

Retraction

Retracted: The Influence of Big Data and Information Fusion Innovative Technology in College Students' Ideological and Political Education

Mobile Information Systems

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

In addition, our investigation has also shown that one or more of the following human-subject reporting requirements has not been met in this article: ethical approval by an Institutional Review Board (IRB) committee or equivalent, patient/participant consent to participate, and/or agreement to publish patient/participant details (where relevant).

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] Y. Li, "The Influence of Big Data and Information Fusion Innovative Technology in College Students' Ideological and Political Education," *Mobile Information Systems*, vol. 2022, Article ID 9265037, 11 pages, 2022.

Research Article

The Influence of Big Data and Information Fusion Innovative Technology in College Students' Ideological and Political Education

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Big data on the Internet has brought another way of thinking to college students' ideological and political research. Teachers in higher education can make full use of the ability of big data in acquiring, storing, managing, and analyzing to innovate ideological and political education work. University faculty can improve their careers, ensuring that university education and politics are scientifically sound and efficient. To explore the modernization of college student ideological and political research in the age of Internet big data, this research usually begins with data that attracts college students and explores college student ideas and culture in a variety of ways. I received the information. Therefore, in the current Internet big data era, the innovation of the current college students' ideological and political education work is deeply analyzed. The current traditional single "indoctrination" theory education can hardly continue to play a strong role. Therefore, starting from the actual requirements of college students, this paper puts forward a new point of view on the choice of educational methods. From the current survey, it is found that college students are still more inclined to choose the method of classroom teaching. Below the significant level of 0.05, the tolerance is greater than 0.1 and the variance expansion factor VIF is both. It is the smallest in the vicinity of 1. Therefore, the more the college students prefer classroom teaching and the way of receiving information from the mass media, the better the effect of traditional ideological and political education and network.

1. Introduction

1.1. Background. Information technology has gradually become a powerful force that cannot be ignored in promoting the development of higher education in China. It has brought great opportunities to university education, but it also has certain challenges. It is conducive to the construction of ideological and political education model and method innovation for college students in the era of big data. Solve the status quo of insufficient effect of theoretical impartation and passive reception in the past education process. The beginning of university ideological and political education began in 1950. Although ideological and political studies have been conducted, for more than half a century, it plays an important role in educating college students to create a genuine sense of the world, life and values, morals,

and their ideas. Class political theory is not ideal due to many factors that are far from human expectations. For example, the contradictions and conflicts arise from the multidimensional and diversified ways of receiving information by contemporary college students. As well as problems such as serious student burnout, leading educational reforms with the introduction of education and strengthening the expansion and integration of modern information and education are an important part of China's development. It has opened up new directions and opportunities for human development. Therefore, by explaining the gist and principles of big data, this article identifies the necessary and changing levels of thoughtful research and the political and key data at the university, highlighting the risks of integration. That is, the arrival of the big data era has brought positive effects, but at the same time, classroom education

and its extension are poor, and the educational subject is still self-centered and engages in one-word teaching, paying less attention to the participatory nature of the educational object.

1.2. Significance. Thinking and ethics, political thinking, and other topics are important stages of college student thinking. Thought and ethical aspects can play a macrorole in macroguidance and concepts. Ideological and political education work is an important work front of the Party and the State, the purpose of which is to continuously transform the worldview, outlook on life, and values of the educated, and continuously improve the moral level and ideological quality, so that people can eventually be able to develop in a comprehensive and balanced way. Given the importance of education and politics and the rise of information, there is no inefficiency at the same time, given what education is suitable for current college students to study and earn a degree. Now, the era of big data is booming. Based on the true principles of intermediate and high performance of large data, identify the impact of how college students receive data on the outcome of ideological and political research.

1.3. Related Work. Yang et al. studied the ideological education of college students based on multimedia technology and cloud service platform. At the same time, the Internet has an important impact on contemporary students. Teachers can communicate with college students more effectively through the Internet and understand students' thinking in a timely manner. Therefore, the wide application of multimedia in ideological and political courses in colleges and universities has become an important symbol of the development of education modernization [1]. Rudyanova and Lebid requested that the Blueshift platform be used to research and apply investment strategies based on its work. We considered the pros and cons of using the Blueshift platform as a service-based platform [2]. Abdulrahman et al. investigated the latest indoor positioning technology, and then conducted a detailed comparative analysis of UWB positioning technology. They also provide advantages, disadvantages, opportunities, and threats (SWOT) analysis to analyze the status quo of UWB positioning technology [3]. The technological convergence and integration of Hershey PC in digital systems is one of the preferred methods to promote new effective work processes and restore business processes. The gradual interconnection of digital technology and business operations has led to the integration and integration of management disciplines, equipment, and applications. The management's increasingly inconsistent understanding of the benefits of integration has prompted a comprehensive inspection of the digital integration path to determine the impact on the integration entity and business goals [4]. Wu takes the establishment of a big data-based college ideological and political education management system as its core purpose, uses Java EE, MVC, integrated SSH2 framework, and other data technology content as its core technical content, and combines taking the functional

