

Research on the Influence of Algorithm Recommendation on College Students' Ideological and Political Education

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Abstract: With the rapid development of the intelligent age, the influence of algorithm recommendation on the ideological and political education of college students is gradually increasing. It satisfies the individual needs of college students, broadens the breadth of value recognition of college students, and helps college students to achieve role transformation in the process of mainstreaming values. At the same time, it also causes college students to fall into the whirlpool of "information barrier", "information addiction" and "information entertainment". Therefore, it is necessary to correctly handle the relationship between algorithms and college students' ideological and political education, highlight mainstream values to guide algorithms, improve college students' algorithm literacy, strengthen the supervision of algorithm technology, and create a good algorithm environment for college students' ideological and political education.

Keywords: algorithm recommendation; college students; ideological and political education

With the development of artificial intelligence, algorithm recommendation has become the preferred information recommendation technology for major network platforms. According to the 47th "Statistical Report on Internet Development in China", as of December 2020, netizens under the age of 39 accounted for 54.9% of Chinese netizens. Among them, college students are the group that uses the Internet the most, accounting for 21%, it is also the audience group with the highest stickiness of algorithm recommendation technology users. Therefore, it is of important theoretical and practical significance to analyze the advantages and problems that the system recommends to the ideological and political education of college students and to try to put forward a holistic strategy plan.

1. The advantages of algorithm recommendation influencing college students' ideological and political education

An algorithm is a series of steps entered into the machine to solve a specific problem. As a product of the combination of artificial intelligence and traditional media, it plays an important role in the ideological and political education of college students.

1.1. Precise push: to meet the individual needs of college students

The widespread application of algorithm recommendation technology has caused a huge change in the way of information dissemination, and has realized a subversive change from "people looking for information" to "information looking for people". First, algorithm recommendation helps college students to accurately mine the people and information they need from the massive resources. Commonly used algorithm recommendations are content-based recommendation algorithms and collaborative filtering-based recommendation algorithms. The two methods complement each other. The content-based recommendation algorithm is based on the user's search data, combined with current hotspots, and infers the user's latest interest. The recommendation algorithm based on collaborative filtering finds users with similar hobbies to the user based on data such as age, gender, occupation and search content, and pushes the content of their interest to related users, and finally forms a group of peers with similar hobbies. Second, the algorithm recommendation realizes the private customization of massive resources, which greatly meets the individual needs of college students. Algorithm recommendation is to form a personalized recommendation by fully mining and processing relevant data of college students, and "portrait" them. It is worth noting that this kind of "portrait" is not fixed, it

will be dynamically updated with the changes of college students' search data, in order to better meet the individual needs of college students.

1.2. User production: helping college students realize the role change in the process of mainstream value dissemination

Algorithm recommendation helps college students to realize the “director dream” and promotes the transformation of their roles from “indoctrinated” to information source in the process of disseminating mainstream values. The communication of traditional mainstream values mainly involves the production of positive energy content by mainstream media and inculcating communication from top to bottom. With the rapid development of new media, short video platforms basically adopt a “user-produced content” operation model. Compared with professional video shooting and production, short video production is more convenient, cost and threshold lower. With just a smart phone, college students can make short videos of mainstream values in a form that people love to see, and spread them to major online platforms. At the same time, the algorithm recommends linking such short videos to peer groups with similar hobbies, which further promotes the spread of mainstream values. In short, from passive acceptance to active participation, algorithm recommendation not only expands the spread of socialist core values, but also improves college students’ acceptance of mainstream values.

1.3. Interactive sharing: Broaden the breadth of value recognition of college students

The promotion of algorithm recommendation technology promotes the ideological and political education of college students to break time and space constraints, enhance their information sharing experience, and expand the breadth of college students’ value recognition. First, the algorithm disseminates huge and complex big data information to all parts of the world in fragmented form, and college students use global network social networking as the stage to form their own cultural circle and circle of friends on the network platform, so that resource sharing can become even greater across time and space restrictions and convenient. Second, recommendations based on collaborative filtering provide the possibility to broaden the value recognition of college students. Traditional media mainly instills the ideological and political education of college students through “top-down”, and it is difficult to pass quantitative assessment on the acceptance of indoctrination content. The relationship between cultural creators and the audience of college students is “two skins”, the algorithm labels college students. When college students comment, collect, and forward information that contains mainstream values, the algorithm can analyze user groups with consistent values and a high sense of identity, which can greatly extend the spread of mainstream values.

