

Research on Policy Support, Business Environment and Talent Agglomeration Effect in SMEs

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Abstract

In the context of global economic competition and industrial transformation, small and medium-sized enterprises (SMEs) have become a vital force driving national economic growth, innovation, and employment. However, compared with large enterprises, SMEs are inherently disadvantaged in talent attraction, retention, and development due to limitations in scale, capital, and brand influence, a core bottleneck restricting their high-quality development. Talent agglomeration, as a manifestation of regional and enterprise talent advantages, is closely related to external policy support and business environment. Based on the perspective of business administration and human resource management, this paper takes the talent agglomeration of SMEs as the research core and constructs a theoretical framework of “policy support - business environment optimization - talent agglomeration effect”. It combines typical cases of SME talent development in China and uses authoritative literature and empirical data to explore the mechanism of policy support and business environment affecting the talent agglomeration of SMEs, as well as the synergistic effect between the two. The study finds that targeted policy support can effectively compensate for the resource shortcomings of SMEs, optimize the business environment can enhance the comprehensive attractiveness of SMEs to talents, and the two form a synergistic driving force to jointly promote the formation and sustainable development of talent agglomeration in SMEs. Finally, this paper puts forward targeted suggestions to improve the policy system, optimize the business environment, and enhance the talent agglomeration effect of SMEs, providing theoretical reference and practical guidance for solving the talent dilemma of SMEs and promoting their sustainable development.

Keywords

Small and medium-sized enterprises, Policy support, Business environment, Talent agglomeration, Human resource management

Introduction

Research background and significance

In the modern economic system, SMEs account for more than 90% of enterprises in most countries and regions, undertaking important functions such as promoting market competition, stimulating innovation vitality, and absorbing labor employment. In China, SMEs contribute more than 60% of GDP, more than 70% of technological innovation achievements, and more than 80% of urban labor employment, which is an indispensable part of the national economic development.

However, in the process of development, SMEs are facing increasingly prominent talent problems: It is difficult to introduce high-level talents, the loss rate of

existing talents is high, the talent structure is unreasonable, and the ability of independent talent training is weak.

According to *the 2024 China SME Development Report*, more than 65% of SMEs believe that talent shortage is the primary problem restricting their development. The talent gap in emerging industries such as high-tech manufacturing, digital economy, and technological services is particularly obvious [1].

Talent agglomeration refers to the phenomenon that a large number of talents of different levels and types gather in a specific region or industry within a certain period of time. This forms a talent ecosystem that

matches the development needs of enterprises and promotes the coordinated development of talents and enterprises. For SMEs, talent agglomeration can not only solve the problem of talent shortage but also realize the sharing of talent resources, technological spillover, and innovative synergy, thereby enhancing the core competitiveness of enterprises. The formation of talent agglomeration is not spontaneous. It is deeply affected by external institutional environment and policy orientation. Policy support, including talent introduction policies, financial support policies, and innovation incentive policies, can directly reduce the cost of talent introduction and development for SMEs. The business environment, covering administrative approval, market supervision, legal protection, and public services, constitutes the external soil for the survival and development of SMEs and affects the willingness of talents to gather and stay.

In the field of business administration and human resource management, existing studies have paid attention to the importance of talent management for enterprise development. However, most of them focus on large enterprises, and research on the talent agglomeration of small and medium-sized enterprises (SMEs) remains relatively insufficient. At the same time, the existing literature on policy support and business environment mostly studies their impact on enterprise growth and innovation performance separately. The research on the synergistic mechanism between the two and the talent agglomeration effect of SMEs is not systematic enough. Therefore, this paper takes SMEs as the research object and explores the relationship between policy support, business environment, and talent agglomeration effect. This has important theoretical significance for enriching the research system of SME human resource management and talent agglomeration. It also has practical guiding significance for governments at all levels to formulate targeted policies, optimize the business environment, and help SMEs break through the talent bottleneck.

