

A Systematic Review of the Impact of High-Level Talent Loss in China's Higher Vocational Colleges

Gao Fang, Ahmad Amri Bin Zainal Adnan

Faculty of Management and Economics, Universiti Pendidikan Sultan Idris (UPSI)

To Link this Article: <http://dx.doi.org/10.6007/IJAREMS/v13-i3/22642> DOI:10.6007/IJAREMS/v13-i3/22642

Published Online: 27 September 2024

Abstract

This study provides a comprehensive overview of the impact of high-level talent loss in China's higher vocational colleges, further understanding the current situation and reasons for high-level talent loss, increasing attention to high-level talent loss, providing a basis for the government and education departments to formulate more effective policies, and promoting the management of higher vocational colleges to adopt more targeted management measures. This study adopts a qualitative research method to systematically review the negative impacts of high-level talent loss on the country, society, higher vocational colleges, teaching staff, teaching and scientific research, other teachers, and talents themselves, from the current situation of high-level talent loss in higher vocational colleges, the types of high-level talent loss, and the factors leading to high-level talent loss. This study found that firstly, with the development of higher vocational colleges and the promotion of the "double high" construction, the trend of talent mobility has become more frequent and diversified. Secondly, insufficient salary and benefits, limited career development opportunities, and poor working environment and cultural atmosphere are the reasons for the loss of high-level talents in higher vocational colleges. In addition, although the national and local governments have introduced a series of policies to reduce talent loss, these policies have limited effectiveness in actual implementation and are difficult to completely curb the loss of high-level talents. This study provides several suggestions for future research. Firstly, it is necessary to conduct in-depth research on the diversity of causes of losses. Secondly, cross college comparative research should be conducted. Thirdly, long-term longitudinal research should be conducted. Fourthly, the effectiveness of policy implementation should be evaluated. Finally, it is suggested that future research can further explore the indirect impact of high-level talent loss on the quality of student education, socio-economic development, and other aspects.

Keywords: Systematic Review, China, Higher Vocational Colleges, High-Level Talent Loss

Introduction

Higher vocational colleges are higher vocational education institutions in China and the main force of vocational education development (Zhu & Ma, 2021). The Chinese government has been supporting the development of higher vocational education and providing policy, financial and other support to higher vocational colleges to promote their development. Higher vocational colleges have basically completed the extension construction with the

main contents of scale expansion, new campus construction, and teaching equipment procurement, and have begun to shift towards the connotation construction with the main contents of deepening teaching reform, improving scientific research level, and enhancing social service capabilities (Zhu & Zhang, 2015). The construction of teaching staff in higher vocational colleges is a key issue in the connotation-oriented development of higher vocational education (Zhang, 2019).

The construction of high-level talent teams in higher vocational colleges is an inevitable requirement for the economic and social development of the new era, and also an inevitable choice for achieving sustainable development of higher vocational education (Ye, 2021). A stable team of teachers with high professional titles, high academic qualifications and high levels is particularly important for higher vocational colleges (Qiu, 2019). High-level talents are the main force driving the construction of high-level teachers team (Zhou, 2021). Whether a higher vocational college can have a high-level talent team is the fundamental factor that determines whether it has the most core competitiveness, and it is an important factor that reflects the school's ability to run and educate students. Therefore, all regions have vigorously introduced policies to attract talents, and colleges have implemented the strategy of strengthening schools with talents, and continuously introduced more outstanding high-level talents to enrich the teaching staff (Li, 2021).

At present, the lack of high-level talents has become one of the main factors restricting the quality of talent cultivation and the level of education in higher vocational colleges, and it is also a difficult problem and bottleneck in the sustainable development of higher vocational education (Ye, 2021). Through the study of the current situation and impact of high-level talent loss in higher vocational colleges, we can not only deeply realize the core role of high-level talents in education quality, scientific research innovation and school development (Li & Wang, 2022), but also reveal the shortcomings of current higher vocational colleges in talent management and retention mechanisms (Chen, 2019). At the same time, this study provides a solid practical foundation and rich theoretical basis for further research on the loss of high-level talents.

Overview of High-level Talent Loss

The term “brain drain” was first proposed by the Royal Society of the United Kingdom in 1963, referring to the migration of British scientists and technicians from the United Kingdom to North America after World War II (Cervantes & Guellec, 2002). Western scholars commonly call talent loss “brain drain”, which vividly illustrates that brain drain is a kind of intellectual drain (Chen, 2021), a one-way flow of talents, with only outflow and little or no inflow (Watanabe, 1969). Brain drain, as a manifestation of talent flow, is a relative phenomenon that inevitably accompanies talent flow, and serious brain drain is a manifestation of unbalanced talent flow (Fu, 2012). Therefore, brain drain is a concern of many countries and regions (Davenport, 2004).

