# Inequality in entry to higher education in Norway – the role of the gap year(s) and gap year activities

## Elisabeth Hovdhaugen & Kari Vea Salvanes

Routledge
Taylor & Francis Group

Check for updates

# Inequality in entry to higher education in Norway – the role of the gap year(s) and gap year activities

Elisabeth Hovdhaugen ⓘ and Kari Vea Salvanes ⓘ

NIFU (Nordic Institute for Studies in Innovation, Research and Education), Oslo, Norway

**ABSTRACT**

Compared to students in other parts of Europe, Norwegian students more often take a gap year (a break) between completing upper secondary education and entry into higher education. Using registry data ($N = 250$ 000), we analysed the relationship between gap years, gap year activities and on-time completion, particularly linked to social background. Students from highly educated families are more likely to take a gap year, regardless of grades. Work is by far the most common gap year activity. However, we found that individuals from highly educated backgrounds are more likely to spend their gap year on activities that could enhance their chances of higher education admission, whereas individuals from low educated backgrounds are more likely to work. We also find that differences in on-time degree completion by time of transition depends on the type of degree pursued. Postponing start reduces chances of on-time degree completion for students pursuing five-year integrated programmes.

## Introduction

The transition from upper secondary education to higher education (HE) is perceived as a continuing path, along which students move directly from one level of education to another. However, it is increasingly common for students to delay entry to HE, typically by taking time off after completing the academic track in upper secondary education. Comparative research in Europe, such as several versions of the Eurostudent survey, has indicated that Norway and the Nordic countries are among the countries with the highest rates of students not proceeding directly from upper secondary education to HE (see e.g., Hauschildt et al., 2021, 2018; Orr et al., 2011).

Taking time off after completing upper secondary education is referred to as 'a gap year", as it interrupts the continuing path of education. This gap year can be filled with leisure time, paid or unpaid work, military service, travel and even additional upper secondary education study. Previous research either discuss students' various options (see for example Johan, 2009; Jones, 2004; O'Shea, 2011) or use qualitative data to explore what students do during their gap year (see for example Heath, 2007; Vogt, 2018). To add to the literature on gap years, the aim of this paper is twofold: (1) to focus on the characteristics of students taking a gap year, as compared to those who transition directly, and (2) to see if group differences in HE completion rates vary by the prevalence of different gap year activities. Hence, we wished to explore associations between time of transition and HE success, particularly related to what students choose to do during their time outside the regular educational path. And as such provide suggestive evidence of whether

delaying the transition to HE makes students more or less equipped to cope with the demands of teaching and learning in HE.

Transition patterns into HE are interesting for several reasons. First, the descriptive pattern is interesting, as the phenomenon has been described quantitatively only to a limited degree, and the impact of delayed transition on success in HE is unclear. (For more on this see the section on *Earlier research*). Second, the high proportion of students in Norway who choose to delay entry to HE is an interesting phenomenon in its own right. Previous research has shown that only about 40 per cent of students who completed the academic track in upper secondary education in the mid-2000s transitioned directly into HE after completion (Vibe et al., 2012, p. 100).

Finally, this is a topic of relevance for policy makers. There is a growing worry about access to qualified workers, and a recent white paper (Meld.St. no. 31, 2023-2024) on the *Long-term Perspectives on the Norwegian Economy 2024* point out that if students complete their degrees six months earlier, this will contribute to increasing the stock of workers. Specifically, the white paper points to Norwegian students being relatively older compared to first-time students in other OECD countries, suggesting that gap-year taking is partly to blame. However, there is little empirical evidence on whether students that delay entry to HE have a longer or shorter time to completion once they enrol. If taking time off between upper secondary education and HE makes students more equipped to complete their degree on-time, there is less of a reason to be concerned about the relatively high share of students taking a gap year.

This paper adds to the literature on gap years by taking a closer look at students in Norway who delay the transition to HE after completing upper secondary education. We were particularly interested in whether there is a social gradient to delaying the transition, and if there are social differences in what students do during their gap year, which may or may not increase their chances of HE admission and degree completion. Additionally, by using detailed population-wide data on what students are doing during their time outside the educational system, we investigate associations between gap year activities and study duration for different groups.

