Research on the Problems and Countermeasures of the Youth Talent Introduction Policy in the SCO Demonstration Zone

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Abstract: As a national-level open platform, China-Shanghai Cooperation Organization Local Economic and Trade **Cooperation Demonstration Zone (referred to** as "SCO Demonstration Zone") holds significant importance for the development of voung talent recruitment. Research reveals multiple issues in current youth talent recruitment limited policies: policy positioning lacking international vision; inadequate channels for attracting foreign talents; weak industrial platforms with traditional industrial structures and insufficient innovation elements; insufficient incentive effectiveness, low salary competitiveness, and imperfect promotion mechanisms; lack of support including housing, education, and healthcare; and weak cultural ecosystems leading to poor urban identity among young talents. To challenges, these optimization recommendations are proposed: formulate differentiated and internationalized talent recruitment policies; expand recruitment bv strengthening enterprise cooperation and foreign talent acquisition; promote the implementation of major projects to facilitate coordinated industrial and talent development; establish diversified incentive systems to enhance salary and career growth opportunities; improve housing, education, and healthcare support measures; and optimize urban cultural ecosystems to strengthen talent belonging. Through systematic policy optimization, the SCO Demonstration Zone can achieve a virtuous cycle between talent aggregation and high-quality development.

Keywords: SCO Demonstration Zone; Young Talents; Introduction Policies

1. Introduction

Young talents are a vital force in modern societal development, playing a crucial role technological advancement and economic growth. The Central Talent Work Conference has explicitly emphasized the need to prioritize youth talent development as a core component of national strategic talent cultivation. This requires providing them with greater trust, support, and assistance, enabling young professionals to take the lead in innovative development and become driving forces for transformation. In this study, "young talents" refer to employed individuals aged 35 or younger who have received college education or higher.

1.1 Basic Information about the SCO Demonstration Zone

In 2018, the China-Shanghai Cooperation Organization Local Economic and Trade Cooperation Demonstration Zone (hereinafter referred to as "SCO Demonstration Zone") was established in Qingdao. The SCO Demonstration Zone serves as a crucial platform for implementing the national strategy of opening up. It has been strategically positioned to connect with the new international cooperation platform of "Belt and Road" countries and serve as a bridge for connectivity between China and SCO member states.

The SCO Demonstration Zone adopts a "1 core area + N linkage zones" layout model, spanning 108 square kilometers across Qingdao. The core area in Jiaozhou City covers 61.1 square kilometers, comprising the 36.7-square-kilometer Jiaozhou Economic and Technological Development Zone and a 24.4-square-kilometer conceptual new district. This strategic location provides connectivity with Japan, South Korea, ASEAN countries, SCO member states, and Mongolia-Russia[1].

According to the "China-Shanghai Cooperation Organization Local Economic and Trade Cooperation Demonstration Zone Construction Master Plan", the construction of the SCO Demonstration Zone aims to expand new international cooperation space and build a new open pattern featuring land-sea linkage and two-way mutual assistance between the east and west. Currently, the demonstration zone has formed four major functional sectors: a modern trade center, a two-way investment cooperation center, an international logistics center, and a commercial-tourism-cultural exchange development center, comprehensively promoting high-quality regional economic development [2].

1.2 The Importance of Young Talents to the Construction of the SCO Demonstration Zone

Currently, the SCO Demonstration Zone is undergoing a critical phase of development opportunities and transformation challenges. As a national-level open platform, its construction and development urgently require strong support from high-caliber young talents. Practice has shown that scientifically sound talent recruitment policies serve as the key driver for aggregating premium human resources, directly impacting the establishment of a regional talent ecosystem and the effective utilization of human capital[3].

Since its establishment in 2018, the SCO Demonstration Zone has implemented multiple talent attraction policies and supporting measures. However, the actual outcomes still fall short of initial expectations. The zone's talent magnetism remains underdeveloped, policy appeal needs enhancement, and talent structure requires optimization. Against this backdrop, systematically improving the youth talent policy framework and comprehensively boosting regional competitiveness have become urgent priorities. By establishing more targeted and competitive policies, the zone aims to achieve three strategic objectives: First, gaining a proactive edge in intensifying talent competition; Second, unleashing talent dividends to foster synergistic interactions between knowledge innovation, technological breakthroughs, and industrial upgrading; Third, creating coordinated development model integrating "talent-industry-environment" dynamics sustain high-quality growth. These initiatives will significantly enhance the zone's business environment competitiveness, ultimately achieving mutually reinforcing progress in talent aggregation and industrial upgrading[4].

2. Theoretical Basis

2.1 Talent Agglomeration Motivation Theory

The analysis of talent aggregation focuses on multiple dimensions including economic markets, work-life environments, humanistic values, and geographical factors. There are two primary models of talent aggregation: government-supported initiatives and marketdriven mechanisms. This paper specifically government-supported examines aggregation. Governments achieve this through public policy formulation and the optimization of talent development ecosystems. Economist Tyler posits that a region's ability to attract talent is influenced by five key elements: high-quality opportunities, robust market supply, entrepreneurial innovation, employers' talent identification and utilization capabilities, and future career prospects[3]. In other words, the critical factors influencing talent mobility primarily stem from spiritual needs such as work-life satisfaction, living environment quality, and the realization of self-worth[5].

