Deconstruction and Reconstruction of Information Security in Ideological and Political Education in the Digital Age

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Abstract

In the context of the digital wave sweeping modern education, securing the information safety of ideological and political education in universities is of paramount importance. Based on the comprehensive risk mechanism, this paper deconstructs the connotation of information security of ideological and political education in higher education in the digital age, divides it into two categories: ideological risk and technical risk, and constructs the influence model of information security level of ideological and political education. Data were collected via questionnaires and a structural equation model was used to test hypotheses, revealing the complex influences of key factors such as educational quality and sustainable development education, informatization teaching environment, campus digitalization level, and the impact on the quality of education. The study finds that the quality of political education in universities lays the foundation of solid information security, whereas network governance capability directly affects it. In contrast, the informatization teaching environment and campus digitalization level play positive mediating roles at different levels.

Keywords: Digital Transformation; Ideological and Political Education; Information Security; Sustainable Development Education; Ideological Risk; Technological Risk.

With the rapid progress of information technology, digital transformation has become an important research topic to be solved in the field of ideological and political education in higher education, which as a core link in shaping students' values and worldviews, is facing unprecedented challenges and opportunities in the digital era (Wei & Lai, 2023). The Internet supplies a broader platform and way for ideological and political education, but at the same time brings ideological risks and technical risks, how to effectively use digital means to improve the quality of ideological and political education under the premise of ensuring information security has become the key to the reform of ideological and political education in higher education. Information security is no longer just a technical issue, but now gradually has been linked to the ideological field, which has an impact on students' values and ideology (Zhu, 2023). Therefore, exploring the deconstruction and reshaping of information security of ideological and political education in higher education under the background of digitization is of great practical significance and theoretical value for strengthening the

management of information security in higher education, improving the quality of ideological and political education, and safeguarding the stability of campuses.

This study tried to use a structural equation model (SEM) to analyze the influencing factors and internal logical relations of information security in ideological and political education in higher education. The influence model of ideological and political education information security constructed under the comprehensive risk mechanism is used to explore the dynamic interaction and causality between the quality of ideological and political education, information teaching environment, campus digitization level (the ability to make more accurate decisions through data analysis and processing, which will be detailed 2.2 Research hypotheses), network governance ability and ideological and political education information security. In terms of specific research methodology, this paper innovatively attempts to integrate ideological risk and technological risk into the same empirical analysis framework to analyze the complexity and multi-dimensional characteristics of information security ideological and political education information security. By constructing models and putting forward hypotheses, and quantifying the effects between variables, this paper reveals the importance of campus digital transformation and how to enhance network governance ability and information security by improving the quality of ideological and political teaching and constructing an information-based teaching environment.

2. Overview of the study

Transformation of Ideological and Political Education in the Digital Age

The digital era has brought a profound impact on the implementation of ideological and political education, especially on the innovation of educational content and methods, which has put forward higher requirements (Shen & Pan, 2023). Intelligent terminals, online education platforms and other digital tools have made the dissemination of information more extensive and convenient, providing new ways of interaction for students' ideological and political teaching (Hu, 2023). However, the main challenge facing ideological and political education in digital transformation is how to integrate digital resources and achieve the transformation from knowledge transfer to value guidance (Chen & Ou, 2023). Zhang and Ma (2023) proposed that the content of ideological and political courses needs to keep pace with the times and combine with the current hot issues in society and students' reality, while the teaching method needs to focus more on interactivity and participation and guide students to think and explore on their own initiative.

In the digital era, the application of big data analysis, artificial intelligence and other data analysis technologies can not only optimize the teaching content and facilitate sustainable development education (Ahmed et al., 2022) but also provide more personalized learning paths and growth guidance by analyzing students' online behaviors (Liu & Zhao, 2024). However, digital transformation also brings considerations of student privacy protection, forcing educators to use these technologies while safeguarding student information (Jin et al., 2024). In addition, the competing ideas in the field of online ideology have become increasingly intense, and ideological and political education needs to improve its ability to guide online public opinion and use digital tools to consolidate and disseminate socialist core values.

