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Research on the Gaps in Algorithm Avoidance Behavior among Youth Groups from the Perspective of Hegemony Theory

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Abstract:
With the popularization of algorithmic recommendation systems on digital platforms, algorithmic recommendation has gradually become an integral part of the daily lives of young people, serving as a core tool for their information acquisition and consumption decisions. By accurately analyzing user data and pushing personalized content, platforms have transformed the methods of information dissemination, consumption decision-making, and social interaction. While technological advancements enhance user experience, they also introduce potential issues of control and exploitation. According to Gramsci's theory of hegemony, platforms, as carriers of dominant power, control users' access to information through the "visible labor" implied by algorithmic recommendations. This mechanism has evolved into phenomena such as the "information cocoon" and "the big data killing - enabled price discrimination against existing customers". These practices, targeting existing customers with higher prices based on their historical data, limit information fairness and make users passive recipients of algorithmic control. As major users of the information society, youth groups reflect the complexity of cognitive differences, dependence, and resistance to algorithmic control, which in turn highlights the broader evolution of group psychology and behavior in the digital age. The aim of this paper is to explore youth group behaviors under algorithmic control from the perspective of hegemony theory, analyzing the underlying social and psychological factors shaping their cognitive differences, dependence, and avoidance strategies toward algorithmic recommendations.

Keywords:
algorithm avoidance, hegemony theory, algorithm resistance, algorithm awareness

1 Introduction

In December 2024, the topic "*Young people began to reverse domestication the big data killing- enabled price discrimination against existing customers"* sparked heated discussions on Weibo, generating 66 million reads and nearly 100 000 interactions. Young users shared their personal strategies for countering "big data killing" expressing dissatisfaction with the platform's algorithmic mechanisms. For example, they attempted to "reverse domestication" the algorithm by using methods such as commenting and "crying poor" to estab-

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lish a certain “persona” that influences the platform's algorithmic push. This phenomenon not only highlights the power dynamics between platforms and users but also reflects a growing cognitive awakening among youth groups. These groups are gradually shifting from being passive recipients to active critics, challenging algorithmic control through tactics like “reverse domestication.”

However, observations reveal that youth groups do not uniformly respond to algorithmic control. While most internet users are aware of the exploitative and controlling nature of algorithms, some remain unaware of algorithmic control or continue to accept it out of convenience or habit. Some young people seek to avoid algorithmic intervention through strategies like “information burnout” or “information avoidance,” reducing their reliance on personalized recommendations and even actively blocking certain platform services. In contrast, others, despite recognizing algorithmic control, continue to rely on platforms. This divergence of responses raises important questions: Are there perceptual gaps regarding algorithmic control within youth groups? Why do gaps exist in avoidance behaviors when engaging with platform algorithms? Are these gaps influenced by factors such as age, education, or income?

2 Literature Review

2.1 The Phenomenon of Algorithmic Avoidance

In recent years, the phenomenon of algorithmic avoidance has attracted considerable academic interest from multiple perspectives. International scholars such as Siles et al. analyzed the behavior of Spotify teenage users, focusing on emotional experiences.[1] They found that when recommendation algorithms suggest content without user consent, users tend to resist these recommendations and often try to disable the recommendation function. Siles argue that such resistance reflects user discomfort with algorithmic control. From the perspective of information demand and privacy management, Hong and Chen discovered that unmet information needs, negative experiences, and the loss of control over privacy management can trigger algorithmic avoidance behaviors.[2] Their study highlights the role of dissatisfaction and privacy concerns in motivating users to actively avoid algorithmic influence. Additionally, Van Dijck examined user response patterns to platform algorithms from a socio-technical system perspective. He concluded that users’ perceptions of and trust in algorithms significantly influence their behavior. His work emphasizes the social dynamics at play in algorithmic control and how these perceptions affect user engagement.[3]

In China, Peng explored the differences in the acceptance and reactions to algorithms through the theory of the “intelligent divide,” noting that cultural and educational backgrounds lead to significant variation in how platform algorithms are perceived across different social groups.[4] Similarly, Yan Qihong, conducted a more detailed investigation into algorithmic avoidance behaviors and selective exposure among youth in China, from the perspective of user algorithm perception. [5] His research indicated that users’ algorithmic awareness and the application scenarios of recommendation algorithms directly influence their choice of avoidance behaviors.[6]

While these studies provide valuable insights into the macro-level effects of algorithms, they often overlook the in-depth analysis of individual users’ behavioral responses and cognitive processes within the algorithmic framework. Moreover, no specialized research has fully explored why youth groups exhibit complex, coexist-

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ing behaviors of both dependence on and avoidance of algorithms after becoming aware of the mechanisms controlling them.

