



Research Paper C: Determinants of AMEP participation (2022)

Executive Summary

- This paper used the Census-derived proficiency in spoken English measure (as established in Research Paper B: Validating self-reported English proficiency levels in the Census) to identify persons from the 2011 Census of Population and Housing (hereafter called the Census) who may have been eligible for enrolment in AMEP by virtue of their low proficiency in spoken English, but who did not participate in the program. This may assist the Australian Government to better understand the drivers of AMEP participation. Identifying the characteristics of those migrants in the Census who were potentially eligible to participate in AMEP, but did not, provides insight into program reach, and helps recognise which groups from across the migrant and humanitarian communities are not engaging with the program.
- The analysis sample is restricted to adult migrants who met AMEP visa rules and who arrived in Australia between 2002 and on or before Census night 2011.
- This gave a final analytic sample of 98,797 persons, of whom 77,963 (79%) participated in the AMEP (prior to Census night 2011).
- Compared with migrants aged under 25 years, female migrants aged between 25 and 44 years and male migrants between 25 and 34 years were more likely to enrol in AMEP. Male and female migrants were progressively less likely to enrol in AMEP after the age of 55 years.
- Female migrants arriving in Australia after 65 years of age had a much lower probability of enrolling in AMEP than younger counterparts. By contrast, the probability of participating in AMEP increased with age for male migrants, reaching its maximum at 60-64 years, before decreasing.
- AMEP participation varied by country of birth. For female migrants, the lowest participation rates were seen for those from Croatia, Hong Kong, Bosnia and Herzegovina, Vietnam and Lebanon. For males, the lowest participation rates were observed among migrants from Hong Kong, South Korea and Japan. By contrast, the highest AMEP take-up rates were observed for migrants from Burundi, Ethiopia, South Sudan, Russian Federation and Sudan, and this pattern was largely similar by gender.
- AMEP participation varied by visa sub-class and within that by gender. For both genders, the lowest AMEP participation rates were observed for holders of Skilled Independent (189), Partner (820), Employer Nomination Scheme (186), Regional Sponsored Migration Scheme (187) and Skilled Independent (885) visas. For female visa holders, the highest AMEP participation rates were among holders of Woman at Risk (204), State/Territory Sponsored Business Owner (892) and Refugee (200) visas. For male visa holders, the highest AMEP participation rates were among holders of State/Territory Sponsored Business Owner (892) and Refugee (200) visas.
- Our results for this paper suggest there were clear differences in AMEP uptake rates by migrant age, age of arrival in Australia, country of birth, visa sub-class, and gender.

Introduction

The Adult Migrant English Program (AMEP) Impact Evaluation Project helps the Australian Government to better understand the drivers of AMEP participation, and the broader impacts participation have on employment and

welfare outcomes for migrants. It consists of topical papers that utilise the broad ranging government information included within the Australian Bureau of Statistics' (ABS) Multi-Agency Data Integration Project (MADIP).

The AMEP Impact Evaluation project began as a collaborative research initiative between the Department of Education, Skills and Employment (DESE) and the Australian Research Council Centre of Excellence for Children and Families Over the Life Course (the Life Course Centre) in July 2019. Jurisdiction over the AMEP subsequently moved from DESE to the Department of Home Affairs (the Department), making the Department custodians of the AMEP data and the key stakeholder in the AMEP Impact Evaluation.

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Aim of the paper

The aim of this research paper is to determine which migrants participate in the AMEP, and which potentially eligible migrants do not.

Before now, it has not been possible to identify the characteristics of those migrants in Census who are, or were, potentially eligible to participate in AMEP, but do not. Newly linked Census-AMEP-Migration data in MADIP offers a unique opportunity to investigate this research question for the first time.