Brain drain is a complex social phenomenon, essentially a population migration, usually involving permanent or long-term changes in residence (Henry & Louis, 1982). Later, brain drain was used to refer to the movement of the most highly skilled talents in different regions, industries and occupations, including scientists, medical staff, engineers and other professionally trained personnel (Bassioni et al., 2016). Wang and Zhao (2019) believe that

high-level talent loss refers to talents with high professional skills, academic level or management ability leaving their original organizations, industries or countries for various reasons, resulting in the loss of intellectual resources in these organizations or regions. Li and Zhang (2020), believe that high-level talent loss refers to the phenomenon that talents with outstanding skills, expertise and leadership in an organization or industry leave their current positions due to more attractive external opportunities or various internal reasons. According to Chen and Fang (2021), high-level talent loss is defined as the phenomenon in which talents with key academic or management capabilities in higher education institutions choose to leave their current institutions for various reasons. Xu and Li (2022), pointed out that high-level talent loss refers to the phenomenon that talents with outstanding abilities and contributions in academic research, teaching, management or technology leave higher vocational colleges or flow to other organizations or industries for various reasons.

There are many reasons for the loss of high-level talents. Due to the differences in economic development levels in different regions and the imperfect cultural system, higher vocational colleges do not have the core competitiveness that is superior to other ordinary universities, resulting in most talents flowing to other colleges and universities or training institutions with better conditions and stronger competitiveness (Li, 2021). If the role of talents cannot be fully utilized, talents are prone to psychological imbalance, which may also lead to talent loss (Li, 2022). Enhancing the sense of belonging, security and identity of talents and establishing a harmonious campus cultural environment can reduce the loss of talents (Li and Zhang, 2020).

Current Situation of High-level Talent Loss

China is one of the countries with the largest brain drain in the world, and the problem of domestic talent flow is very serious (Li & Chen, 2021). The loss of high-level talents is not a new problem (Li & Wang, 2020). Since the 1980s, the phenomenon of inter-regional brain flow in China has been obvious. With its superior natural conditions, location and economic advantages, as well as preferential policies, the eastern region has attracted talents from the central and western regions (Li & Zhang, 2020). The main direction of the flow of high-level brains is from the inland to the eastern coastal areas, which makes the eastern part of China a net inflow region and the northeast and central and western regions a net outflow region (Zhou et al., 2018). Faced with the shrinking of high-level talent reserves in recent years, China has taken some measures to deal with brain drain or unreasonable flow, while encouraging "talents return" in the central and western regions. Despite the above measures, most provinces in the central and western regions are still facing the phenomenon of large-scale brain drain (Li & Wang, 2020).

Tang (2017), studied the brain drain in colleges in Qiqihar and found that the brain drain is serious and the flow pattern is relatively simple. Most of the brain drain goes to colleges and universities in central cities and southeast coastal cities, some go to emerging colleges and universities in the west that are in urgent need of high-level teachers, and a small number go to other enterprises and institutions in the region. Brain drain is characterized by young people and high academic qualifications. Qu (2018), believes that local colleges are at a disadvantage in the battle for talents due to factors such as resources, funds, and policies, and are trapped in the dilemma of "not making ends meet", especially in the economically

underdeveloped central and western regions. Colleges in underdeveloped central and western regions are particularly prone to brain drain.

The Types of High-level Talent Loss

Vertical Loss and Horizontal Loss. According to the direction of talent loss, talent loss is divided into vertical loss and horizontal loss. Vertical loss refers to the flow of talents across levels, which often occurs between regions or colleges and universities at different levels, as shown in Figure 2.1 below. Horizontal outflow refers to the flow of talents between colleges at the same level, which is mainly cross-school flow, as shown in Figure 2.2 below.