Deconstructing and reshaping information security in ideological and political education

The speedy development of information technology has posed new challenges to the information security of ideological and political education. In the process of deconstructing and reshaping information security, scholars have emphasized the necessity of comprehensively examining the existing system at the strategic (Guo et al., 2024), institutional (Li, 2023) and

cultural (Zhang et al., 2023) levels. Li Mingchao (2023) deconstructs the current information security system, revealing the inadequacy of technical protection, management loopholes and lagging cultural awareness. At the technical level, Wu Jiangxing et al., (2023) propose that system security protection measures should be strengthened, and advanced information security technologies should be deployed to withstand network attacks and ensure the safe use of educational resources. Reconstruction work at the management level calls for the establishment of sound regulations and policies, the development of an information security management system, and its implementation into day-to-day operations and maintenance to ensure the smooth running of educational activities (Min, 2023). The cultural level focuses on cultivating users' awareness of information security and cyber ethics in order to build a healthier online educational environment (Li & Zhou, 2023). Yan Lili and Hou Hongyin's (2023) study also focuses on topics such as privacy protection, pointing out that in the process of collecting and analyzing personalized learning data, strict privacy protection standards must be followed to prevent the use of student data for inappropriate activities.

Although existing research has studied and analyzed the information security of ideological and political education in the digital era, there are three major shortcomings. Firstly, there is insufficient in-depth empirical research on the practice of emerging technologies in ideological and political education, failing some theories and strategies to be closely integrated with the practical situation; Secondly, there is not enough discussion on how to deal with the balance between technological development and humanistic concerns, and how to maintain the relevance and effectiveness of ideological and political education in a comprehensive digital environment; Thirdly, there is also a relative lack of research on how to analyze and serve the guidance of personalized education paths with regard to the huge amount of data generated by students spontaneously in digital environments.

Research Models and Assumptions

Research Modelling

The research on comprehensive risk mechanisms deconstructs the information security of ideological and political education in higher education in the digital era into ideological risk and technological risk, and puts forward the model of the impact of digital transformation on the information security of ideological and political education, as shown in Figure 1. In this model, the quality of ideological and political education uses digital means to control and improve the quality of educational content and use innovative educational methods to improve teachers' ideological and political teaching level, which is the basis of ideological and political education information security; the information-based teaching environment is the product of the quality of ideological and political teaching, which acts together with the quality of ideological and political teaching on the level of campus digitization; the level of campus digitization is the mediating variable condition of network governance ability and ideological and political education information security, which is the result of their joint action of the two; there is a causal relationship between digital network governance ability and ideological and political education information security, which is the most important and intuitive manifestation of ideological and political education information security. In the meantime, the quality of ideological and political teaching and information teaching environments have both direct and indirect effects on network governance ability and ideological and political education information security.

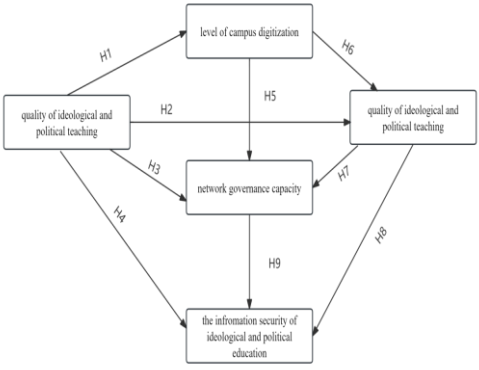

Figure 1 Theoretical model of the research hypothesis

Research hypotheses

The quality of ideological and political teaching in higher education has a direct impact on the level of digitization of the campus. High-quality ideological and political teaching can cultivate students' understanding and application ability of digital technology, enhance the demand for digital tools and resources, and promote the introduction of more advanced digital facilities and technologies to meet the needs of teaching and learning (Qi, 2023). At the same time, high-quality ideological and political teaching also focuses on fostering critical thinking and innovation among students, who are inclined to use digital technologies for problem-solving and collaboration, thus further contributing to the development of digital tools and platforms on campus (Li, 2023). In addition, a good ideological and political curriculum will educate students to understand and practice ethics in the digital age as well, which is crucial for maintaining and developing a healthy campus digital environment. From this, the hypothesis is formulated:

H1: There is a positive effect of the quality of ideological and political teaching in higher education on the level of campus digitization.