## Research questions

Our aim with this paper is to answer several research questions, which are linked and build on each other.

1. *Do students who choose to delay entrance into HE differ from students who make the transition directly?*
2. *What do students do during their gap year (gap-year activities)?*
    a. *Do gap-year activities vary by socio-economic background?*
3. *Are students who delay entry to HE more or less likely to graduate on time?*

Taken together, the research questions aim at uncovering if there are socio-economic differences both in the timing of transition into HE, and in what students do during their year(s) outside the formal educational system. Additionally, as taking a gap year is quite common in Norway, there may be lessons to be learned for other countries.

## Earlier research on gap years or delayed transition to HE

Most of the research on students postponing entry to HE is from the US, UK and Australia. However, in these countries, the phenomenon is described in diverse terms. In the US, it is mainly described as "delayed transition" while British and Australian research more often talks about "gap year". This might seem like a minor detail, but it seems as if the way the phenomenon is described is also related to the findings, indicating that the labels "gap year" and "delayed transitions' entail different activities or contexts.

In American research, students delaying the transition to HE is often linked to students having low grades and coming from families with low levels of education. Hence, students who delay the transition to HE do so out of a deficit, that they do not have the grades required to move on to HE directly, not have the cultural capital needed to gain access, or do not have the financial means needed to access HE directly after completing secondary education. Horn et al. (2005) used data from several American surveys and their study indicates that students who delay HE entry are more likely to come from low-income families or to be a single parent. This finding is supported by several other American studies (Bozick & Deluca, 2005; Rowan-Kenyon, 2007; Wells & Lynch, 2012). Through a survey, Martin (2010) found that among high school students, lower levels of academic motivation predict the intention to take a gap year. Hence, it seems as if a consistent finding in the American setting is that taking time out before starting HE is linked to low motivation or low socio-economic status. However, this may be an effect of financial constraints, as participation in HE can be expensive in the US. Though Stehlik (2010) points to financial constraints as a reason for delaying HE entry in England, he argues that this is less prevalent than other reasons related to education or career planning.

The tale is generally different in the UK and Australia, where delaying the transition is generally considered to be a choice, as students to a larger extent actively choose to have a gap year. It also seems as if there is a difference in the "profile" of students who take a gap year in these countries. One Australian study did not find any significant difference in social background between those who delay entry and those who make the transition directly when controlling for other variables (Birch & Miller, 2007). Instead, they found that the determinants of taking a gap year were largely the student's prior academic achievements, English-language background and if they lived in more rural areas (Birch & Miller, 2007). Additionally, researchers have found that low-achieving students are more likely to take a gap year (Birch & Miller, 2007; Curtis, 2014).

Earlier research on delayed transition to HE in the Nordic countries have had a varied focus, likely reflecting differences in the structure of the higher education systems across the different countries. A Swedish study also point to the finding that students who take a break between completing upper secondary education and starting university are more likely to have had a poorer academic record than their peers who commence directly. This finding holds regardless of social background, as the association between parents' education and gap year taking is "not strong" (Holmlund et al., 2008, p. 695). In a Danish study that focused on age at graduation, and thus indirectly also on gap years, find that while there is a social gradient to age at graduation, the social differences in taking a gap year are much smaller, and in many cases not statistically significant (Lund & Klausen, 2016). This finding is also supported by survey data, where there are no social differences in why students take a gap year. Only 18 percent of students use their gap year to gain additional qualifications to access HE, while the rest see the year more as a break (Lund & Klausen, 2016, p. 23). Hence, in the Danish setting taking time off between upper secondary and HE is common among all social groups, and almost all of them (95 percent) think of this break as beneficial.

These findings differ from Finnish research where students may have to take a gap year involuntarily, due to their university application being rejected (Heiskala et al., 2023; Isopahkala-Bouret, 2020). In Finland two-thirds of a cohort of university applicants are unsuccessful in gaining admission to their preferred program. If they choose to accept a lower-ranked education programme this may reduce their possibilities of being admitted to their preferred education at a later date. Thus, for students with strong preferences for specific education programmes it is optimal to take a gap year and wait a year to reapply. Hence, the large prevalence of this form of involuntary gap year is a particular feature of the Finnish system and is directly linked to how the admissions system is rigged. Both in the accounts of the other Nordic countries, as well as in Australia and the UK, students taking a break between upper secondary and HE is to a larger extent regarded as a choice, rather than a choice forced upon them due to not getting admitted.