2.2 Algorithmic Control under Hegemony Theory

Hegemony theory, first introduced by Italian scholar Antonio Gramsci, describes the ruling class's efforts to maintain social dominance through culture, ideology, and other subtle means. With the widespread application of big data and artificial intelligence, scholars have increasingly linked hegemony theory with algorithmic control, examining how algorithms function as a form of hidden power to exert social control over individuals on digital platforms and in society at large.

From the perspective of hegemonic theory, algorithms are not merely technological tools but are instead the manifestation of social power relations. Lash explored the shift from external hegemonic politics to internalized forms of control, emphasizing that the power in modern societies penetrates through cultural and technological systems, thereby creating an "inner domination" framework. [7] Algorithms, as a representation of such power, covertly construct dominant relationships between individuals and groups . Scholz further elaborated on algorithmic control as a modern form of social discipline, analyzing how personalized recommendations and gatekeeping mechanisms empower algorithms to exert control over individuals' choices and behaviors.[8]

Building on this foundation, Liu analyzed the representation and logic of algorithmic power in the post-hegemonic era.[9] He revealed how algorithms provide individuals with a false sense of freedom, masking their influence through personalized recommendations and other mechanisms. Liu argued that algorithmic control operates as an implicit force that shapes user behavior while reinforcing systemic inequalities.

However, while existing research has contributed significantly to understanding the broader societal implications of algorithmic control, it has largely overlooked the complex responses of youth groups under such systems. Current literature provides limited insight into how youth groups simultaneously exhibit resistance to and reliance on algorithmic recommendations. Moreover, the impact of algorithmic control on social trust and group interactions remains underexplored, particularly in the context of hegemonic theory.

2.3 Research Questions

This paper, grounded in hegemony theory, aimed to address the following questions: Were there cognitive differences in youth groups' perceptions of algorithmic control? Why did youth groups exhibit both dependence and resistance when confronted with platform algorithms? Why did some groups choose avoidance, while others continued to rely on the algorithms? What underlying factors, such as digital literacy, group characteristics, or social status, contributed to these behavioral differences? Answering these questions enhanced our understanding of algorithmic cognition and behavioral mechanisms among youth groups, provided valuable insights for optimizing platform algorithms, and contributed to the creation of a more equitable and transparent information dissemination system.

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3 Research Methodology

To address the research questions proposed in this paper:

Q1:Were there differences in perceptions of algorithmic control among youth groups?

Q2:Why did youth groups exhibit both dependent and defiant behaviors when confronted with platform algorithms?

Q3: Why did some groups choose to avoid algorithms while others continued to rely on them?

Q4:Did deeper factors, such as algorithmic literacy, group characteristics, and social status, contribute to these behavioral differences?

This study adopted two research methods: content analysis and questionnaire survey. By collecting and analyzing data from multiple levels and perspectives, the study aimed to uncover cognitive differences in algorithmic control among youth groups and identify the potential factors influencing variations in algorithmic avoidance behavior within these groups.

3.1 Content Analysis Method

The content analysis method was employed to understand cognitive differences and behavioral responses among youth groups when facing algorithmic control by examining public discussions on social media platforms. The primary data source was the comment section of the Weibo topic "*Young people began to reverse domestication the big data killing - enabled price discrimination against existing customers.*" Specifically, big data crawling tools were utilized to collect comments related to the topic, focusing on discussions about the impact of algorithms. Relevant discussion points and emotional attitudes were then extracted from these comments.

Once the data collection was completed, this study applied two analytical techniques: keyword frequency analysis and sentiment analysis.

Keyword Frequency Analysis: This technique examined the frequency of key terms in the comments to identify potential differences in opinion expression and cognition among various youth subgroups regarding algorithmic control.

