

Persistence in higher education – differences by immigrant background, social background, gender and field of study

**Using Social Statistics to Illuminate the
Issues, Processes, and Outcomes in Higher Education:
International Viewpoints**

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Research questions

Parental education and gender

- Are there gender differences in persistence, when controlling for fields and type of study?
- What is the effect of parental education on persistence, when controlling for fields and type of study and academic ability? Are there differences between male and female students concerning the effect of parental education level?

Fields of study

- Are differences in persistence related to differences in the choice of fields and type of study?

Research questions (cont.)

Immigrant background

- To what extent do we find differences between first- and second-generation non-Western immigrants and ethnic Norwegians in persistence in HE when controlling for parental education level?
- To what extent do we find differences between non-Western immigrants and ethnic Norwegians in persistence in different types of studies? Do immigrants more seldom than ethnic Norwegians stay on in master (postgraduate) programmes?
- How does academic ability (grades achieved in upper secondary education) affect the possible difference in persistence between the immigrants and the ethnic Norwegians?

Data and definitions

- Former students in upper secondary education, who entered upper secondary education in 1999 or 2000.
- Those of this group who have enrolled into HE in 2002 or 2003
- Those who entered HE later than 2003 will not have had the opportunity to graduate from master studies within our observation period.
- The observation period extends to 2008. Students of non-Western origin are born in (or their parents are born in) Asia, Africa, Latin-America or Eastern Europe.
- First-generation immigrants, who are born outside Norway where both their parents are born abroad
- Second-generation immigrants, who are born in Norway but where both parents are born abroad.
- The rest: Ethnic Norwegians
- Students with Western background (first- and second generation), who represent only 0.6 per cent of the cohorts are excluded from the analyses.

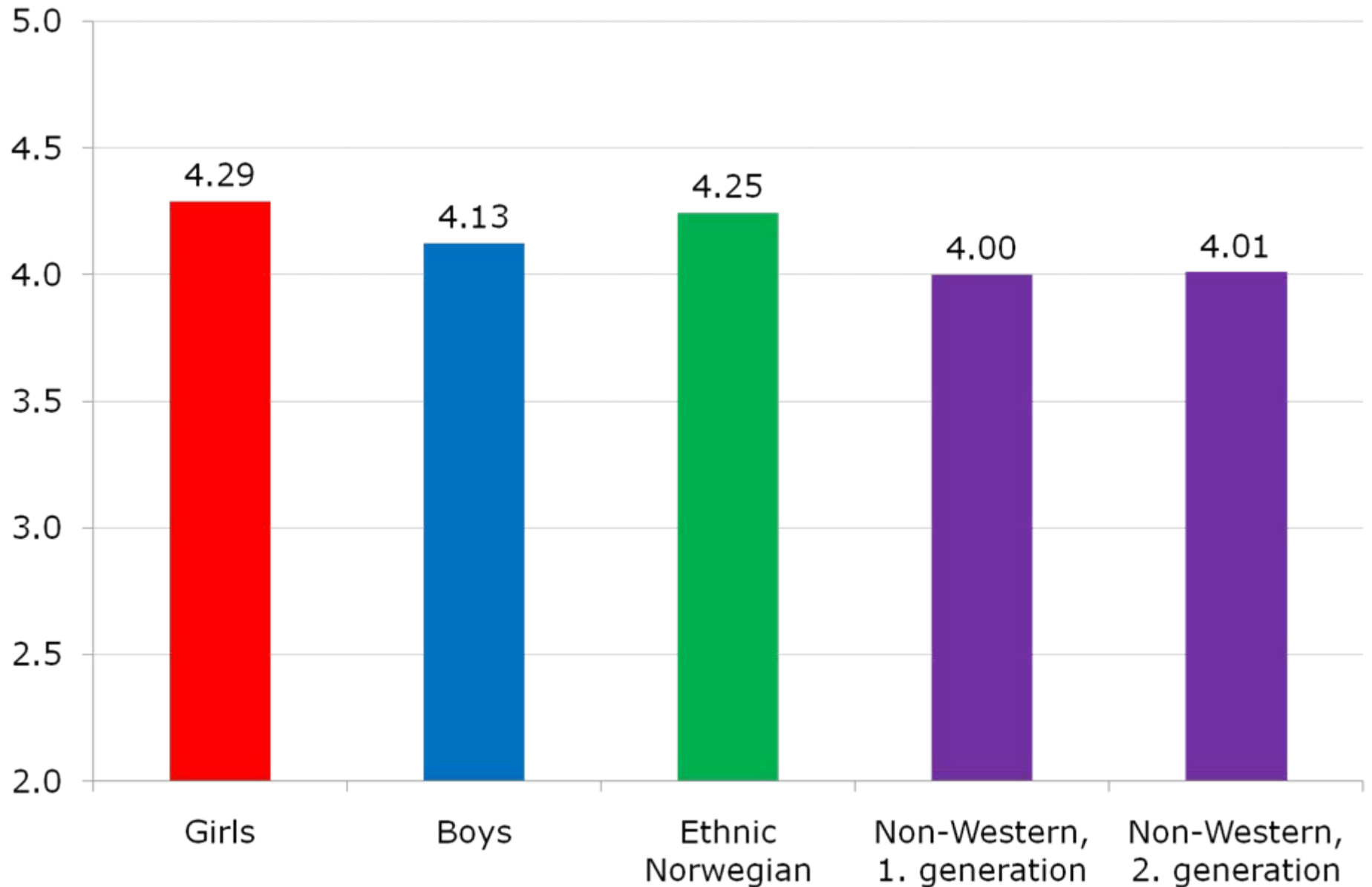
Enrolment in HE in 2002 or 2003, of the total 1999- and 2000 cohorts

