**ORIGINAL ARTICLE**

# Measuring diaspora populations and their socio-economic profiles: Australia's Chinese diaspora

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**Abstract**

Data on diasporas are incomplete, inaccurate, and beset by definitional fluidity as the concept itself evolves. Despite their significant role in homeland development, members of a diaspora population are typically passed over in origin countries' censuses, and policies and planning rely instead on statistics generated in destination countries. To analyse the data available from destination countries, this article deploys two coordinated concepts—diaspora and transnationalism. We construct a demographic and socio-economic profile of the Chinese diaspora population in Australia spanning 2000–2016. That work is based on the 2016 Australian Census and on Migrants Integrated Dataset (ACMID) and 2016 Australian Census and Temporary Entrants Integrated Dataset (ACTEID) micro-files sourced from the Australian Bureau of Statistics. The profile is disaggregated by permanent or temporary residency status, visa, and citizenship, stratified by geographic distribution, and compared with that of Australia's overall migrant population. Nuanced understandings of the size, composition, distribution, and socio-economic integration into the destination lays a baseline necessary for policymakers and agencies in the countries of origin as they work toward more targeted diaspora engagement practices. Those understandings also inform retention strategies in Australia concerning diaspora groups that can enhance economic and social inclusion.

**KEYWORDS**
Australian census and migrants integrated data, Australian immigration, Chinese diaspora, socio-economic integration, transnationalism

## 1 | INTRODUCTION

The number of people living outside their country of birth has increased dramatically, growing from 173 million (or 2.8%) of the world's total population in 2000 to 281 million (or 3.6%) in 2020 (The United Nations Department of Economic and Social Affairs [UN DESA], 2020). There has also been a marked change in international migration from simple linear new-settlement arrangements to temporary, multidirectional, or even circular movements (Global Commission on International Migration [GCIM], 2005). Known as diasporas, the groups comprising outward movement are key to development in their countries of origin, but typically are excluded from national population census or other data collections, primarily because origin

countries cannot trace emigrants or recover information on descendants born overseas. Demographic research has failed to develop national population measures to accommodate diaspora explicitly (Ho et al., 2015). Playing down *transnationalist* aspects of migration and development holds back efforts to form and refine policy (Faist, 2000). Unlike most nations (United Nations [UN], 2013), Australia and many Asian-Pacific countries lack explicit diaspora policies (Rosser, 2021). Diaspora policies in source countries usually seek contributions to development in the homeland by enabling ties to be maintained and by protecting (or establishing) diasporic populations' rights. Diaspora policies sit between domestic and foreign agendas, are primarily formulated as domestic, but operate and exert influence beyond borders (Délano & Gamlen, 2014) because they are involved in developing and capitalising on external linkages.

Transnationalism captures the changing nature of global migration and provides a *topos* for understanding diaspora policy. Glick-Schiller et al. (1992, p. ix) defined transnationalism as the process through which migrants "establish social fields that cross geographic, cultural and political borders." Migrants forge and retain transnational linkages that are relevant to familial, sociocultural, economic, and political developments in both countries of origin and destination (Faist, 2000; Faist et al., 2013). This resurgent optimism about the migration–development relationship motivates source countries to draw on human capital and financial prosperity from emigrants and their descendants (Gamlen, 2019). Transnationalist research reinvigorates the whole notion of diaspora, with new attention to remittances, financial investment, injection of new technology, socio-cultural exchange, and political engagement or influence back to homelands (Skeldon, 2008). These linkages combine to institutionalise *diaspora engagement*, in, for example, Mexico (Portes & Zhou, 2012), India (Pande, 2017), and China (Tan & Liu, 2022).

Forming, reforming, or refining engagement policy demands a clear understanding and reliable data about the size, composition, and characteristics of the people in diaspora; but in origin countries, they are typically excluded from census data and the like. International migration information is incomplete, inaccurate, and inconsistent (Abel & Sander, 2014). Partly, that is because *diaspora* is a complex, multi-faceted, dynamic, and evolving concept (Bauböck & Faist, 2010). Attempts at a robust definition (elaborated in Section 2) have been put forward by international institutions and by countries of origin and destination. Conceptual uncertainty complicates efforts at measurement and the choice, collection, and processing of data.

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**Key insights**

This study helps close a research gap between transnationally oriented advances in conceptualising diaspora and the data needed for quantification and analysis. It highlights the most useful variables for quantification concerning the Chinese diaspora in Australia: original citizenship, current citizenship, birth country, birth country of parents, year of arrival, visa type, and self-reported ancestry or background. Using integrated census and migration datasets, it measures size, composition, and distribution and analyses different levels of socio-economic integration. Outcomes give a baseline to assist design of effective engagement policy in origin countries and, in destination countries, inclusivity strategies for their diverse diaspora populations.

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Origin nations have typically relied on records generated in destination countries, where a nuanced understanding of the size, composition, distribution, and integration of immigrant groups enables a baseline for retention policy, and programs to enhance immigrants' socio-economic and political inclusion, across economic, socio-cultural, and political domains (Spencer & Charsley, 2016). In early studies, transnationalism was portrayed as opposed to conventional concepts such as assimilation and integration (Basch et al., 1994; Guarnizo & Smith, 1998); but now researchers suggest that integration into destinations can either facilitate or inhibit diaspora linkages (Chaudhary, 2018; Miller, 2010). Mexico provides an example of successful facilitation of linkages between the homeland and its emigrants, through carefully designed diaspora policy and programs that foster integration in destination societies (Schmid, 2017).

This article enlists two fundamental concepts that have evolved together—transnationalism and diaspora—to estimate and analyse the Chinese diaspora cohort in Australia spanning 2000–2016. It uses unique national datasets to examine how data collection keeps pace with theoretical advances concerning the migration–development nexus and to demonstrate how analysis of such data can inform development for both the origin and the destination. We analyse two microdata sets from the Australian Bureau of Statistics (ABS): the 2016 Australian Census and Migrants Integrated Dataset (ACMID) and 2016 Australian Census and Temporary Entrants Integrated Dataset (ACTEID) micro-files (Confidentialised Unit Record Files, or CURFs).

We address two questions. First, what are the size, composition, and distribution of the Chinese diaspora in Australia over 2000–2016? Second, how integrated into Australian society is this diaspora? There are two reasons for this twin focus. First, the Chinese diaspora is among the most numerous globally (UN DESA, 2020), and it takes second place in Australian immigration (1.25 million or 5.3% of Australia's population; 2016 Census) after the United Kingdom (Australian Bureau of Statistics [ABS], 2021). Yet, there is little research into its composition, distribution, and socio-economic characteristics at destination. Second, China's profound demographic, social, and economic transitions have forced a transformation in its diaspora engagement policy (Tan et al., 2021). The heterogeneity, long history, and sheer size of Chinese migration to Australia lend substance, reliability, and generalisability to our investigation.

Six sections follow. Section 2 assembles relevant definitions of diaspora and outlines the limitations of conventional data sources. Section 3 introduces Australia's census-migration integrated data. Using the available integrated datasets, Section 4 presents results concerning the composition and distribution of Australia's Chinese diaspora, and Section 5 analyses its socio-economic integration. Section 6 discusses innovative ways (existing and potential) of collecting and analysing such data and derives policy implications for China (origin) and Australia (destination). Section 7 concludes the paper.

# 2 | OVERVIEW OF DEFINITIONAL VARIATIONS AND DATA LIMITATIONS

## 2.1 | Definitional variations

The term *diaspora* originates in Greek language and thought: διασπορά means a wide sowing or dispersion, as of seeds. Since the mid-1980s, globalisation has introduced or expanded the economic dimensions of the concept (Cohen, 1997)—with migrants who are predominantly voluntary, active in cultural, social, economic, and political spheres (Sheffer, 2003); dispersed either permanently or temporarily (Brubaker, 2005); and characterised by a hybrid cultural orientation at their destination (Bhabha, 1994). This turbulent evolution makes it difficult to apply a universally agreed delineation to inform the collection of data on diaspora, let alone its interpretation (Bauböck & Faist, 2010).

The definition proposed by the International Organization for Migration (IOM) and the Migration Policy Institute (MPI) (Agunias & Newland, 2012, p. 15) has been particularly influential: "Emigrants and their descendants, who live outside the country of their birth or ancestry, either on a temporary or permanent basis, yet still maintain affective and material ties to their countries of origin." This characterisation highlights two features: movement across borders and, more importantly for our purposes, the transnational linkages mentioned above (often simply *linkages*, hereafter). These two features enable diasporas to participate in wide-ranging economic, political, socio-cultural, and familial activities and nurture transnational identities that preserve a sense of homeland (Tan et al., 2018). Together, concerns with circular and temporary migration, translational linkages, and the notion of diaspora constitute a new paradigm in thinking about the relationship between migration and development.

## 2.2 | China's legal definition of its diaspora

China's own definition considers four factors: citizenship; permanent or temporary migration or residency status; short- or long-term duration of stay after migration; and, for descendants, number of generations since leaving China. According to the *Provisions on Defining the Identities of Overseas Chinese, Chinese of Foreign Nationalities, Returned Overseas Chinese and Relatives of Overseas Chinese* issued by the State Council of China (Overseas Chinese Affairs Office [OCAO], 2018), the Chinese diaspora include two broad groups: *Huaqiao* and *Huaren*. Specifically, *Huaqiao* refers to the segment who are Chinese citizens, hold permanent residency overseas, and have lived in the destination country for at least 18 months within two consecutive years. *Huaqiao* also covers Chinese without permanent residency but with long-term temporary residency in a destination country; that is, entitled to legal residency of five years or more. *Huaren* refers to the remaining segment, who used to be Chinese emigrants but have taken foreign citizenship *and* includes their descendants born overseas and who hold foreign citizenship. And notably, China's diaspora engagement strategy has consistently encompassed a special group: *compatriots of Hong Kong, Macao, and Taiwan*.