High-quality ideological and political teaching promotes the development of students' critical and creative thinking, which in turn stimulates demand for more interactive and personalized teaching environments. When students expect to be able to learn through more active engagement and reflection, the informationalized teaching environment has to be adapted to meet the demand, thus enhancing student engagement. Excellent ideological and political teaching also emphasizes the development of students' information quality and media literacy, and the informatized teaching environment needs to incorporate more elements of information security and digital ethics so that students can explore and learn in a safe cyberspace. Therefore, high-quality ideological and political teaching not only directly enhances students' need for advanced digital tools, but also indirectly promotes the ongoing improvement and development of the informatized teaching environment through students' expectations, leading to the hypothesis;

H2: The quality of ideological and political teaching in higher education has a positive effect on the information-based teaching environment.

Ideological and political teaching can cultivate students' awareness of network civilization, their sense of responsibility and their behavioral habits of abiding by network rules. High-quality ideological and political teaching can facilitate students' comprehension of the correct utilization of network resources, and enhance their self-restraint and network ethics. In addition, high-quality ideological and political teaching helps students establish positive values and a sense of social responsibility by explaining and guiding the knowledge of ideological and political theories in the context of information technology. Students' possession of correct values and behavioral orientation in the network environment helps to form a positive and healthy network culture and improve the self-discipline of the entire campus network environment, thus providing a solid social and cultural foundation for network governance in higher education. In addition, students are able to make rational judgements and reactions when facing negative information and network risks, reducing the

coping pressure in network governance. Therefore, the successful implementation of ideological and political teaching not only improves the ability of individual students, but also provides humanistic support and ideological guarantee for the construction of a stable and orderly network environment in higher education, and improves the overall ability of network governance. Thus, the hypothesis is proposed;

H3: There is a positive effect of the quality of ideological and political teaching in higher education on the ability of network governance

The improvement of the quality of ideological and political teaching in higher education helps to strengthen the awareness and measures of information security in ideological and political education. Through high-level ideological and political teaching, students attain a more profound comprehension of national regulations and campus rules and regulations, and enhance their sense of responsibility for protecting personal and educational information security. High-quality ideological and political teaching can facilitate students in the identification and resistance of security risks in cyberspace, and reduce the probability of incidents such as malware dissemination, phishing and information theft. It also helps to cultivate students' cybersecurity skills, which can respond to and resolve security issues in a timely manner, and maintain the stability and security of the ideological and political education information system in higher education. As a result, the hypothesis is proposed;

H4: There is a positive effect of the quality of ideological and political teaching in higher education on the information security of ideological and political education.

With the high quality ideological and political teaching can enhance students' awareness of the importance of information security and their sense of responsibility and self-protection. Simultaneously, it can improve students' discrimination ability, so that they can accurately judge the authenticity and reliability of information in front of massive network information, effectively resist the invasion of wrong ideas and harmful information, and indirectly protect the purity and authority of educational content. High-quality education systems are more receptive to and effectively integrate information technology, such as the use of encrypted communications, secure learning platforms and other technical instruments to protect education content and student data. In addition, the combination of educational content and modern information technology can also enhance the interactive and attractive teaching, so that students can receive education more effectively in a safe environment. Therefore, the hypothesis is put forward;

H5: There is a positive effect of the level of campus digitization on network governance capacity.