Sentiment Analysis: Using natural language processing (NLP) technology, sentiment analysis uncovered the emotional tendencies embedded in the comments, allowing for a deeper exploration of the emotional attitudes held by different youth groups toward algorithmic control.

By employing the content analysis method, this study sought to identify general cognitive and behavioral tendencies among youth groups concerning algorithmic control. Additionally, it assessed whether cognitive differences and emotional responses existed when these groups encountered platform algorithmic control.

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3.2 Questionnaire Method

3.2.1 Hypotheses Formulation

Building on the observed phenomenon of differences in youth groups' perceptions of algorithmic governance, this study sought to further analyze the underlying factors contributing to the coexistence of resistance and dependence on algorithms within this demographic. The following hypotheses were proposed to test the impact of various factors on the algorithmic avoidance behaviors of youth groups:

H1: The greater the perception of algorithmic benefits, the less likely the audience is to engage in algorithmic avoidance.

H2: Higher income levels are positively associated with a higher likelihood of algorithmic avoidance.

H3: Individuals with better real-time status (e.g., stable mental and physical well-being) are more likely to engage in algorithmic avoidance.

H4: Higher levels of education increase the likelihood of algorithmic avoidance.

H5: Greater algorithmic literacy is positively correlated with higher algorithmic avoidance behaviors.

H6: Stronger algorithm recommendation capabilities are associated with a higher likelihood of algorithmic avoidance.

In order to verify these hypotheses, the questionnaire explored background information, algorithmic recommendation usage, and algorithmic avoidance behaviors within youth groups. This analysis aimed to identify the factors influencing algorithmic avoidance behaviors and the refusal of algorithmic use among youth.

3.2.2 Sampling Methods

The target group of this study consisted of youth aged 18 to 35 years. The study included individuals from different social classes, educational backgrounds, and cultural contexts. The sample size was set at 300 youth, based on a 95% confidence interval and a 3% margin of error.

The data collection process was conducted on January 13, 2025, and involved the compilation and analysis of responses. The survey included both open-ended and closed-ended questions, focusing on the following areas: (1) Basic Information Confirmation:Questions regarding age, gender, and other demographic details. (2) Independent Variables:Questions related to income, education, real-time status, perceptions of algorithmic benefits, algorithmic recommendation usage, and algorithmic literacy. (3) Dependent Variable:Questions aimed at identifying algorithmic avoidance behaviors, such as whether respondents actively avoided algorithmic recommendations.

The questionnaire consisted of 31 questions, of which 30 were single choice questions and 1 was multiple choice questions. The survey was distributed using both online and offline methods, including through WeChat, Weibo, the Questionnaire Star sample bank, and offline distribution. This combination of distribution methods ensured a wide-reaching sample and enhanced the reliability of the data.

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4 Research Findings and Discussion Points

4.1 Description of the Comment Data on the "Big Data Kills" Tweet

In this study, we employed Octopus Collector to capture comments related to the popular topic "*Young People Start To Anti Tame Big Data Kill*" on the microblogging platform. The data collection period spanned from 0:00 on December 14, 2024, to 23:59 on January 14, 2025. A total of 413 comment entries were collected, each containing key information such as user ID, username, user homepage link, and the timestamp of each post.

Before proceeding with the analysis, we performed a data screening process to eliminate irrelevant entries, ensuring the data set was focused and relevant. The data cleaning and pre-processing steps included the following:

(1)Data Formatting and Unification: Raw data were formatted and unified, retaining only essential fields, such as usernames and comment content.

(2)Content Filtering: Using ROSTCM.6 software, we filtered out non-textual elements, such as punctuation and emotional symbols, and manually merged similar terms or phrases into a single category for consistency. Additionally, common but insignificant words (e.g., "we," "everyone," "then," "so") were removed to enhance the relevance of the analysis.

(3)High-Frequency Word Extraction: After cleaning, we extracted the top 100 most frequently mentioned words in the comments to identify key topics and themes for further analysis.

This systematic cleaning and preparation of the data ensure that only meaningful content is analyzed, which will allow for a more accurate understanding of youth group perceptions and responses to algorithmic control.