The Provisions state that massive numbers of temporary migrants are not legally defined as *Huaqiao*, among them Chinese students studying in overseas institutions (1.66 million by the end of 2019, according to the Chinese Ministry of Education) and migrant labour workers (0.99 million by the end of 2019, according to the Ministry of Commerce). Nevertheless, temporary migrants, especially international students, are an integral part of China's engagement policy and programs. Over the last 40 years,

China has cultivated its international students as a diaspora resource, funding them in the late 1970s, permitting some self-financed overseas study in the early 1980s, and encouraging Chinese students to pursue overseas education since the mid-1990s. Since the mid-1990s, with increasing globalisation and telecommunication advances, the official slogan of attracting international students shifted from "returning home to serve the country" to serving the country by regulating and tapping Chinese knowledge networks that contribute from afar or circulate transnationally. Physical return is no longer deemed essential (Leung, 2015).

## 2.3 | Limitations of traditional data sources

Although IOM and MPI suggested a working definition of diaspora that includes descendants of emigrants (Agunias & Newland, 2012), international organisations settle on an approximation using the International Migrant Stock database administered by the UN DESA to quantify diaspora populations. Data collection has not kept pace with evolving conceptions of diaspora and associated transnationalism. International data rely heavily, for availability and quality, on migration data collected by individual countries.

In countries of origin, four key sources provide estimates of emigrant stocks and flows. The first is national border-control agencies. In Australia, unpublished administrative data and a Movements Database maintained by the Department of Home Affairs (DHA) enable analysis of distribution and of some basic demographic characteristics (for example, age-sex structure) of Australian-born and foreign-born cohorts leaving Australia, permanently or otherwise (Hugo, 2006). Few nations, however, collect administrative data on *all* people exiting (Hugo, 2014). The second source of emigration data is the population census, which collects detailed demographic and socio-economic characteristics of the entire population and sometimes includes information obtained from emigrants' still-resident family members; but this cannot guarantee the capture of *all* emigrants (Hugo, 2006). The third source is registration abroad by embassies or consulates, which lacks accuracy because overseas registrations are normally not compulsory, and many emigrants do not participate (Bálint et al., 2018). Countries of origin clearly have limited ability to collect data on their emigrants, to say nothing of descendants born overseas. The fourth source is the registration of the overseas population. Overseas Indians comprise Non-Resident Indians (NRIs) and Overseas Citizens of India (OCIs). NRIs are Indian citizens living overseas whose information can be collected through Indian censuses. OCIs are former Indian citizens or descendants of Indian citizens and their spouses. These can generally apply for an OCI card to access long-term visas and various socio-economic rights in India; but registration is voluntary, so not all of the Indian diasporas can be tracked and studied through the OCI system.

Given such limitations, origin countries rely heavily on population statistics gleaned at destination countries, where standard sources include census databases, administrative registers such as border-control data, population registration systems, and sample surveys such as national labour force surveys (Hugo, 2014; Özden et al., 2011). The total for the Chinese diaspora population estimated by a prominent Chinese researcher, Zhuang (2020), is often quoted as the only source of China's official data. His estimate was founded on censuses, surveys, government documents, NGO reports, expert estimates, and media releases at the destinations. Most countries follow the synchronisation of national censuses proposed by the UN since 1958, which enhances the consistency and comparability of migration data across the globe, laying groundwork for estimating the size of international migrant stocks and mapping migrations between paired countries (Abel & Cohen, 2019). Nevertheless, censuses often undercount migrant numbers. Singapore, for example, excludes all but citizens and permanent residents; and elsewhere, migrants often seek to avoid being counted (Hugo, 2006). Some administrative registers at destinations provide valuable information. Australia's immigration system is atypical, collecting information on countries of birth, countries of origin and destination, and some basic demographic characteristics for *all* persons entering and leaving.[1] This system enables analysis of numbers and characteristics of migrants to and from Australia.

Census data are still the most reliable for comparability, but coverage varies considerably. For example, only Australia and Canada collect information about citizenship, birthplace, and ancestry on at least two generations: census respondents, their parents, and their ancestors. Such information enables countries of origin to identify their diaspora populations at destinations: migrants and their descendants, by the IOM and MPI definition. But the national census excludes such information in other major destination countries such as the United States, Germany, Russia, Saudi Arabia, the United Kingdom, and France; and, useful as they are, the Australian and Canadian data are insufficient for disaggregating groups within a particular diaspora segment (*Huaren* or

*Huaqiao*). The general outcome includes incompleteness, imprecision, and incomparability.

# 3 | CENSUS AND MIGRATION INTEGRATED DATA

Our study subjected two microdata sets—the 2016 Australian Census and Migrants Integrated Dataset (ACMID) and the 2016 Australian Census and Temporary Entrants Integrated Dataset (ACTEID)—to numerical calculation and statistical analysis in DataLab, maintained by the ABS. The datasets cover the largest samples of permanent and temporary migrant groups in Australia. With few sparse-data caveats, they are valuable resources for measuring diaspora. ACMID 2016 links 1,924,551 (88%) of 2,166,014 records from the Permanent Migrant Database (PMD, administered by the Department of Social Services, DSS) with 2016 Census data (ABS, 2018). The 2016 ACMID micro-file covers only individual permanent-visa holders who arrived between 1 January 2000 and 9 August 2016 (census night), excluding their descendants born as Australian citizens. So, estimation of diaspora population based on the integrated data is by no means complete. The 2016 ACTEID micro-file links 2016 Census data to DHA data on temporary-visa holders who were present in Australia on the 2016 census night. It links 974,803 (60%) of 1,635,498 records from the temporary migrant data with 2016 Census data (ABS, 2019).

Containing information on migrants' *visa* class, country of *citizenship* before and after migrating to Australia, and primary *ancestry*, the integrated datasets enable us to differentiate among diaspora types and also between subgroups within a diaspora population according to IOM definitions and those used by countries of origin—China, in our case. The linked datasets offer detailed information on permanent, temporary and other visa categories and demographic, social, economic, and geographic characteristics of migrants. Visa categories range from the top-tiered skilled, family, and humanitarian migration streams to the medium-level skilled independent, and family partner visa schemes. It is worth noting that Australia's linked census-migration datasets are not unique: Canada has linked its 2016 census with administrative immigration records since 1952, including information on temporary foreign workers, international students, and asylum claimants (McLeish, 2017).

We next show how the census-migration integrated datasets can produce novel insights into the size and demographic and socio-economic profile of the Australia-based Chinese population. Incompleteness of data inevitably leads to an underestimation of its size. Despite this caveat, we demonstrate the great potential of such datasets, fitting with varying definitions of diaspora.

# 4 | AUSTRALIA'S CHINESE DIASPORA: SIZE, COMPOSITION, DISTRIBUTION

## 4.1 | Size and composition

Chinese law distinguishes between *Huaqiao* and *Huaren*, and practically, *compatriots of Hong Kong, Macau, and Taiwan* (*HMT compatriots*, hereafter) are also subsumed under China's diaspora policy and strategies. We have also estimated the size of the total Chinese diaspora in Australia as including those studying abroad and temporary migrant workers, as suggested by the IOM definition. This latter measurement might usefully inform China's refinement of policy, especially if it aims to cover a full spectrum of its diaspora. In sum, based on the two databases and applying China's legal and practical definitions, our estimates of those coming to Australia in 2000–2016 period are 357,978 persons (Total A in Table 1) and 414,387 persons (Total B in Table 1), respectively 34.5% and 24.2% less than the 546,380 based on a broad definition that includes temporary migrants (Total C in Table 1). Considering the rates of linked records from the ACMID (88%) and ACTEID (60%) databases, the actual total numbers of Chinese diaspora population were approximately 400,935, 479,908, and 664,498, respectively, in light of China's legal, practical, and broad definitions.

We tabulated eight variables: original citizenship held by Chinese migrants, current citizenship (for example, Chinese, or naturalised Australian since migrating to Australia), birth country, birth country of mother, birth country of father, year of arrival in Australia, type of visa held on arrival, and self-reported ancestry. Cross tabulations of these variables differentiate *seven* components or subgroups of the Chinese diaspora population. As apparent in Table 1, the largest component is *Huaqiao* (151,345, or 27.7% of Grand Total C), mostly permanent residents having lived in Australia for at least two years (21.9%) and those having lived for less than two years at the time of 2016 census night (4.3%). Two-year residency is the basic requirement for converting to Australian citizenship. The second component is *Huaren who were previous Chinese citizens*, amounting to 73,700 (or 14.0% of Grand Total C). The third and fourth components are *Huaren* who are Chinese descendants, on permanent and

**TABLE 1** Chinese diaspora in Australia, according to China's legal, practical, and broad definitions

| Diaspora components | Criteria | Groups | | | Number estimate | % |
|---|---|---|---|---|---|---|
| Huaqiao[a] [1] | Chinese citizens | Permanent visa holders | Arrived in 2000–2013 | | 119,633 | 21.9 |
| | | | Arrived since 2014 | | 23,434 | 4.3 |
| | | Permanent visa holders who did not indicate year of arrival | | | 6100 | 1.1 |
| | | Permanent visa holders who did not indicate current citizenship | | | 2178 | 0.4 |
| | | Subtotal | | | 151,345 | 27.7 |
| Huaren: Previous citizens [2] | Chinese taking up Australian citizenship in 2000–2016 | | | | 73,700 | 14.0 |
| Huaren: Descendants | Two types of descendants of Chinese migrants: Children and distant descendants: Children[b] are non-Chinese citizens born to a Chinese parent | Permanent visa holders [3] | Children | Both Chinese parents | 7186 | 1.3 |
| | | | | One Chinese parent | 6038 | 1.1 |
| | | | Distant descendants | Sole Chinese ancestry | 58,791 | 10.8 |
| | | | | Dual Chinese ancestry | 20,542 | 3.8 |
| | Distant descendants are non-Chinese citizens with no Chinese parent but reporting Chinese ancestry (grandparents or beyond) | Temporary visa holders [4] | Children | Both Chinese parents | 4523 | 0.8 |
| | | | | One Chinese parent | 1768 | 0.3 |
| | | | Distant descendants | Sole Chinese ancestry | 23,519 | 4.3 |
| | | | | Dual Chinese ancestry | 10,566 | 1.9 |
| | | Subtotal | | | 132,933 | 24.3 |
| Compatriots of HK, Macao, Taiwan | Migrants entering Australia holding the passport of Hong Kong, Macau or Taiwan | Permanent visa holders [5] | | | 23,199 | 4.2 |
| | | Temporary visa holders [6] | | | 33,210 | 6.1 |
| | | Subtotal | | | 56,409 | 10.3 |
| Temporary Chinese migrants [7] | Chinese citizens under temporary visas | Student visa holders | | | 96,445 | 17.7 |
| | | Working visa holders[c] | | | 19,481 | 3.6 |
| | | Temporary visa holders arrived since 2011 (excluding student and working visas) | Bridging visa | | 3981 | 0.7 |
| | | | Others | | 1413 | 0.3 |
| | | Temporary visa holders who did not indicate year of arrival | | | 8007 | 1.5 |
| | | Huaqiao on temporary visa arrived in 2010 or before (excluding student and working visas) | Bridging visa | | 2521 | 0.5 |
| | | | Others | | 145 | 0.0 |
| | | Subtotal | | | 131,993 | 24.2 |