A British study found that students who take a gap year are usually from higher socio-economic backgrounds (Crawford & Cribb, 2012, p. 55), and recent interview-based research from Norway supports the impression that students considering a gap year come from a more privileged background (Vogt, 2018). Further, Crawford and Cribb (2012) found no difference in prior attainment between those who make the transition to HE directly and those who take a gap year, but the students who have taken a gap year tend to have a lower belief in their own abilities.

Hence, in the European setting, it seems as if students who take a gap year are usually from a better-educated background, but the evidence is mixed on whether students who take a gap year had poorer academic achievements in their upper secondary education. However, it is possible that the variation in findings on prior achievements might be linked to issues other than background variables, such as the HE system and/or the admissions system in the country. The variation in findings related to gap years in the Nordic countries may be an indication of this.

There is also variation in the findings of how taking a gap year relates to study progression. All the American studies found that delaying HE entry is negatively correlated with gaining a degree (Bozick & Deluca, 2005; Horn et al., 2005). Students who delay HE entry are negatively selected and this disadvantage prevails through university. Australian and British studies on the other hand found that taking a gap year is positively correlated with academic performance in HE. Birch and Miller (2007) suggest that taking gap year "appears to motivate students for study when they commence university", and that this relationship is strongest for low-achieving students (Birch & Miller, 2007, p. 341). Crawford and Cribb (2012) found that students who have had a gap year are more likely to graduate with a good degree (first – or second-class degree) compared to those who make the transition to HE directly. Hence, again we see the difference between the American findings, which indicate that delaying HE entry is a prevailing disadvantage, and the British and Australian findings which indicate that taking a gap year might have a positive effect on future performance.

## Theoretical frameworks for understanding delayed transition to HE

As a great deal of the earlier findings on students who delay their transition to HE are related to social differences in who makes this kind of choice, sociological understandings of what can explain this kind of behaviour is relevant. As several scholars have pointed out, taking a break in the educational path is particularly common among students from educated families (see for example Crawford & Cribb, 2012; Vogt, 2018). This might be interpreted within a framework of cultural capital and habitus (Bourdieu, 1984; 1986). Students with high levels of cultural capital would see progression to HE as a natural part of their path to adulthood and would not let this view be affected by whether they progress directly or not. McDonough (1994; 1997) studied educational choice among female students of differing social origins and used the argument that the family and/or high school habitus creates a form of entitlement to a certain kind of HE, and thus to HE access. If students are brought up in a family in which they are expected to undertake HE, postponing the attendance by a year or two might not change this expectation. This type of argument could contribute to explaining why students from educated families are more likely to postpone HE attendance.

A slightly alternative approach would be to view the findings in light of social differences in educational decision-making, or what is usually known as "relative risk aversion" (Breen & Goldthorpe, 1997; Van de Werfhorst & Hofstede, 2007). They point to three mechanisms which can contribute to explain differences in educational choice. The first is similar to the one described above, that students from educated families are more likely to continue in education as they want to keep their social position. Hence, this would imply that for students from educated families a break in the educational path of a year or two is not detrimental to the goal of gaining a HE-degree. Second, students originating in different social positions may interpret their chances of being successful in HE differently, and this is thus linked to ability. Hence, this may imply that students from less educated

families need a stronger signal, in this case in terms of grades from upper secondary education (as this is the basis for access to HE-programmes), in order to pursue a degree, compared to students from families with HE. The last mechanism Breen and Goldthorpe (1997) point to is the level of resources, which may be relevant in cases where students use their gap year to gain additional qualifications for HE-access.

Both these theories points to students from a HE-background being more likely to purse HE, regardless of grades. Since taking a gap year is more prevalent in the middle class (Vogt, 2018), we can assume that students from families with HE are more likely to continue in HE after a gap year.