Results

It was challenging to identify potentially eligible migrants from existing data, mainly because currently available data did not have sufficient information to assess whether a migrant satisfied all three main eligibility conditions set out by the AMEP for the reference period 2003-2019 under review. To be eligible for AMEP during the reference period, a migrant had to: (i) hold a permanent visa or eligible temporary visa, (ii) register at AMEP within 6/12 months of visa commencement/entry to Australia, and (iii) have less than Functional English.¹ While we had some information about visa commencement (from the Migration dataset) and year of arrival in Australia (from the Census), we had no information about why eligible visa holders did not register within 6/12 months after arrival (i.e., the second eligibility condition). Moreover, there was a concern that information about English proficiency available in Census, while being highly correlated with some professionally assessed measures of English skills or socio-economic variables as shown previously (see Research Paper B: *Validating self-reported English proficiency levels in the Census*), may not be detailed or precise enough to accurately identify whether an eligible visa holder has less than Functional English. However, our analysis in Research Paper B: *Validating self-reported English proficiency levels in the Census* suggests it is valid to use Census-derived proficiency in spoken English for this purpose.

Taking these important data constraints into account, to identify migrants who were potentially eligible for AMEP enrolment, in Census data, we have focused on two criteria: visa sub-class from the Migration dataset and Censusderived proficiency in spoken English.

In particular, eligible visa holders (i.e., eligibility condition (i)) were identified using information on their most recent and AMEP eligible visa sub-classes available in the Migration dataset. As discussed in the conclusion of Research Paper B: *Validating self-reported English proficiency levels in the Census*, a migrant who self-reported speaking English "not well" or "not at all" on Census can be classified as having less than Functional English and hence is potentially eligible for AMEP enrolment (i.e., eligibility condition (iii)).

As AMEP aims to serve adult migrants, the sample was restricted to migrants who first arrived in Australia at the age of 18 or older to live for one year or more. Additionally, because Census 2011 only includes individuals who arrived in Australia before the census date of 9 August 2011, the sample was restricted further to AMEP clients who arrived in Australia on or before that date. We further excluded migrants who arrived in Australia before 2002 because some of them might have enrolled at the AMEP within 6/12 months after arrival and we do not observe them in the 2003-2019 AMEP data. This resulted in a final analytic sample of 98,797 individuals, of whom 77,963 (79% of the final sample) participated in AMEP.

¹ Eligibility conditions (ii) and (iii) have been changed since April 2021.

Figure 1 visually presents the composition of the final analytic sample. At Census 2011, 74% of individuals in the sample were under 45 years of age (Panel A) and 72% of them arrived in Australia before they were 40 years old (Panel B). Panel C shows the top 10 countries of birth for migrants in our sample. These are China (accounting for 23% of the whole sample), Vietnam (8%), Iraq (7%), India (6%), South Korea (5%), Myanmar (4%), Sudan (3%), Afghanistan (3%), Thailand (3%) and Lebanon (3%). Panel D reports top 10 visa sub-classes of migrants: Partner 100 (representing 29% of the final sample), Partner 801 (15%), Global Special Humanitarian 202 (11%), Refugee 200 (10%), Contributory Migrant Parent 143 (5%), Employer Nomination Scheme 856 (4%), Skilled - Independent 136 (3%), State/Territory Sponsored Business Owner 892 (2%), Regional Sponsored Migration Scheme 857 (2%), and Remaining Relative 115 (1%).



Figure 1: Linked AMEP, Migration and 2011 Census. A brief description of individuals in the analytic sample

Notes: Figures (in percentages) are calculated from a sample of 98,797 migrants in matched AMEP, Migration and 2011 Census datasets.

Employing a regression approach to understanding AMEP enrolment decisions

To examine factors driving the decision to participate in AMEP among the potentially eligible migrants described above, we employed a regression approach. This approach was chosen over alternatives such as pair-wise correlations (as has been done in Research Paper B: *Validating self-reported English proficiency levels in the Census*) because it can simultaneously account for multiple factors which may influence the AMEP take-up decision, and which may be highly correlated with one another. For example, regression analysis showed that the age of arrival in Australia and visa sub-class were significantly associated with English proficiency and each of these two factors can independently affect the migrant's decision to participate in AMEP.