requirements of the ideological and political management system of colleges and universities as the main reference content, the architecture mode, and main functions of the system are introduced, respectively [5]. Yijun's research publishes various explanations and measures to meet the needs of self-disclosure time. Based on the definition, definition, and characteristics of vanity press, we expand the impact of college student's self-disclosure on the ethical concepts, the relationship between personality and mental health. She develops a self-developed media-based culture and leadership model, preparing measures for college student self-promotion and political education. It has benefited from the development of ideological and political education for college students, as well as the steps taken to achieve these positive outcomes [6]. Yu and Wang consider political education at the university as a major network of information platforms and collaborations. With the development of modern information, ideological and political education and education at universities are gradually beginning to use art and technology to promote student pride and interest [7]. Many scholars are concerned about the ideological and political education of Chinese college students and carried out research under the conditions of the times. However, the integration with digital media requires a deep understanding of this aspect, and it is very difficult for those who do not know enough about it. In addition, there are a small number of people who have a very clear understanding of the ideological and political education model, its educational characteristics, and potential factors, and so it is difficult to operate.

1.4. Innovation. Based on the background of Internet big data, this article focuses on the innovative strategies of ideological and political education for college students under the integration of big data, hoping to continuously improve the effectiveness of ideological and political education for college students in the new era [8]. On the basis of studying the influence of college students' information on ideological and political education, an educational method based on big data and information fusion innovation technology is proposed. Analyzing these reasons carefully and exploring their countermeasures is of great significance to improving the teaching quality and actual effects of political theory courses [9].

2. University Ideological and Political Education Based on Big Data

2.1. The Meaning of Big Data and Its Development History. Since the emergence of big data, it has been respected by all sectors of society [10] and has been quickly applied to all aspects of social development. Using big data technology to measure and analyze the world, and to mine the potential value of the data itself by analyzing the correlation of the data, so as to better promote the development of society [11]. At present, there is no clear definition of the concept of big data. Diversity, high speed, and value [12] are shown in Figure 1. The definition given for the concept of big data is

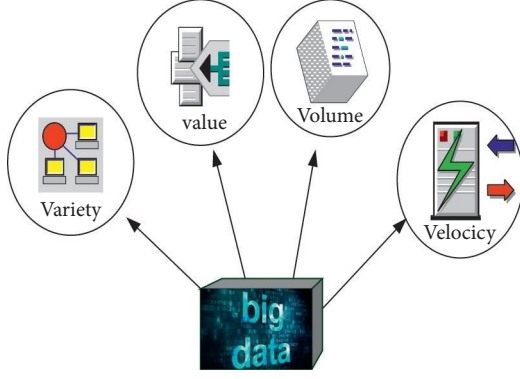


FIGURE 1: Basic characteristics of big data.

that the scale of data is so large that it cannot be obtained, processed, and organized in a short period of time through conventional data processing software to become information that helps enterprises make business decisions more positively [13].

After entering the information society, people generally refer to all the information stored on the computer, including stored music, videos, and data [14]. Before 1965, due to the high price of computer storage hardware, the amount of data did not change significantly. Moore's Law proposed by Intel's cofounder Gordon Moore completely broke this status quo [15], making computer hardware more expensive. Processing speed and storage capacity will be doubled in one to two years.

BM introduced the first commercial hardware memory [16]. After the cost of data storage broke through the cost limit, the storage cost continued to drop. In 2010, the price was reduced to less than 1 cent [17]. The technology of computer hardware will continue to develop, see Figure 2.

2.2. Target Tracking and Data Association Calculation Based on Fusion System. There are generally two types of traditional data association methods: Bayesian methods and Non-Bayesian methods [18]. Bayesian methods include Probabilistic Data Association Filter (PDAF) and Joint Probabilistic Data Association Filter [19].

Based on the target dynamic model, it is assumed that the state equation of the target is

$$y(A+1) = f(A)y(A) + g(A)W_1(A). \quad (1)$$

Observation equation:

$$Z(A) = h(A)y(A) + W_2(A), \quad (2)$$

$y(A)$ represents the state vector and $Z(A)$ is the observation vector. $f(A)$ and $h(A)$ are used as the transfer matrix of the former two, respectively, $W_1(A)$ and $W_2(A)$ are independent mean values, set to 0. Gaussian noise with covariance α and r , respectively:

$$\begin{aligned} e[W_1(A)(W_1(J))^t] &= \alpha(A)\theta_{AJ}, \\ e[W_2(A)(W_2(J))^t] &= r(A)\theta_{AJ}. \end{aligned} \quad (3)$$

In the above formula, θ_{AJ} represents the impact function and e denotes the sample space.