## The Norwegian education system

In Norway, only students who have successfully completed an academic qualification in upper secondary education are eligible to undertake HE, and this is commonly done by following the academic track. In a starting cohort in upper secondary education about half enter the academic track while the other half start the vocational track. Within the academic track there are three types of programmes: a general programme, an aesthetics programme and an athletics programme. The first is the largest of all upper secondary programmes, amounting to about 40 per cent of a cohort (Frøseth et al., 2008, p. 75). In the general programme, students can choose to take particular subjects (e.g., advanced mathematics and science) which gives access to HE programmes with high prestige, such as medicine and engineering. These particular subjects also give bonus points in the student's diploma, increasing the chances of admission to competitive HE-programmes. The latter two academic upper secondary programmes, aesthetics and athletics, provide students with the minimum academic qualification needed for access to HE, and thus no particular subjects which provide bonus points for admission. Public HE-institutions in Norway has no tuition fees.

The degree format in Norwegian HE is in line with the Bologna format: three-year bachelor's degrees, two-year master's degrees that build on a bachelor's degree, and five-year integrated master's degrees/professional programmes.[1] Apart from long professional degrees and most forms of integrated master's, all HE institutions provide both bachelor's and master's degrees. However, unlike many other HE systems, prestige in the Norwegian HE system is more often linked to the type of programme, rather than to the institution. This is also reflected in admissions points needed for admission to various types of degrees. In most bachelor's degree programmes, the competition for admission is limited, and students with modest grades may also be admitted. For integrated master's programmes, exemplified by teaching, law, medicine and engineering, competition for admission is usually harder, but it varies by programme. Competition for admission is highly competitive in medicine, for which students need to have close to the maximum GPA for admission (see Hovdhaugen et al., 2020, p. 63), and it is also high for law and engineering. However, gaining admission to teaching degrees is less competitive.

Admission to HE is primarily based on grades, and the final transcript a student receives in upper secondary education is the basis for admission (Sandsør et al., 2022). In addition to students' GPA, it is also possible for students to collect various forms of bonus points, which are added to the GPA. There are bonus points for passing certain subjects (advanced mathematics, science subjects and foreign languages other than English), bonus points based on age and for participating in military service/HE/Folk high school (described below). Hence, students who do not have the required GPA to enter a programme can collect various forms of bonus points to enhance chances of admission. Additionally, it is possible to improve grades by resitting exams. However, improved grades affect which quota students apply through. There are two admissions quotas, the first quota is for

[1]There is one professional programme, medicine, which is a six-year programme. Due to data limitations, students in that programme are not included in analyses of completion rates. Out of the 250,036 students in our sample, only 1,997 students were registered as being enrolled in medicine when they start higher education, and as such they constitute 0.8 per cent of our sample. As this is a very minor part of the sample, excluding them is unlikely to have an impact on our results.

students 21 years old or younger with no improved grades, while the regular quota is for all applicants. In practice this implies that applicants 21 years old or younger are competing in both quotas, while applicants aged 22 or older only compete in the regular quota. Programme places are equally divided between the two quotas (hence, in a programme with 60 study places, 30 places are reserved for students who apply through the first quota while the other 30 places are reserved for applicants in the regular quota) in all fields of study. In the first quota, only grades and bonus point for subjects counts, while in the regular quota all forms of bonus points apply. Hence, in terms of points needed for admission, the quota system gives priority to younger students (Sandsør et al., 2022).

The application system is centralised, and students can list up to ten options, choosing between both bachelor's level programmes and integrated master's programmes. The ranked options are a combination of programme and institution. Most programmes only require the minimum academic qualification, but 39 per cent of all programmes offered have at least one extra requirement for admission (Hovdhaugen et al., 2020). For example, advanced mathematics is one of the requirements for science programmes, medicine, architecture and engineering, while it is sufficient to have completed any academic programme for admission to law or psychology. However, many of these programmes have few study places, thus only about one in five study places offered each year requires students to have taken particular subjects.