	Per cent enrolled in HE
Ethnic Norwegian	24.2
1. generation, non-Western	26.0
2. generation, non-Western	33.0
Males	16.4
Females	32.9
Mother less than higher education	20.0
Mother higher education	36.6
Father less than higher education	19.6
Father higher education	37.8
Total	24.4

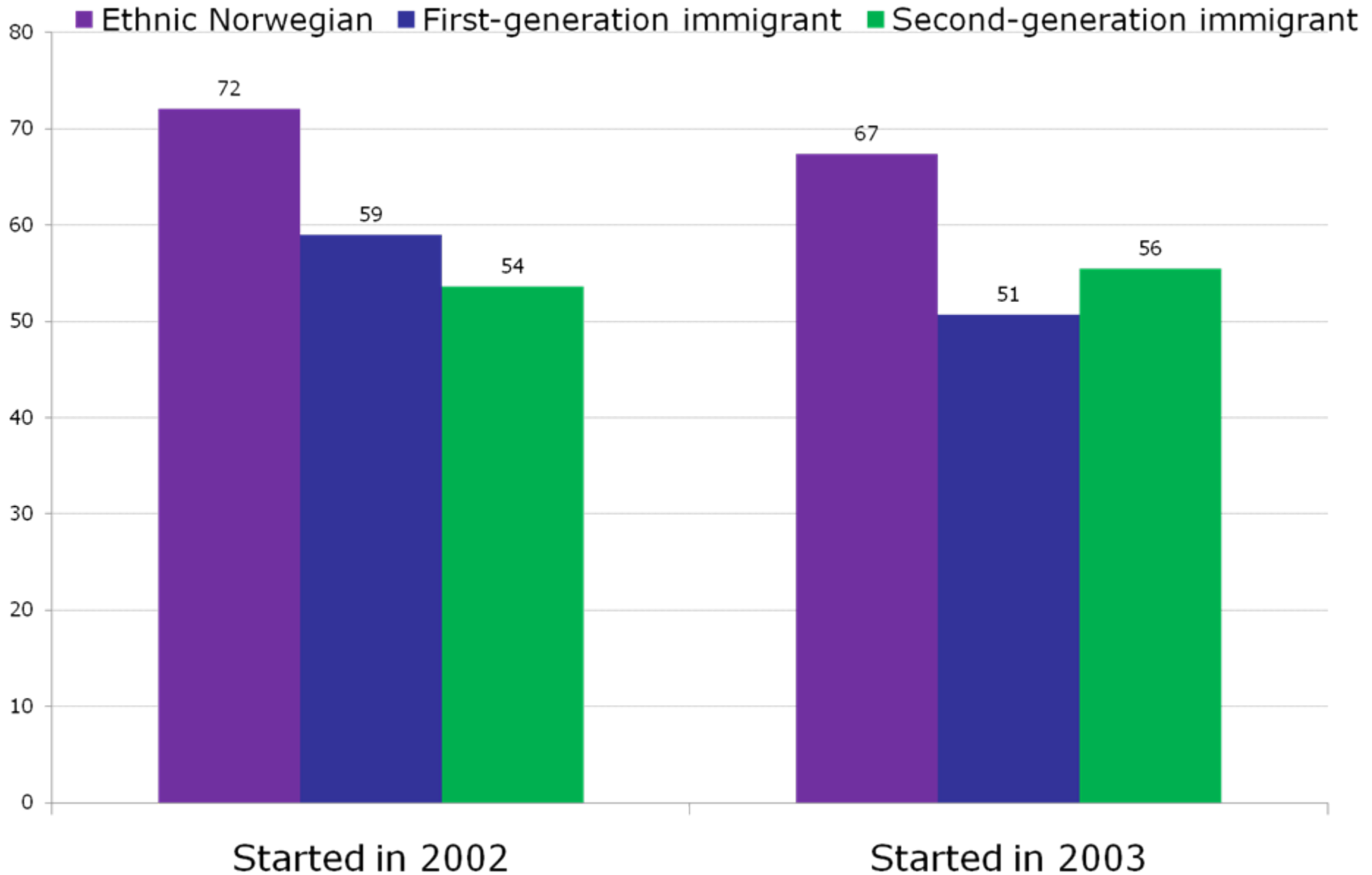
Enrolment in HE in 2002 or 2003, of those of the 1999- and 2000 cohorts who had achieved university admission certification