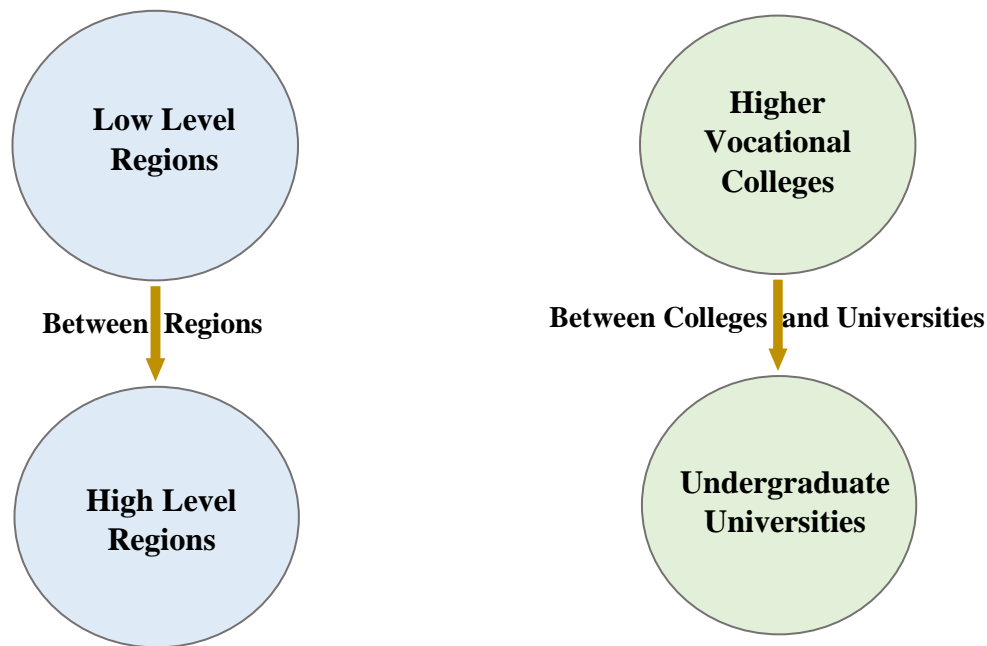


Figure 2.1. Vertical Loss

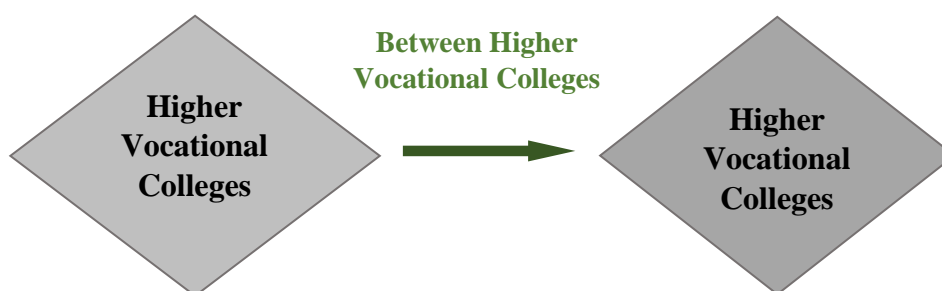


Figure 2.2. Horizontal Loss

Internal Loss within System and Cross System Loss. According to the different scope of loss, talent loss can be divided into internal loss within system and cross system loss, as shown in Figure 2.3 below. The loss between colleges is limited to within higher education, therefore it can be referred to as internal loss within system. The loss from colleges to institutions, enterprises, etc. beyond the higher education system is called cross system loss, as shown in Figure 2.4 below..

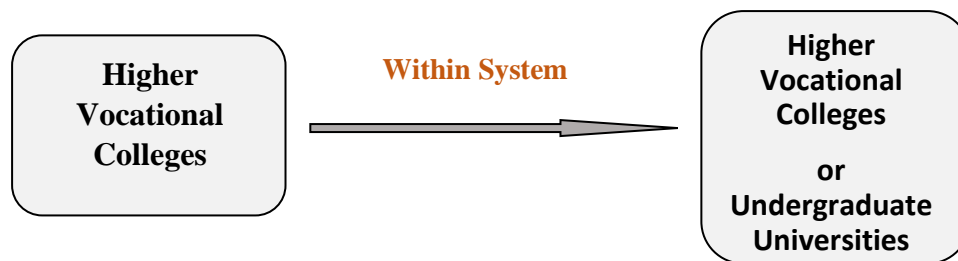


Figure 2.3. Internal Loss within System

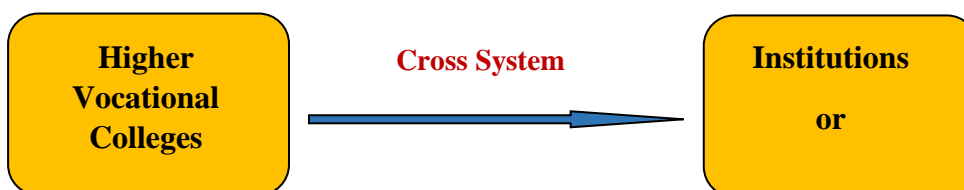


Figure 2.4. Cross System Loss

Explicit loss and implicit loss. According to the affiliation of talents, talent loss can be divided into explicit loss and implicit loss (Liu, 2019; Yu, 2014). The difference between explicit loss and implicit loss is that explicit loss mainly refers to the reduction in quantity, while implicit loss mainly refers to “people are absent-minded” (Li, 2015). Explicit loss refers to talents leaving an organization due to various subjective and objective factors and seeking better opportunities (Liu, 2019). As for implicit loss, experts and scholars have studied the implicit talent loss in my country from different angles. Yu (2014) pointed out that the implicit loss of talents is the lack of enthusiasm for talent work and the inability to give full play to their talents. Liu (2010) proposed that implicit loss is manifested in strong work ability and high skill level, but cannot effectively handle work, nominally serving the school, but actually relying on school resources to engage in individual activities and seek personal interests. Fan (2010) believes that the manifestations of hidden loss include the loss of personnel, energy, knowledge, professionalism, values, etc. In Li's (2015) study on hidden loss, it is no longer simply limited to the second career, but has risen to the loss of teacher quality or effectiveness. Each category has its own characteristics.