There are several features of the Norwegian system that may contribute to making a gap year attractive for students. In addition to filling gap years with leisure time, paid or unpaid work, military service or travel, it is also possible for students to re-sit upper secondary school examinations to improve their chances of being accepted into their preferred HE programme. After completion of academic upper secondary education, students can choose both to sit new upper secondary exams and re-sit exams they have already passed. In both cases this is done to improve chances of admission to HE in the regular quota. This type of activity can be combined with other activities, such as travel or work. Additionally, a specific type of schools known as "Folk high schools' exist, which provide a form of community-based interim year outside the official educational system (Bagley & Rust, 2009), and some students choose to take this as an activity during their gap year. Folk high school education has existed for over a century, and initially, these schools provided an opportunity for rural youth to access educational opportunities they otherwise would not have. Today, these boarding schools provide a form of general citizenship education with an alternative pedagogical model in which students are active partners in creating their own learning material and learning environment (NOU, 2001, p. 16). In this type of school there are no examinations and completion of a school year does not provide any formal qualification but gives students bonus points when applying for admission to HE. Most schools have programmes oriented around a range of topics, such as international solidarity, athletics or outdoors activities, or music, design or arts and crafts (Borgen & Borgen, 2016).

## Data and methods

We used high-quality, population-wide, Norwegian register data with personal identifiers. This allows us to merge information from several registers, as well as linking children and parents. The data include detailed information on everyone's educational trajectory, through all levels of education, and for students studying in Norway or abroad. We merged these data with information on employment status, participation in military service, whether they took upper secondary school examinations after completing upper secondary school and whether they spent time in a Folk high school. In addition, the data contain background characteristics of individuals and their parents.

We restricted our sample to students who were living in Norway in the year they turned 16, who transitioned directly from lower secondary to upper secondary school and completed the academic track within three years (on-time completion), qualifying them for admission to HE. The data set included only students who completed upper secondary school in the period 2003–2015 (total N = 250,036), and there are two main reasons for this. First, the time frame is related to educational

reforms in upper secondary education and HE. Norway implemented HE reform in 2003 which changed the degree format in line with the Bologna process. This implied offering three-year bachelor's degrees, two-year master's degrees, and five-year integrated master's degrees/ professional programmes. Hence, as this was a substantial change in the degree system, we focused on the period from 2003 onwards to keep the HE system fixed across cohorts. The upper limit of the time frame is based on the latest change in the structure of upper secondary programmes in Norway, as the number of academic programmes increased, and the number of vocational programmes was reduced from 2016. Again, to keep the upper secondary system fixed across cohorts, we restricted the data to students who had completed an academic upper secondary programme before the number of academic programmes available changed. Second, an upper time limit of 2015 is also related to the data base only being updated until 2020. As we wanted to investigate if students who started HE either directly or after one or two gap years complete within estimated time, we needed five years of observations for a bachelor's degree. Hence, we are focusing our analyses on students who are within the age span 19–21 when entering higher education. In the analyses of completion rates the data were limited to the period 2003–2013 for students taking a five-year integrated master's degree, but as this is only a small proportion of our sample all the other analyses were done on the cohorts finalising upper secondary education from 2003 to 2015. The reason for restricting our attention to students who transition within two years after completing upper-secondary education (who are in the age span 19-21) is that we would like to include as many cohorts as possible when investigating HE degree completion. Furthermore, the great majority of students have entered HE within two years, as only about nine per cent of our sample enter HE after more than two years. For the 2003–2015 cohorts, only about four per cent of students have not enrolled in higher education within 5 years of academic upper secondary school completion.

## Outcome variables

In our analyses we focused on three outcomes. As the aim of the paper is to study gap years, our main outcome was to compare those who transition directly into HE and those who delay entry by one or two years. Additionally, as we wanted to investigate the association between time of transition to HE and on-time degree completion, we measured whether students completed HE within the expected time frame. In this analysis we distinguished between those taking a three-year bachelor's programme and those taking a five-year integrated master's degree.

For students delaying entry by one or two years, we also identified their activity during the gap year, as reported in register data, usually annually. We could identify four types of activities: whether they (1) are employed, (2) in military service, (3) in Folk high schools or (4) registered as taking upper secondary school examinations, either to improve their grades or take examinations not previously sat to qualify for admission into programmes with specific subject requirements. The data from the employment statistics is registered the third week in November in each year, while activities related to education are registered as of 1 October. However, as we measured annually, actual date of registration is not that important.