2.2 Theory of Talent Flow and Talent Introduction

Talent mobility refers to the spontaneous movement of professionals across regions, industries, and positions influenced by internal and external factors. The primary goal of talent recruitment is to attract skilled individuals, which requires organizations to possess sufficient "pull power" to effectively attract and retain talent. Talent policies serve as a crucial tool for attracting professionals. Through scientific design and strategic planning, these policies can enhance the appeal to meet demand, reduce resistance in the process, and ultimately achieve successful talent acquisition[6].

3. Analysis of the Current Situation of Young Talent Introduction in the SCO Demonstration Zone

As a national strategic platform, the construction of the SCO Demonstration Zone's "Four Major Centers" imposes unique demands on young talents. The current talent supply shows significant gaps in quantity, structure, and quality compared to industrial development needs, while existing policy systems struggle to effectively support strategic development requirements[7].

3.1 Young Talent Introduction Policy

Since its establishment in 2018, the SCO Demonstration Zone has continued to implement Jiaozhou City's talent recruitment policies, which is fundamentally inconsistent with the zone's status as a national strategic platform. The

current "Thirty Talent Policy Measures of the SCO Demonstration Zone" primarily address young professionals through university graduate living allowances, housing subsidies, and one-time relocation grants, as detailed in Table 1.

Table 1. Policies for the Introduction of Young Talents

Educational level	Subsistence allowance	housing subsidy	One-time settlement	
Doctoral candidate	2000 yuan/month for up to 36 months	1200 yuan/month, up to 36 months	150,000 yuan	
Master's research	1000 yuan/month, up to 36 months	800 yuan/month for up to 36 months	100,000 yuan	
Undergraduate	500 yuan/month, up to 36 months	500 yuan/month for up to 36 months	not have	

3.2 Functions of Talent Introduction Agencies

The Shanghai Cooperation Demonstration Zone Management Committee currently operates 10 departments. These include two General Departments: Department General (Administrative Affairs) and General Department II (Development Zone Management Office and Emergency Management Office). Three Industrial Development Departments are established: Development Department Development Department II, and Industrial Development Department III. Two Enterprise Service Departments are also operational: Enterprise Service Department I (Shanghai Cooperation Demonstration Zone Investment Promotion Bureau) and Enterprise Service Department II. Other key components comprise the International Exchange and Cooperation Department, Policy Research and Institutional Innovation Department, Regional Coordination Department, and disciplinary inspection and supervision bodies. As shown in Figure 1, personnel from General Department I are concurrently responsible for talent recruitment initiatives..

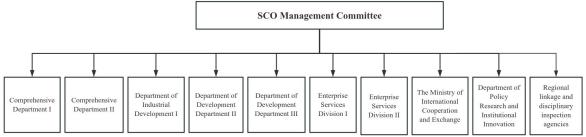


Figure 1. Organizational Structure of the SCO Management Committee

3.3 Overview of Demand for Young Talents

As a national-level international cooperation platform, the SCO Demonstration Zone demonstrates growing demand for globally-oriented professionals with specialized expertise and interdisciplinary capabilities. The 2023 Talent Demand Report from enterprises within the zone reveals significant demand for young talents in economic trade, logistics, cross-border e-commerce, and smart city development sectors, while there remains a critical shortage of internationally competent professionals and highly educated specialists[8].

The core industries in the SCO Demonstration Zone are experiencing significant talent shortages. Key sectors include international trade and logistics, financial services, smart cities, and digital economy. In the field of international trade and logistics, there's a 68% talent gap in cross-border e-commerce and

international supply chain management. Financial services require professionals skilled in international settlements and cross-border investment financing, with a 55% demand shortfall. Meanwhile, technical experts in smart city development and digital economy fields such as big data, IoT, and industrial internet face a 73% talent shortage[9].

There is a severe shortage of internationally competent interdisciplinary professionals and highly educated talents. Specialized fields like "Russian Language + Law" and "English + International Trade" face acute talent gaps, with only 15% of corporate needs being met. The qualification rate for Russian and Central Asian languages (including Kazakh and Uzbek) remains below 40%. In key industries such as aerospace and marine economy, the master's degree or higher qualification rate stands at 32%, while young high-education professionals are rapidly departing due to limitations in industrial

platform development[10].

3.4 Overview of young talent supply

At present, the total number of young talents in the SCO Demonstration Zone is about 28,000, and there is a large gap in the quantity, structure and quality of talent supply.

The total supply of young talents remains insufficient. Cross-border e-commerce professionals account for only 32%, while financial service professionals make up 45%. talent Technical supply in smart development and digital economy sectors stands at 27%, with international logistics professionals contributing 37%. Annual recruitment of professionals in less commonly taught languages falls below 30, and 70% of these positions are concentrated in first-tier cities[11].

The talent structure of young people is unbalanced. According to the statistics of insured personnel, most young talents are between 25-35 years old, with 38.8% holding associate degrees, 56.4% holding bachelor's degrees, and only 4.8% holding master's degrees. The number of doctoral students is zero. The age structure and educational background of talents are shown in Table 2 and Table 3:

Table 2. Age Structure of Young Talents

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Age	the proportion of (%)
20-25 years	15.80
25-30 years	41.80
30-35 years	20.64
35-40 years	13.64
> 40 years old	8.35

Table 3. Educational Background of Young
Talents

Tulcing					
Record of formal	The proportion of				
schooling	(%)				
Junior college education	38.77				
Undergraduate course	56.42				
Master Degree Candidate	4.81				
Doctoral candidate	0%				

4. Problems Existing in the Policy of Introducing Young Talents in Qingdao SCO Demonstration Zone

This survey distributed 102 questionnaires and achieved a 100% response rate, with all responses valid. The questionnaire covered key aspects including young professionals 'basic profiles, their satisfaction with entrepreneurial needs, work environment, living amenities, and innovation platforms, awareness of talent

policies, policy appeal, and suggestions for policy improvements. Using SPSSAU statistical software, we analyzed 26 attitude scale items from the questionnaire, yielding data as shown in Table 4. The α coefficient reached 0.733, exceeding the 0.7 threshold, indicating strong reliability. The KMO validity index of 0.705 further confirms excellent validity, demonstrating questionnaire's the robust measurement properties. Through data analysis and interviews, we identified the following issues in youth talent recruitment policies.