We carefully chose a list of factors that may help explain why potentially eligible migrants with some specific and observable characteristics were more likely to enrol in AMEP than others. This list did not include factors which were possibly affected by the migrant's decision to enrol in AMEP in the first place, such as labour market or educational choices. This restriction was necessary because we only observed potentially eligible migrants at one point in time (i.e., at Census 2011) and many migrants arrived in Australia long before this time. The final list of explanatory variables included the migrant's age (measured at the time of 2011 Census and in various age groups), age of arrival in Australia (in various groups), English proficiency, visa sub-class, country of birth, and year of arrival in Australia. The dependent variable of this regression is a binary one which takes the value of one if the potentially eligible migrant participated in AMEP by the 2011 Census date, and zero if otherwise.

We modelled AMEP take-up behaviours for female and male migrants separately. Females represented 66% of the final sample and, on average, were more likely to participate in AMEP (82% of them did) than males (74%). To accommodate the binary nature of the dependent variable, we applied a Logit regression model and reported the estimated results in marginal effects. A positive reported result for a particular variable (for example, the "25 to 29 years" age of arrival group) indicates that individuals with this characteristic had a higher probability of participating in AMEP than individuals who arrived in Australia between 18-24 years, and vice versa. Furthermore, the magnitude of the impact of a given variable can be viewed from the size of its estimate in either a positive or negative direction. This technique was used for Figures 2-6 in this paper.



Figure 2: Impact of age on the probability of participating in AMEP

Notes: Migrants linked across AMEP, Migration and 2011 Census datasets. Results (in Marginal Effects (ME)) are from a Logit regression for males and females separately. Results (marginal effects (reported in bars)) and 95% confidence intervals (in grey sticks) are multiplied by 100 for aesthetic purposes. Other explanatory variables include age of arrival in Australia groups, English proficiency indicator, visa sub-classes, countries of birth, year of arrival in Australia, and an intercept. "Under 25" is set as the base group.

Figure 2 presents the impact of migrant age on their probability of participating in AMEP, suggesting noticeable differences by age group and by gender. For instance, as compared to migrants aged under 25 years (i.e., the base group), migrants aged between 25 and 44 years for females and between 25 and 34 years for males were more likely to enrol in AMEP. Moreover, for these age groups, the effects of age on the probability of participating in AMEP were greater for females. For age groups above 55 years, male and female migrants were much less likely to enrol in AMEP than those in the base group. We also observed that, from the age of 55 years, the age impact on AMEP enrolment was more pronounced for males than for females.



Figure 3: Impact of age of arrival in Australia on the probability of participating in AMEP

Notes: Migrants linked across AMEP, Migration and 2011 Census datasets. Results (in marginal effects) are from a Logit regression for males and females separately. Results (marginal effects (reported in bars)) and 95% confidence intervals (in grey sticks) are multiplied by 100 for aesthetic purposes. Other explanatory variables include age groups, English proficiency indicator, visa sub-classes, countries of birth, year of arrival in Australia, and an intercept. "Under 25" is set as the base group.

Figure 3, which reports estimated marginal effects of age of arrival in Australia on the probability of participating in AMEP, also highlights substantial age and gender differences. Particularly, for females, while there was no difference in the probability of enrolling in AMEP for migrants who arrived in Australia before age 25 years and those who arrived between the ages of 25 and 64, those who arrived after age 65 years had a noticeably lower (by 11 percentage points) probability of enrolling in AMEP. By contrast, for males, the influence of age of arrival on AMEP uptake followed a generally increasing pattern from the age of 45 years, reaching a maximum at 60-64 years, before decreasing, though it was still relatively high for those arriving in Australia aged 65 years and older.



Figure 4: Impact of country of birth on the probability of participating in AMEP

Notes: Migrants linked across AMEP, Migration and 2011 Census datasets. Results (in marginal effects) are from a Logit regression for males and females separately. Results (marginal effects (reported in bars)) and 95% confidence intervals (in grey sticks) are multiplied by 100 for aesthetic purposes. Marginal effects are ranked ascendingly, using results for females. Other explanatory variables include age groups, age of arrival in Australia groups, English proficiency indicator, countries of birth, year of arrival in Australia, and an intercept. "China", which represents the largest share of all migrants in this analytical sample, is set as the base group.

