

Brainpower Process: Understanding Chinese Talent Flow Between China and Australia

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Abstract

Despite extensive research on Chinese talent flow between the home and host countries, little is known about the talent flow between China and Australia. This research addresses a gap in the existing body of knowledge regarding the flow of Chinese talent between these two countries. Scholars describe the flow of talent through several prominent “brain” concepts such as brain drain, brain circulation, and, most recently, brain linkage. This study aims to investigate the characteristics of talent flow between China and Australia. The study conducted 22 semi-structured interviews with Chinese talent who moved to Australia as Chinese international students. After they graduated from Australian universities, most participants remained and gained work experiences in knowledge-based industries before becoming entrepreneurs in Australia. Some returned to China, however most decided to stay in Australia. The research sheds light on the complex interplay of factors influencing Chinese talent flow, its dynamics and contingency on various factors and individual decisions. The push-and-pull theory serves as a framework to explore the factors shaping talent flow. Notably, this study has found that Chinese talent combine Australia’s work-life balance with China’s economic opportunities, benefiting both individuals and the two nations. The research highlights the temporal nature of talent decisions, with participants often delaying their return to China until favourable prospects emerge, such as improved business opportunities or familial responsibilities. Overall, the study argues that integrating brain concepts and the push-and-pull theory provides valuable insights into the current dynamics of talent flow.

Keywords: China, Australia, Chinese Talent, Brain Drain, Brain Circulation, Brain Linkage

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Introduction

China has experienced an extraordinary outflow of talent. Such flow is most apparent through the departure of Chinese students who travel overseas to study but later choose to stay in the host country for whatever reason (Blanchford & Zhang, 2014, p.206). By 2008, approximately 1.4 million Chinese travelled overseas to study, and around 390,000 had only returned to China (Han & Zweig, 2010, p.293; Shin & Moon, 2018, p.11). By other estimates, according to the Chinese government (Ministry of Education, 2020), from 1978 to 2019, over 6.5 million Chinese students or scholars studied overseas. By the end of 2019, around 1,656,200 were still studying or researching, while 4,904,400 had completed their studies. Of this number, 4,231,700 (or 86.28 per cent) students and scholars chose to return to their home country after completing their studies (Ministry of Education, 2020).

Overseas education, including higher education, is popular among Chinese families in Mainland China. While there are many options globally, certain countries are preferred, notably Western nations like the United States, the United Kingdom, Canada, and Australia. Additionally, some Asian countries, such as Japan and South Korea, have also become popular destinations. China is also a significant economic partner and a major source of international students for countries like Australia.

China is important to Australia, whether in economic terms, such as trade and economic relations or cultural connections between the nations through the Chinese diaspora in the country. China is Australia's largest trading partner. Australia's prosperity relies heavily on trade and investment with China. By the end of 2021, Chinese investment in Australia reached AUD 92 billion. In 2020-21, China bought AUD 168 billion of Australia's exports, accounting for 42 per cent of its total exports. China is Australia's top overseas market for many exports, including agriculture, resources, services, and education, including international (DFAT, n.d.). Global student mobility has become essential to the international higher education landscape (Cao et al., 2016, p.200). Overseas students paying higher tuition fees than domestic students present an attractive market for universities (Su and Harrison 2016, p.906). For example, Australian total education exports reached over AUD 40 billion in 2019 and over AUD 26 billion in 2022. From the total education export, higher education in 2019 was worth over AUD 27 billion and over AUD 17 billion in 2022 (Department of Education, 2023). The economic relationship between the two nations is also significant for international education in Australia. China is also the largest source of international students in Australia. For many years, China has been Australia's top and largest source of international students (Department of Education, 2023). Over 745,500 Chinese students studied in Australia between 2002 and 2022 (Department of Education, 2023). As of July 2023, over 152,000 international students from Mainland China were studying in Australia (Department of Education, 2023).