Research objectives and content

This paper takes the talent agglomeration effect of SMEs as the core research objective, and specifically completes the following research contents.

First, sorting out the relevant theories of policy support, business environment and talent agglomeration, and clarifying the connotation and measurement dimensions of each variable. Second, analyzing the mechanism of policy support affecting the talent agglomeration of SMEs, the mechanism of business environment affecting the talent agglomeration of SMEs, and the synergistic mechanism of policy support and business environment. Third, combining typical cases to conduct empirical analysis on the relationship between the three, and verifying the promoting effect of policy support and business environment optimization on the talent agglomeration of SMEs. Fourth, putting forward feasible countermeasures and suggestions to enhance the talent agglomeration effect of SMEs from the perspectives of policy improvement and business environment optimization.

Research methods and innovations

This paper adopts a combination of theoretical analysis and case analysis. In terms of theoretical analysis, it sorts out and summarizes the classic theories such as talent agglomeration theory, resource-based view, and institutional theory, and constructs a theoretical analysis framework [2]. In terms of case analysis, it selects typical regions and SMEs with outstanding performance in talent agglomeration in China, such as Liuzhou City in Guangxi and Bozhou District in Zunyi City in Guizhou. These regions have formed a perfect policy system and optimized business environment to promote SME talent gathering. The study conducts in-depth analysis of their policy practices, business environment optimization measures, and talent agglomeration effects.

The innovations of this paper are mainly reflected in two aspects. First, from the perspective of business administration and human resource management, it focuses on the talent agglomeration problem of SMEs, which makes up for the deficiency of existing research focusing on large enterprises. Second, it breaks through the single perspective of existing research, explores the synergistic effect of policy support and business environment on the talent agglomeration of SMEs. It also clarifies the internal mechanism between the two, providing a new research perspective for solving the talent dilemma of SMEs, thus enriching the theoretical system of SME human resource management.

Theoretical basis and literature review

Core concept definition

The definition of SMEs varies from country to country. In China, SMEs are divided into small and medium-sized enterprises according to *the Standards for the Classification of Small and Medium-sized Enterprises (2021 Edition)* issued by the Ministry of Industry and Information Technology.

The classification is based on indicators such as operating income, number of employees, and total assets. SMEs are characterized by small scale, flexible operation, strong adaptability to the market, but weak anti-risk ability, insufficient capital and talent reserves. This paper mainly focuses on industrial SMEs, high-tech SMEs and service SMEs, which are the main groups facing talent agglomeration problems.

Policy support for SMEs in this paper refers to a series of policy measures formulated and implemented by the government to promote the talent development and growth of SMEs. These policies mainly include three dimensions: talent introduction and incentive policies, financial and tax support policies, and innovation and entrepreneurship support policies. Talent introduction and incentive policies include talent subsidies, housing security, children's education, and other preferential policies. Financial and tax support policies include tax reduction and exemption, loan interest subsidies, and financing convenience for SMEs. Innovation and entrepreneurship support policies include the construction of innovation platforms, industry-university-research cooperation support, and scientific research project funding.

The business environment refers to the sum of various external conditions and institutional arrangements for enterprises in the process of market entry, production and operation, and transformation and development. This paper is based on the World Bank's business environment evaluation system and China's local business environment construction practices. It divides the business environment into four dimensions: administrative approval efficiency, market competition environment, legal rights protection, and public service support. A good business environment is characterized by simplified approval procedures, fair market

competition, perfect legal protection, and comprehensive public services.

The talent agglomeration effect of SMEs refers to the comprehensive effect produced after a large number of talents gather in SMEs or industrial clusters dominated by SMEs, including talent scale effect, talent structure optimization effect, talent retention effect and innovation driving effect. The measurement of talent agglomeration effect mainly includes the number of talents introduced, the retention rate of core talents, the proportion of high-level talents, and the number of innovative achievements transformed by talents.