From the register-based employment statistics we can identify whether an individual is employed or in military service. Even if Norway formally has mandatory conscription to the military, only about 8000–9000 individuals (about 15% of a cohort) are admitted to service. From the National Education Database, we know whether individuals take upper secondary school examinations. Based on this information we defined an indicator variable equal to 1 if the individual is registered as sitting at least one such examination during the gap year. Finally, we measured whether the individual was registered in a Folk high school during the gap year. These gap year activities are not necessarily mutually exclusive, except for military service and work. However, it is rare to do military service and attend Folk high school in the same year, and as Folk high school is full-time education, students usually do not work.

### Independent variables

To evaluate whether there are differences in background characteristics by time of transition to HE, as well as gap year activities, we used the following variables: gender, minority background (born in Norway to foreign born parents, "descendants', or born abroad, "immigrants'), if students have completed the general academic programme or an athletics or aesthetics programme during their academic upper secondary education, parental education level and GPA from upper secondary school, which is used for admissions into upper secondary education. Parental education level is measured the calendar year the student turns 16 and is equal to the education level of the parent with the highest reported education level in the following four categories: compulsory education, upper secondary education, short HE (bachelor's degree) or long HE (master's or PhD). Frequencies for the background variables used in bivariate analyses and regressions can be found in Table A1 in the Appendix.

## Methods

We started out analysing the data using bivariate analyses, in which we used a T-test to assess whether the differences are statistically significant. To investigate if there are differences between students who make the transition directly and those who delay transition by a year or two, we used multinomial logistic regression. Multinomial regression is used when the outcome variable has three or more categories (Long & Freese, 2006). Significance of coefficients (unstandardised B and standard errors displayed in table) are calculated compared to direct transition. As coefficients presented in the tables are not directly interpretable, they have been recalculated into probabilities, using average marginal effects (AME) in STATA. This output is presented as a figure in which each column sums to 100 per cent. To investigate differences in on-time degree completion, we used regular linear regression. The completion rate was estimated using separate regressions for students in bachelor's degree programmes and integrated master's degree programmes, but the findings are presented in the same figure, to ease comparison.

## Results

### Time of transition to HE

Earlier Norwegian research have shown that students who have completed the academic track during their upper secondary education generally are strongly oriented towards HE, (Salvanes et al., 2015; Støren et al., 2007). Most students tend to move into HE within a few years after completion of their upper secondary degree. Figure 1 shows if students have moved into HE within two years after completion of upper secondary education, in the period 2003-2015.

For those who made the transition, we distinguished between the proportion of students who transitioned directly, or who delayed transition by one year and two years, respectively. The group that has not started in HE within two years is small throughout the period, moving from 10.4 per cent at the start of the period to 7.7 per cent in 2015.

The proportion who transitioned directly into HE increased in the period, from 35.9 per cent in 2003–47.7 per cent in 2015. There was a corresponding decline in the proportion of students that delayed entry by one year, moving from 41.2 per cent in 2003–34.8 per cent in 2015. The decline happened at the start of the period; from 2005 onwards, the proportions have been stable at above 40 per cent for direct transition, and the corresponding proportion for one-year delay at around 35 per cent.

Therefore, we see that the pattern of delaying HE by a year or two is not a new phenomenon in Norway. Still, during the last decade, direct transition into HE has become more common. There are several explanations for this change. First, the change in the degree system through the HE reform in 2003 introduced new, more structured programmes at university (St.Meld no.

**Figure 1.** Frequency of direct vs. delayed transition among those that completed the academic track upper secondary education in the period 2003-2015.

27, 2000-2001). Following this change there were indications that this had an impact on students' choice of programme, by reducing the proportion who switched programmes (Hovdhaugen, 2011), and it is possible that the new, more structured programmes have also had a positive effect on students' choices on when to start HE. Second, the admissions system underwent a minor change in 2009, increasing the quota for younger students (under 22 years of age) and thus rewarding direct transition. Yet, as the pattern of more students moving directly into HE started before 2009, this cannot be the only explanation.