With the more and more extensive application of information technology in ideological and political teaching, teachers and students can enhance their proficiency in using digital tools, and enhance the overall improvement of the digital level of the campus. The construction of the information technology environment also promotes the popularization and enhancement of knowledge and skills related to network security and data management and strengthens the efficiency of the school's management of educational resources and the governance of cyberspace. This environment not only supplies more digital learning resources, but also promotes network governance to rely more on data-driven and technological support, enabling universities to deal with network problems more accurately and efficiently, and to strengthen the network security protection system. As a result, the hypothesis is proposed;

H6: There is a positive effect of IT teaching and learning environment on the level of campus digitization.

The construction of information-based teaching environment is usually accompanied by the upgrading of campus network infrastructure, including high-speed network, wireless network

coverage, and the popularity of intelligent terminal devices, which are the physical basis for improving the level of campus digitalization. The improvement of these hardware facilities directly promotes the digital transformation of the campus. At the same time, the information teaching environment is not only limited to the teaching level, but also covers the management application and scientific research application. In the information teaching environment, the resources inside and outside the campus can be more easily shared, and the intercourse and cooperation between teachers and students can be promoted. The information-based teaching environment can generate a large amount of teaching and management data. Through data analysis and processing, schools can make more accurate decisions, such as curriculum optimization, resource allocation, and student learning outcome assessment. This data-driven approach to management is one of the hallmarks of the digital campus. Therefore, the hypothesis is put forward;

H7: There is a positive effect of informative teaching environment on campus network governance capacity.

The informatized teaching environment provides a robust technical support and management platform for the information security of ideological and political teaching in higher education, and the digitization of the content of ideological and political teaching makes information security a key element. The content of ideological and political teaching and related information can be effectively protected from unauthorized access and malicious attacks through advanced information technology means, such as data encryption, access control and network monitoring. The informatized environment prompts teachers and students to raise their awareness of information security, so that they can consciously comply with information security norms in their daily information interactions and guard against the risks of information leakage and misuse. In addition, the informatization management system also facilitates the tracking and analyzing of information security issues in the context of ideological and political teaching, and the timely detection and resolution of potential threats, thus maintaining the overall security of the ideological and political teaching information environment. From this, the hypothesis is proposed;

H8: There is a positive effect of informatized teaching environment on information security in ideological and political education.

Network governance capacity has a direct impact on the information security of ideological education. Efficient network governance can ensure the correct delivery and safe storage of ideological education content, prevent the dissemination of erroneous and harmful information through the strict supervision of network platforms, and network governance also involves the standardization of users' behavior, which further protects students from the influence of inappropriate information. In addition, strengthening network governance capacity helps to rationally allocate educational resources, ensure that the information security department can quickly respond to all kinds of security incidents, and create a safe and stable network environment for ideological and political education. From this, the hypothesis is proposed;

H9: There is a positive impact of cyber governance capacity on information security in ideological and political education.

A robust network governance framework enables the effective development and enforcement of network usage rules, policies, and technical standards, thereby ensuring the health and safety of the network environment. This is particularly important for ideological and political education, as a conducive Internet environment can reduce the spread of bad information, protect students from harmful content, and maintain the purity and positive orientation of ideological and political education information. Under the framework of network governance, strengthening the protection of

personal information can prevent the leakage of sensitive information of students and teachers, build a sense of trust, facilitate the participation of individuals in online ideological and political education activities, and promote open and honest communication and discussion.

Measurement of variables

Structural equation modelling was used in the study, the research questionnaire was in the form of an online questionnaire and the design variables were Likert 5-point scale. Each question item in the questionnaire was assigned a rating, which was expressed in terms of difference data, and for each question in the scale, five alternative answers indicating the level of attitudinal agreement were given, with scores ranging from 1 to 5, with 1 representing a fully non-compliant, 2 referring to non-compliant, 3 meaning fair, 4 representing compliant, and 5 meaning fully compliant.