4.2 Diversity of Users: Differential Perception of Algorithmically Controlled Phenomena

The result from the buzzword word cloud reveals that youth groups not only focus on specific economic benefits (e.g., air ticket prices), but also express strong emotional concerns regarding the perceived unfairness caused by algorithms (e.g., "big data killing "). As shown in the word cloud of hot words in microblog comments (Figure 1), the terms "too expensive" and "air ticket" appear most frequently, with 351 and 256 occurrences respectively. These reflect the youth group's heightened attention to air ticket prices and consumption costs.

Additionally, the terms "can't afford" and "big data killing" are also prevalent, indicating the group's sensitivity to price disparities and perceived injustices. Particularly, the phrase "too expensive" underscores their concerns about price disparities, reflecting their dissatisfaction with perceived unfair pricing practices. The term "big data killing" holds an important position in the analysis, indicating a strong focus on the phenomenon of "big data killing", particularly in relation to the role of algorithms in regulating consumer prices.

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Figure 1 the buzzword word cloud of Weibo comments on big data price discrimination

In addition, sentiment analysis of the comments reveals three primary emotional tendencies. Approximately 61.74% of the comments are negative, reflecting dissatisfaction and anxiety towards the “big data killing” phenomenon and the perceived unfairness of algorithmic control. This negativity likely stems from consumer frustration, helplessness, and anger regarding price disparities and the exploitation of personal data. 39.27% of the comments are neutral, suggesting that some users are indifferent or view the phenomenon as irrelevant to their personal experiences. Only 7.99% of the comments express a positive sentiment, indicating that a minority of users view the phenomenon more favorably, possibly perceiving it as beneficial or convenient, or exhibiting a higher level of tolerance towards algorithmic recommendations.

The analysis of microblog comment data reveals significant differences in how youth groups perceive algorithmic control. Their behavioral responses are likely influenced by several factors, including individual cognition, social experience, and technological literacy.

One segment of the youth group is particularly concerned with consumer prices, especially air ticket costs. The frequent appearance of terms such as “too expensive” and “can't afford” underscores their dissatisfaction with high prices and the financial pressures they face. These users are particularly focused on price transparency and fairness, which may stem from incidents like the 2018 Ctrip price discrimination case, where the platform allegedly used big data algorithms to discriminate against long-time users by charging them higher prices. This group is especially wary of algorithmic biases and opacity, resulting in a deep mistrust of digital platforms. They fear that these platforms may exploit users' historical consumption data, leading to price discrimination and exacerbating social inequities.

Another group of users is more concerned with how algorithms manipulate prices and consumer behavior through personalized recommendations, particularly with respect to the “the big data killing - enabled price discrimination against existing customers” phenomenon. Their concerns center around privacy violations, informational bias, and the potential impact of algorithms on individual decision-making. These concerns highlight the tension between the profit-driven motives of digital platforms and the potential for algorithmic manipulation. Personalized content pushed by algorithms, such as higher-priced goods or price discrimination based on purchasing habits, may exacerbate income inequality and reinforce social stratification. In response, some users seek to “domesticate” these algorithms by increasing their algorithmic literacy and control over the recommendations they receive, thus reducing the perceived unfairness of algorithmic decision-making.

Additionally, some users express a more positive attitude towards the phenomenon, as evidenced by the use

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of words like “learned” in their comments. These users show a desire to understand the issue more deeply. While they acknowledge the challenges posed by algorithms, they are more open to exploring the phenomenon and do not engage in algorithmic avoidance behaviors. This suggests that while these groups may be more accepting of new technologies, they lack a critical understanding of the potential privacy risks and social inequities inherent in algorithmic control. Their positive outlook may reflect a general acceptance of technological innovation, rather than a deep reflection on the implications of algorithmic governance.

Through this analysis, it is evident that youth groups exhibit diverse perceptions of algorithmic control. These differences are shaped by a variety of factors, including personal concerns about pricing, privacy, and social fairness, as well as varying levels of awareness and technological literacy.