temporary visas, respectively. We identified two gradations in degree of connectedness to China: (1) *children of Chinese citizens* who are not themselves Chinese citizens (3.5%) and (2) *all other descendants (grandchildren or beyond) of Chinese citizens* who are not themselves Chinese citizens (20.8%). Those of this second degree (distant descendants) originated from places such as South-East Asian, European, and North American countries and some were born in Australia. The fifth and sixth components are *HMT compatriots* on permanent and temporary visas, respectively. They totalled 56,409 persons (10.3%). The seventh and last component (156,205, 29.5%) comprises *temporary Chinese migrants*, the overwhelming majority of whom do not meet China's legal definition of *Huaqiao*. This component covers four subclasses: (1) students (96,445, 17.7%); (2) working-visa holders (19,481, 3.6%); (3) other temporary-visa holders such as those holding bridging visas whose length of stay was less than five years at the 2016 census night (5394, 1%); and (4) long-term temporary migrants who had lived in Australia for five years or more (excluding student and working-visa holders) by the 2016 census night and so could also be classified as *Huaqiao* (2521, 0.5%).[2]

For comparison, we estimated diaspora quantity and composition using the IOM definition. Specifically, we distinguished Chinese migrants and their descendants using the variable *country of birth* (Table 2). The total number in the same time period (2001–2016) was 531,016 persons, slightly less (by 2.9%) than the number calculated using China's definition (546,380). Similarly, considering the rates of linked records from the ACMID (88%) and ACTEID (60%) databases, the actual total was estimated at 648,429.

Two limitations in using self-reported *ancestry* to identify the subgroup of "distant descendants of Chinese diaspora" deserve mention. First, the conceptual boundaries of *nation-state* as a geopolitical concept and *ancestry* as a socio-cultural concept do not match perfectly. People reporting Chinese ancestry do not necessarily consider China their homeland. The integrated datasets show that 516,904 persons reported Chinese ancestry, two-thirds of whom (66.4%) claimed mainland China as their immediate origin. Another one-third were mainly from Hong Kong (5.0%), Taiwan (4.0%), South-East Asian countries such as Malaysia (9.5%), Indonesia (4.3%), Singapore (3.3%), the Philippines (1.2%), and Vietnam (1.1%), and other parts of the world including Australia (1.3%) and New Zealand (1.3%). Given that a third of people reporting Chinese ancestry did not come from mainland China, including them in Chinese diaspora would yield an overestimation. It may potentially lead to conflicting claims involving China and other

**TABLE 1** (Continued)

| Diaspora components | Criteria | Groups | Number estimate | % |
| --- | --- | --- | --- | --- |
| Total A (based on legitimate definition): | [1] + [2] + [3] + [4] | | 357,978 | 65.5 |
| Total B (based on practical definition): | [1] + [2] + [3] + [4] + [5] + [6] | | 414,387 | 75.8 |
| Total C (based on broad definition): | [1] + [2] + [3] + [4] + [5] + [6] + [7] | | 546,380 | 100 |

Data sources: ABS (2020a, 2020b).

[a]This category includes a small number of permanent visa holders whose duration of stay in Australia was less than 2 years, although they were not officially categorised as *Huaqiao* according to China's legitimate definition.

[b]Information on parents' citizenship is unavailable. We used the variable "born in China" as a proxy for "Chinese citizenship" of parents.

[c]Includes a small number of *Huaqiao* who were migrants holding long-term temporary visas (>5 years). CTEID data cannot differentiate those whose temporary working visas (etc.) are independently held from those whose visas were arranged by a Chinese agency; so we subsumed all with temporary working visas under "Working visa holders."

**TABLE 2**   Quantity and composition of Australia-based Chinese diaspora estimated using IOM's definition

| Components of diaspora | Criteria | Groups | | Number | % |
|---|---|---|---|---|---|
| Chinese migrants | Migrants born in mainland China | Permanent visa | | 221,096 | 41.6 |
| | | Temporary visa | | 126,793 | 23.9 |
| | | *Subtotal* | | *347,889* | *65.5* |
| Descendants of Chinese migrants | Migrants not born in mainland China, but born to Chinese migrants or reporting Chinese ancestry | Children | Permanent visa | 13,995 | 2.6 |
| | | | Temporary visa | 4,074 | 0.8 |
| | | Grandchildren and beyond | Permanent visa | 78,308 | 14.7 |
| | | | Temporary visa | 32,878 | 6.2 |
| | | *Subtotal* | | *129,255* | *24.3* |
| Migrants of HK, Macao, Taiwan | Migrants born in Hong Kong, Macau, or Taiwan | Permanent visa | | 25,878 | 4.9 |
| | | Temporary visa | | 27,994 | 5.3 |
| | | *Subtotal* | | *53,872* | *10.1* |
| Total | | | | 531,016 | 100 |

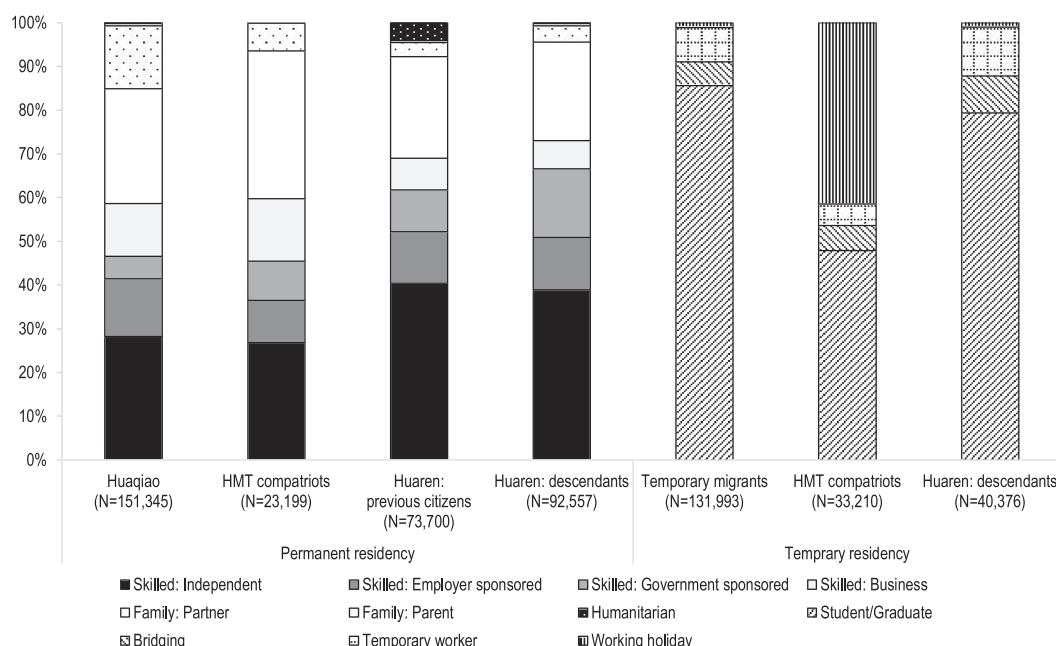Data sources: Authors' estimation based on ABS data (2020a, 2020b).



**FIGURE 1**   Distribution of Australia-based Chinese diaspora groups, by residency status (permanent, temporary) and by visa type. Data sources: ABS (2020a, 2020b).

countries such as those in the South-East Asia. As the second limitation, ancestry is an intrinsically useful but vague variable or indicator for measuring people's socio-cultural linkages to homeland. Some people maintain economic and non-economic linkages with an origin country without reporting it as an "ancestry," long after any actual connection with that country has faded. Others may report a distant ancestry based on a surname, for example.

## 4.2 | Diaspora distinctions by visa type

Figure 1 shows the proportional distributions of the aforementioned seven Chinese diaspora subgroups by key visa category, differentiated by Australian permanent or temporary residency. Among the seven subgroups, the four that hold permanent residency comprise *Huaqiao*, some *HMT compatriots*, previous citizens of *Huaren*, and descendants of *Huaren*. The other three comprise *HMT*

*compatriots*, descendants of *Huaren* who lived in Australia under a temporary visa on the 2016 census night, and other temporary migrants. Among permanent residents, skilled Chinese migrants are more likely to be in *Huaren* subgroups—that is, previous Chinese citizens and Chinese descendants (accounting for about 40%)—than in subgroups within *Huaqiao* and *HMT compatriots* (nearly 30%). Notably, the largest percentage of people (nearly 15%) holding skilled-business visas appeared to be *HMT compatriots*; however, most in this subgroup (17,829) appeared to be *Huaqiao*. The humanitarian-visa holders are observed predominantly in the *Huaren* subgroup that have converted from Chinese to Australian citizenship. As for the temporary residents, most of the Chinese migrants (85%) and descendants (nearly 80%) are students. Strikingly, in both absolute and relative terms, *HMT compatriots* are most likely to hold working-holiday visas (13,691, over 40%) among the three subgroups of Chinese temporary migrants (shown in the right panel of Figure 1).