Data collection and analysis

Data sources

The selected survey respondents are all college students in higher education institutions. In an effort to improve the quality of the questionnaire and ensure the veracity and distinctiveness of the data, the questionnaire was distributed to college students in four different higher education in Wuhan in order to understand the level of information security of student's ideological and political teaching in different schools. The online questionnaire was distributed through the online platform wenjuanxing (Questionnaire Star), and as of 30th October 2023, a total of 402 questionnaires were collected, and after eliminating the invalid answer sheets (questionnaires with less than 60s of answering time, all of which chose the same answer items or had missing answers), 370 valid questionnaires were finally obtained, representing a 92.04% validity rate. The questionnaires used were all anonymous to avoid disclosing personal privacy information, so as to truly understand the level of information security of students' ideological education in colleges and universities.

Descriptive statistics

Using SPSS software, the three independent variables were set as gender, grade level, and major (natural science and social science), and the dependent variables were set as the level of ideological security and the level of technological security by independent samples t-test. The independent samples t-tests for gender, grade and discipline are presented in Table 1, and the p-values of all factors are greater than 0.10, indicating that there is no crucial difference in the security level of digital ideological and political education (ideological security level and technological security level) among college students of different genders, grades, and disciplines at the level of 0.10.

Table 1 Independent samples t-test

implicit variable	Description	quorum	Level of ideological security		Technical security level	
			T	P	T	P
distinguishing between the sexes	male	237	-0.154	0.879	0.067	0.947
	female	133	-0.013	0.99	-0.211	0.834
Grade (university students)	first-year	95	0.328	0.744	-0.462	0.646
	second-year	105	0.108	0.915	0.255	0.800
	third-year	80	-0.389	0.698	-0.172	0.864
	fourth-year	90	0.231	0.818	-0.333	0.74
academic discipline	natural sciences	184	0.145	0.886	0.089	0.929
	social sciences	186	-0.194	0.847	-0.376	0.709

Source: Authors

Reliability and validity analyzes

The reliability and validity of the variables were analysed by Cronbach's coefficient (Cronbach's α) and combined reliability using SPSS software, when Cronbach's α is above 0.7, it shows that the reliability of the study is good. The Cronbach's α of the scales were all between 0.8 and 1, proved that the questionnaires had high reliability, as shown in Table 2.

Table 2 Measurement model reliability and convergent validity tests

structural variable	Observation projects	factor loading	Cronbach's alpha	Combined reliability CR	Mean variance variance AVE
Quality of ideological & political Teaching	The content is close to reality	0.783	0.823	0.884	0.544
	Diversification of teaching methods	0.826			
	Highly specialised faculty	0.801			
Informative teaching environment	Degree of support for digital facilities	0.759	0.852	0.902	0.583
	Wide range of online platform applications	0.796			
	content is updated in a timely manner	0.778			
Level of campus digitisation	Popularisation of digital technology applications	0.733	0.801	0.873	0.526
	Improved data analysis system	0.762			
	Digital resources to meet demand	0.747			
Network governance capacity	Network governance policy norms	0.811	0.837	0.892	0.552
	Effective regulation of network resources	0.851			
	Cyber risk prevention response	0.832			
Information ideological security in and political teaching	Technical safeguards in place	0.806	0.865	0.915	0.605
	Security audits were conducted on a regular basis	0.786			
	Content ideological protection	0.822			
	Web-based correctness guarantee mechanism	0.818			
	Quick and effective response strategies	0.795			

Source: Authors

The validity of the study was investigated using convergent validity analysis, which demonstrated that the measurement model exhibited satisfactory convergent validity. For the discriminant validity of the measurement model, the squared value of the mean variance and the correlation coefficients of the latent variables were used to determine the validity, and the results showed that the measurement model exhibited satisfactory discriminant validity, as illustrated in Table 3.