2. The negative impact of algorithm recommendation on college students’ ideological and political education

Technology is originally a tool, method or method created by mankind and used to recognize and transform nature. It is a subordinate of man. Now algorithms are acting against man himself with an external, alien and hostile force. The algorithm recommendation not only helps the ideological and political education of college students, but also makes them fall into the dilemma of “information barrier”, “information addiction” and “infotainment”.

2.1. The “information barrier” narrows the scientific nature of college students’ ideological and political education

In “Filtering Bubbles: What the Internet Didn’t Tell You”, Paritser pointed out that even if two people use the same keyword to search on the same browser at the same time, they may get completely different content. This is because browsers use algorithmic recommendations to label information and users, push information that users are interested in according to user preferences, and automatically filter information that they may not like, thus forming a closed “information barrier”. If college students stay in a homogenous “information barrier” for a long time, constantly strengthen their inherent ideological system, and reject all heterogeneous information, they will eventually form a value bias. In addition, college students receive homogeneous information without thinking, and rarely communicate with the outside world, which will reduce social stickiness, gradually move away from the mainstream society, immerse themselves in the “beautiful world” portrayed by algorithms, and ultimately result in value solidification. In short, the “information barrier” has caused value prejudice

and value consolidation, and has increased the difficulty of integrating mainstream ideology into the ideological and political education of college students.

2.2. “Information addiction” corrodes the rationality of college students’ ideological and political education

Professor Shen Zheng pointed out that “information addiction” is manifested by addicts who have a strong behavioral and psychological need for browsing information. Once the behavior is forced to stop, it will produce extreme pain or anxiety. On the one hand, the algorithm recommendation technology itself potentially contains a set of addiction mechanisms. For example, Douyin uses a 15-second short video to create a sense of unfulfilled meaning, and uses warm water to boil frogs, allowing college students to immerse themselves in the virtual world without knowing it. On the other hand, over time, the addictive mechanism implicit in algorithm recommendation will continue to erode the ability of college students to think independently. Neil Bozeman pointed out in “Entertainment to Death” that what people feel painful is not that they replace thinking with laughter, but that they don’t know why they laugh and why they no longer think. Affected by algorithm recommendations, college students are overly addicted to “information barriers”, habitually use one-sided thinking to understand fragmented information, and are unacceptable to the mainstream value discourse system with coherent logic, and even hold an indifferent attitude. This conflict directly affects the mainstream ideology Ideological and political education for college students.

2.3. “Information entertainment” dispels the backbone of college students’ ideological and political education

Nicholas Carr put forward the concept of “infotainment” in “Shallow: How the Internet Poisoned Our Brains”. “Information entertainment” believes in the supremacy of entertainment, and all affairs are interpreted as entertainment, which makes college students face the challenge of “excessive entertainment”. First, algorithm recommendation regards user traffic as a god, and constantly recommends “interesting” information for it. The panoramic carnival makes college students naturally reject serious and systematic information, and desire content that is entertaining, superficial, and vulgar. Second, the algorithm recommendation emphasizes the audience-oriented nature, and transfers the “control of customs” originally belonging to the professional media to the algorithm, so that college students face the challenge of marginalizing mainstream ideology in the process of ideological and political education. In order to cater to college students, the algorithm uses vulgar and funny content to gain attention, and even directly fabricates some content that violates mainstream values, and attempts to export Western ideology in an unruly manner, which seriously affects the ideological and political education of college students. Algorithms do not have neutrality. The values of algorithms are human values. If the mainstream ideology is marginalized under the influence of capital logic and algorithm recommendations, college students ideological and political education will lose the backbone and fall into the dilemma of confusion of values.