4.3 Analysis of Factors Influencing Algorithmic Avoidance Behavior in Youth Groups

This study analyzed responses from 353 participants through a questionnaire survey, ensuring that the sample was representative in terms of gender, age, education, and occupation distribution. The majority of respondents were aged 25 to 29 years, with 66.9% holding a bachelor's degree or higher. Their income predominantly ranged from $2 000 to $7 999. The descriptive analysis of both independent and dependent variables indicates that respondents generally had a positive perception of the benefits algorithms offer. Furthermore, their ability and literacy in using algorithmic recommendations were also favorable. However, a certain degree of avoidance behavior was observed, with a mean value of 3.58 in algorithmic avoidance behaviors. Overall, respondents exhibited a balanced attitude towards algorithm-related cognition and behaviors, reflecting the general characteristics of the youth group.

The study employed correlation and regression analyses to explore the relationships between perceptions of algorithmic benefits, income levels, personal real-time status, education levels, algorithmic literacy, and the ability to use algorithmic recommendations, and algorithmic avoidance behavior. Pearson correlation coefficients were used to measure the strength of these relationships. The analysis revealed that perceptions of the benefits of algorithms, personal real-time status, education level, algorithmic literacy, and algorithmic recommendation usage ability all had significant positive correlations with algorithmic avoidance behavior, with correlation coefficients of 0.463, 0.300, 0.159, 0.527, and 0.565, respectively. The regression coefficients for these factors were 1.303, 1.911, 1.430, 0.859, and 0.766, showing significance in the regression model. In contrast, there was no significant correlation between income level and algorithmic avoidance behavior, indicating that the research hypothesis H2 was not supported.

The data analysis suggests that algorithmic avoidance behavior is influenced by multiple factors, notably perceptions of algorithmic benefits, real-time personal status, education level, algorithm literacy, and the ability to use algorithmic recommendations. These factors are interconnected and have different effects on avoidance behavior depending on the context. Among these, algorithmic recommendation usage ability and algorithmic literacy were found to have the most significant influence, with strong correlation and regression coefficients. Perceptions of the benefits of algorithms and personal real-time status also had a noteworthy impact on avoidance behavior, while education level exhibited a relatively smaller effect, with lower correlation and regression coefficients. Notably, income level did not have a significant influence on algorithmic avoidance behavior in this study. Despite the importance of income in influencing user behavior, its impact may be

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moderated by other variables in this context.

4.3.1 Surveillance Capitalism: The Deep Impact of Platform Control on User Dependency and Avoidance Behavior

The study found that perceptions of algorithmic benefits and the ability to use algorithmic recommendations had a significant impact on users' avoidance behaviors. While users may recognize the potential benefits of algorithms, concerns about algorithmic control and transparency drive them to adopt avoidance strategies to prevent algorithms from overly influencing their decisions and behaviors. Moreover, users with a high ability to use algorithmic recommendations are more adept at understanding and adapting to recommendation systems to enhance personalized experiences and avoid irrelevant content. However, excessive control and filtering of recommended content may lead to increased avoidance behaviors, as users become more selective, potentially avoiding recommendations that do not meet their needs, even if they are not entirely irrelevant.

This phenomenon of youth groups relying on and resisting algorithms can be traced to the strong commercial motivations behind platform algorithms and their implicit control mechanisms. As Zuboff asserts, platform algorithms promote a form of “surveillance capitalism” by closely monitoring and profiling user behaviors and data, thus guiding and controlling user behaviors through data collection and customized recommendations. Over time, users lose autonomy in this process, triggering algorithmic avoidance behavior.

From a hegemonic perspective, platform algorithms push personalized content to achieve commercial goals by monitoring user behaviors and collecting data. These algorithms profoundly influence users’ decisions, inadvertently strengthening the platform’s control. The power dynamics behind platform algorithms are significant, as users’ decisions and behaviors appear to be made within a framework set by the platform, thereby reinforcing implicit control. Through granular data analysis, platforms can exert precise influence to maximize commercial interests.

Despite the ability to self-regulate, young people often find it challenging to completely resist the influence of platform algorithms. This is especially true when recommended content does not align with users' needs or infringes upon their privacy. For instance, algorithmic recommendations on social platforms may push extreme or biased content based on users' past interactions, resulting in the “information cocoon” effect and privacy violations. As seen in scandals like the Facebook data breach, public trust in platform algorithms has significantly eroded. Even when users recognize the potential economic benefits of algorithmic recommendations, they acknowledge the risks and unfairness associated with algorithms, leading to avoidance behaviors to mitigate further manipulation.