Australia is one of the top preferred destinations for Chinese international students. Generally, Australia is the third most popular country, after the United States and the United Kingdom. Australia's popularity among Chinese international students is due to its affordable education costs and welcoming immigration policies with options for skilled migration and permanent residence (Tan & Hugo, 2016; Zhai et al., 2019). After completing their studies, many students decide to remain in Australia to gain work experience or to migrate permanently, thus further exacerbating China's problem of losing talent. As a host country, Australia stores China's brainpower. In some instances, the storage is temporary; in others, it is longer-term or even permanent when the individual does not wish to return to China. For

example, according to the Australian Bureau of Statistics (2023), Mainland China was among the five most common countries of birth for migrants who transitioned from a temporary visa (such as a student visa) to a permanent visa in Australia.

While the rate of returnees may have increased, in their paper, Zweig and Wang (2013) argued that China's best and brightest talent still prefer to stay overseas. Thus, this further exacerbates the brain drain problem that China has been suffering from (Yang & Welch, 2010, p.595; Yang, 2020, p.58). Chinese talent who decide not to return to China and remain in the host country, often become part of the Chinese overseas community or diaspora, including the knowledge diaspora whose connections to their home country do not stop existing (Welch & Hao, 2016). The existing connection to China provides beneficial opportunities for the home country. It allows the Chinese government to access it through talent attraction policies or by creating appropriate conditions and environments for them to return.

Unlike many studies that limit the scope of talent flow to examining when Chinese students leave China for overseas study or just after graduation and return to China, this research explored a broader view of Chinese talent and their journey. The talent flow of the research participants consisted of three main steps. This study followed their steps of the journey from 1) when they departed Mainland China and arrived in Australia as international students, 2) the time spent in the host country, specifically when they became knowledge workers and entrepreneurs, and 3) finally, their decisions as representatives of Chinese talent to either return to China or remain in Australia. To better understand this flow, this study examined factors that drive Chinese talent to study overseas, their experiences living and working abroad, the advantages and knowledge they gain while overseas, and future intentions to return to China.

Scholars have captured talent flow through well-known concepts such as brain drain (Deng, 1992; Pedersen, 1992; Saxenian, 2002), brain circulation (Saxenian, 2006), and brain linkage (Shin & Choi, 2015; Shin & Moon, 2018). While brain drain, brain circulation, and brain linkage were developed separately and, therefore, as distinct concepts, they do not provide the complete picture of Chinese talent flow. Instead, to have a more holistic view and better capture the complexity of Chinese talent and its flow, this study examined each concept in conjunction with each other. This study refers to these three main concepts used as brain concepts. Factors influencing the flow of talent through brain concepts can be explained by applying the push-and-pull model commonly used in international education, economic geography, and migration literature. These brain concepts and the push-and-pull model provided the theoretical framework for this study.

Brain Concepts

In academic literature, brain drain is traditionally perceived negatively, especially for developing countries. The loss of highly skilled individuals is seen as a permanent detriment, hindering these countries' development (Cao, 1996). This perspective views brain drain as a one-way flow of talent, where developing countries lose their best minds to more developed nations, thus exacerbating their developmental challenges.

However, contrary perspectives exist. Some scholars argue that brain drain does not necessarily equate to a permanent loss. They suggest that talent will eventually return to their home countries, especially when the economic and political conditions improve (Deng, 1992;

Pedersen, 1992). This perspective sees the migration of skilled professionals as temporary, with the potential for positive returns when these individuals bring back their acquired knowledge and skills.

The concept of brain circulation offers a more nuanced understanding of skilled migration. Unlike brain drain, brain circulation emphasizes the two-way movement of professionals between home and host countries. AnnaLee Saxenian, a prominent scholar in economic geography, describes this phenomenon where emigrants return to their home countries, bringing back valuable skills, establishing business relationships, and starting new companies (Saxenian, 2006). This model transforms the negative connotations of brain drain into a positive cycle of talent and knowledge exchange.

Saxenian's work and other studies highlight how professionals from developing countries like China and India return home to contribute to their local economies while maintaining connections with their host countries (Saxenian, 2002; Welch, 2013). This circulation of talent fosters economic growth and innovation, benefiting both home and host countries. For example, Chinese engineers and entrepreneurs frequently move between the United States and China, contributing to both economies and enhancing bilateral relations (Saxenian, 2005).