Suppose that at time A , the effective observation set $z_A = \{z(A, J)\}_{J=1}^{M_A}$, $z^A = \{z_L\}_{L=1}^A$ is all the valid observations accepted at time A , and M_A represents the number of observations. Effective observation at every moment:

$$\left[Z(A) - \hat{Z}\left(\frac{A}{A-1}\right) \right]^t [s(A)]^{-1} \left[Z(A) - \hat{Z}\left(\frac{A}{A-1}\right) \right] < G^2. \quad (4)$$

$s(A)$ is the new covariance and the one smaller than G is the effective observation, G table the normalization factor. The standard update filter equation is [20]

$$\begin{aligned} \hat{y}\left(\frac{A}{A-1}\right) &= f(A)\hat{y}\left(\frac{A-1}{A-1}\right), \\ \hat{Z}\left(\frac{A}{A-1}\right) &= h(A)\hat{y}\left(\frac{A}{A-1}\right), \\ p\left(\frac{A}{A-1}\right) &= f(A)p\left(\frac{A-1}{A-1}\right)f(A)^t, \\ s(A) &= h(A)p\left(\frac{A}{A-1}\right)h(A)^t + r(A), \\ w(A) &= p\left(\frac{A}{A-1}\right)h(A)^t s(A), \\ \hat{y}\left(\frac{A}{A}\right) &= \hat{y}\left(\frac{A}{A-1}\right) + w(A)V(A), \\ V(A) &= \sum_{J=1}^{M_A} \beta_J(A)V_J(A), \\ V_J(A) &= Z_J(A) - \hat{Z}\left(\frac{A}{A-1}\right), \\ p\left(\frac{A}{A}\right) &= p^0\left(\frac{A}{A}\right) + w(A)\{\beta_0(A)s(A) \\ &\quad + \sum_{J=1}^{M_A} [\beta_J(A)V_J(A)V_J(A)^t] \\ &\quad - V(A)V(A)^t\}w^T(A), \\ p^0\left(\frac{A}{A}\right) &= p\left(\frac{A}{A-1}\right) - w(A)s(A)w(A)^t. \end{aligned} \quad (5)$$

The $\beta_J(A)$ table observes the associated probability of J and the $\beta_0(A)$ table does not have the probability of an observation source.

$\beta_J(A)$ is the derivation of the associated probability and the observation can be written as the sum of the past set z^{A-1} and the latest $z(A)$. At this time, the associated probability is

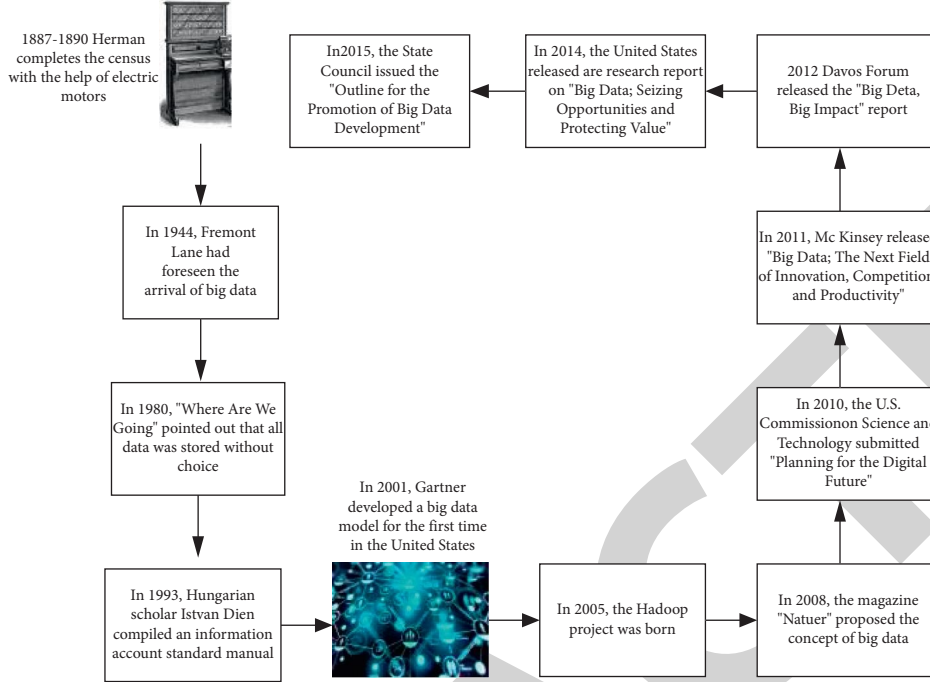


FIGURE 2: The development process from small data to big data.

$$\beta_j(A) = p \left\{ \frac{\varepsilon_j(A)}{z^A} \right\}$$

$$= \frac{1}{C_A} P \left[\frac{z(A)}{\varepsilon_j(A), M_A, z^{A-1}} \right] \times p \{ \varepsilon_j(A) / M_A, z^{A-1} \},$$

$$J = 0, 1, \dots, M_A. \quad (6)$$

Among them, C_A represents the standard constant, $\varepsilon_j(A)$ is the observation that $z_j(A)$ originates from the target, and $\varepsilon_0(A)$ is that no observation originates from the target.

