series of adverse health consequences [6]. On the other hand, the fast-paced, highly stimulating content of short videos has, to a certain extent, reduced older people's acceptance of long-cycle, low-return activities (in-depth reading, skill learning), thereby squeezing time for traditional leisure activities [9].

4.2. Reconstruction of social networks: from offline circles to online communities

Douyin has extended and reconstructed the original offline social networks of silver-haired groups. Rural older people assist each other in shooting short videos and exchanging skills, extending offline opera friends and neighborhood relationships online to form exclusive Douyin communities [2]. WeChat groups and Douyin comment sections have become their new online social venues. In addition, through algorithm-based interest recommendations, older people can meet strangers with similar interests in fields such as calligraphy and opera, thereby expanding their weak social ties.

However, the boundaries of this reconstruction must also be recognized. Interactions through online weak ties mostly stay at the level of superficial interest exchanges, and it is difficult to completely replace family affection and friendship with deep emotional support in reality. To a certain extent, Douyin has also reshaped intergenerational family dynamics: younger generations can foster digital emotional connections by liking and commenting on older adults' content.

4.3. Activation of self-worth and subjectivity: from content consumers to content producers

Douyin provides silver-haired groups with the technological possibility to shift from objects of leisure to subjects of leisure. Some older users have transformed from mere content recipients to active content creators. The significance of this transformation lies not only in the diversification of leisure patterns but also in the activation of older subjectivity. Creating short videos to gain social attention facilitates identity reconstruction and the rediscovery of self-worth among silver-haired groups.

For older people, this process also helps break social stereotypes about older people, transforming older users from recipients of digital content into co-builders of online culture. However, the transformation from passive consumption to active production usually requires users to have critical media literacy and clear self-awareness.

5. Dilemmas and risks of Douyin leisure practices among silver-haired groups

5.1. New risks after "crossing the digital divide": leisure addiction and imbalance of daily life rhythm

Dependent use of short videos has become increasingly common among silver-haired groups. A special survey by Renmin University of China shows that the proportion of middle-aged and older netizens who use short videos every day is as high as 71.8% [10]. Long-term high-frequency use can easily evolve into usage addiction. The immersive experience created by short videos compresses users' perception of reality and causes users to lose their sense of time judgment [11]. This addiction directly leads to the imbalance of their daily life rhythm, specifically manifested in irregular daily routines, irregular diet, and severely squeezed sleep time [6].

This addiction does not entirely stem from weak individual willpower; the platform's algorithm and interaction design are key driving forces. Sun Yuchen pointed out in his research that information flow platforms use a variety of addictive designs, such as manipulative behaviors that exploit user vulnerabilities. For older adults, financial incentives (such as earning virtual coins by watching videos) and variable-ratio reinforcement (never knowing what the next video will be) can effectively encourage them to stay online. A survey of older people in Beijing found that platform manipulation behaviors have a significant positive impact on the addiction degree of subjects [10]. This means that leisure addiction is the result of the combined effect of algorithm design and the psychological needs of older people.

5.2. Information dilemma and cognitive security: false information, information cocoons, and consumption traps

The popularization of generative artificial intelligence has further exacerbated information security risks. The algorithmic personalized recommendation mechanism continuously pushes homogeneous content of interest to older users, gradually building information cocoons, continuously narrowing users' information exposure, and solidifying inherent cognitive biases [10]. Silver-haired groups have a weak ability to distinguish health information, and it is difficult for them to distinguish AI-forged health science popularization, false advertisements, and voice fraud imitating relatives [12]. According to CCTV.com, lawbreakers in Huangshi, Hubei, once used AI to imitate the voices of younger generations to commit telecommunication fraud, causing multiple older people to suffer property losses. AI-generated false information is more deceptive than traditional rumors and is often widely forwarded through groups of relatives and friends. Therefore, addressing false information and consumption traps not only requires improving the information literacy of silver-haired groups but also underscores the urgency of labeling AI content by its source.