## 4.3 | Spatial distribution

Diaspora engagement policy is formulated and implemented at a national level. In Australia, a nuanced understanding of the distribution of subgroups at subnational—that is, state or territory—scales is significant for

development of diaspora policy and strategies. We estimated numbers at State level, disaggregated by residency status and by subgroup. The distributions of various subgroups vary significantly by state or territory and by residency status. All seven diaspora subgroups are highly concentrated in the two largest states: New South Wales and Victoria. In comparison, *HMT compatriots* are almost evenly distributed across the three eastern coastal states: New South Wales, Victoria, and Queensland. Chinese temporary migrants are more likely than other subgroups to live in the Australian Capital Territory. Similarly, distant Chinese descendants holding permanent residency are more likely than other subgroups to settle in Western Australia. This pattern is probably related to a historical migration corridor established by Chinese migrants during the 19th-century gold rushes (Millar, 2009) and sustained inflows of migrants with Chinese background but originating in South-East Asia (Kennewell & Shaw, 2008).

## 5 | A PROFILE OF AUSTRALIA'S CHINESE DIASPORA

## 5.1 | Demographic characteristics

The age-sex pyramids of the seven diaspora subgroups are presented in Figure 2. Generally, the four subgroups
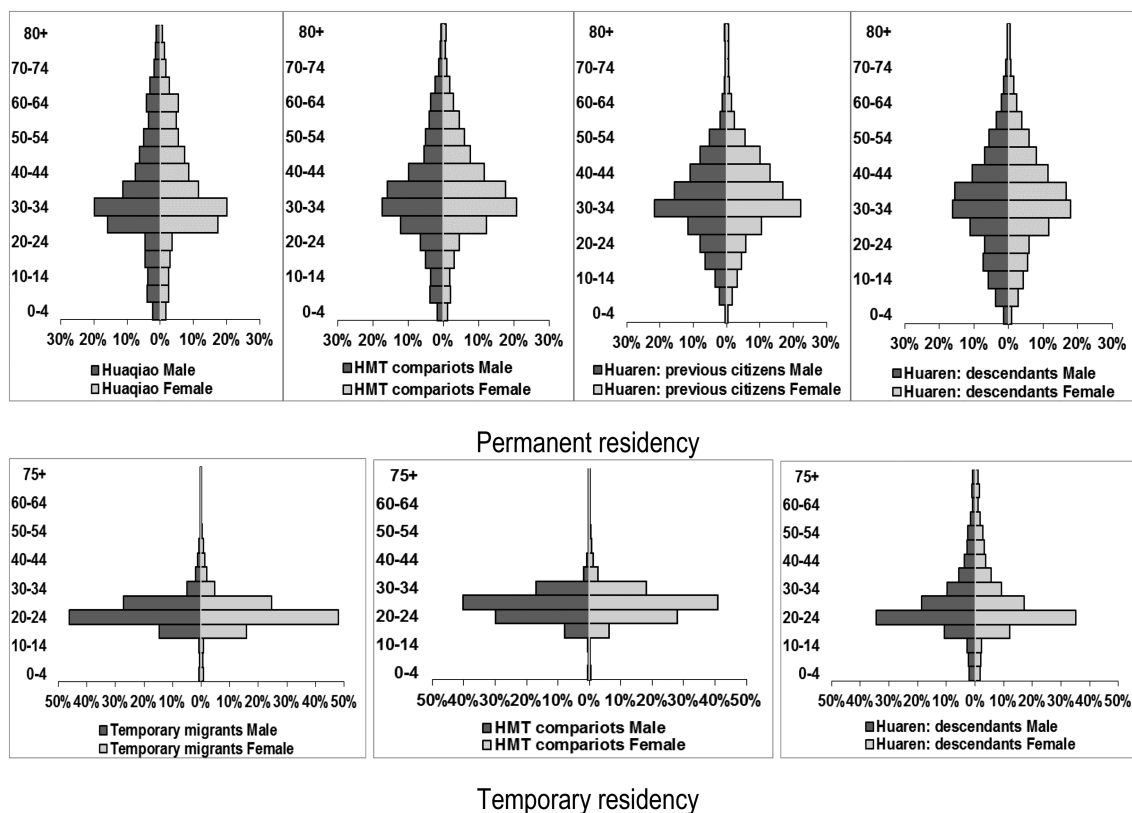


**FIGURE 2** Age-sex pyramids of Australia-based Chinese diaspora groups, by residency status (permanent, temporary). Data sources: ABS (2020a, 2020b)

under permanent residency are more dispersed across age cohorts than those under temporary residency. The four permanent subgroups differ little in age-sex structure. That said, *Huaqiao* have a relatively higher proportion aged between 25 and 29; and among *HMT compatriots*, from age 25 to 64 females are slightly more numerous than males. In the three temporary subgroups, younger cohorts predominate (15–34, especially 20–29); and descendants of *Huaren* show a more dispersed age distribution than either temporary migrants from China or *HMT compatriots*.

There is a significant discrepancy in family composition for the subgroups differentiated by residency status. More than 80% of migrants across all four permanent-visa subgroups live with family members. The percentage drops dramatically for the three temporary-residency subgroups: descendants of *Huaren* (to 48%), Chinese temporary migrants (to 25%), and *HMT compatriots* (to 20%). Among these, descendants of *Huaren* have the largest proportion of temporary-working and bridging visa holders, while Chinese temporary migrants and *HMT compatriots* have the highest proportions of student and holiday-maker visa, respectively. It is reasonable to infer that holders of bridging temporary working visas are more generally able afford settlement in Australia than holders of student and holiday-maker visas. Therefore, descendants of *Huaren* are much more likely to migrate with their families under temporary visas than Chinese temporary migrants and *HMT compatriots*.

## 5.2 | Socio-economic integration into destination by diaspora subgroup and visa type

Diaspora individuals even from the same country do not constitute a homogeneous group because their socio-economic characteristics vary significantly across diaspora subgroups and by residency status. Indicators of immigrant integration developed by the Organisation for Economic Co-operation and Development (OECD) (2015) measure three general areas of integration, including skills and labour-market situation such as educational attainment, host-country language proficiency, employment status, and occupation; living conditions such as income and dwelling; and civic engagement such as naturalisation rate, voting participation rate, and sense of belonging to the destination. The ACMID and ACTEID datasets allow us to derive the following relevant integration indicators for the seven Chinese diaspora subgroups: spoken-English proficiency; highest educational attainment for people

aged 15 or older; field of study; housing tenure; and labour-market outcomes—specifically employment status, skill alignment in post-migration jobs, industry of employment, and personal weekly income. Skill alignment is here defined as *degree of match or mismatch* between workers' qualifications or skills and what employers demand (Quintini, 2011). *Skill mismatch* indicates the difference between an individual's skill level and what is required in a job. The Australian and New Zealand Standard Classification of Occupations (ANZSCO) classifies occupation skills into five levels; the greater the range and complexity of tasks, the higher the required level (ABS, 2019). In our study, an individual's skill level is measured by the extent of formal education.

Our general *null hypothesis* is that the degree of integration for *Huaqiao* groups and temporary migrants is not as high as for *Huaren* and *HMT compatriots*. *Huaqiao* and Chinese temporary migrants usually have strong connection with the home country. For each variable measuring integration, the significant $P$ value in Pearson chi-square testing shows that corresponding diaspora subgroups differentiated by residency status (permanent, temporary) diverge significantly.

We examined nuanced distinctions by residency status among the seven subgroups. As shown in Table 3, individuals falling in different subgroups have divergent degrees of English proficiency, educational attainment, field of study, labour market outcomes, and housing ownership. Most characteristics show negative relationships with degree of connection to China. Generally, vital homeland connections are supposed to exist among *subgroups originating in mainland China*; that is *Huaqiao*, *Huaren* who were previous Chinese citizens, and temporary Chinese migrants. They are therefore less likely to have high English proficiency, be employed, have secure jobs with skills matched, work in STEM-related industry sectors, earn a high weekly income (AU$1324 or more), or own a house outright than are *HMT compatriots* and the *subgroup from other nations*, such as *Huaren* who were distant descendants. However, they are more likely to have a higher level of educational attainment such as a postgraduate degree or graduate diploma/certificate or to have studied in STEM fields.[3]

## 5.3 | Chinese diaspora's socio-economic integration: Comparing those from mainland China and other nations

Measuring integration requires a benchmark against which integration outcomes for targeted populations can

**TABLE 3** Pearson chi-square testing: Socio-economic characteristics of Chinese diaspora groups, by residency status (permanent, temporary)