Fusion parameters, the associated probability can be calculated as

$$\beta_0(A) = \frac{B}{B + \sum_{l=1}^{M_A} E_l} \quad J = 0, \quad (7)$$

$$\beta_j(A) = \frac{E_j}{B + \sum_{l=1}^{M_A} E_l} \quad J = 1, \dots, M_A.$$

In

$$B = \left[\frac{2\pi}{G} \right] \lambda v(A) \frac{1 - p_d p_g}{p_d},$$

$$E_j = \text{Exp} \left[\left(\frac{-V_j(A)^t(A) s^{-1}(A) V_j(A)}{2} \right) \right], \quad (8)$$

$$v_A = \frac{\pi^{M/2}}{\Gamma(M/2 + 1)} G^{M/2} |s(A)|^{1/2}.$$

$v(A)$ represents the effective area volume, p_d is the true probability, p_g represents the probability of falling into the M effective area, and λ is the clutter density.

At the same time, the associated probability must satisfy the following constraints:

$$\sum_{J=0}^{M_A} \beta_J(A) = 1, 0 \leq \beta_J(A) \leq 1. \quad (9)$$

2.3. Characteristics of Ideological and Political Education in the Era of Big Data. Innovative development of college students' ideological and political education, an important educational practice, should accurately grasp the changes and characteristics of the environmental resources [21, 22].

- (1) The educational environment is complex and varied: the environment of ideological and political education in colleges and universities is an external factor and an important part of cultivating and improving the ideological. Marx once said: "People create the environment and the environment can also create people. "Any educational practice activities are inseparable from the constraints of the environment. The ideological and political education environment is also changing in the era of big data, mainly in the following aspects. First, the social environment changes [23, 24]. The process of internationalization continues to intensify. The ideological trend of educational objects will become more active and unpredictable. This puts forward the new ideas for ideological and political educators. Second is the changes in the network environment [25, 26].

Common Civic Education platforms include “Easy Classroom” and “Civic Education Micro-class Platform”. In recent years, resource information with unstructured data as the main body has been disseminated in the interconnected virtual space, which has gradually suppressed and replaced the trend of structured and semistructured application data, and more nihility and sensory stimulating network data information. More accepted by the educated, it is easy to cause the influence of the “three views”. But at the same time, web data reduces the cost of knowledge and, to a certain extent, the cost of work. Third is the change in the way of interpersonal communication, but it has widened the real distance between people and led to the decline of people’s ability to communicate [27].

- (2) Diversified informatization of educational resources: The current network data information is more widely contacted by educators than educators, and the massive amount of information has become a “double-edged sword” that affects the effectiveness of education. How to make good use of more and more online education platforms and high-quality and positive information to effectively lead the development of political and ideological education is an issue that educators should pay attention to in the new era.
- (3) Investigation on the Impact of Ideological and Political Education of College Students based on Big Data Information Fusion.

Combining the foregoing and the comprehensive colation of the literature, as well as my own interpretation and elaboration of the acceptability of ideological and political education, this study explores the impact of college students’ information receiving methods on ideological and political education.

Based on the research model in Figure 3, two hypotheses are proposed. Hypothesis 1: College students’ information acceptance style is significantly related to students’ overall attitude toward ideological and political education. Hypothesis 2: College students’ information acceptance style is significantly related to the effect of traditional ideological and political education. Then, we designed this survey experiment based on these assumptions. This experiment collected sample data in the form of questionnaires. In order to ensure the reasonable feasibility of the questionnaire, the first part of the questionnaire mainly collects the basic information of the sample, such as age, gender, grade, and major to understand the basic information distribution of the sample.

The second part of the questionnaire mainly collects the information reception methods of college students. Starting from the basic status of college students’ information reception, traditional classroom teaching, traditional mass media, new media, and social interpersonal communication, it designs and investigates indicators to carry out corresponding responses.

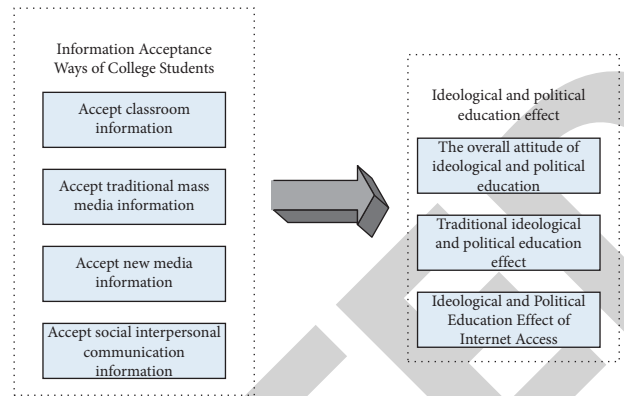


FIGURE 3: Block diagram of the research process model.

