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Research on the Identification Mechanism of University Young Teachers' Political Institutional based on Binary Logistic Regression Analysis

Rongfan MA¹, Junling YANG²

Abstract

The university has always been the main front of political and ideological construction. The ideological and political form of the young faculty group consisting of important teachers is particularly important. Under the background of China's current reforms entering the deep water area and tackling the hardship period, it is of great significance to effectively consolidate the ideological consensus, political identity, and political identity of young teachers in colleges and universities. On this basis, this study combines the methods of qualitative analysis and quantitative analysis, using binary logistic regression model, scientifically analyzes and accurately identifies the factors that influence the identification of ideological and political education systems for young teachers in colleges and universities. On this basis, it proposes to recognize the institutional performance release system. The institutionalized countermeasure system strengthens institutional identity through institutional advantages and respects the recognition of a solid system with political beliefs.

Keywords: binary logistic regression analysis, young teachers, ideological education, political education, institutional identity, social development, social group.

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Introduction

The institutional is the foundation of political stability and social development. The root of its establishment, continuation, and effective implementation lies in the affirmation, acceptance, and trust of the general public. China is currently in a critical period of economic transformation and social restructuring (Yang, 2016). The reform and opening up and the in-depth development of the socialist market economy have liberated and developed socialist productivity, which have enhanced China's overall national strength, and improved the people's living standards (He & Wu, 2016). At the same time, the interests of all levels of Chinese society have diverged, and interest demands have changed. Some political organizations, social groups, and members of society have also produced varying degrees of confusion and even rebelliousness in value judgments and choices, and have taken certain extreme behaviors (Gao, 2014). Under such circumstances, how to unify the ideological consensus and strengthen the ideological and political education of contemporary Chinese citizens with social development goals and values that conform to the laws of social development and represent the fundamental interests and aspirations of the broad masses of the people, especially the ideological and political education institutional. Identity has become a major issue concerning political stability and social development (Li, 2018).

On this basis, the study takes the young teachers of colleges and universities as the starting point, and through the theoretical hypothesis of constructing the political institutional identification mechanism, the questionnaire data used to obtain the analysis data, and then the econometric model is used to scientifically identify the influencing factors of the political institutional identification. People know how to improve the countermeasures institutional.

Literature review

Political identity exists at the social level and individual level. From a social perspective, political identity is a form of social psychology (Yang, 2016). This kind of social psychology is generally expressed in the form of community recognition, acceptance of the political ideals, political beliefs, or political beliefs of the members of the community. The community maintains an important emotional basis for political rule, social forces, political turmoil, and social division. In addition, the premise of thought; from the individual level, political identity is the ideology or emotional orientation of a political organization, political unit, or political group that a member of a community feels belongs to. Specific to the field of institutional identity, the factors that can influence the institutional identity are the institutional itself, the enforcement of institutional enforcement rights, and the institutional recognition of ideology (Yang, 2016).

Institutional regulations

The institutional regulations have collectively referred to as the textual regulations such as laws, regulations, and policies. Legality and cooperation of the institutional (Feng, 1996), rationality, impartiality, and representation directly affect the degree of institutional identity. Among them, legality is the basis of the institutional, and the institutional with legal procedures and legal content is a prerequisite for institutional identification (Overton, 2018). Justice is the requirement of the institutional (Czerniawski *et al.*, 2018), and it is the soul that the institutional can be recognized. It has an important influence on the individual's conscious recognition and execution institutional. The representativeness is rooted in the process of institutional formation, that is, the institutional is the product of the game and struggle among different groups, different classes, different interest groups, and even different classes. It represents the interests of the public and is the basis for the institutional to recognize and implement. Based on this, the study proposes the following assumptions:

H1: Legitimacy of institutional regulations affects institutional identity

H2: Representation of institutional regulations affects institutional identity

H3: The fairness of the institutional stipulates the institutional identity

Institutional implementation

The realization of institutional functions depends on the intensity, efficiency, and effectiveness of institutional implementation. Institutional execution usually has methods such as voluntary execution, passive execution, and enforcement. Voluntary execution refers to the institutional of acceptance and recognition from the heart, consciously abide by and implement the institutional. Passive execution is to challenge or not fully identify the institutional, to be pressured, to abide by and enforce the institutional. Enforcement is to use mandatory force to force no Compliance personnel comply with the institutional and take legal measures to correct their violations and damage to the institutional. Therefore, the institutional nature of the institutional implementation should have a significant impact on institutional identity (Xiao, 2018), and the study proposes hypothesis H4.