While brain drain and brain circulation focus on the outflow and inflow of talent between home and host countries, the concept of brain linkage describes a scenario where emigrants maintain strong connections with their home countries without necessarily returning permanently. This model, introduced by Shin and Choi (2015), focuses on the ongoing interaction and collaboration between emigrants and their countries of origin. It highlights how the diaspora can contribute to their home country's development through business visits, short-term stays, and continuous professional engagement.

The push-and-pull model is a prominent framework used in academic literature to explore the reasons behind individuals' decisions to migrate, especially in the context of higher education, economic geography, and migration studies. This model has been extensively applied to understand the mobility of Chinese talent, including international students and professionals (Mazzarol & Soutar, 2002; Liu et al., 2022). The push-and-pull model is particularly relevant in understanding international student mobility. It helps to analyse why students decide to study abroad and what factors make a particular host country attractive. For instance, push factors in the home country may initiate the decision to seek education abroad, while pull factors in the host country make it an appealing destination for international students (Mazzarol & Soutar, 2002).

Methodology

This study used a qualitative research approach with in-depth, semi-structured interviews of 22 participants. This method allowed for the discovery of various cultural, political, and social factors not available from secondary sources, providing nuanced data for analysis. The participants, who moved to Australia from Mainland China, had studied and attained higher education qualifications from Australian universities. The group consisted of 15 female and seven male participants, all interviewed in English with an intermediate level of proficiency. Interviews, conducted between 2020 and 2021, lasted about 60 minutes each. If a participant did not understand a question, the interviewer paraphrased it to ensure comprehension. Ethics

approval was obtained from the Curtin University Human Research Ethics Committee prior to the study.

All interviews were recorded and transcribed using speech-to-text software. To ensure data reliability and identify recurring themes, the researcher repeatedly compared the recordings to the transcriptions. Data saturation was reached after interviewing 22 participants, aligning with Charmaz's (2006) guideline that qualitative studies stop collecting new data when no new insights emerge. The study used both deductive and inductive thematic data analysis, employing qualitative coding to develop and test categories and themes with existing concepts. NVivo software was used for coding and data analysis.

Brainpower Process and Influencing Key Factors in the Context of the Research Participants' Flow as Chinese Talent

Cultivating talent and knowledge is a core national strategy under President Xi Jinping's leadership, crucial for China's modernisation. The government aims to transition its economy to a knowledge-based model, emphasizing a future built on intellectual resources rather than physical labour (Simon & Cao, 2009a; b). However, China faces a shortage of skilled local talent due to many individuals seeking education and career opportunities abroad, raising the risk of brain drain. To mitigate this, the Chinese government has focused on attracting overseas Chinese talent since the 1990s by improving living and working conditions in Mainland China (Pedersen, 1992).

Early efforts prioritized high-level talent, such as scientists and academics, and later expanded to include other professionals and entrepreneurs. Various programs have been developed to encourage overseas-educated talent to return, including the Yangtze River Scholars Program, Spring Light Plan, 100 Talents Plan, 1,000 Talents Plan, 111 Program, Distinguished Overseas Scholars Program, Project 985, Double First Class, and the National Medium and Long-term Talent Development Plan.

Although academic literature and government data indicate an increase in returning overseas talent, some still choose to remain in host countries (Zweig, 2006; Ministry of Education, 2020). These individuals often become part of the Chinese knowledge diaspora, contributing to China's economic growth from abroad. Recognizing the value of this diaspora, the Chinese government has invested significant effort and resources to engage and attract it to meet China's economic needs.

The government has been finding ways to access it better and attract Chinese talent from the knowledge diaspora to return to China, preferably permanently or alternatively on a temporary basis. Scholars like Welch and Hao (2013) highlighted one crucial aspect of the knowledge diaspora. The knowledge diaspora desires to contribute to China's development due to their belonging through culture and identity. The diaspora contributes through their knowledge transfer, investments, trade, international networks, advanced technology, and managerial know-how transmission. Members of the knowledge diaspora often act as a bridge between Mainland China and the rest of the world. The studies by Saxenian (2006) and Yang and Welch (2010) showed the contribution of Chinese talent as knowledge-bridges that help connect China with the international business and scholarly communities.