Theoretical basis

The resource-based view holds that enterprises are a collection of heterogeneous resources, and scarce, valuable irreplaceable resources are the source of enterprise competitive advantage. For SMEs, talents are the core strategic resource, but SMEs are inherently short of resources due to scale constraints. Policy support can provide external resource compensation for SMEs, such as financial subsidies and talent channels. Optimizing the business environment can reduce the external resource acquisition cost of SMEs, helping them obtain and gather core talent resources and form competitive advantages.

Institutional theory emphasizes that the institutional environment affects the behavior and performance of enterprises [3]. A sound institutional system and standardized institutional environment can reduce the uncertainty of enterprise operation and talent flow. Policy support belongs to formal institutional arrangements. It can guide the flow of talents to SMEs through institutional incentives. The business environment is a comprehensive embodiment of formal and informal institutions, and a good business environment can form a stable institutional expectation for talents and enhance their willingness to gather in SMEs.

Talent agglomeration theory believes that talent agglomeration is affected by factors such as regional economic development, policy environment, industrial supporting and living convenience. When a region or enterprise has policy advantages and a good business environment, it will form a "talent depression effect", attracting talents from other regions to gather. For SMEs, the formation of talent agglomeration can also produce a spillover effect, promoting the exchange and cooperation

of talents between enterprises and improving the overall talent level of SMEs.

Literature review

Foreign scholars have early research on SME talent management, focusing on the impact of enterprise internal human resource management practices on talent retention, such as salary incentives, career development and corporate culture. However, foreign research on the business environment mostly focuses on its impact on enterprise innovation and entrepreneurship, and there are few studies directly linking the business environment with the talent agglomeration of SMEs.

Domestic scholars have conducted a lot of research on SME talent problems, pointing out that talent shortage, high loss rate and imperfect training mechanism are the main problems. In terms of policy support, scholars believe that the current talent policies are mostly tilted towards large enterprises and high-level talents, and the pertinence and accessibility for SMEs are insufficient. In terms of business environment, studies have shown that simplifying administrative approval, improving financing convenience and strengthening legal protection can enhance the development vitality of SMEs and indirectly promote talent gathering.

However, the existing research has the following deficiencies. First, most of them study the impact of policy support or business environment on SME talent management separately. They lack research on the synergistic mechanism. Second, most of the research focuses on the macro level, and the case analysis for specific SME practice is insufficient. Third, from the perspective of business administration and human resource management, the research on the talent agglomeration effect of SMEs is not systematic enough, which needs to be further deepened [4].

Mechanism analysis of policy support, business environment and talent agglomeration effect of SMEs

Mechanism of policy support affecting talent agglomeration of SMEs

Policy support directly acts on the talent agglomeration of SMEs through incentive, guidance and guarantee mechanisms, and compensates for the inherent disadvantages of SMEs in talent competition.

First, the incentive mechanism of policy support reduces the cost of talent introduction and development for SMEs. For example, the government provides talent introduction subsidies, housing subsidies, and living allowances for SMEs to recruit high-level talents. This reduces the economic pressure of SMEs to attract talents. The tax reduction and exemption policies for SMEs that carry out talent training and introduce core talents reduce the operating cost of enterprises and enable them to invest more resources in talent construction.

According to the practice of Bozhou District in Zunyi City, Guizhou Province, the district has issued a number of supporting policies for private enterprise talent development. It has given subsidies and tax incentives for SMEs to carry out industry-university-research cooperation and talent training. As a result, the number of talents introduced by SMEs in the region has increased by 32% year-on-year, which directly reflects the incentive effect of policies.

Second, the guidance mechanism of policy support optimizes the talent structure of SMEs. The government formulates talent policies oriented to industrial development, guides SMEs to introduce talents in short supply of emerging industries, and supports enterprises to carry out talent training in key positions. For example, some regions have launched targeted talent introduction plans for high-tech SMEs, focusing on supporting the introduction of R&D and technical talents. This promotes the optimization of talent professional structure and age structure of SMEs, and enhances the matching degree between talents and enterprise development.