The Factors of High-level Talent Loss

Brain drain is a complex social phenomenon, driven by multiple factors (including subjective or external factors and objective or internal factors) (De Haas, 2010). External factors involve demographic, social, economic, cultural, political systems (Beechler & Woodward, 2009) and physical environmental factors (Czaika & Parsons, 2017), while internal factors include personal income (Grossmann & Stadelmann, 2013), self-development and self-realization (Halman & Müller, 2006) and promotion (Devaro & Brookshire, 2007). Bredtmann, Martínez Flores and Otten (2019) also believe that the main reasons for brain drain include personal psychological state, work motivation, etc. However, the salary system, work environment, and colleague relationship factors also affect the flow of high-level talents in China. According to previous scholars' analysis of the factors causing brain drain, it can be seen that the factors affecting brain drain mainly include economic, social, organizational and individual aspects.

Economic Factor. The eastern coastal areas, especially the Pearl River Delta, Yangtze River Delta and Beijing Tianjin region, with superior natural conditions, regional and economic advantages as well as preferential policies, have become growth centers, gathering a large amount of resources, but other areas have experienced massive resource losses (Yan et al., 2015). Guo, Zhen and Wang (2016) believe that the universities of the eastern region are in close contact with international communities, and have a better academic atmosphere. Therefore, cultural value deviation is another deep reason for brain drain. The western region's backward economy and culture make it difficult to retain high-end talents, resulting in talent loss in the western region (Wang, 2006). Zheng (2018), believes that the increasing economic income has intended many college teachers in the west to flow to the eastern region. Furthermore, inter-regional wage differentials and better career prospects play a dominant role in attracting skilled labour. For high-level talents, the eastern region has relatively superior material conditions, which can provide their children with higher quality educational opportunities than the central and western regions.

In addition, As Li (2021), analyzed, due to the current inadequate system, higher vocational colleges do not have better core competitiveness compared to other ordinary universities, which leads to the outflow of most talents to other universities or training institutions with better conditions and competitiveness. Tian (2006), pointed out that regional socioeconomic gaps in household conditions and teaching facilities, which affect family and personal utility, are the root causes of brain drain.

Society Factor. American psychologist Levin (1971), explained from the perspective of environmental driving that an environment that is not conducive to talent development can lead to talent choosing to leave. Herbert (2007), were the first to attempt to integrate the labor market and individuals to examine and study talent turnover behavior.

Liu (2007), believes that the low professional status is a major reason for the loss of teachers in higher vocational colleges. Under the influence of traditional thinking, compared with ordinary universities, society has a lower recognition to vocational education (Li, 2021). Compared to ordinary teachers in higher education institutions, higher vocational teachers cannot gain a sense of recognition from society, which greatly undermines their professional enthusiasm (Wu, 2013), especially those with high education and professional titles, in order to avoid social prejudice and the embarrassment of low professional status (Yu et al., 2005), and pursue better self-development, they choose to leave the school (Wu, 2013). This is in line with the traditional Chinese belief of "moving towards higher places" (Yu et al., 2005).

Organizational factors. Zhu (2019), analyzed the factors affecting talent loss from the perspective of the siphon effect and found that the school's development speed and scale are important factors affecting talent loss. Li (2021), pointed out that vocational colleges generally have problems such as insufficient internal mechanisms for talent training and weak teaching and research environment. Colleges lack scientific mechanisms in the use of talents, training talents, motivating talents, and stabilizing talents, resulting in talent loss (Yang, 2014). Schools focus on introduction rather than training. After introducing talents, it is difficult to develop and build exclusive development platforms for them, and it is difficult to give full play to their strengths and qualities. The role of talents cannot be fully utilized, and talents are prone to psychological gaps, leading to talent loss (Li, 2022). In addition, the limited scientific

research resources and project support of higher vocational colleges make high-level talents more inclined to choose research universities or enterprises, as well as institutions with a stronger academic and scientific research atmosphere, rather than higher vocational colleges.

Mamun and Hasan (2017), believe that the root cause of talent loss is that the organization's senior management has not paid enough attention to this major issue and has not realized the damage caused by personnel turnover to the overall performance of the organization. "Talents are migratory birds. They need basic food, but they value the spiritual atmosphere more. The more senior the talent, the more sensitive they are to this spiritual atmosphere" (Dai, 2005). Therefore, another reason for employees to leave is that they feel that they are not valued (Silzer and Dowell, 2010). Due to the limitations of vocational colleges' own conditions, such as development platforms, salary and benefits, talent loss is promoted (Wu, 2013). Pearl Meyer (2010), believes that the salary, scientific research funds, and class fees given to teachers by colleges are significantly related to teacher turnover. Some local colleges do not pay attention to welfare benefits, which leads to employee dissatisfaction and aggravates talent loss (Li, 2015). Colleges' salaries are mostly linked to professional titles rather than workload, so there is a lack of incentive mechanisms, and often lead to talent loss due to unsatisfied economic reasons (Wang, 2016).

Li (2021) pointed out that the actual investment of the state in vocational colleges is far lower than that in general education, which seriously affects the mobility of teachers and students in colleges and universities. This restricts the development of vocational colleges. Therefore, vocational colleges generally face the problems of weak teaching and research environment and lack of scientific research platform, which leads to the loss of high-level talents.