| Socio-economic characteristics | Permanent | | | | Temporary | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| | Huaqiao[a] | Compatriots of Hong Kong, Macau, and Taiwan | Huaren: previous citizens | Huaren: descendants | Temporary migrants[b] | Compatriots of Hong Kong, Macau, and Taiwan | Huaren: descendants |
| **Spoken English proficiency** | | | | | | | |
| Speak English only (%) | 1.3 | 6.0 | 4.3 | 19.3 | 1.3 | 2.6 | 17.4 |
| Speak very well/well (%) | 59.5 | 74.4 | 78.9 | 73.2 | 79.7 | 60.3 | 72.7 |
| Speak not well/not at all (%) | 39.2 | 19.7 | 16.8 | 7.5 | 19.0 | 37.1 | 9.9 |
| Total (N) | 150,305 | 23,065 | 73,388 | 92,252 | 123,188 | 27,417 | 40,228 |
| | Pearson Chi2(6) = 5.7e+04 Pr = 0.000 | | | | Pearson Chi2(6) = 2.4e+04 Pr = 0.000 | | |
| **Highest education attainment (≥15 years)** | | | | | | | |
| Postgraduate degree/graduate dip. or cert. (%) | 25.0 | 20.8 | 28.8 | 19.1 | 15.0 | 6.3 | 8.7 |
| Bachelor degree (%) | 25.7 | 35.5 | 28.0 | 44.1 | 29.8 | 28.0 | 27.9 |
| Advanced dip./dip. (%) | 9.8 | 9.2 | 9.5 | 8.1 | 6.7 | 10.9 | 13.7 |
| Cert. I–IV (%) | 3.6 | 4.1 | 4.6 | 3.9 | 1.2 | 3.5 | 4.2 |
| Secondary education (%) | 34.2 | 29.3 | 28.1 | 23.7 | 47.0 | 49.5 | 44.8 |
| No education attainment (%) | 1.7 | 1.2 | 1.0 | 1.2 | 0.4 | 1.7 | 0.8 |
| Total (N) | 130,267 | 20,475 | 66,774 | 80,387 | 116,687 | 24,968 | 36,076 |
| | Pearson Chi2(15) = 9.7e+03 Pr = 0.000 | | | | Pearson Chi2(15) = 6.1e+03 Pr = 0.000 | | |
| **Field of study** | | | | | | | |
| STEM (%) | 25.9 | 20.0 | 23.4 | 27.2 | 24.8 | 16.2 | 24.5 |
| Health (%) | 7.2 | 12.1 | 8.8 | 12.9 | 3.5 | 6.5 | 10.6 |
| Education, business management, humanity and social sciences (%) | 56.3 | 53.8 | 57.5 | 48.2 | 59.4 | 55.1 | 46.3 |
| Other (%) | 10.6 | 14.2 | 10.3 | 11.7 | 12.3 | 22.2 | 18.5 |
| Total (N) | 86,000 | 14,645 | 48,267 | 61,746 | 62,992 | 13,740 | 20,363 |
| | Pearson Chi2(9) = 2.5e+03 Pr = 0.000 | | | | Pearson Chi2(9) = 3.4e+03 Pr = 0.000 | | |
| **Employment status** | | | | | | | |
| Employed (%) | 56.2 | 63.9 | 69.8 | 70.2 | 21.5 | 54.2 | 48.1 |
| Unemployed (%) | 6.2 | 5.5 | 5.5 | 5.6 | 9.5 | 9.1 | 9.1 |
| Not in the labour force (%) | 37.6 | 30.6 | 24.7 | 24.2 | 69.0 | 36.8 | 42.9 |
| Total (N) | 138,242 | 21,577 | 69,296 | 83,804 | 120,861 | 27,077 | 37,589 |
| | Pearson Chi2(6) = 6.4e+03 Pr = 0.000 | | | | Pearson Chi2(6) = 1.8e+04 Pr = 0.000 | | |

(Continues)

**TABLE 3** (Continued)

| Socio-economic characteristics | Permanent | | | | Temporary | | |
|---|---|---|---|---|---|---|---|
| | Huaqiao[a] | Compatriots of Hong Kong, Macau, and Taiwan | Huaren: previous citizens | Huaren: descendants | Temporary migrants[b] | Compatriots of Hong Kong, Macau, and Taiwan | Huaren: descendants |
| **Skill alignment** | | | | | | | |
| Match (%) | 61.4 | 59.9 | 62.6 | 66.7 | 57.1 | 54.6 | 62.5 |
| Not match (%) | 38.6 | 40.1 | 37.4 | 33.3 | 42.9 | 45.4 | 37.5 |
| Total (N) | 72,587 | 13,150 | 46,042 | 56,621 | 24,803 | 13,052 | 17,176 |
| | Pearson Chi2(3) = 466.978 Pr = 0.000 | | | | Pearson Chi2(3) = 214.999 Pr = 0.000 | | |
| **Industry of employment** | | | | | | | |
| Primary (%) | 1.6 | 1.4 | 1.3 | 1.7 | 1.8 | 14.9 | 10.5 |
| Secondary (%) | 15.0 | 9.1 | 12.4 | 10.6 | 8.5 | 17.0 | |
| Tertiary: STEM-related (%) | 13.2 | 12.5 | 13.9 | 17.3 | 12.3 | 2.9 | |
| Tertiary: other (%) | 70.3 | 76.9 | 72.5 | 70.4 | 76.4 | C65.2 | 78.9 |
| Total (N) | 71,129 | 13,174 | 45,375 | 56,714 | 23,964 | 13,732 | 17,140 |
| | Pearson Chi2(9) = 1.2e+03 Pr = 0.000 | | | | Pearson chi2(9) = 5.4e+03 Pr = 0.000 | | |
| **Personal weekly income (AUD)** | | | | | | | |
| High (≥1324) (%) | 21.3 | 25.7 | 29.7 | 39.6 | 12.7 | 21.1 | 18.0 |
| Median–high (662–1323) (%) | 24.9 | 27.6 | 28.4 | 23.0 | 10.3 | 19.3 | 16.0 |
| Low–median (331–661) (%) | 16.8 | 15.4 | 17.0 | 11.5 | 12.7 | 24.6 | 19.4 |
| Low (<331) (%) | 13.0 | 11.8 | 11.3 | 10.0 | 9.6 | 9.1 | 12.2 |
| Nil/negative (%) | 24.1 | 19.5 | 13.7 | 15.9 | 54.8 | 25.8 | 34.4 |
| Total (N) | 151,345 | 23,199 | 73,700 | 92,557 | 131,993 | 33,210 | 40,376 |
| | Pearson Chi2(12) = 1.3e+04 Pr = 0.000 | | | | Pearson Chi2(12) = 1.4e+04 Pr = 0.000 | | |
| **Housing tenure** | | | | | | | |
| Owned outright (%) | 15.2 | 24.2 | 16.7 | 18.3 | 9.4 | 11.7 | 12.8 |
| Owned with a mortgage (%) | 58.8 | 47.7 | 63.8 | 53.8 | 20.1 | 17.4 | 22.2 |
| Rented (%) | 25.5 | 27.6 | 19.0 | 27.5 | 67.9 | 68.0 | 62.5 |
| Retirement village (%) | 0.5 | 0.6 | 0.4 | 0.4 | 2.7 | 2.8 | 2.5 |
| Total (N) | 147,561 | 22,592 | 71,778 | 90,412 | 120,361 | 28,242 | 35,579 |
| | Pearson Chi2(9) = 3.5e+03 Pr = 0.000 | | | | Pearson Chi2(9) = 1.1e+03 Pr = 0.000 | | |

Data sources: ABS (2020a, 2020b).

[a]Includes permanent visa holders whose duration of stay in Australia was less than 2 years, though they were not officially defined to be *Huaqiao*.

[b]Includes a small number of *Huaqiao* who were long-term migrants holding temporary visa (>5 years).

be assessed (OECD, 2015). We therefore compared integration outcomes for Chinese diaspora subgroups with those for all migrants in Australia. To reduce the complexity in our comparisons, and to capture certain subtle differences across diaspora subgroups and visa types, we reassigned members of six subgroups to more inclusive two subgroups or categories, as follows. First, into a *mainland China subgroup* we merged all *Huaqiao*, all previous citizens of *Huaren*, and all the three subgroups under temporary residency. Second, into a group called *Huaren from other nations* we merged all descendants of *Huaren*, whether permanent or temporary. These changes enable us to analyse how integration of Chinese diaspora varies by original birth nation.

The resulting three new broad subgroups—*mainland China subgroup*, *HMT compatriots*, *Huaren from other nations*—are used for analysis in the rest of the paper.

Figures 3–7 show nuanced patterns in the varying levels of integration across our three broad subgroups, across a range of visa types, and across types of residency status, as compared to migrants in Australia generally. Overall, the *mainland China subgroup* has the lowest level of English proficiency, while the English proficiency of *all migrants in Australia* is the highest, followed by *Huaren from other nations* and *HMT compatriots*. Within the *mainland China subgroup*, those coming to Australia under the independent-skilled visa scheme are most likely to speak English very well or well, followed by those coming under government-sponsored and student schemes (Figure 3). For *HMT compatriots* and *other nation group*, those coming under the employer-sponsored, independent-skilled, and government-sponsored schemes speak English very well or well.

Looking at the highest educational attainment, within the *mainland China subgroup* and the *other nation group*
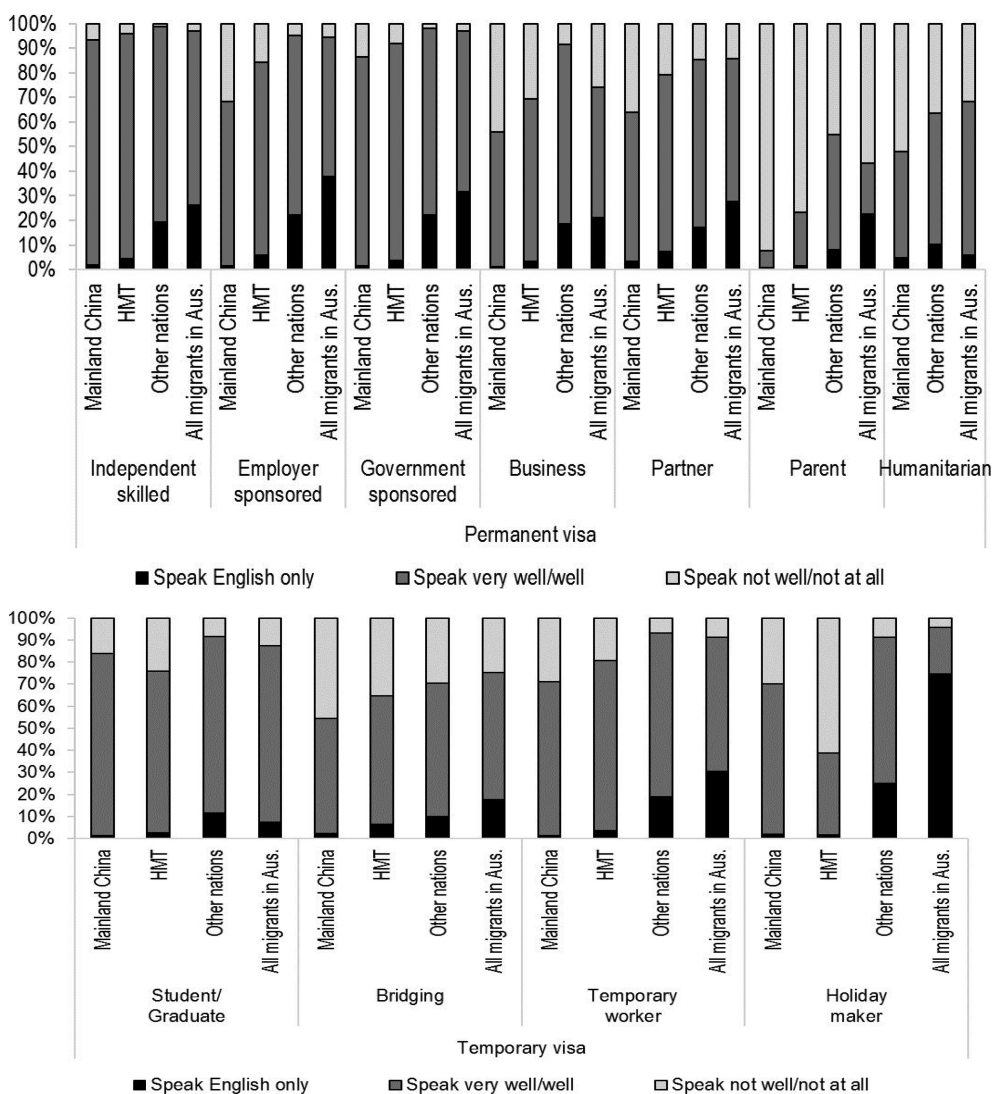