In the rest of this paper, our focus is on students who have made the transition to HE within two years after completing their upper secondary degree. We thus focus on students who were ages 19–21 when transitioning to HE.

### Social differences in timing of transition

In order to investigate differences between students with direct versus delayed transition to HE, we ran a multinomial logistic regression. (This can be found in Appendix, Table A2). As our focus is on differences by socio-economic background, we illustrate the findings on parental education in Figure 2.

We can see that there is a divide between students coming from families with and without HE, with gap years being more common in the first group. About half of students from families without HE transition directly, while 36–37 per cent have a one year gap. For students coming from families with HE it is more common to take a gap year, in this group 42–46 per cent transition directly, while 41–44 per cent wait one year before starting. The proportion taking two gap years is low in all four groups.

When controlling for the other variables in the regression, students with a low GPA are much more likely to take a gap year, or to state this the other way around: the better grades a student has,

**Figure 2.** Analysis of direct vs. delayed transition, by parent's educational level. Analyses based on multinomial logistic regression, see Appendix Table A2. Standard errors (displayed in Appendix) are generally small.

the more likely it is that the student will continue directly into HE. Additionally, males and students who took the athletic or aesthetic programme instead of the general academic programme are more likely to take a gap year, while students of minority background are more likely to move directly into HE.

To investigate further if there is an interaction between parent's educational background and grades, we ran a multinomial logistic regression with a combined variable accounting for the inter-action effect. However, as the pattern for direct and delayed transition is similar for students whose parents do not have HE, and similarly those who come from families with HE, long or short, are largely the same, we have chosen to distinguish only between if parents have HE or not. The results are presented in Figure 3 (while the regression can be found in Appendix Table A3).



**Figure 3.** Direct vs. delayed transition to HE, by parent's educational level and grades. Analyses based on multinomial logistic regression, with interaction term for parent's educational level and grades, see Appendix Table A3. Note that "1 gap year" and "2 gap years' are two distinct groups, which are treated as separate outcomes in the regression. Standard errors (displayed in Appendix) are generally small.

Figure 3 illustrates that the likelihood of direct transition is higher the better the grades are, both for students coming from families with and without HE. Still, the likelihood of transitioning directly is higher for students coming from families without HE, regardless of grades. Additionally, the pattern of delayed transition is slightly different when comparing students from families with and without HE. For students coming from families with HE, the proportion which delays transition by one year is stable between all quartiles of grades, 41–43 per cent in all groups. For students coming from families with only compulsory or upper secondary education, the proportion who delay transition by a year is slightly reduced as grades increase from 39 per cent for the first grade-quartile to 34 per cent for the fourth grade-quartile. Hence, for students from families without HE, the likelihood of taking a one-year gap year is slightly reduced as grades increase, while this pattern is similar in all grade-quartiles for students coming from families with HE. This may indicate that for students from educated families, grades have less influence on the choice to take a gap year after completing upper secondary education. Furthermore, as there is a grade-gradient to starting directly in HE, there is also a grade-gradient to having a two-year gap year. This might be linked to students with the lowest grades from upper secondary education, particularly in the first and second grade-quartiles, needing time to improve their grades to compete for admission to HE.

## Gap year activity

The next question we investigated was what students do in their gap year, and Figure 4 illustrates how this has changed over time. Data for re-sitting upper secondary examinations are only available from the 2007/2008 school year, and thus the cohort completing upper secondary education in 2007 is the first cohort we can use these data for.



**Figure 4.** The development in gap year activities over time.

The most common activity while having a gap year is to work. Even though the proportion has varied slightly over time, in most years in our observation period, six out of ten gap year takers worked during their gap year. Attending a Folk high school has been a gap year option for about one in five for the entire period, while the proportion doing their military service has varied more over time. In 2003 it was over 15 per cent, down to around 6 per cent in the period 2007–2011, and then increasing again to 17 per cent in 2012. In the last three years the proportion dropped to 13–14 per cent in 2013 and 2014 and to 11 per cent in 2015. We have no direct explanation for the variations over time, as the observed pattern is linked to changes in the system of military conscription over time, and variations in budgets for the military. Since 1993, the period of general military service has been 12 months.