Third, the guarantee mechanism of policy support stabilizes the talent team of SMEs [5]. The government improves social security for SME talents, solving household registration, education, and medical care issues to ease their worries. Meanwhile, policy supports SMEs in building talent incentive and promotion mechanisms, enhancing talents' sense of belonging and loyalty.

Mechanism of business environment affecting talent agglomeration of SMEs

The business environment is the external soil for the survival and development of SMEs and an important factor affecting talent's choice of employment. A good business environment enhances the comprehensive

attractiveness of SMEs to talents through environmental optimization, expectation stabilization and platform building [6].

First, optimizing the administrative approval and market environment to enhance the development vitality of SMEs, thereby attracting talents. Simplifying administrative approval procedures, reducing the cost of enterprise handling, and creating a fair and orderly market competition environment can improve the operational efficiency and development potential of SMEs. Talents tend to choose enterprises with good development prospects, and the enhanced vitality of SMEs will naturally form a talent attraction effect. For example, Liuzhou City, Guangxi Province, has built a “one-stop” talent service platform and optimized the administrative approval process for SMEs. It has attracted more than 400 urgently needed talents for local key SMEs through customized talent recruitment activities. This achievement is closely related to the optimized business environment.

Second, improving the legal protection and public service environment to stabilize the employment expectation of talents. Strengthening the protection of intellectual property rights and safeguarding the legitimate rights and interests of enterprises and talents can create a stable and secure working environment for talents. Improving public services such as transportation, education, and medical care can create a favorable living environment for talents. Talents pay more and more attention to the comprehensive living environment when choosing employment, and a perfect public service and legal environment can enhance the willingness of talents to gather and stay for a long time. Therefore, the government should increase investment in public services and strengthen the construction of the rule of law. Only by continuously optimizing the soft environment can we truly retain talents and provide long-term support for the development of SMEs.

Third, building an industrial supporting and innovation environment to provide a development platform for talents. A good business environment is often accompanied by a sound industrial supporting system and innovation platform. SMEs gather in industrial clusters with perfect supporting facilities, and talents can obtain more opportunities for technical exchange and

career development. The industry-university-research cooperation platform built by the government provides a stage for talents to carry out technological research and development and innovation practice, meeting the self-development needs of talents and promoting the sustainable agglomeration of talents.

Synergistic mechanism of policy support and business environment

Policy support and business environment are not independent of each other, but form a synergistic driving force to jointly promote the talent agglomeration of SMEs. Policy support provides institutional incentives and resource support for optimizing the business environment. The optimized business environment enhances the implementation effect of policy support, forming a virtuous circle of “policy promotion + environment optimization”.

On the one hand, policy support is the core driving force for optimizing the business environment. The government’s formulation of targeted policies to simplify administration and delegate power, reduce taxes and fees, and protect the rights and interests of SMEs is a direct measure to optimize the business environment. Policy orientation can guide the market, society and other forces to participate in the construction of the business environment, and solve the pain points and difficulties in the business environment, such as financing difficulties, approval delays, and unfair competition.

On the other hand, the optimized business environment is an important carrier for the implementation of policy support. A sound business environment can ensure that SME talent policies are accurately implemented and effectively implemented, avoiding the phenomenon of “policy hollowing out”. For example, the government’s talent subsidy policy can be quickly implemented through a perfect public service system, and the policy dividend can be directly transmitted to SMEs and talents, enhancing the actual effect of the policy.

In the synergistic process, policy support solves talents’ “unwillingness” to enter SMEs through external incentives, while the business environment solves their “inability to stay” through environmental optimization. The two complement each other, building a sound talent ecology and promoting sustainable talent agglomeration for SMEs.