We also found noticeable heterogeneity in the likelihood of enrolling in AMEP by countries of birth. Figure 4 shows that, for female migrants, the highest AMEP take-up rates were observed for those from Burundi or Ethiopia, who were about 10 percentage points more likely to participate in the AMEP than those from China - the base group. This was followed by those originating from South Sudan, Russian Federation and Sudan. By contrast, also for females, the lowest participation rate was seen for migrants from Croatia who were 13 percentage points less likely to enrol in AMEP than Chinese migrants. They were followed by migrants from Hong Kong, Bosnia and Herzegovina, Vietnam and Lebanon. A largely similar take-up pattern by country of birth was observed for male migrants. Specifically, male migrants from South Sudan, Ethiopia, Burundi and Bhutan had the highest AMEP participation rates while those from Hong Kong, South Korea and Japan had the lowest take-up rates.

In some cases, we also noticed opposing take-up patterns by male and female migrants originating from the same home country. For example, male migrants from Pakistan or Iraq were more likely to participate in AMEP classes than Chinese male migrants but the opposite was true for female migrants from the same countries. Note, however, that for some countries the estimates were statistically significant for male or female migrants only. For instance, only male migrants from Afghanistan and Egypt were more likely to participate in the AMEP than Chinese male migrants since the estimates were positive and statistically significant (at the 1% level) for them only. Conversely, only female migrants from Cambodia or Turkey were statistically significantly less likely to enrol in the AMEP than female Chinese migrants.



Figure 5: Impact of visa sub-class on the probability of participation in AMEP

Notes: Migrants linked across AMEP, Migration and 2011 Census datasets. Results (in marginal effects) are from a Logit regression for males and females separately. Results (marginal effects (reported in bars)) and 95% confidence intervals (in grey sticks) are multiplied by 100 for aesthetic purposes. Marginal effects are ranked ascendingly, using results for females. Other explanatory variables include age groups, age of arrival in Australia groups, English proficiency indicator, countries of birth, year of arrival in Australia, and an intercept. "Partner (100)", which represents the largest share of all visa sub-classes in this analytical sample, is set as the baseline group.

Figure 5 highlights substantial differences in AMEP participation rates by visa sub-class. For example, the highest participation rates were observed among female holders of Woman at Risk (204), State/Territory Sponsored Business Owner (892) and Refugee (200) visas since the estimates were positive and statistically significant for them only. Following these are female holders of Child (101), State/Territory Sponsored Business Owner (892), Carer (116) and Remaining Relative (115) visas because their estimates were not statistically different from that of the base group (i.e., Partner (100)). The list of visa sub-classes where holders of such visas displayed the highest AMEP take-up rates changed slightly for male migrants. Specifically, for male migrants, the highest take-up rates were observed for holders of State/Territory Sponsored Business Owner (892) and Refugee (200) visas, followed by holders of Child (101), State/Territory Sponsored Business Owner (892), Carer (116) and Remaining Relative (115) visas because their estimates of the base group (i.e., Partner (100)). The list of visa sub-classes where holders of such visas displayed the highest AMEP take-up rates changed slightly for male migrants. Specifically, for male migrants, the highest take-up rates were observed for holders of State/Territory Sponsored Business Owner (892) and Refugee (200) visas, followed by holders of Child (101), State/Territory Sponsored Business Owner (892), Carer (116) and Remaining Relative (115) visas.

By contrast, Figure 5 indicates the lowest uptake rates were observed for female holders of Skilled - Independent (189), Partner (820), Employer Nomination Scheme (186), Regional Sponsored Migration Scheme (187) and Skilled - Independent (885) visas because the estimates are smallest (i.e., more negative and statistically significant) for them. We observed a largely similar take-up pattern for male migrants as the lowest uptake rates were represented by holders of Employer Nomination Scheme (186), Partner (820), Skilled - Independent (189) and Regional Sponsored Migration Scheme (187) visas.