Similarly, as creators and carriers of knowledge who are highly educated, skilled, and entrepreneurial, the research participants of this study are the representatives of this Chinese

knowledge diaspora that is part of China's growing. This study found that the research participants are connected to their home country through belonging, culture, identity, family, history, and most of them contribute to the home country and connect it with Australia and vice versa through their entrepreneurial activities.

All research participants are born during the period of China's vast economic growth starting from the late 1970s. Since the 2000s, the rise of China's middle class has led many families to send their children to study overseas. One of the main goals of sending children abroad has been to develop their human capital, including education and work experiences, to help uplift their competitiveness and social mobility in China's employment market when they return. This study found that while in Australia, the research participants have not only developed their human capital. They have also become knowledge workers and entrepreneurs with high levels of human and social capital and skills that required to knowledge economies who have been acting as transnational bridges between China and Australia.

This study found that in order to become part of China's brainpower, the research participants need to undertake specific steps during their journey. These steps are represented through concepts like brain drain, brain circulation, and brain linkage. In this study, I refer to this process as the brainpower process, which is driven by the main discovered push and pull factors that help explain it.

This study argues that focusing on each brain concept alone to understand such a complex phenomenon of the Chinese Talent's flow is complicated and has limitations. Instead, this research examined and applied these concepts alongside each other as one brain concept contributes, impacts, and leads to another. This process is not consistent. Depending on the talent's factors and decisions, the concepts can change.

The research participants in this study are heterogenous, representing several groups of Chinese talent, such as international students, knowledge workers, and entrepreneurs. They are driven by various push and pull factors during different stages of their talent journeys. An overview of the research participants' journey as the representatives of Chinese talent is summarised below. The talent flow outlined in Figure 1 involves the research participants' departure from China as international students, the time spent in Australia as international students, knowledge workers, and later as entrepreneurs, including a short-term return to China for work by some participants. It also comprises the research participants' decision to remain in Australia and return to China for some.

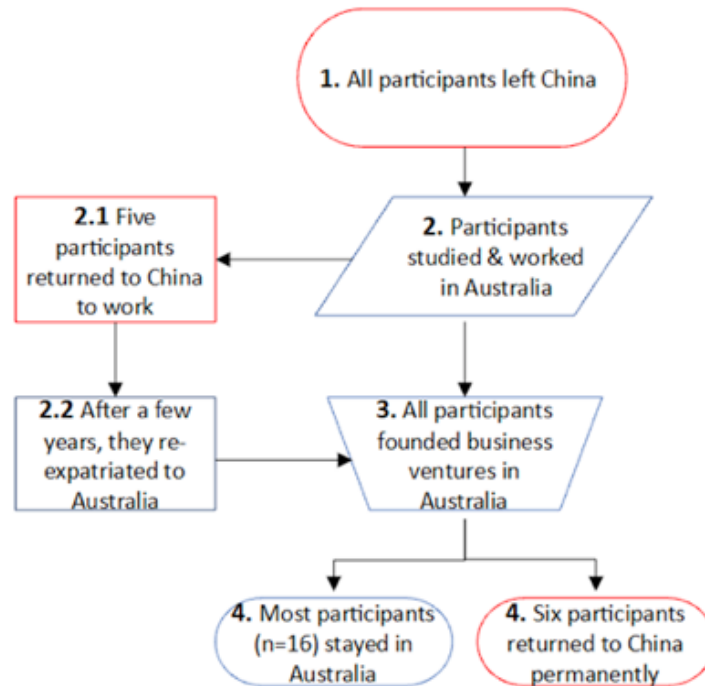


Figure 1: Overview of the research participants' talent flow

If relying on the traditional notion of the brain drain concept, this initial departure from China to Australia by the research participants as international students (step 1 in Figure 1) carries negative connotations. The implications of the departure may be considered as a permanent loss of Chinese talent for the home country, thus contributing to China's problem of brain drain. While this study acknowledges that there is a risk of loss when talent leave China, for instance, they may never return or ever contribute to their home country. However, this research agrees with some previous academic studies on Chinese talent and its flow. Notably, studies conducted by Deng (1992), Pedersen (1992), and Zweig (1997), which argued that Chinese talent based overseas want to return to their home country. They even contribute to China and its economic development and growth through their existing connections with the home country (Saxenian, 2005, 2006; Yang & Welch, 2010), thus making a permanent loss very unlikely.