	Per cent enrolled in HE
Ethnic Norwegian	48.5
1. generation, non-Western	66.2
2. generation, non-Western	65.5
Males	40.0
Females	55.8
Mother less than higher education	48.1
Mother higher education	50.9
Father less than higher education	47.6
Father higher education	51.7
Total	49.2

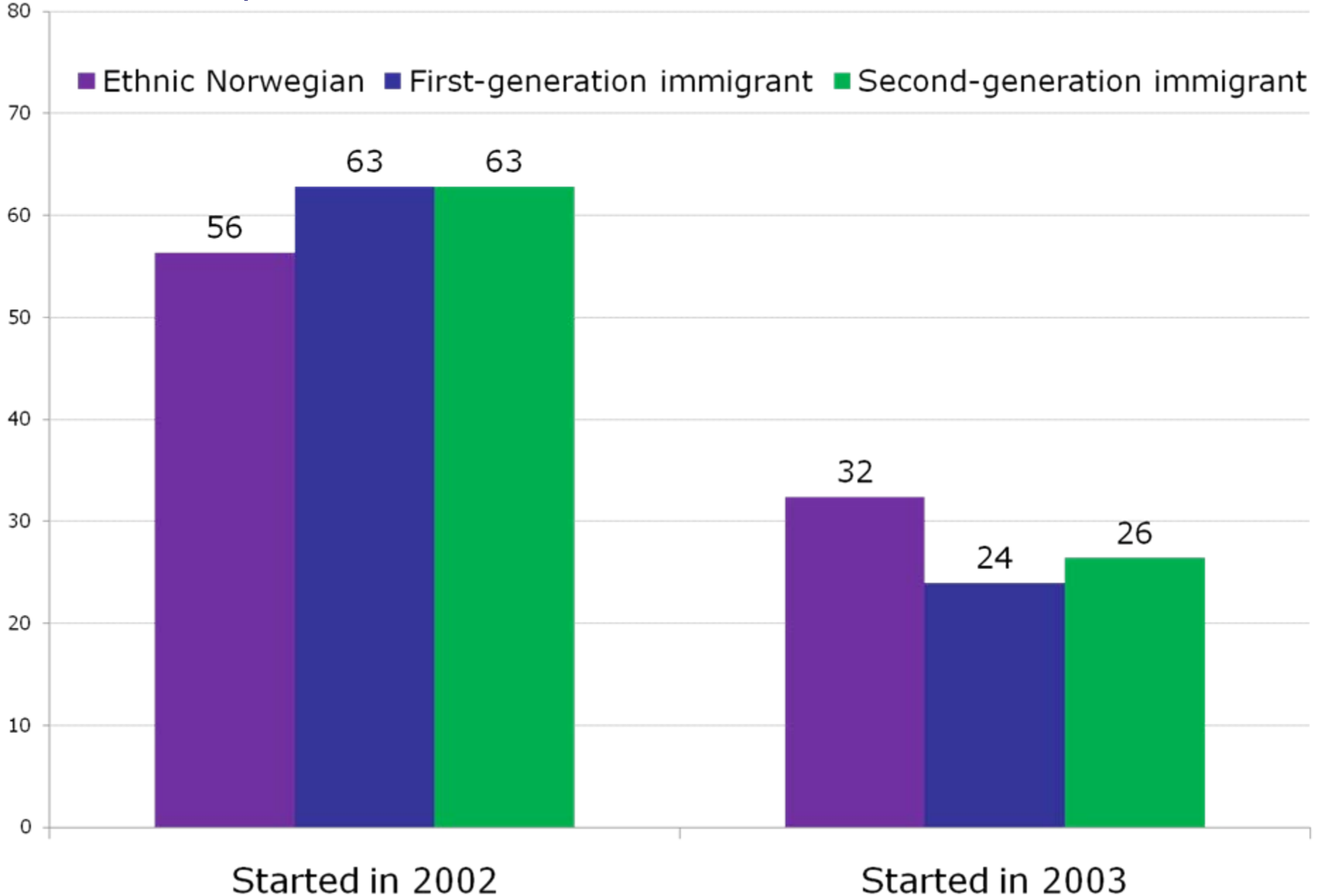
Average grades achieved in upper secondary education