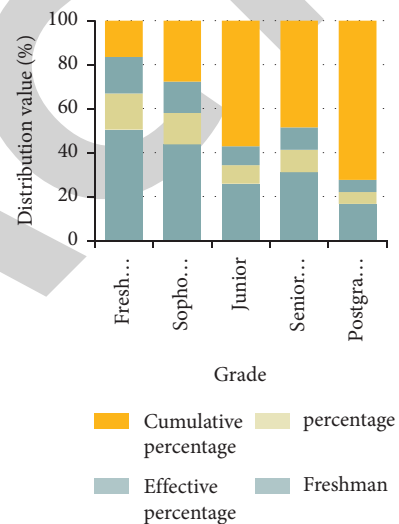


FIGURE 4: Grade distribution.

The third part of the questionnaire mainly focuses on the investigation of the effects of ideological and political education in colleges and universities. The variables to be investigated are put forward on the basis of analysis; three types of college students’ attitudes towards ideological and political education, traditional ideological and political education, and online ideological and political education. Then, design 14 questions based on it.

The subjects of this research are selected as college students in school, so that samples can be collected in each grade stage. Therefore, the questionnaire distribution method this time is part of the actual distribution and part of the network distribution. Reality questionnaires are distributed in each grade of college students. Considering the arrangement of ideological and political courses, most of the samples in this experiment are freshmen and sophomores. A total of 350 questionnaires were distributed this time, and 305 valid questionnaires were recovered, with a recovery probability of 87.14%. The probability of recovery is better.

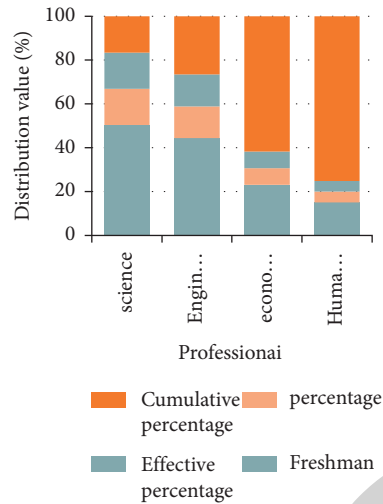


FIGURE 5: Professional distribution map.

TABLE 1: Average daily online time.

	Frequency	Percentage	Effective percentage	Cumulative percentage
Within 1 hour	17	5.6	5.6	5.6
1–3 hours	152	49.8	49.8	55.6
3–5 hours	95	31.1	31.1	86.7
5–10 hours	33	10.8	10.8	97.2
More than 10 hours	8	2.6	2.6	100
Total	305	100	100	

In order to ensure the accuracy of the analysis this time, a 5-point measurement method was used to divide, from very disagree to very agree, one increment.

2.3.1. The Basic Situation of the Sample. Among the 305 samples in this survey, males accounted for 50.8%, and there were 155 people. Women accounted for 49.2% and there were 150 people. The gender composition of the sample is average.

As shown in Figure 4, the subjects of the survey are college students, and the proportion of freshmen and sophomores for their academic qualifications is relatively large, about 61.9%. Juniors, seniors, and graduate students accounted for 10.8%, 19.3%, and 7.5%, respectively. The data are mainly distributed in the first two grades, which also compound the curriculum arrangement of ideological and political teaching.

As shown in Figure 5, the professional composition of the sample is not evenly distributed, and the number of engineering subjects accounts for the majority. However, the content of the survey is aimed at all college students, and the overall impact is not significant.

2.3.2. Network Behavior Habits of College Students Based on Big Data. As shown in Table 1, the survey results of the sample show that the daily online time of the survey sample is concentrated in 1–3 hours, accounting for about 49.8% of the total sample.

Through the survey, it is found that most college students prefer social practice survey education methods such as visit style internships; virtual network research practice, and other teaching modes, as shown in Table 2. The preferred students account for 35.1% and the students who conduct interactive teaching through social networks account for 7.2%. It can be seen that college students have a good acceptance of Internet teaching.

They are very accustomed to the way of obtaining learning materials on the Internet. Most college students prefer the practical mode of actual investigation or the virtual teaching mode on the Internet, and interact with teachers through social networks.

2.3.3. Sample Reliability Analysis. Reliability is the degree of reliability of the questionnaire. This study uses Cronbach's consistency coefficient to verify. If the coefficient is in the range of 0.8 to 0.9, it means that the inherent reliability is high. If the coefficient is within the interval of 0.7 to 0.8, it means that the scale is still within the credible zone. If the coefficient is in the interval of 0.6 to 0.7, it means that there is a problem with a small part of the scale. However, the coefficients in the range of 0.5 to 0.6 have major problems and need to be carefully considered. However, the part below 0.5 is basically unreliable and it is recommended to delete it.

After deleting the low variable part of the sample result, after adjusting it, the sample credibility measurement table as shown in Table 3 is obtained.

TABLE 2: Preferred ideological and political education models.

	Frequency	Percentage	Effective percentage	Cumulative percentage
Traditional classroom teaching	27	8.9	13.1	13.1
TV, documentary, radio publicity and education	40	13.1	18	31
Social practical education such as visits, internships, field investigations, etc.	107	35.1	35.1	66.2
Virtual practical education such as virtual network research and simulation cases	55	18	8.8	75
Teachers interactively teach through forums, weibo and other new media	22	7.2	7.2	82.3
Classroom interactive teaching using discussion, context setting, etc.	54	17.7	17.7	100
Total	305	100	100	

TABLE 3: Factor analysis of the way college students receive information.