Therefore, in the context of surveillance capitalism, the transparency and fairness of algorithms play a crucial role in users' willingness to rely on or avoid them. If algorithmic recommendations are opaque and do not offer sufficient information or choice, users are likely to resist. However, if platforms enhance the accuracy of recommendations while improving algorithmic transparency and disclosing the underlying mechanisms and business logic, users' trust will likely increase, thereby reducing avoidance behavior.

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4.3.2 Individual Real-Time States: Privacy-Preserving vs. Autonomy-Driven Algorithmic Avoidance Behavior

Individuals' real-time states significantly influence their algorithmic dependency and avoidance behaviors. In today's information-saturated and highly competitive society, individuals' emotional and psychological needs drive their behavior regarding algorithms. When youth group members experience favorable life and emotional states, they prioritize privacy protection and autonomy, leading them to actively avoid algorithmic recommendations that could violate privacy or interfere with decision-making. In such cases, individuals are more inclined to avoid algorithmic interference in their decision-making, displaying marked avoidance behavior.

Conversely, when individuals face heightened social pressure or emotional distress, they tend to rely more on algorithmic recommendations to reduce the decision-making burden and cope with emotional stress. The growing phenomenon of information overload, compounded by increased social competition, places many individuals, particularly the youth, in a state of anxiety and exhaustion. For example, academic pressures, workplace competition, or personal life challenges often hinder individuals' ability to sift through vast amounts of information and make informed decisions. In these circumstances, algorithmic platforms, through personalized recommendations, offer rapid decision support by helping individuals quickly identify relevant content from a sea of information, thereby conserving time and energy in the decision-making process.

As Byung-Chul Hann observes in The Burnout Society, information overload and social competition exacerbate psychological pressures, fostering a pervasive sense of “burnout.” Individuals experiencing high social and emotional stress often find it challenging to rely on their own judgment, turning instead to external systems such as algorithmic recommendations. This dependency shows a two-way effect: while personalized recommendations reduce psychological pressure in the short term, they may also result in “decision-making inertia” that weakens an individual's ability to make independent choices over time.

In summary, while algorithmic recommendations provide valuable decision support in the short term, excessive reliance may undermine individuals' independence in the long run. Addressing this issue requires enhancing individuals' mental resilience and cognitive abilities. When individuals are in better emotional states, they are more likely to recognize algorithmic risks and actively avoid recommendations that do not align with their needs, thereby protecting their privacy and autonomy.

4.3.3 Highly Literate Groups: Algorithmic Active Avoidance Behavior Based on Potential Risk Identification

Education level and algorithmic literacy have a profound impact on the algorithmic avoidance behavior of youth groups. Through their strong critical thinking and information screening ability, the highly educated group can clearly recognize the potential bias, privacy invasion, and other risks brought by algorithms, and timely adopt avoidance strategies. This cognitive mechanism prompts them to show high sensitivity and alertness when facing algorithmic recommendations, thus actively avoiding the influence of algorithms.

Typically, the complex algorithms used behind platforms often lack sufficient transparency for users to fully understand how their personal data is collected, analyzed, and utilized. This black-box operation of al-

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gorithms makes users lack control and understanding of their own data during the information consumption process, which in turn exacerbates distrust of algorithms. The more educated and algorithmically literate youth population is usually able to demonstrate higher levels of critical thinking and recognize potential risks that algorithms may pose. For example, they are able to identify hidden risks such as bias issues, information manipulation, and privacy invasion in algorithmic recommendations, and then actively adopt avoidance behaviors when facing algorithmic recommendations by thinking deeply and evaluating their potential negative impacts.