Personal factors. Personal factors include not only material conditions such as salary, housing, and personal life needs, but are also closely related to factors such as age, spouse's work, and family life (He et al., 2014). Although family relationships are generally not a driving factor, many professionals and other high-quality personnel believe that the challenge of raising a family and providing them with a high-quality lifestyle and educational opportunities is a key reason for mobility (Fargues, 2011). Xiong and Liu (2014), believe that salary affects talent mobility. If high-level talents feel that their value is not fully recognized, they will naturally think of changing the status quo through transfers, resignations, etc., and strive to gain full recognition from society. Qiu (2019), believes that there are three situations that affect talent loss. The first category is that they do not internalize the noble profession of teachers as the starting point of educational behavior, lack the spirit of dedication to their jobs, and cannot play the role of high-level talents; the second category is that some high-level talents, after achieving certain achievements, blindly pursue the improvement of political status, often lose the time and energy to truly engage in academic pursuits due to long-term inefficient administrative work, which undoubtedly constitutes a hidden loss to the school; the third category is indifferent to the collective, and even sacrifices the interests of the collective to satisfy personal values. At the same time, the need to obtain self-development, high-quality education conditions for children, and family life capital also promotes the flow of high-level talents (Guo et al., 2016).

In addition, the outflow of high-level talents is not only driven by general factors, but also influenced by other factors, such as the need to realize their own value and the need to serve their hometown (Soon, 2010). Niu (2016), believes that the pursuit of personal development and continuous improvement of one's own abilities are the main reasons for the flow of talents. Zhao and Zhang (2018) believe that career development obstacles often make talents feel insecure, prompting them to seek opportunities to move outward. The demand for high-quality education conditions for children and family living capital also promote the flow of high-level talents (Guo et al., 2016). Li (2022), believes that family reasons are the main reason for the outflow of talents based on statistical analysis. Li (2021), also found that many high-level talents have problems with inaccurate self-positioning and biased personal beliefs. Some people are unable to work at ease because of various problems such as personal marital status, family factors, and economic pressure, which objectively leads to low work efficiency and invisible loss of talents (Qiu, 2019).

Impact of High-level Talent Loss

Impact on the Country and the Society

The irrational flow of high-level talents has seriously affected the overall strategic layout of my country's higher education, caused unnecessary waste of educational resources, and even undermined social equity and stimulated social contradictions (Zhang & Li, 2022). First, irrational talent flow is contrary to the original intention of my country's balanced development layout of higher education. Second, irrational talent flow will lead to a large loss of national fiscal funds. Finally, irrational talent flow is not conducive to my country's realization of social equity and may stimulate new social contradictions (Zhou & Lou, 2020).

Impact on Higher Vocational Colleges

Retaining and continuing to introduce high-level talents is the core of the current construction of the faculty team of higher vocational colleges, and is a realistic and inevitable requirement for achieving sustainable development of higher vocational teachers. Firstly, the large-scale loss of high-level talents will bring many negative impacts to colleges, such as reducing the visibility of colleges, damaging the reputation and image of colleges, resulting in a decrease in the number of admissions, and ultimately hindering the development of colleges. Secondly, it will also affect the development of relevant scientific research projects in colleges, directly causing economic losses to colleges (Liu, 2019), leading to an overall decline in the level of discipline construction, and affecting the improvement of social support and technological innovation capabilities. Thirdly, the loss of high-level talents will also cause significant losses to the college's operating costs such as recruitment costs, relocation costs, development costs, and reset costs (Liang, 2019).

Impact on Teaching Staff

High-level talents have high professional and technical capabilities and personal qualities. They are leaders in their industries and fields and have great influence. Once high-level talents are lost, the school's teaching staff will lack morale and cohesion, which will have a great impact on the structure of the teaching staff of colleges, professional teams, teaching and research offices, and the improvement of teaching levels, resulting in instability of the teaching staff and an unbalanced teaching structure (Pi, 2021). Moreover, the loss of talent has caused mismatches in the proportion, academic structure, professional title structure, and age structure of the teaching staff, making it difficult to cultivate talents of

equal strength in a short period of time, affecting the healthy development of the teaching staff (Tan, 2021) and causing a "fault" phenomenon (Liang, 2019).

Impact on Teaching and Scientific Research

The loss of talents causes the teaching plan to be disrupted, disrupts the normal teaching order, affects the continuous and stable development of scientific research projects, slows down the progress of scientific research projects (Li, 2022), is not conducive to the development of teaching and scientific research, and will also affect the development of related scientific research projects of the school, directly causing economic losses to the school (Liu, 2019).

Impact on other Teachers

The loss of high-level talents has a great psychological impact on other teachers, leading to low morale and negative energy impact on in-service teachers, making them doubt the prospects and management of the college, making it difficult for them to engage in teaching and scientific research with peace of mind, and weakening their enthusiasm and initiative in work (Li, 2022). They begin to shift their energy away from teaching and scientific research, and start or prepare to start looking for new jobs and new colleges. This will lead to a negative tendency in the college that if you don't leave, you won't become a talent, if you become a talent, you will leave, if you don't leave, you are not a talent, and you must leave (Liang, 2019).