	Measurement questions	Alpha value	Credibility
Information receiving channel	C1. New media channel C2. Mass media channels C3. Classroom channel C4. Teacher's family and friends	0.601	Middle
Classroom lectures by professors	W1. Teacher classroom teaching is important W1. Teacher classroom teaching is helpful W1. Better understanding of classroom knowledge	0.696	Middle
Traditional mass media	W2. TV and radio are irreplaceable W2. TV and radio help W2. TV and radio are easy to remember	0.547	Low
New media	W3. Cannot live without a mobile phone W3. People around you use their mobile phones to view information W3. Like on weibo W3. Web search is better	0.662	Middle
Social interpersonal transmission	W4. Learn from people around you and change yourself W4. Interpersonal communication makes it easier for you to agree with certain points of view W4. Communication with teachers' family and friends is very important	0.652	Middle
Overall attitude	A1. The current ideological and political education is outdated and boring A2. The current ideological and political education content method does not pay much attention to the students' ideological status A3. The current ideological and political education teaching content is rich and colorful A4. The current teaching methods of ideological and political education are very lively	0.824	High
Influence of traditional education	J1. Video documentaries in class can increase students' interest J2. The deeds of advanced characters on TV help to raise ideological and political consciousness J3. Campus broadcast propaganda has a subtle effect on improving students' ideological and political consciousness	0.605	Middle
Involvement of online education	N1. Online ideological and political education can raise student interest N2. The creation of a special website on ideological and political education is effective for college students' ideological and political education N3. Teachers can keep abreast of students' thought dynamics in time through social network communication N4. Teachers face-to-face communication with students after class can enhance students' ideological understanding	0.681	Middle
Overall reliability		0.764	Middle

TABLE 4: Coefficient test of KOMy and Bartlett.

KMO metrics	0.750
Bartlett	1758.446
Df.	300
Sig.	.000

TABLE 5: Summary of factor analysis nomenclature.

Serial	Number	Constitute Name
1.	A1-A4	Overall attitude perception
2.	N1-N4	The effect of the intervention of online education
3.	W4	Social interpersonal transmission and acceptance
4.	W1	Teacher lectures
5.	J2-J4	The impact of traditional education methods
6.	W2	Accepted by traditional mass media
7.	W3	New media acceptance

TABLE 6: Correlation analysis between sample variables.

	W1	W2	W3	W4	A1	J	N
W1.Pearson correlation	1	0.267	0.202	0.412	-0.063	0.241	0.286
Significance	~	0.000	0.001	0.000	0.304	0.000	0.000
Sum of squares and crosses	77.88	20.14	14.46	29.76	-5.63	20.93	21.85
Covariance	0.300	0.078	0.056	0.115	-0.022	0.080	0.084
N	305	305	305	305	305	305	305
W2.Pearson correlation	0.415	0.308	1	0.292	-0.185	0.005	0.152
Significance	0.001	0.187	~	0.000	0.003	0.940	0.014
Sum of squares and crosses	20.14	72.85	5.65	21.37	-9.15	25.60	15.55
Covariance	0.077	0.280	0.022	0.083	-0.038	0.098	0.061
N	305	305	305	305	305	305	305
W3.Pearson correlation	0.202	0.082	1	0.293	-0.186	0.005	0.154
Significance	0.001	0.189	~	0.000	0.003	0.940	0.014
Sum of squares and crosses	14.46	5.65	65.84	19.33	-15.03	.372	10.66
Covariance	0.0560	0.022	0.253	0.077	-0.059	0.001	0.042
N	305	305	305	305	305	305	305
W3.Pearson correlation	0.414	0.308	0.293	1	-0.127	0.097	0.171
Significance	0.000	0.000	0.000	~	0.042	0.122	0.006
Sum of squares and crosses	29.76	21.39	19.34	66.81	-10.33	7.74	12.08
Covariance	0.115	0.083	0.075	0.258	-0.041	0.030	0.046
N	305	305	305	305	305	305	305

After deleting questions with low credibility, the credibility increased to 0.764. The credibility of traditional mass media and new media has not reached 0.7. Except for the traditional mass variables, the rest have reached above 0.6.

3. Factors in the Acceptance Mode of College Students Based on Big Data Ideological and Political Education

3.1. Behavioral Traits. This experiment uses a factor analysis measurement table to analyze the degree of behavioral traits, and then uses the KOM value and Bartlett to test its validity and credibility.

According to Table 4, the value of KOM is within the range of 0.7 to 0.8, which is a more appropriate result. If it is below 0.6, it means that it is not suitable for analysis. At the same time, it can be concluded that Bartlett's explicit probability is below .001, which achieves its characteristics, which means that there is correlation between the data.