Table 3 Measurement model discriminant validity test

sports event	Quality of ideological & political teaching	Informative teaching environment	Level of campus digitization	Network governance capacity	Information Security in ideology & political teaching
Quality of ideological and political teaching	0.735				
Informative teaching environment	0.362	0.762			
Level of campus digitization	0.202	0.422	0.721		
Network governance capacity	0.253	0.303	0.123	0.742	
Information Security in ideological and political Education	0.303	0.161	0.093	0.202	0.775

Source: Authors

Structural modelling tests

In order to test the fit validity situation of the structural model, the whole model was examined with the help of AMOS software for structural equation modelling, and the fit of the structural model was judged to meet the standard requirements from three perspectives, namely absolute fit, value-added fit, and composite fit. The results demonstrated that all the fit indices of the research model surpassed the critical values, therefore, the fit validity of the structural model was good, as shown in Table 4.

Table 4 Structural model fit indices

goodness-of-fit indicator	PGFI Parsimonious goodness-of-fit index	PNFI Parsimonious standard fit index	GFI goodness-of-fit index	RMSEA Root mean square error of approximation	NFI standardized fit index (SFI)	IFI Incremental fit index	CFI Comparison of fit indices
recommended value	>0.5	>0.5	>0.9	<0.08	>0.9	>0.9	>0.9
test value	0.953	0.826	0.911	0.052	0.963	0.927	0.969

Source: Authors

Research hypothesis testing

The model analysis of structural equations is carried out with the help of AMOS software to test the research model hypotheses, as shown in Table 5. The test results show that the quality of ideological and political teaching in higher education has significant positive influence characteristics on the level of campus digitization, informatized teaching environment, and information security of ideological and political education, and the hypothesis of positive and significant influence on the network governance capacity does not hold. There are significant positive influence characteristics of informatized teaching environment on network governance ability and information security of ideological and political education, and the hypothesis of positive and significant influence on campus digitalization level is not valid. Campus digitalization level has significant positive influence on network governance ability, and the same as network governance ability on information security of ideological and political education. In summary, it can be found that the information security of ideological and political education is mainly affected by the joint and direct influence of teaching quality (β=0.455, $p<0.01$), informatized teaching environment (β=0.273, $p<0.01$), and network governance capacity (β=0.498, $p<0.01$), of

which network governance capacity has the greatest impact effect, indicating that the ideological The core influence factor of political education information security lies in the control mechanism of digital means. Network governance capacity is mainly directly affected by factors such as campus digitalization level (β=0.414, p<0.01) and informatized teaching environment (β=0.329, p<0.01), among which the corresponding effect of campus digitalization level is greater, reflecting that the digitalization level is the basis of information management. The level of campus digitization is significantly affected by the quality of ideological and political teaching (β=0.312, p<0.01), indicating that the digital development of ideological and political teaching cannot be separated from the digital demand.

Table 5 Significance test of path coefficients of model structural variables

suppose that...	causal relationship	Standardized path factor	t-value	Positive significance
H1	There is a positive effect of the quality of ideological and political teaching in higher education on the level of campus digitization	0.312	3.831	Positively significant
H2	The quality of ideological and political teaching in higher education has a positive effect on the information technology teaching environment	0.286	4.073	Positively significant
H3	There is a positive effect of the quality of ideological and political teaching in higher education on the ability to govern online	-0.067	-1.345	Positively significant
H4	There is a positive effect of the quality of ideological and political teaching in higher education on the information security of ideological education	0.455	5.241	untenable
H5	There is a positive impact of the level of campus digitization on cyber governance capacity	0.414	6.124	Positively significant
H6	There is a positive effect of informational teaching and learning environment on the level of campus digitization	-0.059	-0.978	untenable
H7	There is a positive effect of informational teaching environment on campus network governance capacity	0.329	4.934	Positively significant
H8	There is a positive effect of informational teaching environment on the information security of ideological education	0.273	4.357	Positively significant
H9	There is a positive effect of cyber governance capacity on information security in Civic Education	0.498	7.321	Positively significant

