Gender Differentials in Educational Profile and Field of Study among Residents

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Introduction

Over the last 2 decades, Singapore's resident population has become better educated. This article compares the educational profile of resident males and females across different age groups between 2000 and 2021, particularly among those with tertiary qualifications¹. It also analyses how the fields of study of polytechnic diploma holders and university graduates have changed for both genders in 2010 and 2020 based on data from the Censuses of Population.

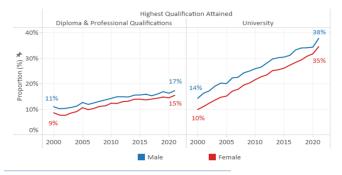
The analysis covers residents aged 25 years and over who were not attending educational institutions as full-time students. It includes those who were upgrading their qualifications through part-time courses. Residents comprise Singapore citizens and permanent residents.

Educational Profile

Rise in Share of Residents with Tertiary Oualification

From 2000 to 2021, the proportion of residents with tertiary qualification increased for both males and females. In 2021, 17 per cent of resident males and 15 per cent of resident females aged 25 years and over had attained diploma and professional qualifications as their highest qualification. This is a 6 percentage-point increase from 11 per cent and 9 per cent for males and females respectively in 2000 (Chart 1).

Chart I
PROPORTION OF RESIDENTS AGED 25 YEARS
& OVER WITH TERTIARY QUALIFICATION
BY HIGHEST QUALIFICATION ATTAINED
AND SEX, 2000-2021



¹ Refers to diploma, professional and university qualifications.

The proportions with a university qualification almost tripled for males and more than tripled for females over the same period, rising from 10-14 per cent to 35-38 per cent.

Gender Gap among Younger University Graduates Widened in Favour of Females

While the share of university graduates among residents aged 25-34 years rose for both males and females, growth was faster for females than males (Chart 2).

Chart 2
PROPORTION OF RESIDENTS WITH
TERTIARY QUALIFICATION BY HIGHEST
QUALIFICATION ATTAINED, AGE GROUP
AND SEX, 2000-2021



In particular, the proportion of females aged 25-34 years with a university qualification surpassed their male counterparts since 2006. In 2021, 64 per cent of females aged 25-34 years had a university qualification compared to 56 per cent for males. On the other hand, the proportion of both males and females in the same age group with diploma and professional qualifications has hovered between 18-26 per cent since 2000.

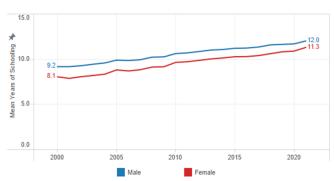
Among residents aged 35-44 years, the gender gap for those with diploma and professional qualifications and university qualification narrowed in recent years. As for residents aged 45 years and over, while the gender gap for those with diploma and professional qualifications remained fairly stable, the corresponding gap for those with university qualification has widened slightly over the years.

Mean Years of Schooling

Difference between Males and Females Narrowed

With more rapid improvement in educational attainment among females, the difference in mean years of schooling between resident males and females aged 25 years and over narrowed to 0.7 years in 2021 as compared to 1.1 years in 2000 (Chart 3).

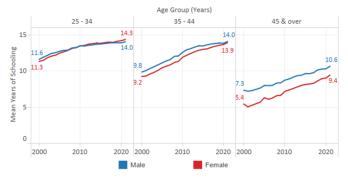
Chart 3
MEAN YEARS OF SCHOOLING AMONG RESIDENTS
AGED 25 YEARS AND OVER BY SEX, 2000-2021



Smaller Gender Gap in Mean Years of Schooling for Younger Residents

The difference in mean years of schooling between males and females was much smaller for the younger age groups. Reflecting the improvements in educational profile among younger females, the mean years of schooling for those aged 25-34 years surpassed that of their male counterparts, at 14.3 years in 2021 as compared to 14.0 years for males (Chart 4).

Chart 4
MEAN YEARS OF SCHOOLING AMONG RESIDENTS
BY AGE GROUP AND SEX, 2000-2021

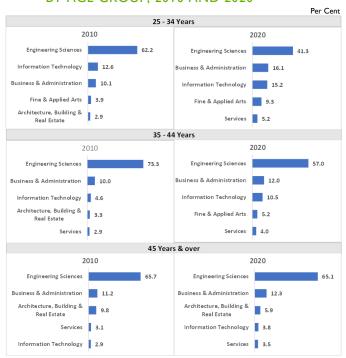


Field of Study

Engineering Sciences and Business & Administration Most Common among Both Male and Female Polytechnic Diploma Graduates across Almost All Age Groups

Engineering Sciences remained by far the most common field of study across all age groups of resident male polytechnic graduates in 2010 and 2020, accounting for the majority within the group, although the proportions have fallen over time (Chart 5). For example, the proportion of male polytechnic graduates aged 25-34 years who majored in Engineering Sciences decreased from 62.2 per cent in 2010 to 41.3 per cent in 2020.