3.2. Variable Analysis of Sample Data. This research mainly analyzes the variables and extracts the explicit value of the inherent similarity relationship. Categorize the variables

into a type of factor, and then use all the information that reflects the original variable. In turn, the overall result analysis is more clear. The main component analysis method is used for factor analysis, and the rotated load diagram is obtained by the maximum variance method. Seven factors are extracted and the total variance accounts for 57.93%.

On the whole, from the load value, the classification of the sample data is basically consistent with the classification of the information receiving methods of college students, and the items below 0.4 in the factor load value are eliminated. After naming the seven extracted factors, the composition is shown in Table 5.

As shown in Table 5, the results of the analysis are basically in line with the classification of information receiving methods in the theoretical model. In addition, the effects of ideological and political education are divided into three categories: A, J, and N after analysis. It was difficult to express and measure the effect of ideological and political education, but now it can be expressed through explicit indicators, such as the overall attitude or the effect of traditional education and the effect of network intervention.

3.3. Correlation Analysis of Variables between Samples. To measure the correlation between the samples, according to

the factor analysis results, and average the values of each measurement. Because of each continuous variable, the Pearson correlation coefficient of product difference is used to express the size of its relevance.

As shown in Table 6, the value of Pearson is generally in the range of $-1\sim 1$ and its positive or negative represents the direction, and it can be considered that the correlation between the two is obvious if it is expressed as $P < 0.01$ or $P < 0.05$. That is to say, the teacher's classroom teaching is related to the traditional and online education methods; the traditional mass media and new media measurement methods are all related to the overall perception of ideological and political education and the effect of online education.

3.4. Conclusion. Due to the correlation analysis, although it has proved that there is a certain degree of correlation. However, there are positive and negative correlations between variables, but they cannot represent the occurrence of correlation. This time, the regression equation model is used to generate explanatory variables, and the four values of R , F , P , DW are used to evaluate whether the regression equation is valid, as shown in Figure 6 (1).

As shown in Figure 6 (2), the tolerance value is within 0-1. The smaller the value, the higher the correlation with other variables. That is, collinearity may occur, and the smaller the value is, the more collinearity will occur. Below the significance level of 0.05, the tolerance is greater than 0.1, and the variance expansion factor VIF is the smallest near 1. Therefore, the regression equation can also be expressed as

$$y = 3.142 - 0.150X_1 - 0.168X_2 + 0.213X_3 + 0.214X_4. \quad (10)$$

where X_1 is the classroom teaching of $W1$ teachers; X_2 is $W2$ traditional mass media; X_3 is $W3$ new media acceptance; X_4 is $W4$ social interpersonal transmission, and y represents the influence of J traditional education methods.

On the whole, in the selection of information receiving methods, the more inclined teachers are to traditional classroom teaching, the better and more positive their overall attitude towards ideological and political education; the more they are towards new media-based information receiving and interpersonal relations. Communication tendencies, the worse the attitude of college students, the less proactive.

As shown in Figure 7, below the significance level of 0.05, the tolerance is greater than 0.1 and the variance expansion factor VIF is the smallest near 1. The regression coefficients of $W3$ and $W4$ are not significant, so the regression equation can also be expressed as

$$y = 1.85 + 0.223X_1 + 0.314X_2. \quad (11)$$

Among them, X_1 is $W1$ teacher's classroom teaching, X_2 is $W2$ traditional mass media acceptance, and y represents A 's overall attitude perception.

As shown in Figure 8, below the significance level of 0.05, the tolerance is greater than 0.1, and the variance expansion factor VIF is the smallest near 1. The regression coefficients

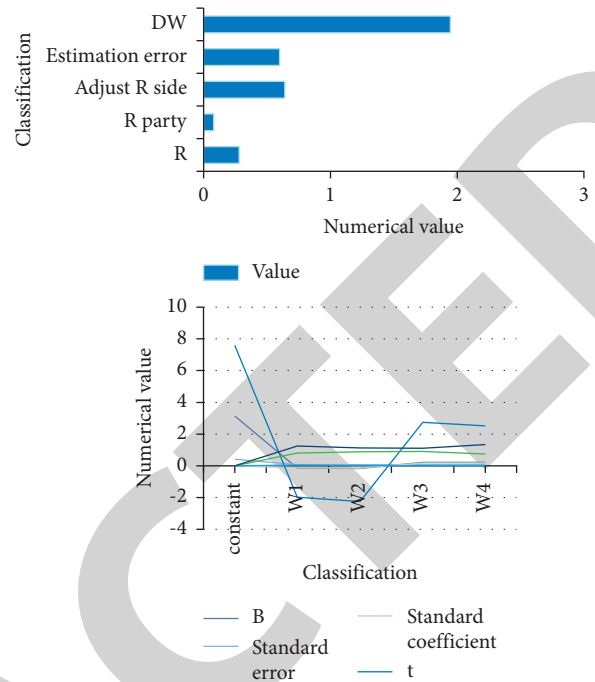


FIGURE 6: Regression results of the way college students receive information on their overall attitudes.