H4: Systematic influence of institutional identity by system implementation.

Institutional performance refers to the effects, or functions of institutional implementation. Institutional performance is mainly reflected in conceptual performance and material performance. Idea performance refers to the effect of system implementation on the political system and its members' value ideas; material performance refers to the function of system implementation to satisfy the political system and its members' interests. When the system can maintain and enhance the values of the people, promote the development of productive forces and meet the interests of members, the system may exert positive effects, which

will promote institutional identity, and vice versa will hinder institutional identity (Zheng, Yin, & Wang 2018).

The study proposes the hypothesis *H5: Institutional performance affects institutional identity*

Hypothesis of identity factors at the individual level

Identity is an affirmative, positive psychological tendency or emotional attribution to a person's beliefs, identities, or communities after rational thinking, analysis, and judgment. Political identity is an affirmative, acknowledged, and accepted emotional response to the social and political concepts, systems, institutions, and modes of power operation in the process of social and political practice. In other words, the individual's identification of the system is essentially the activity of the individual's subjective initiative to transform the subjective and objective world. Further explanation, the subjective initiative is specific to the institutional identity field, that is, the institutional identification motivation (Trent, 2013).

At the same time, combined with the logic of institutional performance in the previous article, the individual's essence of institutional identity is that individuals form a value based on the judgment of the system to satisfy their own demands (Rom & Eyal, 2019) Because values have embodied in the direct interests, ideals, beliefs, and direct interests are the pre-element of shaping values, ideals and beliefs are the goal of shaping values, so the value-based institutional identity should not be able to break away from individual interests and political beliefs(Loughran,2007).

Based on this, the study proposes factors affecting institutional identity at the individual level:

H6: Interest claims restrict individual recognition of the system

H7: Political beliefs influence individual identity with the system

Empirical Analysis of the Identification Factors of Political System of Young Teachers in Colleges

Data source

Influenced by research ideas and research paradigms, research has carried out in the field research process, and China University of Geosciences (Beijing) has selected in a targeted manner. This is a famous science and technology. Huazhong Normal University is known for its humanities and science. Like Zhongshan University, it is a famous sample university. In the sample survey, 300 questionnaires were distributed and 295 questionnaires were collected. There were 292 valid questionnaires with an effective rate of 97.33%. The specific sample distribution and its efficiency are shown in *Table 1*.

Table 1. Sample distribution of questionnaires and their efficiency

School	Number of investigations	Number of copies	Effective number of copies	Efficient
China University of Geosciences (Beijing)	100	100	100	100%
Central China Normal University	100	98	97	97%
Sun Yat-sen University	100	97	95	95%
Total	300	295	292	97.33%

Model selection

As an important part of political identity, institutional identity is an affirmative, acknowledged, and accepted emotional response to the social and political concepts, institutions, institutions, and modes of power operation in the process of social and political practice. Therefore, individuals lack intuitive and effective measures for institutional identity.

In other words, the binary logistic model can indirectly reveal the individual's identification of the system. That is, the individual regards institutional identity as a two-category variable and assigns a value of 0,1. When the value of the binary variable is 0, it means that the corresponding event does not occur; otherwise, the corresponding event occurs. Furthermore, for the m independent variables corresponding to the dependent variable Y, X1, X2, . . . , Xm are reflected, and the overall probability of occurrence of an event is $\pi (Y=1)$. At this time, the logistic regression model corresponding to the independent variables X1, X2, . . . , Xm is:

$$\pi (Y=1) = \frac{\exp (\beta_0+\beta_1X_1+\beta_2X_2+\beta_mX_m)}{1+\exp (\beta_0+\beta_1X_1+\beta_2X_2+\beta_mX_m)} \quad (1)$$

$$= \frac{1}{1+\exp[- (\beta_0+\beta_1X_1+\beta_2X_2+\beta_mX_m)]} \quad (2)$$

or

$$\text{Logit} [\pi (Y=1)] = \ln \left[\frac{\pi(Y=1)}{1-\pi(Y=1)} \right] = \beta_0+\beta_1X_1+\beta_2X_2+\beta_mX_m \quad (3)$$