Case analysis of policy support, business environment and talent agglomeration effect of SMEs

Case selection

This paper selects two typical cases in China. The first is Bozhou District in Zunyi City, Guizhou Province, which represents regional policy and business environment practice driving SME talent agglomeration. The second is high-tech SMEs in Liuzhou City, Guangxi Province, which represents enterprise-level talent agglomeration under the support of regional policies and optimized business environment. The two cases have typical representativeness. Bozhou District has formed a sound policy system for SME talents and optimized the business environment through institutional innovation, with a significant talent agglomeration effect for SMEs. Liuzhou City focuses on the talent needs of SMEs in key industries and combines policy support with business environment optimization to help high-tech SMEs gather core talents. This case can fully reflect the relationship between policy support, business environment, and talent agglomeration effect.

Case 1: Practice of Bozhou District, Zunyi City, Guizhou Province

Bozhou District takes the talent development of SMEs as the key work and constructs a “1+1+N” talent policy system based on the provincial and municipal “14th Five-Year Plan” talent development plan. This system consists of one overall talent development plan, one district-level general policy, and a number of supporting measures.

Specifically, it has issued policies such as *the Implementation Plan for the Co-construction of Four Chains of Talent Team* and *Several Measures for Promoting the Talent Development of Private Enterprises to Help the Industrial Doubling Action*. These policies provide all-round support for SMEs in ten aspects, including scientific research innovation, skill training, and professional title evaluation. The district has set up a special talent fund to give subsidies to SMEs for introducing high-level talents. It also gives subsidies to SMEs for carrying out staff training. It encourages SMEs to set up R&D institutions and gives financial support for industry-university-research cooperation projects. It simplifies the professional title evaluation

process of SME talents. It breaks the restrictions of academic qualifications and identities to smooth the career development channel of SME talents.

Bozhou District has implemented a system of party committee contact and service experts and a system of cadres at three levels guaranteeing services for enterprises, set up a team of 177 talent service specialists, and provided “one-to-one” agency services for SMEs and high-level talents. The district has optimized the administrative approval process. It has realized the “one-stop” handling of enterprise-related matters. It has shortened the approval time limit by more than 50%. It has strengthened the protection of the legitimate rights and interests of SMEs. It has established a complaint and feedback mechanism for enterprises and solved the difficult problems encountered by SMEs in operation and talent management in a timely manner. At the same time, it has built 20 industry-university-research bases and enterprise technology centers relying on local vocational education resources, providing a platform for SME talent training and technological innovation.

Through the combination of policy support and business environment optimization, Bozhou District has achieved remarkable results in SME talent agglomeration. The district has introduced and trained more than 4,500 industrial talents for SMEs. This includes more than 120 professional and technical talents. More than 20 SMEs have established long-term cooperative relations with universities and scientific research institutions. The talent retention rate of core positions has increased by 28%. The number of scientific and technological achievements transformed by SME talents has increased year by year, and the innovation vitality of enterprises has been significantly enhanced. Talents have become the core driving force for the development of local SMEs, and the number of high-quality SMEs in the district has increased by 35% year-on-year.

Case 2: Practice of high-tech SMEs in Liuzhou City, Guangxi Province

Liuzhou City has implemented a precise talent introduction action for SMEs. It has established a “two-way contact and two-way service” mechanism with key SMEs. It has also carried out customized talent recruitment activities such as “cloud double selection +

offline special recruitment” to accurately match talents for enterprises.

The government has built an innovation and entrepreneurship cluster area for SMEs and provided supporting policies such as rent reduction and exemption, financial support, and talent awards. It has also held government-bank-enterprise-talent docking meetings to provide more than 1.1 billion yuan of talent financial support for SMEs. In terms of business environment optimization, the city has built a “digital talent pool + exclusive service network” system, set up a talent service hall, and integrated services such as policy consultation, subsidy application and talent settlement to provide convenient services for talents working in SMEs.

Affected by regional policy support and optimized business environment, local high-tech SMEs have achieved effective talent agglomeration. A total of more than 400 urgently needed talents in management and technical skills have been recruited for key SMEs, and more than 500 high-level talents have gathered in the innovation and entrepreneurship cluster area. These SMEs have formed a reasonable talent structure, and the proportion of R&D talents has increased from 15% to 32%; the core talent loss rate has dropped from 25% to 8%, and the talent stability has been greatly improved. Relying on the gathered talents, the SMEs have completed the registration of 196 technical contracts with a value of 1.682 billion yuan, and solved more than 40 technical problems, realizing the coordinated development of talent agglomeration and enterprise innovation and development.