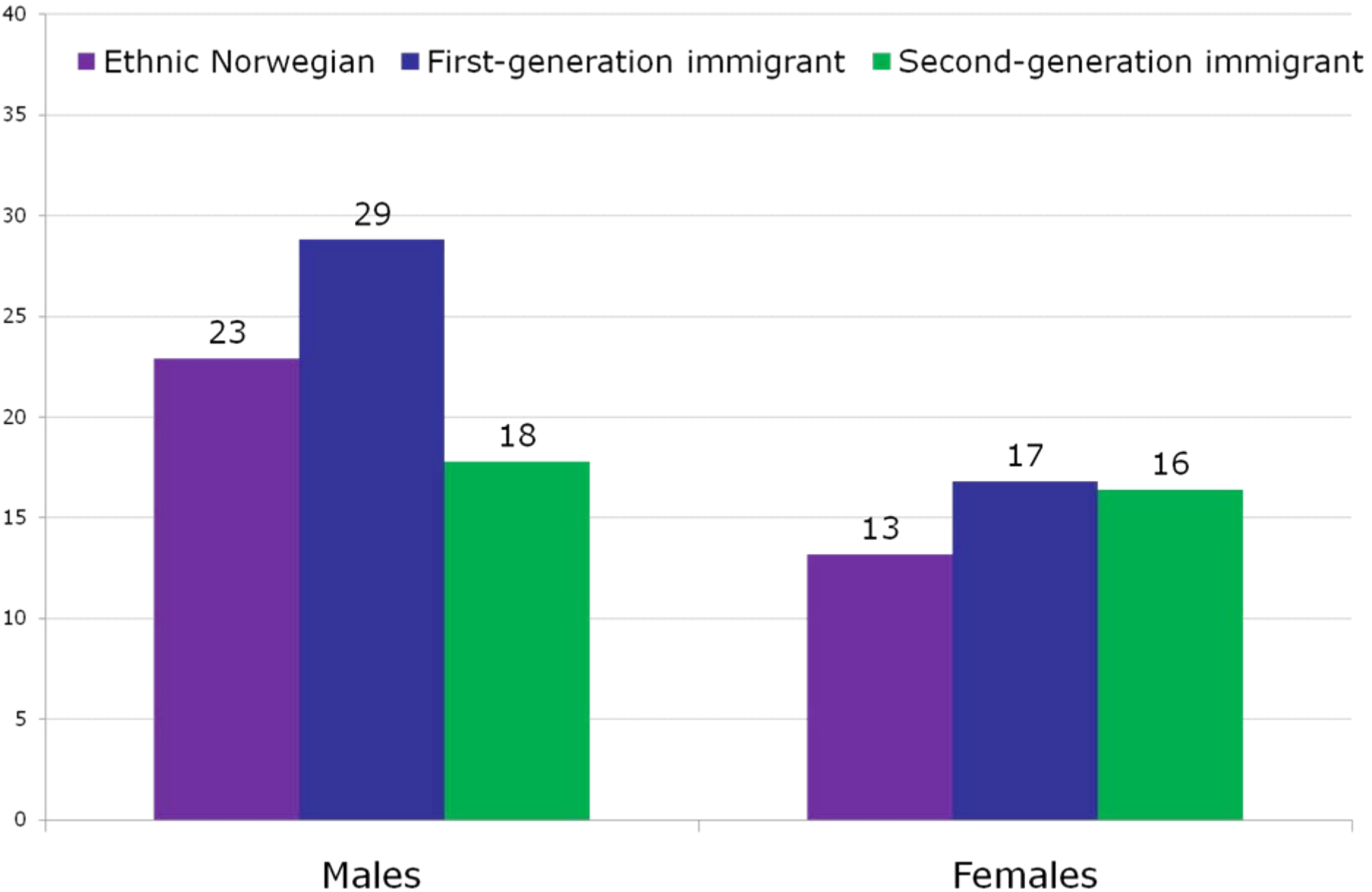
Completed bachelor level (not started in master studies)