Impact on Talents Themselves

The unreasonable flow of talents will also have a certain impact on the talents themselves. On the one hand, frequent talent flow will reduce the stability of academic research in the short term, distract talents from scientific research, and ultimately affect the quality and quantity of academic output. On the other hand, unreasonable flow will increase the work risks of high-level talents, more easily damage their legitimate interests, and be detrimental to the realization of their self-worth (Zhou & Lou, 2020). At the same time, the loss of talents will have a negative impact on the mental health of in-service teachers, causing them to doubt the prospects and management of the school, increase psychological uncertainty, and find it difficult to engage in teaching and scientific research with peace of mind, and weaken their work enthusiasm and initiative (Li, 2022), and may even affect the mentality of other teachers, resulting in a "domino effect" (Pi, 2021).

Conclusion

Through the study of the current situation and impact of high-level talent loss, this study has obtained a series of major findings. First, the study found that with the development of higher vocational colleges and the advancement of "double high" construction, the trend of talent flow has become more frequent and diversified. Some high-level talents choose to move between different colleges to seek better career development opportunities, rather than just staying in a single college. Secondly, the study shows that insufficient salary and benefits, limited career development space, poor working environment and cultural atmosphere are the reasons for the loss of high-level talents in higher vocational colleges. Some high-level talents prefer to flow to regions, universities or enterprises that offer higher salaries and more development opportunities. In addition, although the national and local governments have introduced a number of policies to reduce talent loss, the study found that these policies have

limited effects in actual implementation and it is difficult to completely curb the outflow of high-level talents. Therefore, the study suggests that policymakers need to pay more attention to the intrinsic needs of talents, such as improving the working environment and enhancing career development opportunities.

Suggestions for Future Research

In order to increase the attention paid to the problem of high-level talent loss and promote the reasonable flow of high-level talents, several suggestions are put forward for future research. First, we should deeply explore the diversity of the causes of loss. Future research should be further refined to explore more complex factors affecting the loss of high-level talents. Second, we should conduct cross-college comparative studies. Future research can compare higher vocational colleges in different regions and different types to reveal the commonalities and differences of talent loss under different backgrounds, which will help to formulate more targeted policies and management strategies. Third, we should conduct long-term longitudinal research. It is recommended that future research conduct long-term follow-up research to observe the dynamic changes of high-level talent loss, understand long-term trends and impacts, and provide more lasting and effective data support for the formulation of education policies. Fourth, we should conduct an evaluation of the effectiveness of policy implementation. Research should focus on the actual effects of existing policy measures in reducing the loss of high-level talents, provide a basis for improving existing policies, and put forward more effective suggestions. Finally, it is recommended that future research can further explore the indirect impact of high-level talent loss on student education quality, social and economic development, etc., which will help to fully understand the extensive impact of talent loss in higher vocational colleges. Through these suggestions, future research can more deeply understand and respond to the problem of high-level talent loss in higher vocational colleges, and provide a more solid theoretical foundation and practical guidance for the development of higher vocational education.

References

- Bassioni, G., Adzaho, G., & Niyukuri, D. (2016). Brain drain: Entice Africa's scientists to stay. *Nature*, 535 (7611), 231-231.
- Beechler, S., & Woodward, I. C. (2009). The global "war of talent". *Journal of International Management*, 15, 273-285.
- Bredtmann J., Martínez Flores F., & Otten S. (2019). Remittances and the brain drain: Evidence from microdata for Sub-Saharan Africa. *The Journal of Development Studies*, 55 (7), 1455-1476.
- Cervantes, M., & Guellec, D. (2002). The brain drain: Old myths, new realities. Organisation for Economic Cooperation and Development. The OECD Observer, 230. 40-42.
- Chen, C. & Fang, Y. (2021). Talent Loss in Higher Education Institutions: An Analysis of Causes and Solutions. *Journal of Educational Development*, 38 (6), 102-108.
- Chen, X. D. (2019). The strategic significance of high-level talents in the development of higher vocational education. *Chinese Higher Education Research*, 12 (5), 45-52.
- Czaika, M., & Parsons, C. R. (2017). The gravity of high-skilled migration policies. *Demography*, 54 (2), 603-630.
- Dai, L. R. (2005). The evaluation concept of university ecology. *Higher Education Research*, 26 (6), 22-27.