Case summary

The two cases fully verify that policy support and business environment optimization have a significant promoting effect on the talent agglomeration of SMEs [7]. Targeted policy support can effectively solve the resource shortage problem of SMEs in talent introduction and training, and optimize the business environment can enhance the comprehensive attractiveness of SMEs to talents. The synergistic effect of the two can form a good talent ecology, realize the introduction, retention and development of talents, and form a sustainable talent agglomeration effect.

At the same time, the cases also show that the policy should be targeted to meet the actual needs of SMEs, and

the business environment should focus on solving the practical difficulties of enterprises and talents, so as to truly play a driving role in talent agglomeration.

Problems existing in policy support, business environment and talent agglomeration of SMEs

Problems in policy support

First, the pertinence of SME talent policies is insufficient. Most of the current talent policies are formulated with reference to the needs of large enterprises, and the policies for small-scale, low-profit SMEs are few. The policies are mostly tilted towards high-level talents, while the support for skilled talents and grassroots talents, which are in urgent demand of SMEs, is insufficient. Second, the accessibility of policies is poor. Some policies have high application thresholds and complex procedures, and SMEs lack professional personnel to handle them, resulting in many policy dividends not being truly enjoyed by enterprises. Third, the policy implementation supervision mechanism is not perfect. There is a phenomenon of “heavy formulation and light implementation” in some regions, and the policy implementation effect is not effectively evaluated and supervised, which reduces the actual effect of policy support. These deficiencies in policy design and implementation significantly weaken the effectiveness of policy support in promoting talent agglomeration in SMEs.

Problems in business environment

First, the administrative approval efficiency needs to be further improved. Individual regions still have problems such as multiple approval links and long handling cycles, which increase the operating cost of SMEs and affect the development vitality of enterprises. Second, the financing environment is not perfect. SMEs have the problems of difficult and expensive financing, and the financial support for talent development is insufficient, which limits the ability of enterprises to invest in talent construction [8]. Third, the public service matching is not in place. The construction of public services such as talent housing, children’s education and medical care in some regions lags behind, which cannot meet the living needs of talents and reduces the willingness of talents to gather in SMEs. Fourth, the market competition

environment is not standardized. The phenomenon of unfair competition still exists in individual fields, and the intellectual property protection of SMEs is not in place, which affects the innovation enthusiasm of enterprises and talents. These problems interact with each other and jointly restrict the improvement of the talent agglomeration effect of SMEs.

Lack of synergy between policy support and business environment

In some regions, the formulation of SME talent policies is disconnected from the optimization of the business environment, and there is no synergistic promotion mechanism. The policy formulation does not fully consider the actual situation of the local business environment, and the optimized business environment does not match the policy orientation, resulting in the failure of the two to form a joint force. For example, some regions have introduced talent incentive policies, but the supporting public services and legal environment are not perfect, and talents still face many practical difficulties after entering SMEs, making it difficult to form a long-term talent agglomeration effect.

Countermeasures and suggestions to enhance the talent agglomeration effect of SMEs

Optimizing the policy support system for SME talent development

First, formulating targeted talent policies for SMEs. According to the development characteristics and talent needs of SMEs in different industries and regions, launching differentiated talent policies, increasing support for skilled talents and grassroots talents, and reducing the application threshold of policies. Second, simplifying the policy application process and improve policy accessibility. Promoting the “one-stop” online application of talent policies, realizing the “one-network handling” of policy declaration, review and distribution, and reducing the handling cost of SMEs. Third, improving the policy implementation supervision and evaluation mechanism. Establishing a policy effect evaluation system, tracking the implementation of policies, listen to the feedback of SMEs and talents, and adjust and optimize policies in a timely manner according to the evaluation results. Fourth, increasing financial and tax support for SME talent training. Giving

tax incentives and training subsidies to SMEs carrying out staff training and industry-university-research cooperation, and encourage enterprises to improve their independent talent training ability [9].