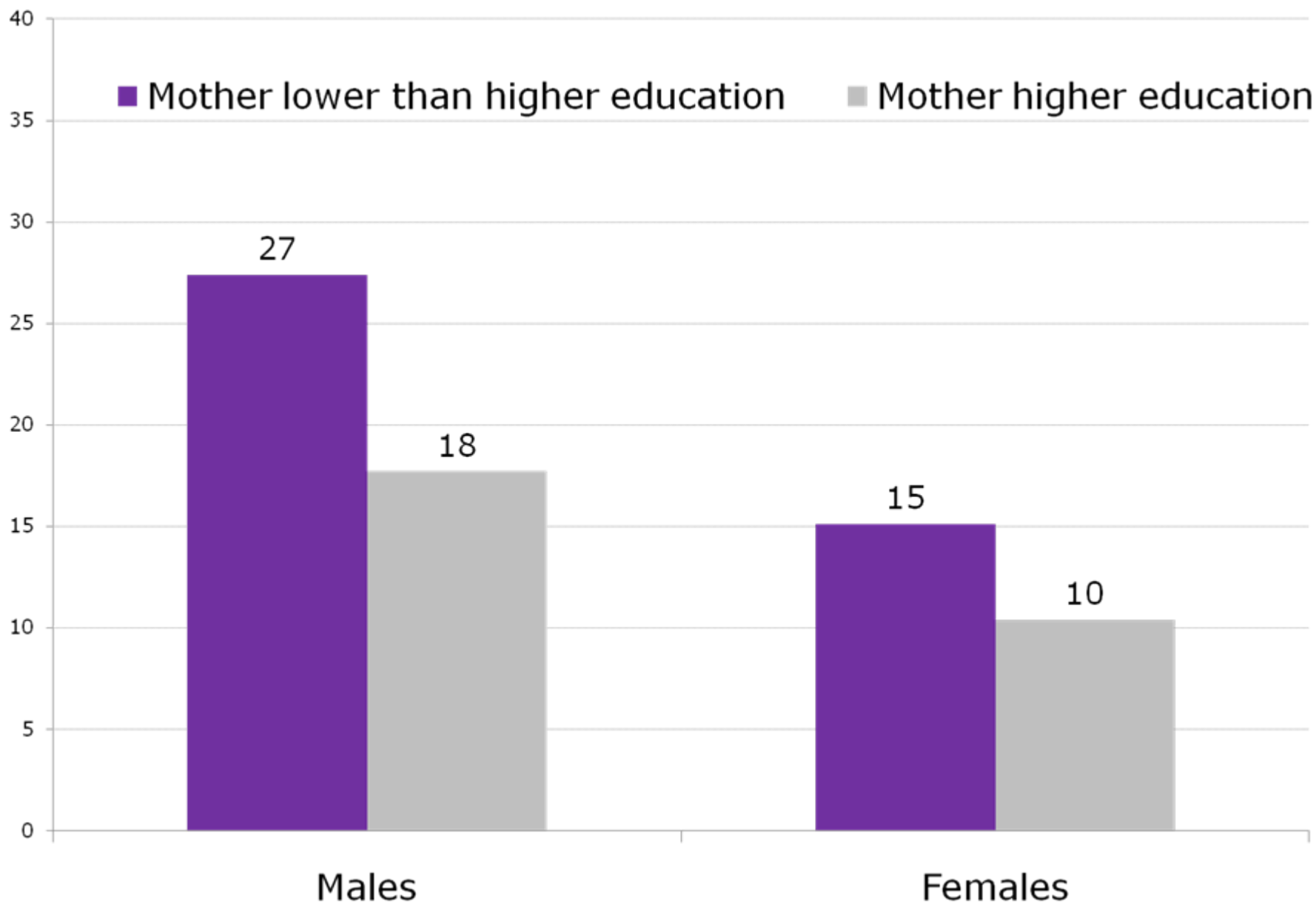
Started in master (level) studies, completed within the observation period