Table 4. Cronbach Reliability Analysis

Number of terms	Sample capacity	Cronbach α
77	102	0.733

4.1 Limitations of Policy Positioning and Lack of Strategic Vision

- (1) The current organizational structure of talent recruitment agencies in the SCO Demonstration Zone is fundamentally flawed. The integrated department's General Division I personnel are currently handling talent acquisition responsibilities concurrently, which lacks the required professional expertise to meet operational demands. Furthermore, fragmented management across multiple departments has created inefficient workflows and constrained operational efficiency, ultimately undermining the effectiveness of policy implementation.
- (2) Insufficient strategic alignment of talent policies. The talent policies in the SCO Demonstration Zone fully adopt Jiaozhou City's "Thirty Golden Policies for Talent", failing to reflect the differentiated talent attraction strategies of the demonstration zone. The policy innovation is insufficient, which does not align with the positioning as a national-level platform. The lack of strategic alignment results in inadequate alignment with the talent demands of the "Belt and Road" initiative, absence of international talent attraction measures, and insufficient coordination with the construction of the "Four Centers" in the SCO Demonstration Zone. Figure 2 shows the statistical results from the questionnaire item "Do you think the SCO Demonstration Zone needs to formulate introduction independent talent policies (differentiated from Jiaozhou City's talent introduction policies)". Among respondents, 45% believe that separate talent introduction policies are necessary, with 34%

considering it extremely important.

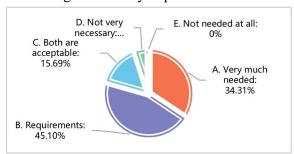


Figure 2. Whether the SCO Demonstration Zone needs to Formulate Independent Talent Introduction Policies

4.2 Poor channels for Attracting Talents, the Channels for Introducing Young Talents Need to be Optimized

4.2.1 Inadequate publicity of youth talent policies

In the test question "Do you know the youth talent policy of the SCO Demonstration Zone?", 36 percent said they did not know much, 25 percent said they knew basically, and 30 percent said they knew more (see Figure 3).

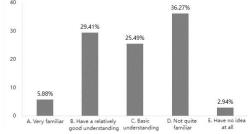


Figure 3. Do You Know the Youth Talent Policy of Shanghai New Area

4.2.2 Poor channels for introducing young foreign talents

Currently, there are over 300 international students in Qingdao. Under current immigration policies, most graduates cannot obtain work visas due to lacking two years of work experience or failing to accumulate 60 points in the points-based system, forcing them to leave. Additionally, some students receive only scholarships instead of wages during their internships at the SCO Demonstration Zone before their study visas expire. This situation significantly hinders the recruitment of young foreign talents.

4.3 Weak Support of Industrial Platform and Urgent Need to Strengthen the Construction of Young Talent Development Carrier

The current industrial structure of the SCO Demonstration Zone exhibits notable

shortcomings. Primarily characterized by low industrial sophistication, it remains dominated by traditional sectors such as trade, logistics, and transportation infrastructure, while lacking leading-edge high-end industrial projects and innovative industrial clusters. The concentration of innovation elements is insufficient, with a limited number of high-tech enterprises scattered across multiple locations, failing to establish economies of scale or collaborative innovation ecosystems. This structural limitation severely restricts career development opportunities for young talents- High-level professionals in key industrial fields face both career ceilings and lack cross-disciplinary collaboration platforms for innovative breakthroughs.

Furthermore, the industrial collaboration mechanism between the SCO Demonstration Zone and Jiaozhou City remains underdeveloped, hindering optimal allocation of talent resources across the region. This talent-industry integration dilemma has created a vicious cycle: inadequate industrial platforms restrict talent aggregation, while the shortage of high-caliber professionals in turn impedes industrial upgrading. To resolve this deadlock, it is imperative to establish a new ecosystem promoting coordinated development among industries, talents, and urban areas.

4.4 Insufficient Incentive Efficiency, the Development Motivation Mechanism of Young Talents Needs to be Optimized

The compensation system lacks competitiveness. Research data shows the salary competitiveness talents index for young in the SCO Demonstration Zone stands at merely 0.68 (industry benchmark: 1.0), with compensation accounting for less than 20% (compared to 35% in leading regions). Due to its geographical location and economic development level, most bachelor's degree holders earn between 3,000-6,000 yuan annually, while master's graduates typically earn 5.000-8,000 yuan. Compared with regions at the same tier, salaries in this zone demonstrate insufficient external competitiveness.

In the questionnaire "What do you think is the reason for insufficient incentives", more than 50% of respondents believe that the compensation incentive mechanism is insufficient, as shown in Figure 4.