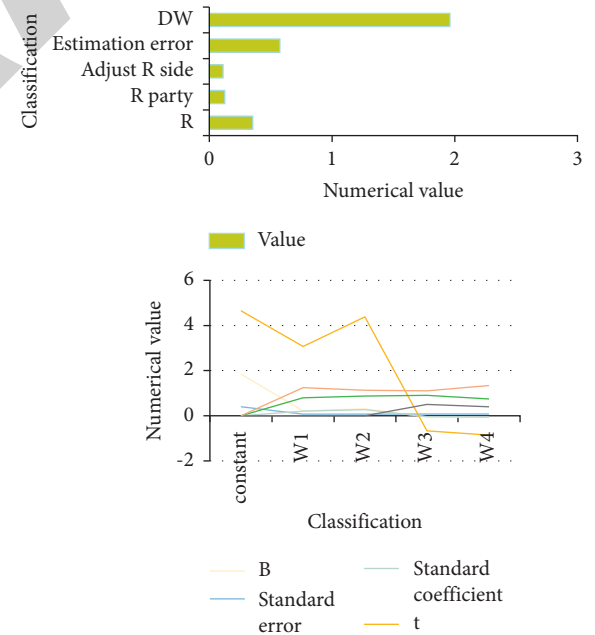


FIGURE 7: Regression results of the way college students receive information on traditional education.

of $W3$ and $W4$ are not significant, so the regression equation can also be expressed as;

$$y = 1.76 + 0.223X_1 + 0.142X_2. \quad (12)$$

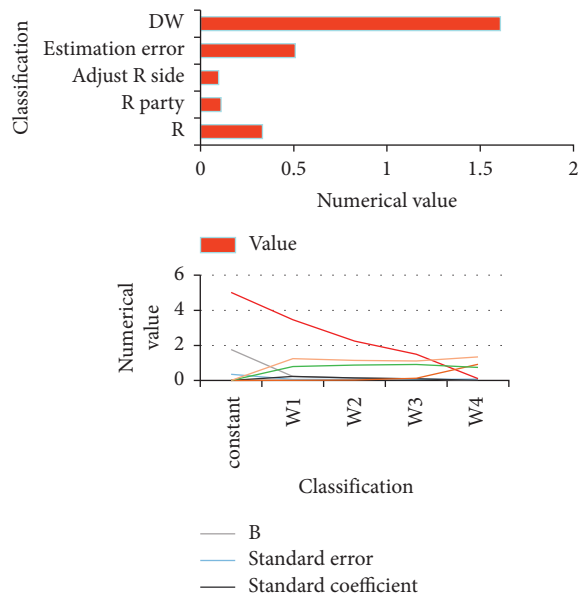


FIGURE 8: Regression results of the way college students receive information on online education.

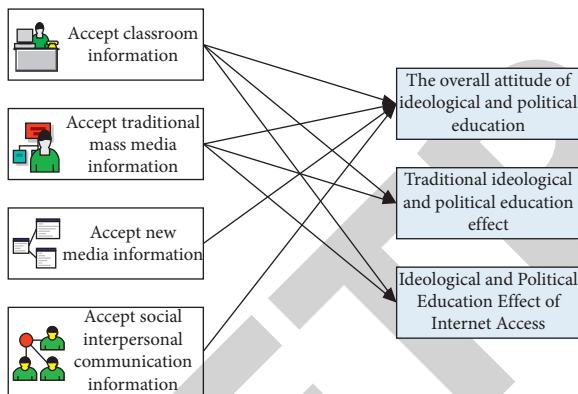


FIGURE 9: Final model.

Here, X_1 is the classroom teaching of $W1$ teachers, X_2 is $W2$ traditional mass media, and y represents the influence of online education intervention.

In the hypothesis, both methods of teacher classroom teaching and mass media information positively affect the effect of online ideological and political education. It also shows that these two methods do not conflict with the effect of network ideological and political education.

The comprehensive conclusion confirms that the final model is shown in Figure 9.

4. Conclusion

This empirical research has determined that under the diversification of the information receiving channels of contemporary college students, college students are more inclined to receive lectures in the classroom and traditional mass media information. The better the attitude of education, the more active it is. On the contrary, the more biased

toward the two methods of new media and social interpersonal transmission, the worse and more negative the overall attitude. The way college students receive information will indeed affect the teaching effect of ideological and political education. Learning knowledge under the premise that college students recognize the importance of classroom teaching will help them to receive information. So naturally, the overall learning attitude towards the current ideological and political education will be more positive. Experiments have proved that traditional ideological and political education and online ideological and political education have relatively good effects. If college students rely too much on new media, then they will take a negative response to the current ideological and political education. With the advent of the era of big data, all walks of life and all fields in society are affected and changed to different degrees. College students' ideological and political education also needs to follow the trend. The party committees of universities and educators should pay attention to the influence of big data era on college ideological and political education and improve the network environment and school environment of college students' ideological and political education.

Data Availability

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

Conflicts of Interest

The author declares that this article has no conflicts of interest.

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