- Davenport, S. (2004). Panic and panacea: Brain drain and science and technology human capital policy. *Research Policy*, 33 (4), 617-630.
- De Haas, H. (2010). The internal dynamics of migration processes: A theoretical inquiry. *Journal of Ethnic and Migration Studies*, 36 (10), 1587-1617.
- Devaro, J., & Brookshire, D. (2007). Promotions and incentives in nonprofit and for-profit organizations. *Industrial & Labor Relations Review*, 60(3), 311-339.
- Fan, X. L. (2010). Facing the Hidden Loss of Rural Teachers. *China Agricultural Education*, 6, 8.
- Fargues, P. (2011). International migration and the demographic transition: a two-way interaction. *International Migration Review*, 45 (3), 588-614.
- Fu, L. B. (2012). Research on Innovative Cultivation Models for Applied Talents in Private Universities. *Journal of Yellow River University of Science and Technology*, 3, 11-15.
- Grossmann, V., & Stadelmann, D. (2013). Wage effects of high-skilled migration: International evidence. *The World Bank Economic Review*, 27 (2), 297-319.
- Guo, H. L., Zhen, F., & Wang, F. (2016). A Study on the Flow of Higher Education Talents in China and Its Influencing Factors. *Education Research at Tsinghua University*, 37 (1): 69-77.
- Halman, L., & Müller, H. (2006). Contemporary work values in Africa and Europe: Comparing orientations to work in African and European societies. *International Journal of Comparative Sociology*, 47 (2), 117-143.
- He, J., Wang, H. C., & Zheng, X. Y. (2014). Analysis of the current intention of scientific and technological talents in colleges and universities. *Population and Development*, 20 (3), 24-32, 42.
- Henry & Louis. (1982). Multilingual demographic dictionary: English section. *Ordina Editions*.
- Herbert A. Simon. (2007). Management Behavior. *Beijing: Mechanical Industry Press*.
- Levin, K. (1971). The war situation.
- Li, H., & Zhang, L. (2020) Regional Economic Development and Talent Mobility: An Empirical Analysis Based on Inter Regional Mobility in China. *Regional Economic Review*, 42 (2), 88-95.
- Li, J. M., & Zhang, Y. Q. (2020). Analysis of the reasons for talent loss in vocational colleges and research on prevention mechanisms. *Modern Vocational Education*, 21, 124-125.
- Li, L. (2015). Research on the influencing factors and countermeasures of implicit turnover of teachers in J Vocational College. *Jiangxi: Nanchang University*.
- Li, M., & Chen, J. (2021). Challenges and countermeasures of China's brain drain: an analysis from an international perspective. *International Talent Exchange*, 7, 56-63.
- Li, M., & Wang, T. (2020) The Historical Background and Countermeasures of High level Talent Loss in China. *Research on Educational Development*, 40 (2), 78-84.
- Li, X. & Zhang, Q. (2020). Understanding the Brain Drain: A Study on High-level Talent Turnover. *China Human Resource Development*, 24 (3), 88-94.
- Li, X. H., & Wang, F. (2022). The current situation and optimization path of high-level talent management in higher vocational colleges. *Higher Vocational Education*, 43 (4), 12-18.
- Li, X. M., & Wang, C. H. (2020) Research on Talent Loss and Countermeasures in Central and Western Regions. *China Human Resources Management*, 11 (5), 56-63.
- Li, X. Y. (2021). Effectively prevent and control the loss of high-level talents in vocational colleges. *Human Resources*, 20, 90-91.
- Li, Y. (2022). Analysis of Talent Flow in Vocational Colleges. *Chinese information*, 12, 176-178.

- Liang, Y. F. (2019). Cause analysis and policy research on the loss of backbone teachers in Z college. (Master's Thesis). *Hebei University of Geosciences*.
- Liu, B. (2019). The "Double High Plan" enhances the quality of vocational education development from multiple dimensions. *Modern Education Management*, 6, 96-100.
- Liu, X. L. (2010). Reflections on Building a Stable Mechanism for Talent Teams in Vocational Colleges. *Xiang Chao*, 9, 72-73.
- Liu, Y. M. (2007). From the Perspective of Needs Theory to Analyze the Loss of Teachers in Vocational Colleges. *Science & technology Information*, 23.
- Mamun, C. A., & Hasan, N.H. (2017). Factors affecting employee turnover and sound retention strategies in business organisation: A conceptual view. *Emerald Insight*, 15 (1), 63-71.
- Niu, J. F. (2016). Attribution analysis of brain drain in Western Universities from the perspective of incentive theory. *Time Finance*, 7, 327-329.
- Qiu, X. J. (2019). Research on the recessive loss of high-level talents in higher vocational colleges —Take Fuzhou area as an example. *Journal of Taiyuan City Vocational and Technical College*, 3, 61-62.
- Qu, Z. J. (2018). Discussion on the causes and countermeasures of brain drain in local universities in central and western China. *Think Tank Era*, 10, 108-109.
- Silzer, R., & Dowell, B. E. (2010). *Strategy-Driven Talent Management: A Leadership Imperative* (1st ed.). San Francisco, CA: Jossey-Bass.
- Soon, J. J. (2010). The determinants of students' return intentions: A partial proportional odds model. *Journal of Choice Modelling*, 3 (2), 89-112.
- Tan, Z. L. (2021). Research on the Salary Incentive Mechanism for Local Universities to Gather High level Talents. *Modern Economic Information*, 16, 7-10.
- Tang, X. X. (2017). Research on the problem of brain drain in Qiqihar universities based on incentive theory. *Theoretical Observation*, 7, 162-164.
- Tian, F. H. (2006). An ecological analyses of the loss of the qualified teachers in colleges and universities of the less-developed districts: An investigation of the loss of the qualified teachers in the colleges and universities of the south and north of Shaanxi province. *Journal of Northwest University (Philosophy and Social Sciences Edition)*, 36 (5), 79-83.
- Wang, J. & Zhao, L. (2019). The Concept and Causes of High-level Talent Drain. *Human Resource Management Review*, 29 (7), 147-153.
- Wang, X. (2022). Research on the introduction and training model of high-level talents. *Education and Talent Research*, 45 (6), 52-59.
- Wang, X. P. (2006). Research on the status quo, causes and countermeasures of brain drain in western universities. *Journal of Xihua University (Philosophy and Social Sciences edition)*, 25 (5), 93-94.
- Wang, Y. Q. (2016). Analysis of the causes and countermeasures of brain drain in colleges and universities. *Management Forum*, 13, 157.
- Watanabe, S. (1969). The Brain drain from developing to developed countries. *The International Laboratory Review*, 99 (4), 401-433.
- Wu, G. X. (2013). On the Loss of Teachers in Vocational Colleges. *Journal of Tianjin Vocational College Union*, 15 (9), 11-12, 27.
- Xiong, L. Z., & Liu, Z. X. (2014). Talk about the reasons of high-level talent drain and the strategy of stability in ethnic local colleges and universities. *Guangdong Chemical Industry*, 41 (24), 130-131.