Comprehensively optimizing the business environment for SME development

First, furthering simplify administrative approval procedures and improving service efficiency. Promoting the reform of “decentralization, regulation and service”, reducing unnecessary approval items, realizing “one-stop service” and “one-window handling” of enterprise-related matters, and creating a convenient and efficient administrative service environment. Second, optimizing the financing environment and solve the financing difficulties of SMEs. Encouraging financial institutions to launch special financial products for SME talent development, increasing loan support for SMEs, and reduce financing costs. Third, improve the construction of public service support. Increase investment in the construction of talent apartments, schools and medical institutions, solving the practical problems of talents such as housing, children’s education and medical care, and creating a comfortable living environment for talents. Fourth, standardizing the market competition environment and strengthening legal protection. Cracking down on unfair competition behaviors, strengthening the protection of intellectual property rights of SMEs and talents, and safeguarding the legitimate rights and interests of enterprises and talents.

Promoting the synergistic development of policy support and business environment

First, establishing a coordinated promotion mechanism of policy formulation and business environment optimization. The government departments should coordinate and cooperate in the process of formulating SME talent policies, fully consider the current situation of the local business environment, and make policies and business environment optimization match each other.

Second, taking policy support as the guide to drive the optimization of the business environment. Taking the SME talent policy as the starting point, promote the improvement of public services, legal protection and administrative services, and form a policy-oriented business environment optimization path.

Third, taking the business environment as the carrier to improve the policy implementation effect. Relying on the

optimized business environment to ensure the implementation of talent policies, and letting policy dividends directly benefit SMEs and talents.

Strengthening the internal human resource management of SMEs

While relying on external policy support and business environment optimization, SMEs should also strengthen their own human resource management [10]. First, establishing a scientific talent incentive mechanism, improving the salary and welfare system, and carrying out equity incentives and innovation dividends for core talents to enhance the sense of belonging and loyalty of talents. Second, paying attention to the career development of talents, building a perfect training and promotion system, and providing development space and opportunities for talents. Third, shaping a good corporate culture, enhancing the cohesion of the enterprise, and forming a corporate atmosphere that respects talents and pays attention to talents. Fourth, carrying out industry-university-research cooperation, taking the initiative to connect with universities and scientific research institutions, cultivating talents in line with the development needs of the enterprise, and realizing the coordinated development of enterprise development and talent growth.

Conclusion

This paper takes the talent agglomeration effect of SMEs as the research core. It is based on the theories of resource-based view, institutional theory, and talent agglomeration. It constructs a theoretical analysis framework of “policy support - business environment optimization - talent agglomeration effect”. It combines the typical cases of Bozhou District in Zunyi City and Liuzhou City in China. It conducts in-depth research on the relationship between policy support, business environment, and talent agglomeration of SMEs. The main research conclusions are as follows:

First, policy support has a direct promoting effect on the talent agglomeration of SMEs through incentive, guidance and guarantee mechanisms, which can compensate for the resource shortcomings of SMEs in talent competition and reduce the cost of talent introduction and training. Second, the business environment affects the talent agglomeration of SMEs by

enhancing the development vitality of enterprises, stabilizing the employment expectation of talents, and building a development platform. A good business environment is an important external condition for attracting talents to gather in SMEs. Third, policy support and business environment have a synergistic effect. Policy support provides institutional incentives for optimizing the business environment. The optimized business environment enhances the implementation effect of policy support, and the two jointly promote the formation and sustainable development of the talent agglomeration effect of SMEs. Fourth, there are still problems such as insufficient policy pertinence, imperfect business environment and lack of synergy between the two in the current practice, which restrict the talent agglomeration of SMEs. Addressing these issues is key to unlocking SME talent potential.