Source: Authors

Modelling analysis

On the basis of the test of the aforementioned structural equation model (SEM), the relevant hypothesis paths are adjusted and the untenable hypothesis paths are eliminated to form the model of the information security level of ideological and political teaching in the digital era, as shown in Figure 2. The effects of the quality of ideological and political teaching on the level of campus digitization, the information

technology teaching environment and the information security of ideological and political education are 0.312, 0.286 and 0.455, respectively, with a direct and significant positive effect on the three factors mentioned above, indicating that high-quality ideological and political teaching can promote the construction and optimization of the school's information technology infrastructure, enhance the modernization of the educational environment and strengthen the security of information so as to reconstruct a safer, more efficient and more comprehensive ideological and political digital environment, so that ideological and political teaching not only plays an important role in the delivery of traditional educational content, but is also a key factor in promoting educational informatization and ensuring network security.

The effect of network governance capacity on the information security of ideological education is 0.498, which ranks first among all the direct influence effects, indicating that improving campus network governance capacity is a key measure to ensure the information security of ideological and political education in the digital era, and improving network governance capacity can not only protect educational information from threats and ensure the correct dissemination and use of information, but also reconstruct a stable and reliable network environment and provide a solid foundation for cultivating students' network quality and security awareness.

The effect of the level of campus digitization on network governance capacity is 0.414, which ranks third among all direct effects, indicating that the level of campus digitization is closely related to network governance capacity, reflecting that the maturity of campus digitization infrastructure and technological application plays a significant supporting role in improving network governance effectiveness. As the level of campus digitization improves, the school's ability in cyber supervision, risk prevention and response will be enhanced accordingly, which has a great function in maintaining cyber security and promoting the healthy development of the information-based teaching environment.

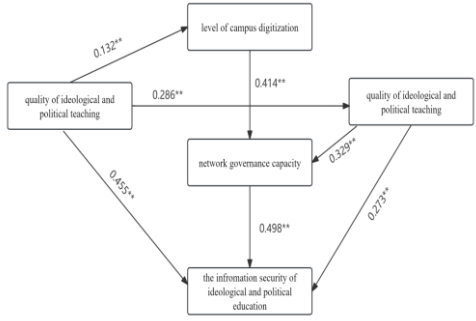

Fig. 2 Information security level model of ideological and political education in the digital era

Conclusion

The analysis shows that there is dynamic interaction and causality between the quality of ideological and political teaching, the informationized teaching environment, the level of campus digitization, the ability of network governance and the information security of ideological and political education. Based on the comprehensive risk mechanism, it is of positive effectiveness to deconstruct the connotation of information security of ideological and political education in higher education in the digital era and reconstruct the influence model of information security level of ideological and political education. The details are as follows:

Firstly, in the information security of ideological and political education in the digital era, the level of campus digitization has a significant positive effect on the network governance capacity, while the network governance capacity has a significant positive effect on the enhancement of information security of ideological and political education, indicating that higher education, in the process of promoting the digital development of campuses,

can enhance the capacity of network governance to a certain extent, which will, in turn, enhance the security of information of ideological and political education. Constructing an efficient network governance structure and enhancing the level of information security management plays a key role in the information security guarantee of digital transformation of ideological and political education. Higher education should attach importance to digital infrastructure and strengthen network governance to ensure the information security of digital ideological and political education.

Secondly, improving the quality of ideological and political teaching helps to reconstruct a better informatized teaching environment. High-quality ideological and political education can not only cultivate students' political awareness and ideology, but also directly enhance the construction level of the informatized teaching environment, providing students with a safer and more educationally valuable digital learning space for ideological and political education. Higher education can optimise the informatized teaching environment by improving the content of the ideological and political courses and teaching methods, which will in turn improve the quality of education and information security.

This study examines the significance of deconstructing the connotations of information security in the ideological and political education of higher education in the digital age. It also reconstructs the influence model of ideological and political education information security level. In future research, different kinds of digital means can be compared and analyzed, while more variables that can reflect the information security of ideological and political education can be added to enhance the applicability of the findings. Moreover, the specific practice of this model requires further discussion.

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