Chart 5
TOP 5 FIELDS OF STUDY FOR RESIDENT MALE
POLYTECHNIC DIPLOMA GRADUATES
BY AGE GROUP, 2010 AND 2020



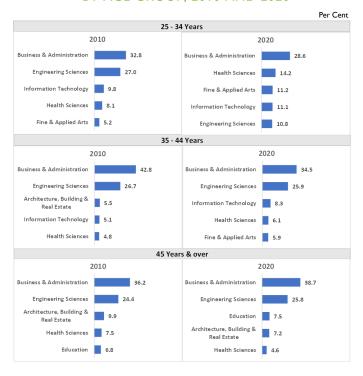
Business & Administration, which was the second most common field of study for males aged 35-44 years and 45 years and over in 2010 and 2020, advanced from third place in 2010 to second in 2020 for those aged 25-34 years.

Business & Administration was the most common field of study across all age groups of resident female polytechnic graduates in 2010 and 2020, although the proportions have fallen for those aged 25-34 years and 35-44 years (Chart 6).

Among those aged 25-34 years, Engineering Sciences went from being the second most common field in 2010 (27.0 per cent) to fifth most common in 2020 (10.8 per cent).

Health Sciences rose from fourth to second in 2020 (an increase in proportion from 8.1 per cent in 2010 to 14.2 per cent in 2020) within the same age group.

Chart 6
TOP 5 FIELDS OF STUDY FOR RESIDENT FEMALE
POLYTECHNIC DIPLOMA GRADUATES
BY AGE GROUP, 2010 AND 2020



Business & Administration Most Common among University Graduates for Both Genders across All Age Groups

Between 2010 and 2020, the top five fields of study among resident male university graduates were similar for all age groups while more variations were observed among their female counterparts.

Business & Administration overtook Engineering Sciences as the most common field of study for resident male university graduates aged 25-34 years and 35-44 years in 2020 as compared to a decade ago (Chart 7).

For those aged 45 years and over, Business & Administration and Engineering Sciences remained as the top and second most common fields of study respectively in both 2010 and 2020.

For female university graduates, Business & Administration and Humanities & Social Sciences were the top and second most common fields of study in both 2010 and 2020 across all age groups (Chart 8).

Chart 7
TOP 5 FIELDS OF STUDY FOR RESIDENT MALE
UNIVERSITY GRADUATES BY AGE GROUP,
2010 AND 2020

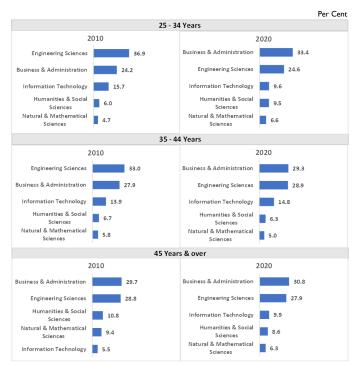
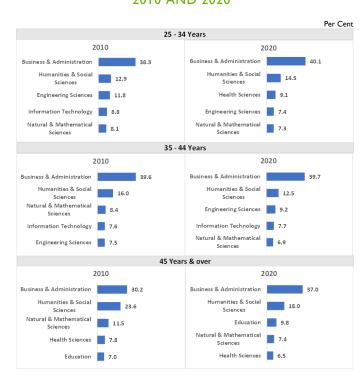


Chart 8
TOP 5 FIELDS OF STUDY FOR RESIDENT FEMALE
UNIVERSITY GRADUATES BY AGE GROUP,
2010 AND 2020



While the proportion who majored in Business & Administration increased for all age groups, the corresponding proportion for Humanities & Social Sciences fell among those aged 35-44 years and 45 years and over, from 16.0 per cent to 12.5 per cent and 23.6 per cent to 18.0 per cent respectively.

The third most common field of study differed over time and across age groups, varying between four fields of study viz. Engineering Sciences, Natural & Mathematical Sciences, Health Sciences, and Education.

Conclusion

The proportion of residents aged 25 years and over with tertiary qualification has increased over the last two decades.

Between 2000 and 2021, there was significant progress in the educational attainment of females, with younger females surpassing their male counterparts in the attainment of university qualification. Correspondingly, the gender gap in mean years of schooling among the younger resident population narrowed.

Engineering Sciences and Business & Administration remained as the top two fields of study for male polytechnic diploma and university graduates for most age groups from 2010 to 2020.

While the top fields of study for females were more varied across the age groups over time, Business & Administration remained as the top field of study for female polytechnic diploma and university graduates across all age groups over the ten-year period.

SingStat Table Builder

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