Finally, this paper puts forward countermeasures from four aspects. Optimizing the policy support system, improving the business environment, promoting synergistic development and strengthening the internal human resource management of SMEs.

Research limitations

This paper has certain limitations in the research process. First, the research mainly adopts case analysis, and the sample scope is limited. Future research can expand the sample scope and carry out large-scale empirical research to verify the research conclusion. Second, this paper focuses on the macro and meso levels of regional policies and business environment, and the research on the micro-level internal mechanism of enterprise talent agglomeration needs to be further deepened. Third, the research is based on the current situation of China's SMEs, and the applicability of the conclusion to SMEs in other countries and regions needs to be further tested.

Research prospect

In the future, with the continuous transformation and upgrading of the economy and the increasingly fierce talent competition, the talent agglomeration problem of SMEs will receive more attention. Future research can be carried out in the following directions. First, exploring the dynamic evolution mechanism of policy support, business environment and talent agglomeration of SMEs, and analyzing the changes of the relationship between the three in different development stages. Second, carrying

out comparative research on SME talent agglomeration in different countries and regions, and summarizing international experience that can be used for reference. Third, combining digital economy, artificial intelligence and other emerging technologies to explore the impact of digital business environment and digital talent policies on the talent agglomeration of SMEs, and adapting to the new situation of digital transformation of SMEs.

Talent is the first resource for the high-quality development of SMEs. Only by forming a joint force of government policy support, business environment optimization, and enterprise internal management can we truly solve the talent dilemma of SMEs. This requires multi-party collaboration and sustained efforts. This will promote the formation of a sustainable talent agglomeration effect and help SMEs achieve better and faster development.

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Conflict of Interest

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References

- [1] Li, S., Rees, C. J., Zhang, H. (2024) The influence of the labour market and COVID-19 on human resource practices in SMEs in China: a longitudinal study. *Employee Relations: The International Journal*, 46(1), 170-187.
- [2] Ioakeimidou, D., Chatzoudes, D., Symeonidis, S., Chatzoglou, P. (2024) HRA adoption via organizational analytics maturity: Examining the role of institutional theory, resource-based view and diffusion of innovation. *International Journal of Manpower*, 45(5), 958-983.
- [3] Emon, M. M. H., Khan, T. (2023) The impact of cultural norms on sustainable entrepreneurship practices in SMEs of Bangladesh. *Indonesian Journal of Innovation and Applied Sciences (IJIAS)*, 3(3), 201-209.
- [4] Abid, K., Loufrani, S. (2024) Talent management in small and medium-sized enterprises: towards an integrative multilevel approach in the French context. *Employee Relations: The International Journal*, 46(5), 1191-1216.
- [5] Zeng, J., Li, J., Yang, Q. (2024) Policy involvement and policy consistency identification of supportive policies for SMEs. *International Entrepreneurship and Management Journal*, 20(4), 2901-2937.
- [6] Abid, K., Polo, F. (2025) Talent development through intrapreneurship: a human-capital approach in French SMEs. *European Journal of Training and Development*, 49(9), 952-974.
- [7] Chen, G., Xu, L. (2025) Determinants of technology-based SMEs' ability to attract talent with a Master's degree: case study of a city in Northeast China. *Plos One*, 20(9), e0333184.
- [8] Chen, K., Cheng, H., Qin, Q. (2024) Assessing the impact of environmental accounting message disclosure quality on financing costs in high-pollution industries. *Journal of Cases on Information Technology (JCIT)*, 26(1), 1-18.
- [9] Liu, J., Jiang, M. (2025) The impact of industry-university-research institute cooperation on the innovation capability of Chinese university faculty. *Higher Education Studies*, 15(4), 298-311.
- [10] Dwikat, S. Y., Arshad, D., Mohd Shariff, M. N. (2023) Effect of competent human capital, strategic flexibility and turbulent environment on sustainable performance of SMEs in manufacturing industries in Palestine. *Sustainability*, 15(6), 4781.