Conclusion

This paper suggests there were clear differences in AMEP uptake rates by migrant age, age of arrival in Australia, country of birth, visa sub-class, and gender, observed across the 2003-2019 reference period. The Department can use these findings to help identify groups of potential AMEP clients who have not made use of this government program, and which could assist NESB migrants to gain Vocational English status (referred to as Functional English during the reference period) and improve their social and economic outcomes in Australia.

We are currently unable to identify any direct causes of these potentially important differences in AMEP uptake. A better understanding of drivers would be useful in designing policies to improve AMEP uptake, especially among groups with low participation rates. Therefore, we suggest further research into the drivers of these differences for current AMEP clients is worthwhile. For example, it is possible that factors such as home-language literacy, prior experience in education settings, linguistic distance, and opportunities to practice speaking English outside of AMEP classes, may affect both the likelihood that migrants participate in AMEP and relevant outcomes of their English learning process.

Lack of information can be one of the main reasons for non-uptake of public programs, especially for programs that are free or offered at minimal cost.² By understanding how AMEP is currently communicated to migrants and humanitarian entrants, we may identify obstacles to participation. For example, offering foreign language web-links that direct migrants to English-only webpages would likely contribute to reduced AMEP uptake.³ If information can be presented in a timely and culturally safe fashion, via accessible communication channels with targeted reach, and in a language that migrants can fully understand, then these approaches may improve take-up. This is particularly relevant given AMEP clients, by definition, have less than Vocational English.

While we have been able to identify the demographic characteristics of those migrants who were eligible to participate in AMEP, but did not, we cannot confirm *why* these eligible visa holders did not participate at AMEP within the first 6/12 months of their arrival in Australia. Therefore, it is important to identify obstacles preventing migrants from registering at the AMEP in this very short and critical transitional period. The sooner migrants can achieve Vocational English, the better their socio-economic outcomes are likely to be. Our work has shown how speaking English "well" or "very well" is related to improved labour market outcomes, higher income levels, lower rates of public housing tenancy, and being less likely to receive any form of income support payment. Further research, that explores the role of obstacles to participation, such as lack of access to information, language-based barriers (due to insufficient English), settlement issues, family/caring duties, or health issues, is needed to inform policy on migrant uptake of AMEP.

² For reviews on non-uptake reasons, see Currie, J., 2006. The take up of social benefits. In: Auerbach A, Card D & Quigley J (eds.) Poverty, the Distribution of Income, and Public Policy. Russell Sage, New York, pp. 80-148 or Ko, W., Moffitt, R.A., 2022. Take-up of Social Benefits. National Bureau of Economic Research Working Paper No 30148.

³ There is no direct evidence showing that presenting materials in non-English would increase uptakes. This suggestion is based on credible evidence suggesting the role of the lack of information in non-uptake (see, for example, Finkelstein, A., Notowidigdo, M.J., 2019. Take-up and Targeting: Experimental Evidence from SNAP. The Quarterly Journal of Economics 134, 1505–1556).

Data notes

- 1. This analysis looks at AMEP participation prior to the August 2011 Census. This is because our proxy measure of Functional English for non-AMEP migrants is taken from the Census, so migrants who arrived post-Census 2011 would have been out of scope for analysis. We could not use a later Census for this analysis due to the limitations of the 2020 AMEP data extract in MADIP. Specifically, MADIP allows users to include only one Census due to data security measures. Further, using the 2011 Census as a baseline was better purposed for analysing long-term post Census employment and welfare outcomes via other linked datasets.
- 2. Breaking down results into male and female is based on gender identity as recorded on the historical data sets used in the analysis presented here. None of these data sources provided gender-diverse identification options at the time of their collection, though most have now been updated to accommodate this for future collections. Therefore, representation of male and female in this paper may be skewed towards sex at birth, and not take into account a person's preferred gender identity.
- 3. The current linked AMEP-MADIP dataset has incomplete tuition hours information for about 34,000 AMEP clients who enrolled in AMEP before 2011. This missing data issue means that some results may be biased, and care should be taken with interpretation.
- 4. All client information used in this study was managed in a secure data environment, de-identified and access restricted only to authorised researchers.

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