Where is the intercept term or constant term of the function, which is the independent variable Xj (j =1, 2, . . . , m) Partial Regression Coefficient (regression coefficient), exp(.) is a natural pair The number (2.71828) is the bottom index.

Therefore, when the binary logistic model is applied to reveal the individual's identity with the system, the two-categorical variable 1 can be used to replace the individual identity, and the assignment 0 is used instead of disagreement. The relevant hypothesis factors are further introduced into the equation model for logical operation. The real influence factor of the individual is on institutional identity.

Variable system

Dependent variable: As mentioned above, the essence of institutional identity is the individual's judgment and emotional response to the system based on its own values. There is no direct and objective measure. It needs to deal with by means of the specific method of the two categorical variables, that is, the individual identity political system is the cause. The variable is set to a dummy variable. If the individual agrees with the political system, it is recorded as 1; otherwise, it is recorded as 0.

Independent variable: The choice of independent variables has guided by theoretical assumptions, and adjusted and improved in light of facts. Among them, the construction logic of the independent variable system at the institutional level has specifically explained by the system regulations, system execution, and system performance. For the system-specified variables, the statutory procedural integrity, the wide range of opinions, and the fairness of content design are the specific measures. Considering that the fairness of content design cannot be directly and accurately measured, the study introduces virtual values to deal with the aforementioned problems, that is, setting relevant subjective evaluation criteria to reflect; in addition, the completeness degree of legal procedures and the wide range of opinions have disclosed by means of public disclosure.

Refining evaluation of relevant regulations and laws: For the system execution variables, because the system implementation emphasizes the system city and effectiveness of the system execution mode, considering the system itself is diverse, there is no objective data to reflect the effective selection and precise application of the implementation method. The research is based on the system implementation mode. The difference is to reveal the effectiveness of passive execution with the complete coherence of the system, to reveal the effectiveness of voluntary execution through the popularization of the system, and to reveal the effectiveness of enforcement through the serious norms of the system. The specific processing method overcomes the deficiencies of the aforementioned level data by means of virtual values.

For institutional performance variables, consider the case where the conceptual performance does not have direct measurement, and the research replaces it with virtual values. For material performance, it can be revealed by means of production index data that can directly reflect the system.

Table 2. Variable description

factor category	Specific variable	Variable nature	Proxy variable	Expected symbol
Individual level	Gender	Virtual	Male 1 and female 2	+/-
	Age	Numerical value	Specific age	+/-
Institutional level	Academic level	Virtual	Doctor is 1, Master is 2, Undergraduate is 3 Other is 4	+/-
	Interest demands	Virtual	Humanities and Social Sciences is 1, natural science is 2	+/-
	Political status	Virtual	The Communist Party members are 1, the democratic parties are 2, and the masses are 3	+
	Legal integrity	Virtual	1. Very complete 2. More complete 3. General 4. Incomplete	+
	Opinion for broadness	Virtual	1. Very broad 2. Broader 3. General 4. Not extensive	+
	Content system justice	Virtual	1. Fairness 2. Fairer 3. General 4. Unfair	+
	Publicity	Virtual	1. Very good 2. Good 3. General 4. Poor	+
	Complete coherence	Virtual	1. Very complete 2. More complete 3. General 4. Incomplete	+
	Serious normative	Virtual	1. Very standard 2. More standard 3. General 4. Not standardized	+
	Gross national income	Numerical value	Gross national income	+
Political Consciousness level	Virtual	1. Great impact 2 Large impact 3. Impact. General 4. No impact	+	

Reliability test

Based on the requirements of the research paradigm, the characteristics of the data obtained from the research, the research needs to carry out the reliability test first.