In addition, this study claims that the brain drain concept is inadequate to fully explain the research participants' journey as Chinese talent, specifically their departure from their home country. Chinese Talent in this study also want to return to China. In fact, at the time of this research, six research participants had already returned to China on a permanent basis, while most have considered their potential return in the future. While Chinese talent were in Australia as international students, instead of a permanent loss of talent for Mainland China, there was a short pause in the brain processes which led to a potential gain for China in the form of required knowledge and skills. I refer to this pause as "brain pause". During this "brain pause" for the home country (step 2 in Figure 1), the research participants began to acquire human capital, social capital, and entrepreneurial experiences that are in high demand in knowledge economies.

After a short brain pause, in pursuit of better career opportunities within knowledge-based industries than what the host country could offer, five research participants (step 2.1 in Figure 1) decided to return to China permanently (or that's what they thought initially). These

participants returned to China carrying with them new knowledge. In academic literature, this return to the home country (albeit temporary for this particular cohort of the research participants) is described as a brain circulation where China and its economy benefited from their return and gained knowledge from the host country. However, after several years of working in knowledge industries in China, some research participants eventually decided to re-expatriate to Australia (step 2.2 in Figure 1). In this instance, the traditional notion of brain drain would consider the second departure by these five research participants as knowledge workers from their home country as a permanent loss. Once again, this concept is limited and does not fully represent the talent flow among the participants in this research. With the re-expatriation or second departure, the brain circulation that benefited China now transitioned into the brain pause instead of brain drain. During this second brain pause of their journey, the participants who returned to Australia alongside the remaining research participants in the host country continued to develop their human and social capital and acquire entrepreneurial experiences further while focusing on bridging the relationship between the home and host countries (step 3 in Figure 1). Most Chinese talent established business ventures with a connection to China or the Chinese community in Australia. This step of the research participants' journey is associated with the concept of brain linkage.

While being in the host country and contributing to the home country, the research participants had to consider remaining in the host country or return to China (step 4 in Figure 1). From all these research participants contributing to China and Australia through brain linkage, six research participants returned to their home country permanently. Similar to those participants who temporarily moved back to China for career opportunities, they carried their knowledge in the form of business ventures, skills, and expertise from Australia to their home country. Most of these participants have business ventures in the Technology sector (specifically fin-tech and AI) operating in China and still maintain their connection with Australia. This permanent return by these participants has contributed to China's brain circulation.

While this study claims that the research participants' departure as Chinese talent does not lead to a permanent loss for China, it acknowledges the brain drain concept and risks associated with the departures. In this instance, brain drain is the crucial starting point of the research participants' journey to becoming the Chinese talent and being part of China's growing brainpower. However, after examining the departure and the following steps of their journey, this study found that, in comparison to other brain concepts in this research, the concept of brain drain plays lesser significance and applicability. In contrast, brain circulation and, especially, brain linkage best describe the research participants' flow between China and Australia.

This study found that brain circulation is mostly relevant to those who returned to China permanently. In contrast, despite a small number of the research participants who returned to China permanently, most participants decided to remain in Australia, indicating the concept of brain linkage is more prevalent than other concepts in the context of describing the research participants' flow. In fact, the concept of brain linkage provides them with flexibility, such that they can utilise and benefit from each country, the host and home. An overview of this brainpower process, which was explained above, is shown in Figure 2 below.