4.5 Insufficient Policy Guarantee and Urgent Need to Improve the Support System for

Young Talents

4.5.1 Insufficient housing subsidies and low policy attractiveness

The housing subsidy standards for young talents remain relatively low (1,200 yuan/month for PhD holders and 800 yuan/month for master's degree holders), with incomplete coverage (those holding bachelor's degrees or below are ineligible). Regarding the survey question "How attractive are the housing and living subsidies in young talent recruitment policies compared to other regions?", 63% of associate degree holders rated them as average or less attractive. Undergraduate students (54%) and master's degree holders (38%) shared similar perceptions.

while 15% considered them very unattractive. Notably, one doctoral candidate in the survey group rated the policy as extremely unattractive (as shown in Table 5).

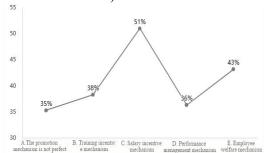


Figure 4. What do You Think are the Reasons for Insufficient Incentives

Table 5. Policy Attraction Questionnaire Analysis

			-0 &					
		3. What is your education level (%)						
Title	Name	Junior college	Undergraduate	Master	Doctor	Amount	X2	p
		education	course	iviasici	Doctor	10		
20. How attractive do you	very large	2(10.53)	12(17.39)	0(0.00)	0(0.00)	14(13.73)		
think the housing and living	Relatively large	5(26.32)	19(27.54)	6(46.15)	0(0.00)	30(29.41)		
subsidies for college	same as	9(47.37)	27(39.13)	4(30.77)	0(0.00)	40(39.22)	25.652	0 00044
graduates in Shanghai New Area are compared with	on the small size	3(15.79)	10(14.49)	1(7.69)	0(0.00)	14(13.73)	33.633	0.000**
other regions	Very small	0(0.00)	1(1.45)	2(15.38)	1(100.00)	4(3.92)		
amount to		19	69	13	1	102		

^{*} p<0.05 ** p<0.01

4.5.2 Supporting education and medical services are not sound

The Shanghai Cooperation Zone Demonstration Area currently faces challenges in educational resources, with only Jiaozhou No.2 Middle School, Shanghai Cooperation Zone Experimental Primary School, and Experimental Primary School currently enrolling students. International school resources remain scarce. Medical infrastructure is underdeveloped, as only Tongji University Affiliated Dongfang Hospital operates as a Grade III Class A medical institution. Additionally, there's no policy support for spousal employment assistance for young professionals.

(6) Weak cultural ecology and poor urban

identity of young talents

living environment in the SCO Demonstration Zone remains overly insular, leaving young professionals with limited social opportunities. A senior official from the Comprehensive Department revealed during an interview that when asked about reasons for leaving their positions, many young talents cited the restricted social atmosphere as a key factor, noting it hinders external connections and friend-making. In response to the survey question "What urgent issues do you think need immediate resolution in your work and daily life at the SCO Demonstration Zone?", 65% of respondents highlighted inadequate urban openness and a lack of recreational facilities as critical challenges, as shown in Figure 4.

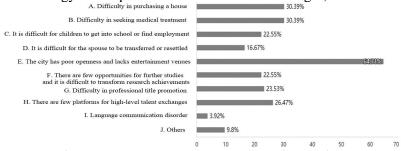


Figure 4. What do You Think are the Urgent Problems to be Solved in Your Work and Life in the SCO Demonstration Zone

5. Suggestions for Optimizing the Young Talent Introduction Policy in the SCO Demonstration Zone

5.1 Set Up a Full-Time Talent Department to Recruit Talents from All Over the World

5.1.1 Set up an independent talent introduction or talent service department

As a platform for international cooperation, the SCO Demonstration Zone bears significant historical development responsibilities and urgently requires an independent talent service department. By collaborating with surrounding universities and research institutions to assemble a specialized talent recruitment team, establishing a Human Resources Service Department under the existing Comprehensive Division I would not only enhance service efficiency and accessibility but also foster stronger professional belonging among young talents in the zone.

5.1.2 Formulate international talent introduction policies that are in line with the actual conditions of the SCO Demonstration Zone

The talent recruitment strategy for the SCO Demonstration Zone should elevate policy positioning, broaden recruitment perspectives, and establish specialized talent policies tailored to the zone's needs. Aligned with the development of its "Four Major Centers" and the growth of key industries and leading enterprises, the initiative should attract global talents from national and international levels. Priority should be given to recruiting urgently needed professionals in international trade, logistics, multilingual translation, and legal fields.

5.2 Expand Talent Channels and Build an International Talent Base

5.2.1 Build a service system of publicity, service and experience to improve graduates' willingness to stay in the district

A special column "Shanghai Cooperation Talents" has been set up on the official website and wechat public account of the SCO Demonstration Zone to release the latest talent policies and implementation rules in a timely manner, provide guidance on the application process of various talent projects, display the innovation and entrepreneurship stories of outstanding young talents, and report the employment cases of key enterprises in the demonstration zone.

Establish a regular policy promotion mechanism. Collaborate with Qingdao University, China Ocean University, and other universities in Qingdao to regularly organize the "SCO Talent Policy on Campus" series of promotional activities. Through policy interpretation sessions, corporate meet-and-greets, career development salons, and other formats, comprehensively showcase the development opportunities and talent policy advantages of the demonstration zone. Select talent consultants from university scholars, research experts, and corporate executives to form an "SCO Talent Advisory Board" that provides policy consultation and career guidance services. Conduct "Campus Tour of Talent Advisors" by organizing advisory groups to deliver specialized lectures and career planning workshops at universities. Select outstanding students from key universities as talent ambassadors, establish "Campus Talent Ambassadors," and provide them specialized training and work allowances. Implement "Enterprise Experience Days for Talent Ambassadors" by arranging visits to key enterprises in the demonstration zone for firsthand exposure to development environments. Host "SCO Career Development Bootcamps" to 'understanding deepen students of demonstration zone through internships and project practices. By building a service system integrating "policy promotiontalent services-practical experience," we will effectively enhance young talents' confidence in the demonstration zone's development and their willingness to stay.