In this paper, the Cronbach α coefficient is calculated to be 0.868, which is greater than 0.8. Therefore, the overall results of the questionnaire are good (as shown in Table 3).

Table 3. Cronbach’s alpha coefficient for reliability analysis

Cronbach’s Alpha	Cronbach’s Alpha based on standardized items	Number of items
.760	.768	13

Statistical operation

The study introduces the data from field research into the binary logistic regression model and judges the model-fitting situation. According to the Hosmer-Lemshow goodness-of-fit test, the significance of the data obtained by the institute and the established model were Sig= 0.947>0.05. The test results were not statistically significant and the model fit was good.

Table 4. Model fitting (Hosmer and Lemeshow testing)

step	Bangla	df	Significance
1	2.791	8	.947

At the same time, through regression analysis, in the variable system set by the institute, the gender, age, academic level variables at the individual level, and the serious normative and political awareness at the institutional level are significantly less. In other words, the aforementioned independent variables do not constitute a factor system that affects institutional identity.

Table 5. Regression calculations

Variables in the equation	B	S.E.	Wald	df	Significance	Exp(B)
step 1 ^a						
Gender	.229	.186	1.514	1	.219	1.257
Age	-.042	.072	.342	1	.559	.959
Political status	-.534	.102	27.691	1	.000	.586
Academic level	.264	.353	.559	1	.455	1.302
Interest demands	.130	.196	.438	1	.018	1.139
Legal integrity	-.018	.034	.268	1	.005	.982
Opinion for broadness	.893	.428	4.344	1	.037	2.443
Content system justice	.288	.830	.120	1	.029	1.333
Serious normative	.806	.447	3.246	1	.072	2.239
Complete coherence	1.330	.502	7.022	1	.008	3.782
Publicity	1.191	.488	5.959	1	.015	3.291
Political consciousness level	.640	.474	1.821	1	.177	1.896
Gross national income	1.433	.552	6.740	1	.009	4.190
Constant	3.715	.623	35.525	1	.000	41.064
a. The variable entered on step 1: [%1., 1:						

Interpretation of the results

As mentioned above, after the binary logistic regression, the political level, academic level and interest appeal of the individual level are significantly better, which indicates that the high-education level group has better depth and breadth of institutional cognition, and thus the system identification. At the same time, groups of different political appearances themselves mean different political beliefs, and confirm that political beliefs influence political identity; the integrity of legal procedures at the institutional level, the wide range of opinions, and the fairness of the content system are good. Institutional regulations are important factors influencing institutional identity. At the same time, the system's perfect coherence, propaganda popularity, and institutional identity have also related to the current voluntary system of China's political system. In addition, the national income total variable has a great influence on institutional identity, and to some extent, it has once again confirmed the great advantages of the socialist political system with Chinese characteristics.

Suggestions on the improvement of the political system identification

Promoting system identification with system performance release

The quality of the system ultimately depends on its operating conditions and actual operating results. Therefore, institutional performance is the ultimate standard for judging the merits and demerits of it, and it is the fundamental path to enhance institutional identity. This is also the scientific result of regression analysis. In fact, the socialist system with Chinese characteristics has released great performance in the course of its operation. That is, the socialist system with Chinese characteristics has supported tremendous development achievements, provided good governance effects, and effectively guaranteed China's political unification and social stability. In other words, the effective combination of the socialist system with Chinese characteristics and the market economic system, while maintaining political stability and social stability, effectively guarantees the smooth progress of reforms.

Based on this, to enhance the recognition of young teachers in colleges and universities, because of perfecting the coherence of the safeguard system and strengthening publicity and popularization, we should continue to promote institutional reforms and continuously release the vitality of the system, based on the overall requirements of legal procedures, wide-ranging opinions, and content system justice. Continuously improve the performance of the system, and then effectively meet the needs of young college teachers and the effective improvement

of political beliefs, and consolidate the identity of young teachers in colleges and universities (Yang, 2016).