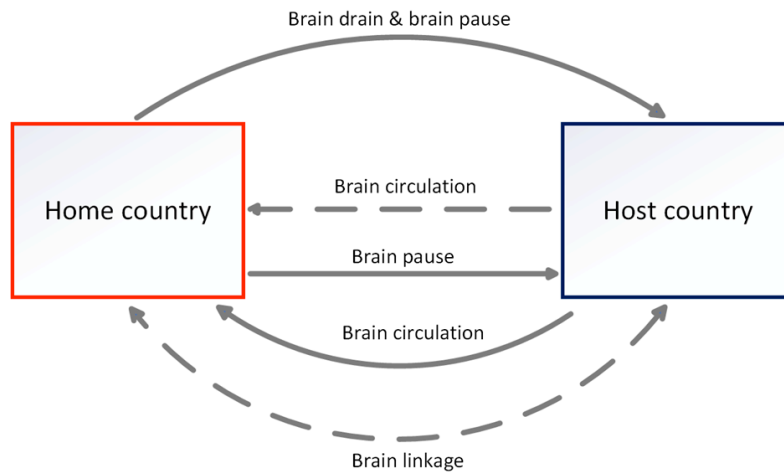


Figure 2: The conceptualised model of the brainpower process of the research participants' journey in this study

To access Chinese talent from the knowledge diaspora as one of the compatible keys to unlocking China's brainpower, the Chinese government must understand that the talent may seek better career opportunities, financial gain, suitable working and living conditions, and flexibility. For example, to combat brain drain and reverse it, the government may aim to attract talent permanently (brain circulation) but will also consider temporary business visits or cross-border activities (as in the case of brain linkage) (see Shin & Moon, 2018).

In terms of most research participants and their flow, this study found that their preferred and optimal option is to incorporate what both home and host countries can offer them. As Chinese talent with experience in knowledge industries who can comfortably operate in both cultural and business settings, the research participants utilise business opportunities that China's economy and vast market provide them and the Australian favourable business environment that promotes work-life balance. Furthermore, through their entrepreneurial activities, both China and Australia benefit too. These factors are important when examining the brainpower processes in the context of Chinese Talent.

This study found that China's economic power, particularly its market that offers vast opportunities, is attractive for Chinese talent and is the number one driving pull factor for most of the research participants. This factor accompanies the research participants during their entire journey, from the day they leave China as international students to the day they return or consider returning as entrepreneurs. After establishing their business ventures in Australia, six research participants eventually moved to China permanently and continued their entrepreneurial activities in their home country. These participants received attractive financial investments for their business ventures from Mainland China. Similar to these research participants who permanently returned to China, others, as entrepreneurs and business owners, also weigh their future intentions and options on whether to return to China permanently based on their commercial needs. This identified key factor of this study that is similar to the findings from other research (such as Wadhwa et al., 2009, 2011) further highlights the importance of China's growing economy. It can offer commercial opportunities to overseas Chinese talent, indicating that this factor may remain important for many of them in the future. China's economic power is undeniably the most crucial and attractive home country's pull factor. This study also found that Chinese talent seek appropriate environments and conditions in their home or host countries.

Delayed Return

China's economy is rapidly changing and transforming. Despite a sceptical forecast of its economic slowdown, especially during the COVID-19 restrictions in the country, the Chinese economy has proven once again that it can still grow (Dezan Shira & Associates 2023). With growth, there is always hope for better changes and transformation, which may also lead to more returns of Chinese talent. Most research participants of this study who decided to remain in Australia have not excluded the idea of returning to China when they see fit, indicating that Pedersen's (1992) delayed return or 'wait and see attitude' among Chinese talent is still relevant today and can also be applied to the research participants of this study.

Reflecting on the papers and studies by Pedersen (1992), Deng (1992), and Zweig (1997), these scholars foresaw that more Chinese talent would eventually return as soon as economic conditions in China improved. In Deng's (1992) argument, improved economic conditions in China will attract more talent to return, thus reducing the issue of brain drain in the country and, instead, transforming it into brain circulation. Equally, Pedersen (1992) explained that changes in economic conditions in China will impact Chinese overseas talent's 'delayed return' and encourage many to return to their home country. Similarly, in his 1997 study, Zweig argued that even more Chinese may return if the economy grows. According to his study of students, scholars, and former residents of China in the United States, over 32 per cent of participants were enthusiastic about returning to their home country in the future (Zweig, 1997, pp. 92-125). Nearly over three decades have passed since Deng's paper (1992), Pedersen's article (1992), and Zweig's study (1997), and China's economy has grown considerably. Rapid economic growth has been a substantial pull factor for return among many overseas Chinese talent, including the research participants of this study. Recent studies found that many overseas Chinese talent are, in fact, returning to China.