5.2.2 Build a school-enterprise collaborative education system and deepen the talent introduction and cultivation system of industry-education integration

Establish a tripartite collaboration mechanism SCO the Demonstration universities, and enterprises, focusing on key areas such as international trade, modern logistics, and intelligent manufacturing. Jointly develop "order-based" talent training programs through a dual-mentor system where enterprise technical experts serve as practical mentors. Implement project-based teaching via codeveloped courses, with enterprises participating in curriculum design and conducting practical training using real-world business cases. Establish model internship bases through the "SCO Elite" special internship program, providing students with paid internship

opportunities. Promote the creation of joint university-enterprise laboratories, industrial colleges, and industry-academia-research collaborative innovation centers to facilitate technology commercialization and talent cultivation, ensuring precise alignment between academic programs and industry demands[4].

5.2.3 Innovate the mechanism of introducing intelligence and accurately meet the needs

To precisely align with the development needs of key industries in the Shanghai Cooperation Organization (SCO), we have innovatively established a "talent attraction and utilization" mechanism, implementing multiple measures to enhance talent team quality. By creating highend platforms such as expert workstations and corporate R&D centers, we focus on attracting outstanding young talents from home and abroad conduct consulting lectures, collaborations, and technical guidance in the demonstration zone. Concentrating on urgently needed fields for zone development, we prioritize recruiting three core talent categories: 1) interdisciplinary professionals proficient in international trade rules and foreign affairs; 2) multilingual experts with global language capabilities; 3) highly educated and skilled professionals in strategic emerging industries like aerospace, intelligent manufacturing, and integrated circuits, thereby effectively optimizing the talent structure of the demonstration zone.

We will deepen institutional reforms in talent recruitment mechanisms, focusing on breaking down systemic barriers to talent mobility. Key measures include: 1) Establishing cross-industry talent exchange mechanisms to optimize resource allocation; 2) Simplifying recruitment processes through "one-stop" talent services; 3) Overcoming traditional constraints like staffing quotas, identity status, and ownership structures to create a more open and flexible policy framework. This will enable market-oriented allocation and social sharing of talent resources. Through institutional innovation, we aim to unleash talent potential and provide robust support for the high-quality development of the SCO Demonstration Zone.

5.2.4 Optimize the residence, employment and entrepreneurship support system to gather overseas young talents

Optimize the talent residency and work permit system. Encourage enterprises in the SCO Demonstration Zone to actively recruit international interns. Drawing on the experience of the Shanghai Free Trade Zone, implement the "Overseas Talent Long-term Residence Permit (B Card)" system, allowing foreign students working in the zone to directly apply for a 10year B Card. Eliminate separate application processes for work permits and adopt a unified "one-card-through" management model. Remove age restrictions for young foreign talents in key industrial sectors while relaxing requirements for academic qualifications and work experience. Provide up to 5 years of work permit duration urgently needed skilled professionals meeting multiple criteria [5]. Grant direct employment eligibility to outstanding foreign graduates holding bachelor's degrees or higher. Establish a support system for foreign young talents' innovation and entrepreneurship. Create "International Youth Entrepreneurship Corridor" to encourage international students at Qingdao universities to engage in part-time activities entrepreneurial within demonstration zone. Eligible high-quality projects will receive entrepreneurial residence permits valid for up to three years. Foreign experts with core technologies will access a "Technical Immigration" fast-track program, featuring simplified business registration and visa processing procedures, expedited approval timelines, and startup funding support.

5.3 Promote the Implementation of Major Projects and Platforms, and Industrial Agglomeration Drives Talent Agglomeration

5.3.1 Implement tax incentives and build industrial innovation ecology

Leveraging Oingdao's industrial strengths and aligning with the cooperation needs of SCO member states, we will prioritize key projects in four major sectors: smart home appliances, machinery manufacturing, green food production, and electronic information manufacturing. We encourage research institutes, R&D institutions, and standard-setting enterprises in these fields to cluster in the demonstration zone, fostering collaborative research efforts. Enterprises will collaborate with research institutions, universities, and upstream/downstream partners across the industrial chain to establish While innovation platforms. maintaining existing industrial advantages, we will increase R&D investments in smart home appliances, machinery manufacturing, green food production, and electronic information manufacturing. By

focusing on high-tech industries with strong market demand, we aim to accelerate the development of specialized industrial clusters enhance the zone's competitiveness. Qualified tech enterprises within the demonstration zone will receive national and municipal-level certification under unified standards, with tax incentives ranging from 15% to 20% depending on certification tiers. We will cultivate leading enterprises and support more tech startups in going public, achieving deep integration of talent and industry to drive coordinated regional economic growth.

5.3.2 Promoting industrial platforms-collaborative gathering of young talents Establish an international exchange platform.