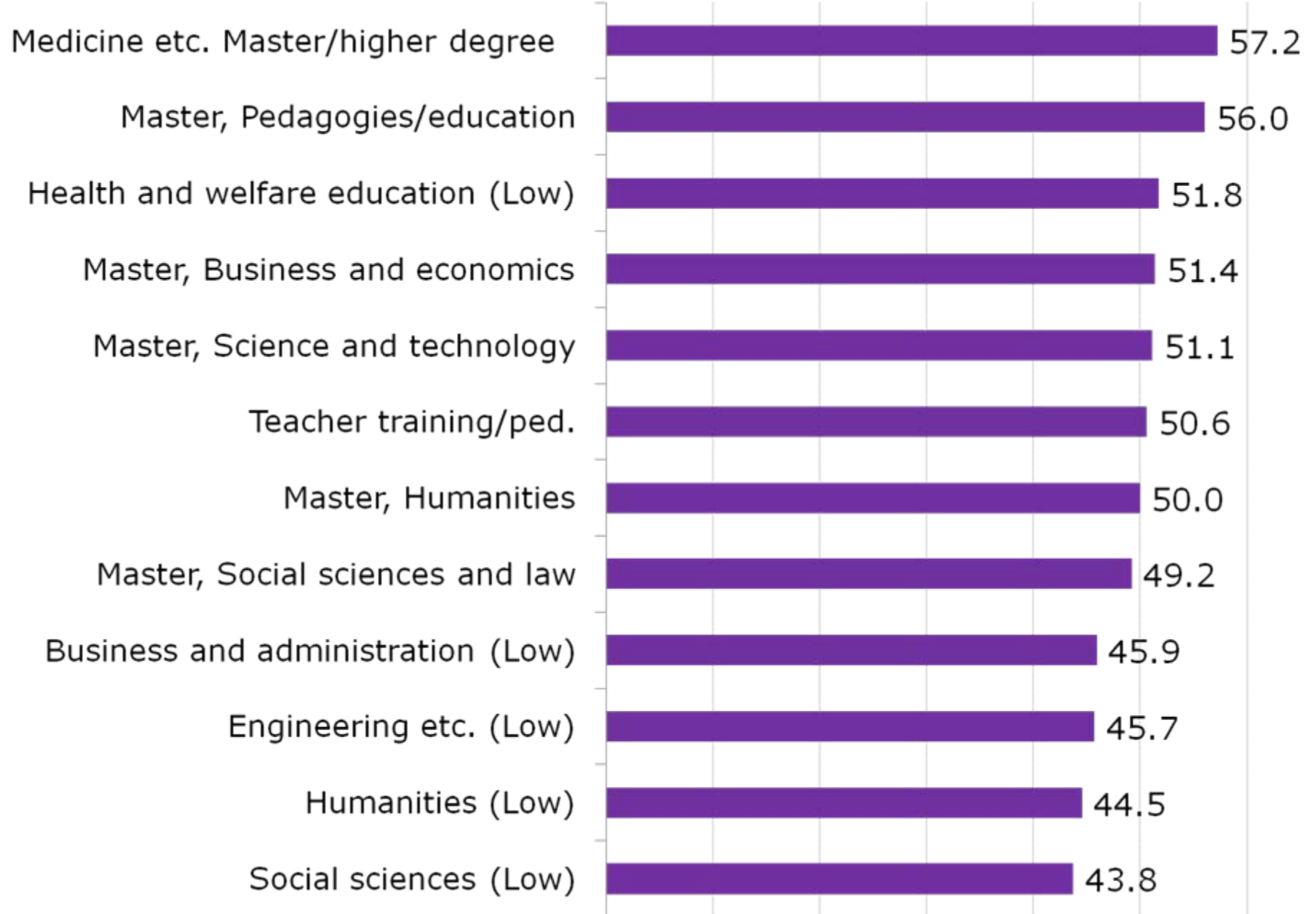
Not completed destined degree (within the observation period) by gender and immigrant background