The research participants who remain in the host country have business ventures that connect Australia with China and vice versa. Many of them have permanent residency in Australia and citizenship in China, indicating flexibility and options for choosing any of the countries depending on circumstances and when the time is right. These findings are similar to Saxenian's research (2000). Using the example of engineers, the author argued that those engineers became transnational as they worked and maintained residences and citizenship in more than one nation, for instance, in the host and home countries (Saxenian, 2000, pp.35-36).

A "wait and see" attitude is observed through research participants' entrepreneurial activities. For most of them, if China offers better commercial opportunities for their business ventures or if they wish to expand and enter the vast Chinese market, they will consider moving back to their home country. However, such consideration is mainly driven by commercial interests rather than personal ones. From their personal point of view, many of the research participants still see China as very competitive without the culture promoting work-life balance that is so important for many of them in their entrepreneurial endeavours.

Conclusion

To unlock this brainpower for efficient performance, the Chinese government must understand the talent and find ways to attract them, for instance, by creating suitable conditions. In the process of becoming the right key to China's brainpower, the research participants have undergone brainpower processes, such as brain drain, brain circulation, and

brain linkage, which are not constant and change depending on stages of the Chinese talent's journey and factors affecting their decision-making process and influencing this flow. While some research participants returned to China permanently, most of them remained in Australia but considered returning to their home country. Yet, they hold off until better opportunities or circumstances require them to return. Such better opportunities include commercial prospects for their business ventures and personal circumstances. Finally, this study argues that Chinese talent combine and integrate possibilities from both countries, utilising Australia's work-life balance and China's economy, which mutually benefit not only themselves but also both nations, thus making the brain linkage concept more prevalent when explaining the talent flow of the research participants of this study.

References

- Blanchford, D.R., & Zhang, B. (2014), Rethinking International Migration of Human Capital and Brain Circulation: The Case of Chinese-Canadian Academics. *Journal of Studies in International Education*, 18 (3), 202-222.
- Cao, C., Zhu, C., & Meng, Q. (2015). A survey of the influencing factors for international academic mobility of Chinese university students. *Higher Education Quarterly*, 70(2), 200–220. <https://doi.org/10.1111/hequ.12084>
- Cao, X. (1996). Debating ‘Brain drain’ in the context of globalisation. *Compare*, 26(3), 269–285. <https://doi.org/10.1080/0305792960260303>
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE Publications.
- Deng, Z. (1992). China’s brain drain problem: Causes, consequences and policy options. *The Journal of Contemporary China*, 1(1).
- Department of Education. (2023a). International students monthly summary and data tables. Australian Government. Available from: <https://www.education.gov.au/international-education-data-and-research/international-student-monthly-summary-and-data-tables>
- Department of Education. (2023b). Education export income, Calendar Year 2022. Australian Government. Available from: <https://www.education.gov.au/international-education-data-and-research/education-export-income-2021-calendar-year>
- Department of Foreign Affairs and Trade (DFAT). (n.d.). *Doing business with China*. Australian Government. Available from: <https://www.dfat.gov.au/trade/agreements/in-force/chafta/doing-business-with-china/Pages/doing-business-with-china>
- Dezan Shira & Associates. (2023). *An Introduction to Doing Business in China 2023*. Available from: <https://www.asiabriefing.com/store/book/introduction-doing-business-china-2023.html?autodownload>
- Han, D., & Zweig, D. (2010). Images of the world: Studying abroad and Chinese attitudes towards international affairs. *The China Quarterly*, 202, 290-306.
- Liu, T., Sato, Y., & Breaden, J. (2022). Factors influencing international students’ trajectories: A comparative study of Chinese students in Japan and Australia. *International Journal of Comparative Education and Development, ahead-of-print(ahead-of-print)*.
- Mazzarol, T., & Soutar, G. F. (2002). “Push-pull” factors influencing international student destination choice. *The International Journal of Educational Management*, 16(2).
- Ministry of Education of the People’s Republic of China. (2020). Statistics on Chinese learners studying overseas in 2019. Available from: http://en.moe.gov.cn/news/press_releases/202012/t20201224_507474.html