- Xu, Z. & Li, M. (2022). High-level Talent Loss in China's Vocational Colleges: An Emerging Issue. *Journal of Higher Education Research*, 45 (2), 45-53.
- Yan, G., Yue, Y. & Niu, M. (2015). An empirical study of faculty mobility in China. *High Education*, 69, 527–546.
- Yang, Z. Q. (2014). Problems and countermeasures of high-level brain drain in western universities. *Research in Continuing Education*, 1, 84-86.
- Ye, L. Y. (2021). Evaluation and Improvement Countermeasures of High-level Talents' Innovation Ability in Higher Vocational Colleges under the Background of Industry Education Integration. *Vocational Education Communication*, 2, 72-80.
- Yu, L. G., Wang, X. M., Wang, Z. Y., & Liao, H. J. (2005). An Analysis of the Reasons for the Loss of Teachers in Vocational Colleges and Countermeasures. *Petroleum Education*. 5, 53-55.
- Yu, Q. S. (2014). Research on the issue of youth talent loss in grassroots central banks. *Financial Education Research*, 27 (2), 76-81.
- Zhang, M. (2020). Multidimensional analysis of high-level talents. *Human Resources Development*, 35(6), 25-32.
- Zhang, Y. (2019). Analysis of key issues of “connotative development” of higher vocational education - Comments on “Research on Connotative Development of Higher Vocational Education”. *News Lover*, 6, 105.
- Zhang, Y. Y., & Li, H. (2022). The Current Situation and Countermeasures of the Drain of High-level Talents: A Case Study of a Province. *Chinese Higher Education Research*. 34(6), 45-52.
- Zhao, R. Y., & Zhang, X. Y. (2018). Analysis of the Correlation between Talent and University Ranking in Chinese Universities under the Background of Double First Class Construction——Based on the RCCSE 2017 Evaluation Report on Chinese Universities and Disciplines. *Journal of Chongqing University (Social Sciences Edition)*, 24 (3), 117-127.
- Zheng, F. (2018). A Study on the Factors and Countermeasures of Talent Loss in Universities in the Western Region. *Teacher training and Management*, 5, 54-57.
- Zhou, H. F., & Lou, J. (2020). Exploration of the reasons and mechanisms for the flow of high-level talents in universities under the background of “Double First Class” construction. *Journal of Beijing University of Posts and Telecommunications (Social Sciences Edition)*, 22 (1), 98-105.
- Zhou, L. (2021). Research on Strategies for Introducing and Cultivating High level Talents in Vocational Colleges from the Perspective of the “Double High Plan” Construction. *Journal of Jiamusi Vocational Institute*, 37(10), 150-151.
- Zhou, Y., Guo, Y. Z., & Liu, Y. S. (2018). High-level talent flow and its influence on regional unbalanced development in China. *Applied Geography*, 91, 89-98.
- Zhu, Q. Y., & Ma, D. (2021). The Reality and Necessity of Adaptive Development of Vocational Colleges from the Perspective of Capability Assessment: Analysis Based on the Evaluation Data of Vocational Colleges in H Province in 2020, 37(6), 135-142.
- Zhu, X. L. (2019). Study on the influencing factors of brain drain in innovation and entrepreneurship from the perspective of “siphon effect”: Taking Zhenjiang, Jiangsu Province as an example. *Assets and Finances in Administration and Institution*, 12, 3-4.
- Zhu, Y. M., & Zhang, X. M. (2015). Cultural inheritance and innovation of connotation construction in higher vocational colleges. *Vocational Education Forum*, 29, 45-48.