5.3. Shortcomings of digital literacy and the alienation tendency of leisure activities

The alienation of leisure activities mainly manifests as non-autonomization, quantification, and materialization. First, leisure content experiences a loss of autonomy: users perceive they are independently choosing content, but the selection of content is actually governed by commercially driven algorithmic recommendations, thereby weakening the right to independently explore leisure options [10]. In addition, the leisure process is quantified and materialized, with the number of likes and followers serving as potential indicators of an older adult's value. Some older people experience psychological anxiety due to fluctuations in the interaction data of their work. The original

entertainment function of short videos fails, and users further detach from real social interaction in digital dependence, causing leisure activities to completely deviate from their original purpose of relaxation.

6. Countermeasures and suggestions for improving the digital leisure environment of silver-haired groups

6.1. Family and individual level: strengthening emotional support and intergenerational guidance

The family is the key to mitigating the negative impacts of the digital leisure environment. Intergenerational digital feedback should not stop at teaching parents to use devices; it should also extend to guiding digital lifestyles. Children need to help their parents understand the logic behind online information. In the face of false information forwarded by elders, convenient, authoritative channels for refuting rumors can be provided. A study by Yan Zhang indicates that children's understanding and support are crucial for alleviating older adults' loneliness, which serves as the emotional root cause of their excessive mobile phone use [6]. Older people should balance online and offline leisure, engage in community activities, and expand real social ties. Enhancing individual literacy means empowering them to make independent choices in a complex digital environment.

6.2. Platform level: algorithm governance and optimization of age-appropriate design

Platforms should ethically optimize algorithms by implementing anti-addiction controls such as usage reminders and content restrictions [10]. Second, age-appropriate design cannot rest on superficial modifications such as enlarging fonts and icons; it must be simplified to account for the cognitive characteristics of silver-haired users [13]. Developers should consider deeper dimensions of media usability from the perspective of digital inclusion for silver-haired groups. They should strengthen the identification of authoritative information and automatically pop up official authoritative interpretation links for controversial health content [12]. Strengthening the labeling of authoritative health information, adding confirmation steps for payments, and providing in-app educational content can reduce the risks of misinformation and fraud [9, 12].

6.3. Social level: building a multi-party cooperative social support system

Communities, senior universities, and government agencies should collaborate to offer regular literacy classes on rumor identification, algorithmic reasoning, and self-control strategies [9]. The government, together with new industry associations, should issue specifications for the release of science popularization content for older people, restrict the commercial behaviors of MCN institutions operating older bloggers, and put an end to traffic hype that overdrafts the physical and mental health of older people [12, 14]. Enhancing self-efficacy through systematic training can reduce the risk of addiction [15].

To address the above dilemmas, it is necessary to build a comprehensive governance framework that integrates the shared responsibilities and actions of platforms, society, families, and individuals [10].

7. Conclusion

This study focuses on the structural impact of the Douyin platform on the leisure patterns of silver-haired groups. Through a systematic analysis of existing literature, it explores the usage behavior, leisure practices, and consequences of silver-haired users. The study points out that, in terms of leisure time allocation, Douyin encroaches on the traditional leisure time of silver-haired groups through fragmented content, disrupting their original life rhythm. At the social network level, it not only extends offline geographical and interest-based social interactions online, but also matches strangers with similar interests, broadening the boundaries of superficial social interaction. While some older adults have achieved subjectivity activation and self-worth reconstruction through short-video creation, this process remains vulnerable to the control and distortion of expression driven by commercial logic.

The study also reveals the significant risks that accompany it. The addiction-oriented product design of platforms, generative false information, and general shortcomings in digital literacy further lead to the alienation of leisure activities and give rise to new mental anxiety. To this end, this paper proposes actionable ideas from four levels: platform, society, family, and individual. These include the ethical governance of algorithms, the establishment of a multi-party cooperative support system, the reinforcement of familial responsibilities, and the provision of authentic emotional support to replace virtual sustenance.

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