Create a regular hosting mechanism for the China-Shanghai Cooperation Organization (SCO) Local Economic and Trade Cooperation Conference, forming a brand system of "one conference, one exhibition, and one forum". Establish sub-forums for industrial cooperation among SCO member states and set up special zones for industrial feature alignment by country. Implement the integrated development model of "port-industry-city", and build an international hub port. Establish an international ship registration center to develop high-end equipment manufacturing, improve international community construction, innovate the "port + park + corridor" linkage mechanism, and create an international multimodal transport center.

Promote the substantive operation of the SCO Economic and Trade College. Establish an operational mechanism for the SCO Economic and Trade College jointly built by government, universities, and enterprises, where government provides policy support educational qualifications, enterprises participate in curriculum development and training base construction, and universities undertake the main functions of teaching and research. Launch a "Belt and Road" infrastructure construction organize training seminar, programs economic and trade officials from developing countries, and develop a multilingual training curriculum system. Establish a cross-border ecommerce practical training base and conduct international logistics and supply management certification training. Collaborate with key provincial universities to establish joint talent cultivation mechanisms in specialized fields such as international trade and crossborder logistics. Introduce international

professional technical training courses through the SCO Economic and Trade College, conduct advanced study programs and urgently needed talent training projects to alleviate the demonstration zone's demand for "high-level, specialized, and cutting-edge" talents.

Leveraging the strengths of key platforms, we will attract and cultivate strategic talents with core technologies to concentrate efforts on overcoming critical challenges. With forwardlooking vision, we will deploy major scientific projects to establish talent-sharing mechanisms aligned with regional development. Focusing on urgently needed innovation breakthroughs, we aim to strengthen comparative advantages and explore new models where talent drives highinnovation innovation and sustainable growth. Policies will be formulated to vigorously support the development of Qingdao Institute of Technology and other universities, establishing "Double First-Class" engineering disciplines essential for the SCO Demonstration Zone. This initiative will nurture innovative enterprises and tech talents with independent competitiveness, positioning the zone [6] as a vital hub for talent and advanced technologies.

5.4 Build a Diversified Talent Development Incentive System

5.4.1 Salary benchmarking in key industries and implementation of differentiated salary incentives

Conduct salary surveys focusing on key industries in demonstration zones such as international trade, modern logistics, and intelligent manufacturing. Select comparable demonstration zones like Xi'an International Port Area and Shanghai Free Trade Zone as benchmarks to establish an evaluation system covering eight dimensions including base salary. performance bonuses, and equity incentives. differentiated compensation strategies: Provide 15% scarcity allowances for talents in less commonly taught languages like Russian and Kazakh, align cross-border ecommerce compensation with Hangzhou Crossborder E-commerce Comprehensive Pilot Zone standards, and reference regional salary levels of leading enterprises like DHL and SF Express for international logistics professionals. programs in strategic emerging industries such as integrated circuits and artificial intelligence will allow companies to allocate 30% of profits

for specialized talent incentives. Establish dedicated reward funds with bonuses determined by individual contributions, team performance, and task completion quality and efficiency. Implement excess profit-sharing plans (15-20% extraction ratio) for technology-driven enterprises and pilot long-term equity incentive programs[7].

5.4.2 Optimize the dual-channel promotion system

Establish a scientific system for professional title and position advancement of young talents, creating career progression pathways. Implement project-based promotion systems management roles, allowing exceptional promotions for those leading major projects. Launch the "SCO Youth Management Elite" training program, with graduates joining the "Demonstration Zone Management Talent Reserve Pool" to enjoy "fast-track" career advancement policies (cross-level promotions) and priority recommendations for central stateowned enterprise positions in SCO member countries. Develop specialized titles like International Business Specialist and Crossborder Logistics Specialist to enhance career development channels. Introduce a "competitionbased evaluation" mechanism, incorporating awards from national/provincial vocational skills competitions (e.g., National Cross-border Ecommerce Competition, International Logistics Skills Competition) into professional title evaluations. First-prize winners may be directly certified as Intermediate Professionals (e.g., International Business Specialist/Cross-border Logistics Specialist), while second and third prizes are considered equivalent to passing Primary Professional Title evaluations.

5.4.3 Deepen growth empowerment training incentives

The government supports the establishment of an Industrial Internet Training Center through collaboration between the SCO Demonstration Zone and Haier COSMOPlat, focusing on core modules including industrial internet platform applications, cross-border e-commerce data analytics, and intelligent supply chain management to cultivate versatile professionals with digital operation capabilities. Employees participating in foundational courses such as industrial internet and cross-border e-commerce will receive 50% financial subsidies for training Enterprises organizing training may apply for annual per capita funding

support of up to 2,000 yuan. Employees obtaining authoritative certifications like Haier COSMOPlat's Industrial Internet Certification will receive full reimbursement of training costs and a one-time reward equivalent to 20% of their monthly salary. These certified personnel will be included in the enterprise's key talent pool, granting priority promotion opportunities.

To address the shortage of skilled professionals in less commonly taught languages and intelligent manufacturing, the initiative offers paid full-time training programs with job retention and 80% salary payments during the training period. **Employees** at SCO Demonstration Zone enterprises are encouraged to participate in vocational skill certifications such as Cross-Border E-commerce Operations Specialist and Industrial Internet Engineer. Those obtain industry-recognized who 50%-100% certifications will receive reimbursement of training costs. Additionally, employees are motivated to undergo social vocational skill assessments, with vocational training subsidies provided to those who pass the evaluations and obtain certification.