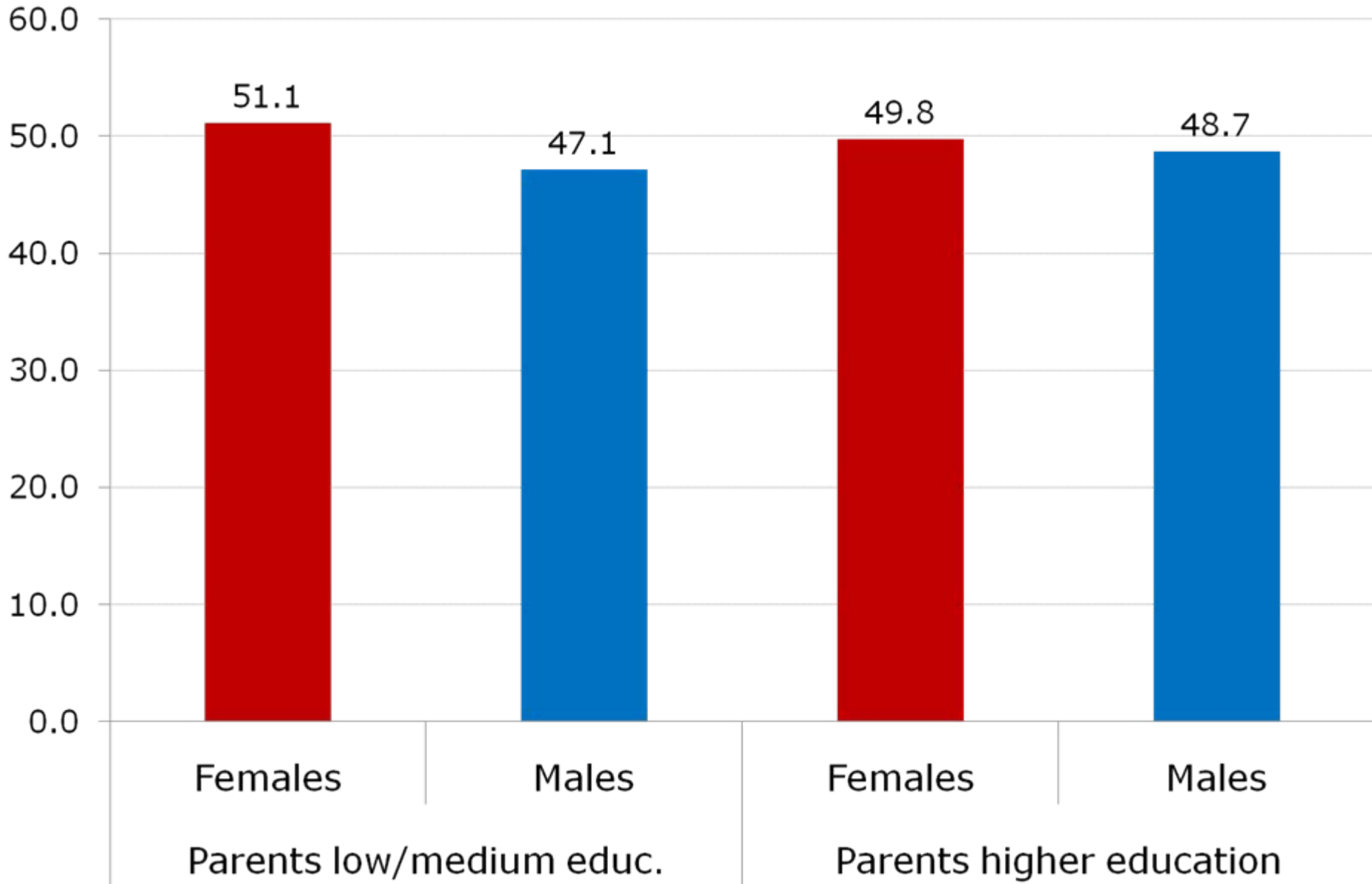
Not completed destined degree (within the observation period) by gender and parental education level