3. Strategy analysis of algorithm recommendation to help college students’ Ideological and Political Education

In view of the difficulties brought by algorithm recommendation to college students’ Ideological and political education, highlighting the mainstream values, guiding algorithms, improving college students’ algorithm literacy, perfecting relevant laws and regulations, and eliminating the contradiction between algorithm recommendation and college students’ Ideological and political education have become the top priority of College Students’ ideological and political education.

3.1. Leading the algorithm: highlighting the mainstream values of algorithm content

Algorithms should return to the origin of service content, and should not put the cart before the horse and let the content be led by the algorithm. First, we must change the algorithm logic and strengthen the mainstream value guidance algorithm. Algorithm recommendation is a product of capital logic. Behind the supremacy of flow is the supremacy of capital. The main body of algorithm design should change capital thinking, combine economic benefits and social benefits, put social benefits in the first place, and create a good algorithm atmosphere for college students’ ideological and political education. Secondly, use mainstream values to check the recommended content of algorithms, and

strive to achieve “human-machine linkage”. In addition to using algorithms to filter and push content, the short video platform must also strengthen the manual check mechanism to conduct a second investigation on the content filtered by the algorithm to strictly prevent the value “side ball” information from flowing into college students. Finally, mainstream media should be good at using algorithms to spread mainstream ideology. Traditional media must adapt to the algorithm recommendation technology, actively try to build an algorithm platform dedicated to promoting mainstream values, use the “cash + flow” method to sign a large number of self-media to create positive energy content, and connect with major network platforms such as Tik Tok and quick worker quick to expand Mainstream ideology dissemination channel.

3.2. Controlling Algorithms: Improving the user literacy of algorithm college students

Improving college students' algorithm literacy is a fundamental measure to solve algorithm problems. Algorithm literacy does not mean that users can read and write code strictly, but that they are aware of the existence of algorithms and the important role they play. First, college students should treat the algorithm technology itself dialectically. Let college students realize that the information they obtain is “distributed” by algorithms, actively search for different types of content, resolve the psychological anxiety caused by homogenized information, break the “information barrier”, and get out of the algorithmic “capture”. Second, college students must be critical of the results of the algorithm, be not superstitious, not blindly follow, and strive to improve the ability of information screening, distinguish the truth and rumors, and consciously resist and report corrupt and backward harmful information. Third, college students must follow the norms of information dissemination. As producers of short videos, college students must take the initiative to shoulder social responsibilities, become communicators who inherit excellent culture, and practitioners who promote the core values of socialism. They must resolutely abandon behaviors that are hot, rhythmic, and fabricating false information.

3.3. Standardized Algorithms: Strengthen the supervision of the application of algorithm technology

Algorithm recommendation technology plays an increasingly important role in the Internet era. It is of great significance to strengthen algorithm technology supervision to construct network security. First, relevant government departments should formulate laws and regulations governing algorithm recommendation. Perfect laws and regulations are the basis and prerequisite for guiding college students to form rational and positive values. Therefore, the government should conduct in-depth research on the problems caused by algorithms, such as intellectual property infringement, personal privacy disclosure, and the implicit spread of Western ideology. It is forced to improve relevant laws and regulations, stipulate the rights and obligations of groups such as algorithm platforms, designers, and audiences, clarify the boundaries of illegal activities, and establish accountability mechanisms. In addition, relevant government departments can combine the development rules of college students and the operation rules of algorithm recommendation technology to predict the possible problems of college students in the process of applying algorithm recommendation platform, and formulate laws and regulations specifically for algorithm recommendation problems of college students in advance. Second, the platform applying algorithm technology should build industry rules for algorithm recommendation technology, implement real-name system as soon as possible, trace back to the source of illegal users spreading false news and violating mainstream values, and implement silence and account sealing.

4. Conclusions

The all-media era dominated by algorithm recommendation is becoming a new situation that affects college students' ideological and political education, actively adapting to the new requirements of algorithm recommendation for college students' ideological and political education, striving to explore new ways to optimize college students' ideological and political education with algorithm recommendation, and continuously expanding college students' ideological and political education. The new perspective, new field, and new situation of education cultivation are the top priority of the ideological and political education of college students in the future.

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