FIGURE 3 English proficiency of Chinese from mainland China, compared to those from Hong Kong, Macau, and Taiwan, *Huaren* from elsewhere, and overall migrants in Australia, by visa type. Data sources: ABS (2020a, 2020b)
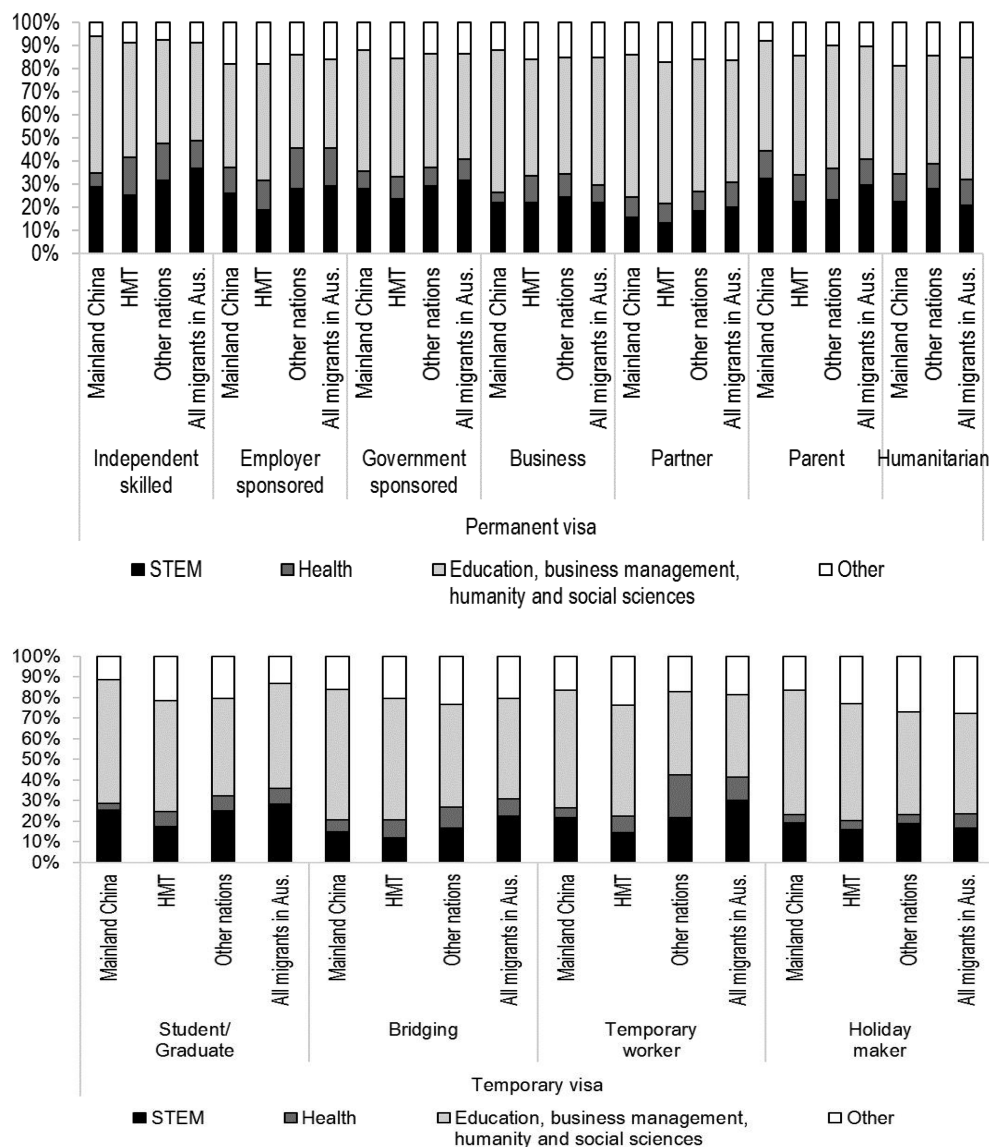
**FIGURE 4** Study field of Chinese diaspora from mainland China, compared with compatriots from Hong Kong, Macau, and Taiwan, *Huaren* from elsewhere, and overall migrants in Australia, by visa type. Data sources: ABS (2020a, 2020b)

over 80% of people coming under the independent-skilled visa scheme received a bachelor degree or above, followed by those under government-sponsored, holiday-worker, and temporary-worker schemes. However, for *HMT compatriots* and *all migrants in Australia*, the educational level of temporary migrants coming under holiday-worker scheme is lower than that for the *mainland China subgroup* and *Huaren from other nations*. The proportion of STEM-related educational qualification for the *mainland China subgroup* is lower than *all migrants in Australia* and also less than *other nation group*, but *HMT compatriots* have the lowest proportion of STEM study (Figure 4). As expected, these three subgroups, and even all migrants in Australia, coming under skilled migration schemes—especially independent, government-sponsored, or employer-sponsored—are more likely than their counterparts coming under any other visa types to study in STEM fields.

While employment status shows very similar patterns among the three Chinese subgroups and *all migrants in Australia* coming under permanent-visa schemes, it differs considerably for people coming to the country under various temporary migration schemes among the *three subgroups*. Employment rates for the *mainland China subgroup* coming under business-and-family (partner) schemes are less than for other subgroups, as well as the overall migrant population. Those within the *mainland China subgroup* who came under the holiday-maker scheme are strikingly less likely to be employed than those in other subgroups or *all migrants in Australia*.

Figure 5 shows that all three subgroups, and all migrants, coming under parent and humanitarian schemes have higher proportions finding jobs matched to their qualifications; this reflects the fact that these migrants usually have lower educational attainments

**FIGURE 5** Skill mismatch of diaspora from mainland China, compared to those from Hong Kong, Macau, and Taiwan, *Huaren* from elsewhere, and overall migrants in Australia, by visa type. Data sources: ABS (2020a, 2020b)
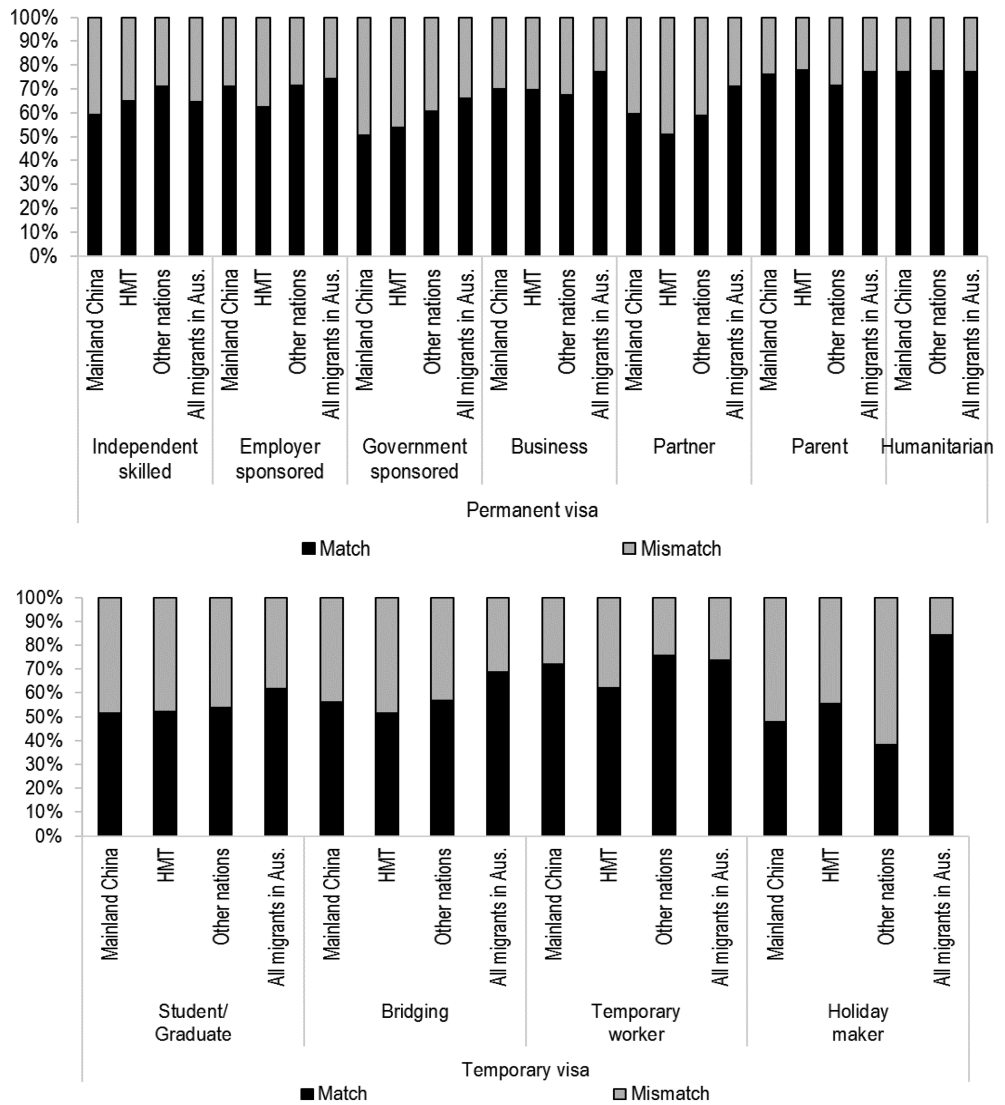


than required in even the least demanding jobs. Interestingly, across these three diaspora subgroups coming under the skilled-migration program, those under the government-sponsored scheme consistently have the lowest level of skill match.