5.5 Improve the Level of Youth Talent Security and Improve Talent Security Policies 5.5.1 Improve the standard of housing subsidies

for young talents and enhance the competitiveness of policies

Drawing on Hainan Free Trade Zone's housing subsidy policies, we will appropriately increase rental subsidies for young talents. The monthly allowance will be set at 1,500 yuan for master's degree holders (or intermediate professional titles and senior technicians), 1,000 yuan for bachelor's degree holders (or junior professional titles and junior technicians), and 800 yuan for associate degree holders, with the subsidies to be distributed over 36 months. This ensures stable support for young talents during their transition period. A one-time relocation allowance will be introduced to encourage talent retention. Inspired by Oingdao's Shinan District housing policy, master's and doctoral graduates purchasing homes in the demonstration zone will receive an additional 50,000 yuan relocation allowance on top of Oingdao's standard housing purchase subsidy, thereby reducing financial pressure. Eligible bachelor's graduates may receive housing subsidies ranging from 20,000 to 30,000 yuan, further enhancing the policy's inclusivity.

We propose optimizing the subsidy distribution mechanism by separating rental and home purchase subsidies. Under current policies, already received rental subsidies are deducted when applying for home purchase subsidies, which undermines the actual sense of fulfillment among talents. It is recommended to abolish this deduction mechanism, allowing talents to fully receive rental subsidies during their three-year housing lease period and enjoy an additional one-time home purchase subsidy when buying a house, thereby establishing a "dual subsidy" model for both renting and purchasing.

5.5.2 Improve the living security policies for children of young talents and employment of their spouses

We will enhance educational resources and implement enrollment policies for children of talents. The SCO Demonstration Zone will deepen its efforts in building high-level universities, supporting qualified universities in Jiaozhou City to accelerate the development of first-class disciplines and promote construction of local high-level universities and applied universities. We will achieve full coverage of school district-based and groupbased management in compulsory education, facilitating cross-school mobility of outstanding teachers. Qingdao's premium education groups are encouraged to establish branch schools or cooperative programs in the SCO Demonstration Zone, while introducing top-tier international schools. Based on the talent classification of young professionals, their children will enjoy autonomous school selection rights when entering public or non-profit kindergartens, primary schools, and junior high schools in Qingdao. Category A (top-tier talents) children will benefit from quota allocation policies during junior high school admissions, while Category B (leading talents) children will receive score reduction policies for high school entrance exams [8]. Priority will be given to ensuring access for children of talents who cannot currently enroll in quality schools under existing policies.

We will implement employment policies for spouses of young talents through multiple channels. For spouses working in government agencies or public institutions outside Qingdao, we will coordinate their employment to local units in the city based on equivalent qualifications and professional expertise. Additionally, we will identify suitable positions

through coordination and recommendations tailored to their academic backgrounds, work experience, and personal preferences [9]. These comprehensive measures aim to provide employment support and security for spouses of high-level talents, thereby enhancing talent recruitment and retention.

5.5.3 Improve the medical policy for young

Support overseas medical institutions hospitals within the establishing Demonstration Zone, while assisting municipal healthcare providers in developing specialized medical services. Pilot cross-border medical insurance programs for patients unable to access domestic or international health insurance, breaking down policy barriers. Designate multiple hospitals as designated institutions for talent health management, establishing dedicated outpatient clinics and online appointment portals to provide high-level professionals with services appointment scheduling, including consultations, hospitalization, and personalized guidance[10]. Parents and spouses shall enjoy equivalent benefits as the talent themselves, with free health checkups provided at varying frequencies and standards according to their professional ranks.

5.6 Optimize the Service Ecology and Build a Talent-Friendly Public Service System

5.6.1 Promote multi-level housing construction for talents and create a one-stop livable living circle

We will continue advancing the talent housing initiative in the SCO Demonstration Zone. The SCO District Government, through integration of social capital, is enhancing housing support for high-level professionals, leading talents, urgently needed experts, and university graduates. Tailored to different target groups, we are developing specialized housing complexes including talent apartments, overseas returnee residences, and innovation hubs, catering to diverse housing needs. This creates an environment where professionals can maintain their careers within 8-hour workdays while enjoying quality living outside of work hours. Simultaneously, we are accelerating development of the SCO International Talent Innovation and Entrepreneurship Industrial Park, which integrates business incubation spaces, office facilities, shopping and dining venues, residential complexes, cultural entertainment

venues, and recreational amenities. This comprehensive complex provides a one-stop living and working environment tailored for talent development.

5.6.2 Build a government-enterprise-school linkage and friendship platform, and build a spiritual and cultural service system

To retain talent, we must address not only their material needs but also their spiritual aspirations. relevant departments of the Demonstration Zone should intensify research on young professionals 'psychological needs, conducting quarterly surveys to identify mental health concerns like loneliness and career anxiety. Customized support programs should be developed to tackle these issues. A dedicated "Youth Support Station" counseling center will provide free psychological guidance services. Led by the Demonstration Zone Administrative Committee in collaboration with the Municipal Women's Federation, and HR departments of key enterprises, monthly themed social events (reading clubs, cultural salons, outdoor teambuilding activities) will be organized[11]. For older single individuals, a special "Yuanju SCO" event series will be created, incorporating interactive formats like intangible cultural heritage experiences and immersive role-playing games to engage younger demographics.

organization conducts cross-industry exchange programs. Regular "Young Innovators' Tea Sessions" facilitate technical knowledge sharing and resource coordination between enterprises in the demonstration zone and talent units in Jiaozhou City. The "SCO Youth Forum" (TED-style) invites outstanding professionals to share career journeys, fostering a sense of belonging among young talents. Cultural empowerment initiatives include the "SCO Reading Month" program, which collaborates with Jiaozhou City Library to organize book giveaways and shared reading events. Monthly International Cultural Festivals feature language workshops and culinary experiences tailored to Russian-speaking regions and Central Asian cultures, meeting the social interaction needs of young professionals.