- Pathways to permanency*. (n.d.). Australian Bureau of Statistics. <https://www.abs.gov.au/articles/pathways-permanency>
- Pedersen, P. (1992). The New China Syndrome: Delayed return as a viable alternative to the “brain drain” perspective. *NAFSA Working Paper #30*.
- Saxenian, A. L. (2000). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China.
- Saxenian, A. L. (2002). *Local and global networks of immigrant professionals in Silicon Valley*. Public Policy Institute of California.
- Saxenian, A. L. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in Comparative International Development*, 40(2), 35-61.
- Saxenian, A. L. (2006). *The new argonauts: Regional advantage in a global economy*. Harvard University Press.
- Shin, G. W., & Choi, J. K. (2015). *Global talent: Skilled labor as social capital in Korea*. Stanford University Press.
- Shin, G. W., & Moon, R. J. (2018). From brain drain to brain circulation and linkage. *A Shorenstein Asia-Pacific Research Centre*. Stanford University.
- Simon, D. F., & Cao, C. (2009a). *China's emerging technological edge: Assessing the role of high-end talent*. Cambridge University Press.
- Simon, D. F., & Cao, C. (2009b). China's future: Have talent, will thrive. *Issues in Science and Technology*, 26(1). Available from: <https://issues.org/simon/>
- Su, M., & Harrison, L. M. (2016). Being wholesaled: An investigation of Chinese international students' higher education experiences. *Journal of International Students*, 6(4), 905-919.
- Tan, G., & Hugo, G. (2016). The transnational migration strategies of Chinese and Indian students in Australia. *Population, Space and Place*, 23, 1-15.
- Wadhwa, V., Saxenian, A. L., Gereffi, G., & Salkever, A. (2009). America's loss is the world's gain: America's new immigrant entrepreneurs, part IV. *The Ewing Marion Kauffman Foundation*.
- Wadhwa, V., Jain, S., Saxenian, A. L., Gereffi, G., & Wang, H. (2011). The grass is indeed greener in India and China for returnee entrepreneurs: America's new immigrant entrepreneurs, part VI. *The Ewing Marion Kauffman Foundation*.
- Welch, A. (2013). Different paths, one goal: Southeast Asia as knowledge society. *Asia Pacific Journal of Education*, 33(2), 197-211.

- Welch, A., & Hao, J. (2013). Returnees and diaspora as a source of innovation in Chinese higher education. *Frontiers of Education in China*, 8(2), 214-238.
- Yang, R., & Welch, A. R. (2010). Globalisation, transnational academic mobility and the Chinese knowledge diaspora: An Australian case study. *Discourse: Studies in the Cultural Politics of Education*, 31(5), 593-607.
- Yang, R. (2020). Benefits and challenges of the international mobility of researchers: The Chinese experience. *Globalisation, Societies and Education*, 18(1), 53-65.
- Zhai, K., Gao, X., & Wang, G. (2019). Factors for Chinese students choosing Australia higher education and motivation for returning: A systematic review. *SAGE Open*.
- Zweig, D. (1997). To return or not to return? Politics vs. economics in China's brain drain. *Studies in Comparative International Development*, 32(1), 93-125.
- Zweig, D. (2006). Competing for talent: China's strategies to reverse the brain drain. *International Labour Review*, 145(1-2).
- Zweig, D., & Wang, H. (2013). Can China bring back the best? The Communist Party organizes China's search for talent. *China Quarterly*. Available at SSRN: <https://ssrn.com/abstract=2195881> or <http://dx.doi.org/10.2139/ssrn.2195881>

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