Figure 6 shows the distribution of industry sectors where the three subgroups were employed, by residency status and by visa type. All the subgroups and *all migrants in Australia* under the independent-skilled scheme are most likely to work in STEM-related tertiary industry, compared to their counterparts under other permanent-migration schemes. Notably, holiday-workers are more likely than any other temporary-visa holders to work in primary industry, especially for *HMT compatriots.*

Income for the *mainland China subgroup* is markedly lower than that for other subgroups, and for *all migrants in Australia* (Figure 7). A probable reason might be due to English language barriers, which inhibit employment

and high wages. Notably, within the *mainland China subgroup* independent-skilled visa holders are most likely to have high income, followed by employer-sponsored, government-sponsored, and business visa holders. Temporary-worker visa holders also have relatively high incomes, across these groups.

In short, the *mainland China subgroup*, by all migration types except temporary worker and student, when compared to the *other nation group*, has a smaller proportion studying STEM or working in STEM-related industries. This reveals that younger generations of *Huaren* such as children and other descendants, predominantly originating in South-East Asian countries, have more successful labour market outcomes in terms of key economic indicators—rate of employment in the STEM fields, and income—and chance of social integration due to high English proficiency and education, than *Huaqiao* and first generation *Huaren*.
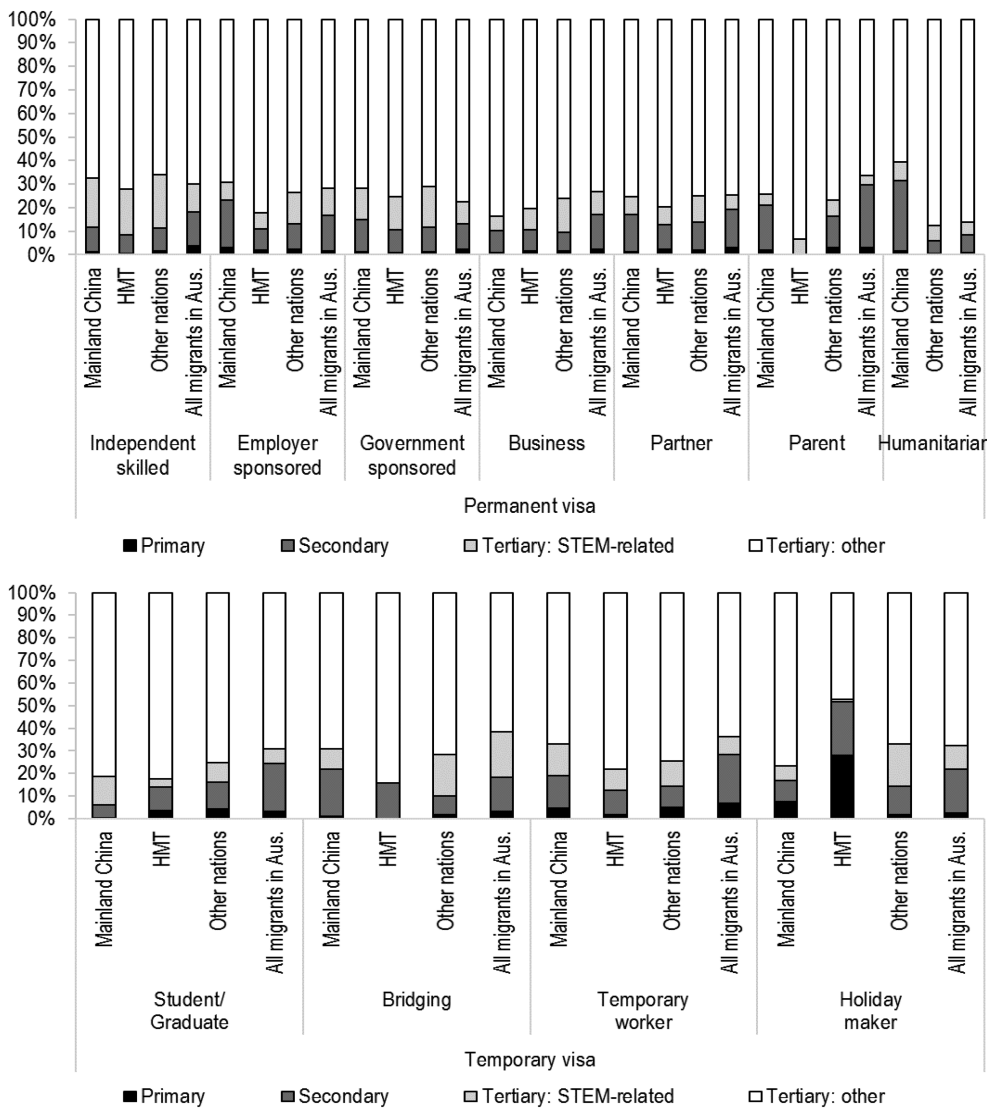
**FIGURE 6** Industry of employment of diaspora from mainland China, compared to compatriots from Hong Kong, Macau, and Taiwan, *Huaren* from elsewhere, and overall migrants in Australia, by visa type. Data sources: ABS (2020a, 2020b)

## 6 | DISCUSSION: DATA AND POLICY IMPLICATIONS

### 6.1 | Data on diaspora

Research into the migration–development nexus has brought to prominence the contributions that international migrants and their next generations have made to countries of origin as much as to countries of destination—whether permanent or temporary, skilled, family-supported, or humanitarian, or first or later generations. However, measurement tools have not kept pace with shifts concerning the essential concept of diaspora, nor with recent transnational understandings of the migration–development nexus. Most governments and populations still fail to appreciate the size, characteristics, and developmental significance of *non-permanent* migrant groups and *overseas-born* diaspora.

A few governments have explored the feasibility of directly counting their overseas diasporas. In 2004, the US Census Bureau launched a test enumeration in France, Kuwait, and Mexico. But it soon reported that census counting of Americans overseas would not be feasible, due to challenges in enforcing mandatory participation, obtaining a complete and accurate address list, and ensuring coverage and accuracy (United States Government Accountability Office [GAO], 2004). In 2011 in Shanghai a pioneering quasi-census (Wu, 2015) collected information on various diaspora groups, including *Huaren*, *Huaqiao*, *Huaqiao* returnees, Hong Kong and Macau compatriots, international students, and more. It surveyed standard demographic and socio-economic characteristics but also mobility, linkages with homeland, and integration at destinations. However, that quasi-census of diaspora conducted in the most developed region required enormous institutional and financial resources, which most parts of China could not afford.

FIGURE 7 Personal weekly income (A$) of diaspora from mainland China, compared with compatriots from Hong Kong, Macau, and Taiwan, *Huaren* from elsewhere, and overall migrants in Australia, by visa type. Data sources: ABS (2020a, 2020b)
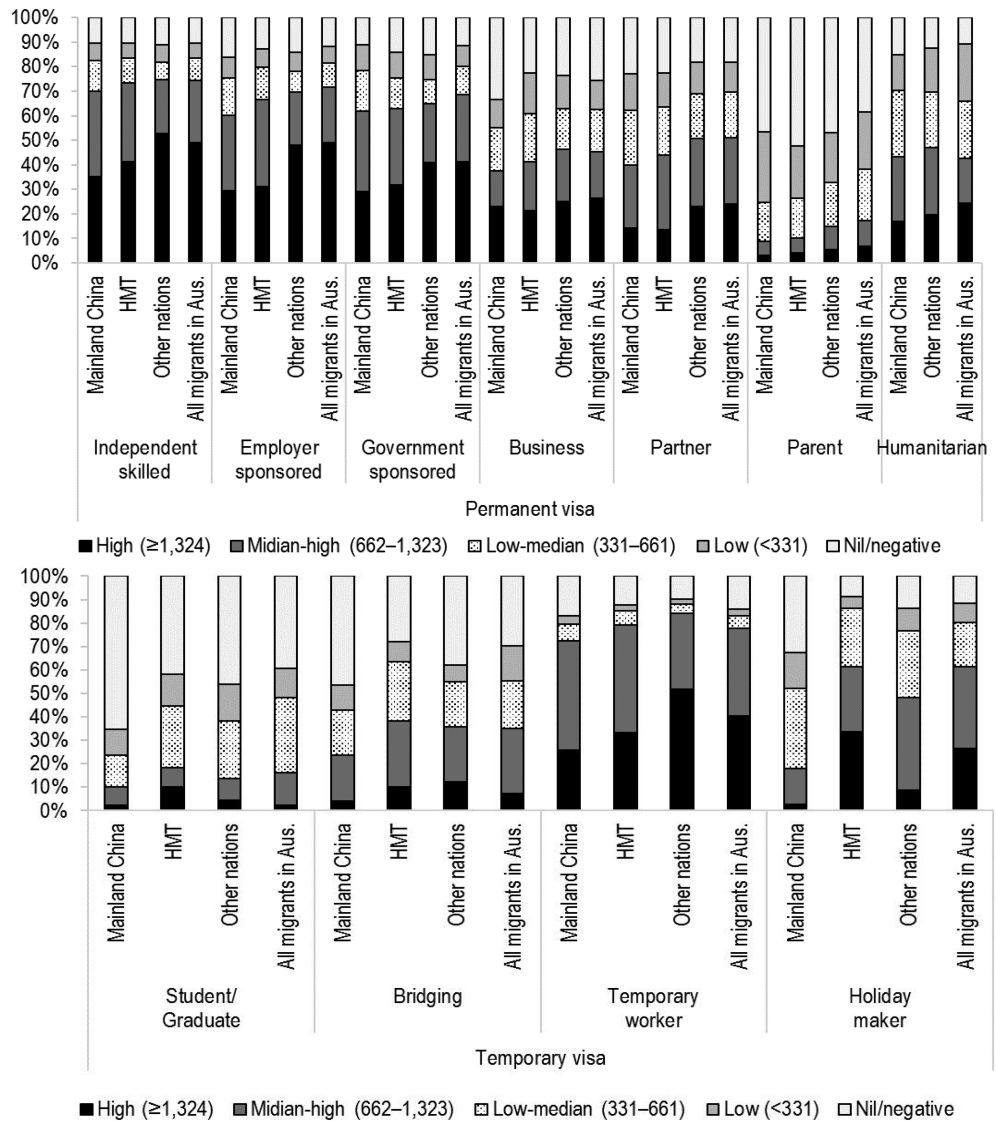
Including standard and consistent migration variables in UN census guidelines that set international statistical standards and methods would be a more feasible advance, encouraging consistency among member states. The recent Global Compact for Safe, Orderly and Regular Migration has urged UN member states to collect "accurate, reliable and comparable data, disaggregated by sex, age, migration status and other characteristics relevant in national contexts" (McAdam, 2019, p. 168). A nuanced understanding of diaspora populations requires innovative data collection on migration in national censuses and surveys: data about country of birth, country of birth of parents, country of citizenship, country of residence five years before the census, most recent arrival date, and reasons for migration, and relies on linking migration data to border records, visas, resident permits, and population registers for example (McAdam, 2019).