5.6.3 Cultivate talents with urban culture

Shaping the SCO Urban Cultural IP. As a distinctive competitive edge for modern cities, urban culture has become increasingly vital to younger generations raised in an era of material abundance who value cultural refinement. By systematically preserving Jiaozhou's

millennium-old commercial heritage and integrating historical resources like the Banqiao Town Ruins and the Maritime Silk Road's starting point, we are establishing the "Jiaozhou Commercial Culture Museum" as a cultural landmark. The "SCO Cultural Corridor" initiative employs AR technology to recreate Jiaozhou's prosperity as a pivotal northern trade hub, enhancing immersive cultural experiences that highlight local cultural strengths and deepen community heritage.

Developing a "15-Minute Cultural Circle". The Shanghe Demonstration Zone will establish 24hour smart libraries and cultural cafes near talent apartments and industrial parks. A "Cultural Allin-One Card" system will integrate library, museum, and theater resources, offering free or discounted access to young professionals throughout the year. The "Jiaozhou Merchant Culture Study Tour" initiative will organize visits to ancient port sites and heritage enterprises, creating innovative experiences. The "Urban Cultural Revitalization Plan" encourages talents to innovate designs for intangible cultural heritage projects Jiaozhou paper-cutting and black pottery craftsmanship.

Integrating international elements to foster an open cultural ecosystem. By leveraging the unique cultural characteristics of SCO member states, we will host the "SCO International Cultural Festival" featuring distinctive events such as Russian oil painting exhibitions and Central Asian handicraft markets. In the core demonstration zone, a multilingual cultural service center will be established to provide books and film resources in less commonly taught languages, meeting the needs of international talents while nurturing local talent development.

6. Concluding Remarks

As a national-level open platform, the optimization and implementation of youth talent recruitment policies in the Shanghai Cooperation Demonstration Zone not only impacts its own high-quality development but also serves as a crucial initiative for Qingdao City to implement the national talent strategy and promote regional coordinated development. Currently, the zone faces multi-dimensional structural challenges in talent recruitment, including policy positioning, industrial support, and incentive mechanisms. These issues require systematic resolution

through coordinated planning by the Qingdao Municipal Government and cross-departmental collaboration.

In the future, the SCO Demonstration Zone needs to integrate into the construction of Qingdao's international talent hub with a more open attitude. Through policy innovation and institutional breakthroughs, the zone will be developed into the preferred destination for young talents along the Belt and Road to pursue innovation and entrepreneurship. Only through coordinated government efforts, multi-party collaboration, and sustained dedication can we truly resolve deep-seated structural achieve contradictions, mutual promotion between talent aggregation and regional development, and provide solid support for Qingdao's construction as a modern socialist international metropolis in the new era.

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References

- [1] Hercog. M. The Role of the State in Attracting Highly-skilled Migrants: The Case of the Netherlands [J]. eipasecope, 2019(3):19-24.
- [2] Maslow. A Theory of human motivation [J]. Psychologiral Review, 2018(03):35-37.
- [3] Sun Rui and Sun Yujie. Construction of an Evaluation System for the Introduction Policy of Young Scientific and Technological Talents and Assessment of Policy Content [J]. China Science and

- Technology Forum, 2020, (11):120-128+146.
- [4] Cui Hongyi, Pan Mengqi, and Zhang Chao. Analysis of Shenzhen's Innovation Talent Development Environment Based on Principal Component Analysis [J]. Science and Technology Progress & Strategies, 2020,37(07):35-42.
- [5] Hu Jun and Ren Yangqiu. Talent Incentives, Corporate Innovation Performance, and Structural Distortions in Innovation - A Quasi-Natural Experiment Based on Urban Talent Recruitment [J]. Management Review, 2024,36(04):100-114.
- [6] Hu Jun and Ren Yangqiu. Talent Incentives, Corporate Innovation Performance, and Structural Distortions in Innovation - A Quasi-Natural Experiment Based on Urban Talent Recruitment [J]. Management Review, 2024,36(04):100-114.
- [7] Yu Minggui, He Mengmeng, Zhang Mengmeng. Talent Introduction Policies, Optimal Allocation of Labor and Intelligent Manufacturing [J/OL]. China Industrial Economics, 2024, (05):116-134.
- [8] Zhang Dali and Li Xiaoming. Review, Current Status and Prospects of Talent Introduction Policies in Henan Province [J]. China Human Resources Development, 2022, (05):11-13.
- [9] Jin Lin. Research on the Urban Talent Environment Evaluation System in Shandong Province [J]. Finance and Economics, 2019(02):137-139.
- [10] Peng Chuanyu and Li Jiafu. Comparative Study of Science and Technology Talent Policies in Urban Clusters Based on a Three-Dimensional Framework: A Case Study of the Yangtze River Delta and Chengdu-Chongqing Urban Clusters [J]. City Observation, 2022, No.81(05):80-96+162.
- [11] Xu Lei, Zhang Xinyu, Liu Rui. Study on Local Government Talent Introduction Policies under Signal Transmission Model [J]. Economic Review, 2024(03):142-164.