Audiences with high algorithmic literacy are able to deeply understand the principles and working mechanisms of algorithms and are clearly aware of how recommender systems make pushes based on personal behavioral data, and even how they may affect their decision-making and privacy. Through a deep understanding of the principles behind algorithms, they are not only able to recognize the potential harms of algorithmic recommendations, but also reduce their reliance on algorithms through autonomous choices. Similar to what happened in the 2018 Facebook data breach, many users took various evasive measures after learning that their data had been misused, such as adjusting privacy settings, restricting data sharing, turning off personalized recommendations, and even opting out of certain platform services. These behaviors reflect the high value that the highly literate group places on autonomy, privacy protection, and the right to choose information, and reflect their strong expectations for algorithmic transparency and fairness. Low-literate groups, however, are less likely to engage in avoidance behaviors because they lack a basic understanding of how algorithms work, they may show less vigilance in accepting algorithmic recommendations, they are prone to accepting content pushed by platforms, and they may not have sufficient cognitive resources to understand complex algorithmic mechanisms.

As revealed by the Intelligent Divide Theory, with the development of intelligent technologies, the differences in technological literacy among people gradually increase. In his Smart Gap Theory, Du Junfei points out that the anti-alienation gap plays a key role in the process of technology acceptance and use, especially in the context of algorithmic recommendation. Users with high literacy can be more vigilant in recognizing the risks and take proactive measures to avoid them. Through practical actions, they are able to effectively minimize the overuse of their personal data by platforms, which not only reflects their sensitivity to the control risks posed by technology but also demonstrates their pursuit of autonomy in the digital age.

5 Summarizing and Reflecting

This study theorizes the algorithmic avoidance behavior of youth groups through content analysis and questionnaire survey methods, aiming to investigate whether there are cognitive differences in their perceptions of algorithmic control and why they exhibit both reliance and resistance behaviors in the face of platform algorithms. The findings suggest that the cognition of the benefits brought by algorithms, personal real-time status, education level, algorithmic literacy, and the ability to utilize algorithmic recommendations all significantly correlate with algorithmic avoidance behavior, thereby validating hypotheses H1, H3, H4, H5, and H6. However, the income level did not show a significant correlation with algorithmic avoidance behavior, thus invalidating hypothesis H2.

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From a hegemonic perspective, this paper explores the reasons for youth groups' reliance on and avoidance of platform algorithms, reflecting the profound control exerted by digital platforms over individual lives within the context of surveillance capitalism. This control is achieved not only through data collection, recommendation algorithms, and personalized advertisements, but also by platforms' "guidance" and "domestication" of user behavior. In this process, platform algorithms become deeply embedded in users' decision-making by offering personalized services that appear beneficial, thereby reinforcing the platform's control over individuals. However, youth groups develop complex attitudes: they rely on the convenience offered by platforms while simultaneously developing avoidance behaviors due to concerns over privacy erosion, restricted choice, and unfair practices. The interplay between platform algorithmic control and the resistance of youth groups manifests the hegemonic phenomenon characteristic of the digital age.

This phenomenon exemplifies the hegemonic development of platform algorithms in modern society. Platforms have strengthened their management and guidance of users through algorithmic recommendations, leading individuals to not only accept this control unconsciously but also gradually adapt and form a behavioral pattern of both avoidance and dependence. The platform's control over users' data and the manner in which information is pushed to them creates a powerful "voice" that suppresses the individual's right to make independent choices, further exacerbating the unfairness and privacy violations associated with algorithms. Thus, algorithmic avoidance behaviors among youth groups are not merely reactions to personalized recommendations but also represent a silent resistance to platform control and information manipulation.

However, the study also revealed that while platform algorithms can provide personalized recommendation services and enhance user experience, the privacy violations and data manipulations behind them may trigger social unrest and erode trust. These negative impacts—particularly concerns about privacy protection, data security, and fairness—have become critical issues within the field of algorithmic recommendation. As digital technologies continue to evolve, these phenomena may intensify, potentially undermining societal trust and diminishing users' willingness to engage with platforms. This could lead to increasing antipathy towards platform algorithms across different social groups.

The limitations of this study include the focus on data collection from a single platform (i.e., microblogging), which may not comprehensively represent user behaviors across various social platforms. Furthermore, regional biases in the sample and the concentration on youth groups limit the generalizability of the findings. Future research should expand data sources to encompass multiple platforms and a broader range of social groups, further investigating algorithmic avoidance behaviors within the context of hegemonic power. Additionally, future studies could explore strategies to mitigate the negative impacts of platform algorithms and promote a fairer and more sustainable information dissemination system by improving algorithm transparency, enhancing platforms' social responsibility, and fostering greater digital literacy among users.

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