Australia's census-migration integrated data resonate with UN requirements. They demonstrate capacity to overcome at least three limitations of conventional data collection. First, linking administrative migration data with census demographic and socio-economic information enables us to estimate diaspora populations and construct their socio-demographic and economic profiles. Second, the linked data cover both permanent and temporary migrants. Information on temporary migrants such as students and temporary workers advances our understanding of the diaspora–development nexus from a transnational perspective, recognising the ever-increasing contributions temporary migrants make to countries of origin and destination (Tan et al., 2018). Third, the linked data yield information for countries of origin on the various subgroups. As showcased in this article, Australia's integrated census-migration data serve to uncover many such nuances and complexities in the Chinese diaspora, disaggregated by residency status and visa scheme.

However, Australia's ACMID and ACTEID datasets have four important limitations. First, the time horizon does not cover all international migrants. For example, ACMID 2016 excludes migrants who took Australian citizenship before 2000 and second and later generations born as Australian citizens. Second, it is impossible to link all migration records to the census data, as discussed in Section 3 above. Third, information on transnational linkage—a crucial factor in defining diaspora—is largely unavailable in the integrated datasets. Only one variable—ethnic language spoken at home—is relevant to transnational linkages. And as the fourth limitation, the integrated data have inherent limitations for measuring third and subsequent generations of diaspora due to the vague variable "ancestry," as we discussed in Section 4.1.

There are limitations to both the integrated census–migration data from Australia (destination) and diaspora censuses in the United States and China (origin). They nevertheless amount to significant data innovations in diaspora research. Other data sources have gradually become available to address these linkage issues, facilitated by advances in information and communication technologies. "Big data" resources, mainly involving telephone and social media usage, open a new window to capture information on linkages. Emerging studies have used mobile phone usage data to monitor migration patterns (Wesolowski et al., 2013), and Facebook data to examine diasporas' geographic distributions, demographic characteristics, and cultural linkages by identifying languages and therefore ethnicities (Garha & Domingo, 2019). Social media, especially country-specific ones like China's WeChat (Xue et al., 2018), give a platform for the construction of virtual transnational space, in which various linkages to homeland built and evolve. New data on the domains, scope, and strength of transnational linkages collected through social media could be useful for defining and categorising diaspora groups in future research.

## 6.2 | Policy implications

Enhanced understandings of the size, composition, and characteristics of diaspora populations furnish a necessary baseline for countries of origin to design or refine engagement policies, and for Australia as a destination country to retain highly skilled migrants, enhance geographic distribution across states and between metropolitan and regional areas, and promote socio-economic integration for all diaspora categories.

Our study has found that Chinese diaspora originating in mainland China—either *Huaqiao* or first-generation *Huaren* taking Australian citizenship—have weaker labour-market outcomes than diaspora from

other nations, such as the South-East Asian countries. The implication is that those diaspora subgroups retaining the closest connection with China may have limited capacity to build economic transnational linkages with homeland. Such subgroups are more likely to make non-economic contributions to China than to provide economic resources such as remittances and direct capital investment. This trend resonates with a vital dimension of China's current diaspora policy—engaging Chinese diaspora to promote the influence of China's soft power and public diplomacy (Siriphon & Li, 2021). Over the past four decades, China has experienced dramatic economic and social development and risen to be a major presence in the world economy. It is therefore transforming its national diaspora policy: from one of tapping diaspora capital for development in the 1980s and 1990s, to emphasising the roles of diaspora in building China's soft power in more recent years. It has sought to supplement its traditional use of hard power with soft power that is intended to "gradually change China's image in the international society from negative to neutral to positive" (Wang, 2008, p. 269). Chinese governments would do well to treat *all* in the diaspora—including those not achieving high socio-economic status—as a bridge or channel for the exchange of technology and wisdom: promoting integration of overseas Chinese into destination societies and enabling them to tell good Chinese stories (Tan et al., 2021).

Another interesting finding is that those coming from mainland China under the temporary-worker scheme do better in the labour market. Rigorous efforts should be made to tap their skills and experience when they return, in addition to China's existing talent programs that lure "permanent" skilled migrants back. Since China's 2000 acceptance into the WTO its economic development has entered a transnational period, shifting from the low to the high end of the industrial chain. Tapping scientific, professional, and entrepreneurial skills in the diaspora has solidified as a strategic aim. All levels of government have sought to attract such talents (Liu & Van Dongen, 2016), especially those of the highest calibre with advanced scientific and professional skills. Some such efforts could be diverted to those under the temporary-worker scheme, who have invaluable overseas working experience and are most likely to return. Back in 2006 the Central Committee of the Communist Party of China touted the emergence of the *new social class* (NSC). Migrant returnees constitute an important part of the NSC. In recent years, different levels of Chinese government have designed and implemented programs to engage those talented freelance workers and entrepreneurs classified as NSC, many of whom are overseas returnees (Tan et al., 2021). More

policies and programs are needed to enable those returned migrants to bring dynamics to Chinese labour market more effectively with the work styles, knowledge, skills, and experiences they have acquired overseas.

Our findings on integration at the destination have significant implications for Australia's immigration policies. Since the mid-1990s a major innovation has been the Regional Sponsored Migration Scheme (RSMS), which aims to stimulate development in regional areas by addressing the labour and skill shortages (Australian Government, 2019). Our study has also shown that those coming to Australia under the government-sponsored scheme consistently have the lowest skill match among all skilled schemes, and lower income than those under independent and employer-sponsored schemes. This finding accords with the fact that attracting skilled migrants under RSMS does not automatically translate to closing a labour-market gap. The Australian government might do well to put greater effort into promoting labour-market outcomes for those coming under RSMS, possibly an effective way to sustain the migrant segment in regional areas.

# 7 | CONCLUSION

This study has worked with and tested Australian innovations in integrating census and migration data as a new approach to producing necessary data for quantification and analysis of a diaspora population, by permanent or temporary residency status and visa category. It should help close a significant research gap between transnationally oriented advances in conceptualising diaspora and the data needed to quantify and analyse diaspora populations. Despite various systems of data collection, the most feasible way to collect internationally comparable information may be to include standard and consistent diaspora-related census variables, or to link census data to administrative data that encompass the relevant variables. The present study has highlighted the following variables as most useful: original citizenship, current citizenship, birth country, birth country of parents, year of arrival, visa type, and self-reported ancestry or cultural/ethnic background. Including these variables in census or administrative data records can distinguish among migrants and diaspora, allowing data collection to keep pace with the widely accepted conceptualisation recommended by IOM.

Taking the Australia-based Chinese diaspora as an example and applying the transnational perspective, we have quantified its size, composition, and distribution, and analysed its social-economic integration. Such understandings were previously unavailable due to data limitations. Employing China's strict legal–conceptual regimentation, we classified seven components of the Chinese diaspora, practical implementations when it is applied to engagement policy and programs in China, and alignment with the more internationally accepted IOM definition. We have identified significant inconsistency between these two definitions viewed from the transnational perspective; and there is inconsistency also between the legal definition and its practical application. Moreover, we have identified three broader subgroups of Chinese diaspora—those from mainland China, compatriots of Hong Kong, Macao, and Taiwan, and the subgroup originating in other nations—to disentangle the complexity and dynamics associated with the Chinese definition and to examine different levels of integration at the destination. Our empirical findings support the argument that diaspora individuals even from the same source country are typically not assignable to a homogeneous group but are divided along socio-economic and political lines (Cohen, 2017). Only through such comprehensive new understandings of diaspora can we establish a more robust baseline for origin countries to design effective engagement policy and strategies, and for destination countries to enhance economic, social, and political inclusion for the complex and diverse diaspora populations that they benefit enormously from hosting.

## CONFLICT OF INTEREST
There is no conflict of interest nor financial incentives involved in this research.

## ETHICS STATEMENT
Ethics was obtained through the University of Adelaide.

## DATA AVAILABILITY STATEMENT
The data that support the findings of this study are available from Australian Bureau of Statistics (ABS). Restrictions apply to the availability of these data, which were used under license for this study.

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## ENDNOTES

[1] Superseded by more automated processing, the outgoing passenger card was abolished in 2017. https://minister.homeaffairs.gov.au/peterdutton/Pages/removal-of-the-outgoing-passenger-card-jun17.aspx

[2] It would be better to keep this minor subgroup here as the following complicated analysis considers this small amount of *Huaqiao* as temporary migrants due to the separate databases used in estimation and analysis.

[3] STEM (Science, Technology, Engineering and Mathematics) encompasses natural and physical sciences, information technology, engineering and related technologies, architecture and building, and agriculture, environmental, and related studies. STEM-related tertiary industry includes information media, telecommunications, and professional, scientific, and technical services (Australian Government, 2020).

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