Strengthening institutional identity with institutional advantages

As mentioned in the foregoing, the important influencing factors of institutional identity depend not only on institutional performance, but also on institutional regulations and system implementation. In other words, the integrity of the system's legal procedures, the wide range of institutional opinions, and the fairness of the system's content system have a significant impact on institutional identity. At the same time, the system's perfect coherence and propaganda timeliness are also important factors in institutional identity (von Suchodoletz *et al.*, 2018).

In fact, it is necessary to strengthen institutional identity and institutional advantages, that is, to fully tap the inherent advantages of the system and effectively strengthen the external advantages of the system. It is further explained that based on institutional integration capability, social organization capability, and public goods provisioning capacity, the internal advantages are focusing on major events, liberating and developing productive forces, (Ji, 2015) promoting social fairness and justice, and achieving common prosperity should be continuously strengthened. At the same time, because of deepening economic and social development, we will continue to consolidate the advantages of the political system (Steinert, O'Sullivan, & Irby, 2019).

On this basis, this paper strengthens the identification of young teachers in colleges and universities. In the process of system design and formation, we should absorb the participation of young teachers in colleges and universities, learn from the opinions of young teachers in colleges and universities, continue to respect the identity of young teachers in colleges and universities, and continue to attach importance to the young teachers of colleges and universities. Then this paper forms a dual institutional advantage pattern that respects the political sphere and values the social sphere.

Shaping the systemic identity with political beliefs

The essence of institutional identity lies in the individual's subjective initiative to transform the activities of the main and objective world. It is embodied in the individual's judgment based on the judgment of the system to satisfy its own demands. Therefore, the system identity based on values should fully respect and satisfy the individual's interests (Cui, 2018). Specifically, the elements of the interests of young teachers in colleges and universities should be satisfactorily satisfied because of the system of accurate identification and appeal, that is, the elements of scientific research resources, material support, honors, and rewards that young teachers of colleges and universities hope for should be considered (Yang, 2011). Highly respected and actively supported. In view of the political beliefs of

young teachers in colleges and universities, we should adhere to the dual principles of “guidance” and “respect” (Bie, 2017). Party committees and organizations at all levels of colleges and universities must rationally guide political demands on the premise of respecting the political beliefs of young teachers in colleges and universities, and continue to attach importance to political ideas. Strengthen political awareness to help the system identify and steadily (He & Wu, 2016).

Conclusion

In summary, based on the research paradigm combining qualitative analysis and quantitative analysis, the theoretical system of the factors affecting the identity of young teachers in the institutional level and individual level is established firstly, and based on the binary logistic regression model (Liu & Li, 2018). Through the scientific analysis of the survey data of college young teachers’ system, were found that the political level, academic level and interest appeal, institutional regulation and institutional performance factors at the individual level constitute the influencing factor system of the young teachers’ system in colleges and universities (Fransson, 2019). On this basis, the study proposes a comprehensive and systematic countermeasure system that enhances institutional identity with system performance release, strengthens institutional identity with institutional advantages, and respects the system identification with political beliefs.

References

- Bie, D.R. (2017). The Evolution and Characteristics of Modern University System. *Jiangsu Higher Education*, 5, 1-8. doi:10.13236/j.cnki.jshe.2017.05.001.
- Cui, Z.J. (2018). The Dilemma and Prospect of Teacher Educators’ Identity- Based on an Analysis of the Published SSCI Papers from 2000 to 2017. *Contemporary Education and Culture*, 10(3), 89-95. doi: 10.13749/j.cnki.cn62-1202/g4.2018.03.016.
- Czerniawski, G., Gray, D., MacPhail, A., Bain, Y., Conway, P. & Guberman, A. (2018). The professional learning needs and priorities of higher-education-based teacher educators in England, Ireland and Scotland. *Journal of Education for Teaching*, 44(2), 133-148. doi: 10.1080/02607476.2017.1422590.
- Feng, B.L. (1996). Research on Teacher Job Satisfaction and Its Influencing Factors. *Educational Research*, 9(2), 42-49.
- Fransson, G., Holmberg, J., Lindberg, O.J., & Olofsson, A.D. (2019). Digitalise and capitalise? Teachers’ self-understanding in 21st-century teaching contexts. *Oxford Review of Education*, 45(1), 102-118. doi:10.1080/03054985.2018.1500357.
- Gao, L.J. (2014). Investigation and Analysis of the Ideological Status of Young Teachers in Universities. *School Building and Ideological Education*, 4, 45-47.
- He, X.L., & Wu, C.J. (2016). Thoughts on the Status Quo and Countermeasures of Young Teachers’ Ideological and Political Work in Colleges and Universities - Based on Empirical Research of Six Universities. *Ideological Education Research*, 1(1), 116-119.