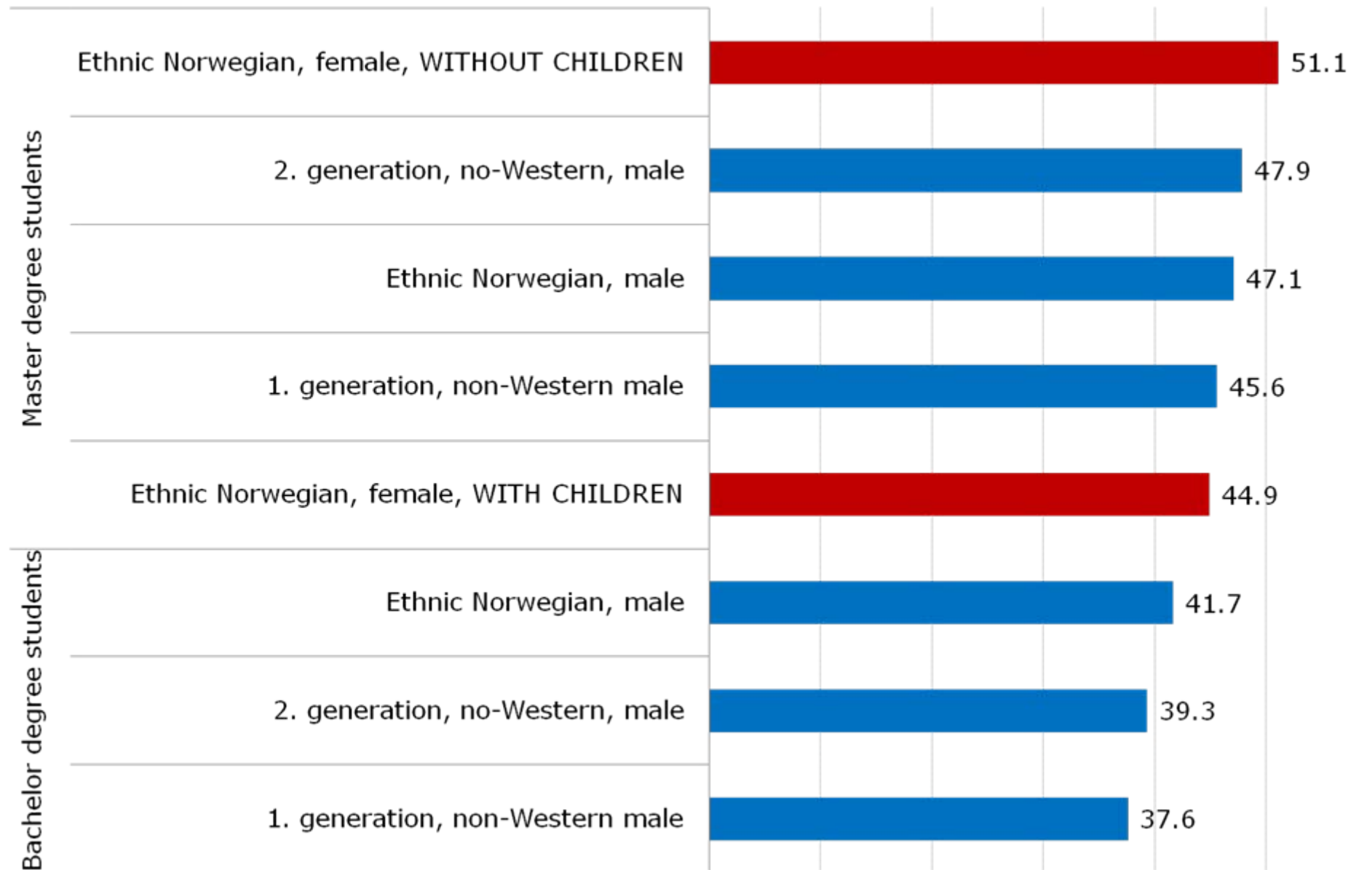
Estimated sum of credit points produced per year, by field and type of study



Estimated sum of credit points produced per year, by gender and parental education level



Estimated sum of credit points produced per year, by immigrant background, type of study and gender



Conclusions (1)

- There are significant gender differences in study efficiency, also when controlling for fields and type of study. Female students without children are the most efficient.
- There is practically no effect of parental education level on persistence measured as study efficiency when controlling for fields and type of study and academic ability.
- For females there is a small negative effect of having parents with higher education, and for males there is a small positive effect of father having higher education.
- Master students have higher study efficiency than those who have not entered a master programme with some exceptions.
- Students within health and welfare have the highest study efficiency, and within this field also the bachelor students have very high study efficiency.
- Bachelor students in science and technology, social science, humanities, and business and administration have the lowest study efficiency.

Conclusions (2)

- Students on master programmes with immigrant background have equally high completion rate as the ethnic Norwegians
- The immigrants' completion rate is lower among students on bachelor programmes (but more second-generation immigrants than ethnic Norwegians stay on in master programmes).

When controlling for parental education level, a complex pattern is found:

- Second-generation immigrants have the highest study efficiency, followed by ethnic Norwegians close behind. This refers to master studies.
- On study programmes below master level studies (where the study efficiency is overall lower), ethnic Norwegians have the highest study efficiency, followed by second-generation immigrants.
- Many *first*-generation immigrants have rather low study efficiency among those who have not entered master programmes, but take lower degree programmes in for example engineering and business and administration

Conclusions (3)

- Academic ability (grades achieved in upper secondary education) affects the difference in study efficiency between the immigrants and the ethnic Norwegians. When controlling for grades, the difference between the immigrant and ethnic Norwegian students at bachelor level is reduced.
- The total results indicate a polarization within immigrant group of students.
- More females than males enter higher education; the social background of the female student population is more diverse than that of males; their intake grades are somewhat better; they have a lower rate of drop-out, and they have higher study efficiency than male students.
- The gender difference is more or less the same among the ethnic Norwegians and the immigrants.