- Ji, W.B. (2015). The Orientation of American University Teacher Development and Its Enlightenment. *Jiangsu Higher Education*, 5, 146-149. doi: 10.13236/j.cnki.jshe.2015.05.044.
- Li, J.H. (2018). The Dual Paths and Their Interactions in Accomplishing National Identity. *Theoretical field of vision*, 12, 77-82. doi: 10.19632/j.cnki.11-3953/a.2018.12.015.
- Liu, C., & Li, X.F. (2018). Research on the Evaluation Model of College Teachers' Morals Based on ANP. *Modern Education Science*, 11, 78-84. Doi: 10.13980/j.cnki.xdjyxx.2018.11.015.
- Loughran, J. (2007). Researching Teacher Education Practices: Responding to the Challenges, Demands, and Expectations of Self-Study. *Journal of Teacher Education*, 58(1), 12-20. doi:10.1177/0022487106296217.
- Overton, D. (2018). Findings and implications of the relationship of pre-service educators, their university tutor and in-service teachers regarding professional development in science in the primary school system. *Professional Development in Education*, 44(5), 595-606. doi: 10.1080/19415257.2017.1388268.
- Rom, N., & Eyal, O. (2019). Sensemaking, sense-breaking, sense-giving, and sense-taking: How educators construct meaning in complex policy environments. *Teaching and Teacher Education*, 78, 62-74. doi: 10.1016/j.tate.2018.11.008.
- Steinert, Y., O'Sullivan, P.S., & Irby, D.M. (2019). Strengthening Teachers' Professional Identities Through Faculty Development. *Academic Medicine: Journal of the Association of American Medical Colleges*, doi:10.1097/ACM.0000000000002695.
- Trent, J. (2013). Becoming a Teacher Educator: the Multiple Boundary-crossing Experiences of Beginning Teacher Educators. *Journal of Teacher Education*, 64(3), 262-275. doi: 10.1177/0022487112471998.
- von Suchodoletz, A., Jamil, F., Larsen, R.A., & Hamre, B. (2018). Personal and contextual factors associated with growth in preschool teachers' self-efficacy beliefs during a longitudinal professional development study. *Teaching and Teacher Education*, 75, 278-279. doi:10.1016/j.tate.2018.07.009.
- Xiao, Q.Y. (2018). Rural Teachers' Occupational Mobility and Its Influencing Factors - An Empirical Study Based on Binary Logistic Regression Model. *Basic Education*, 15(5), 36-45. doi: 10.3969/j.issn.1005-2232.2018.05.005.
- Yang, J.L. (2016). On the Main Contents of Contemporary Chinese Political Identity. *Research on Socialist Core Values*, 2(5), 21-26. doi:10.16513/j.shzyhxjzgyj.2016.05.003.
- Yang, Y. (2011). An Analysis of Self-identity Dilemma of Teacher Educator from Sociological Perspective. *Contemporary Teacher Education*, 2, 6-10. doi: 10.16222/j.cnki.cte.2011.01.012.
- Zheng, X., Yin, H.B., & Wang, M.H. (2018). Leading with teachers' emotional labour: relationships between leadership practices, emotional labour strategies and efficacy in China. *Teachers and Teaching*, 24(8), 965-979. doi:10.1080/13540602.2018.1508432.