However, the most interesting change over time is the increase in students who re-sit upper secondary examinations to improve their grades. This proportion has increased from six per cent in 2007 to a high of 15.2 per cent in 2012, after which it stabilised at about 13 per cent. Hence, we observe that it is becoming increasingly common for students to improve their grades to improve their access to HE.

A related question is how the pattern of activities is linked to social background, which is shown in Figure 5. Military service is relatively evenly distributed among students from different social backgrounds, with only a slightly higher proportion, 11–12 per cent, doing military service among students from families with HE, compared to 9 per cent for those coming from a family with only compulsory education. There are social background differences in the proportion spending a year in a Folk high school. One in four students from families with HE do this, while it is only true for 17–18 per cent of students from less educated families. Hence, we observe that this type of gap year activity is more common among students coming from a well-educated background. Spending the gap year working displays the opposite relationship: 65 per cent of students from families without HE work, while this only applies for 60 per cent of students who have parents with short HE and 53 per cent per cent of students who have parents with long HE (Figure 4). Even though re-sitting upper secondary examinations is not a common way to spend a gap year, there is a clear social pattern for who do this. Figure 5 show that while 16 per cent of students from families in which the parents have long HE degrees re-sit examinations, this is true for 12 per cent of students in families with short HE degrees and only 10 per cent of students in families without HE. As mentioned earlier, re-sitting examinations may be a way to improve one's chances



**Figure 5.** Gap year activities, by parental educational level.

of gaining admission to a particular HE programme, as improved grades are counted in admission in the general quota.

### On-time degree completion by time of transition

The last research question refers to on-time degree completion and whether it varies by time of entry to HE. We investigated this through two linear regressions, one for three-year programmes and one for five-year programmes, with results illustrated together in Figure 6 (all controls included). Figure 6 shows that for students who are pursuing a three-year bachelor's degree those that delay HE entry by one or two years are somewhat more likely to complete on time than those who started directly. Students in five-year integrated master's programmes do not display the same pattern: there is no significant difference in completion rates between students who start directly and those who have one gap year, while those who takes two gap years are slightly less likely to complete on time. This finding may be interpreted as if preservation of human capital is more important in longer, more demanding degrees. Most of the five-year programmes require students to have taken advanced mathematics or science to qualify for admission, and one interpretation of the pattern observed may be that these skills may "wear off" if students wait too long before they continue in education. However, this finding may also be explained by differences in the types of programmes that students pursue: We cannot rule out that our findings are partly driven by those delaying entry to HE by two years are also pursuing more difficult degrees and therefore take longer to complete.

### Discussion and conclusion

This paper documents that in Norway over half of a cohort completing academic upper secondary education, qualifying them for access to HE, take a gap year before they start HE. This may be due to choice or because they are not admitted to their preferred education. Something we cannot distinguish between in our data, but qualitative research indicates that in most cases this is by choice



**Figure 6.** On-time degree completion by timing of transition.

(Vogt, 2018). Compared to many other countries, the prevalence of gap year(s) is relatively high. However, even if the proportion moving directly into HE is only 45 per cent in the latter years of our empirical period, it has risen by ten percentage points from 2003 to 2015. Additionally, our analysis shows that a very small minority, ten per cent in 2003 and about eight per cent in 2015 have not made use of their right to access HE within two years of completing the academic upper secondary education. Hence, most students who have qualified to access HE choose to use it, even though they are not moving directly into HE after completing upper secondary education.

We show that that students who take a gap year are different from students who do not, particularly with respect to social background and grades. The better the grades the greater the chance of starting directly in HE. This is not surprising given that students under 21 are given priority in admission to HE. However, this correlation is stronger among individuals with parents without HE compared to individuals with parents with a HE degree. This result is in line with earlier findings based on Australian and European data (Birch & Miller, 2007; Crawford & Cribb, 2012), as well as a Norwegian qualitative study (Vogt, 2018). This supports the interpretation resting on cultural capital, that students from educated families are expected to take HE and postponing the transition a year does not change their goal to commence and complete a HE degree.

Another important difference between students from different social backgrounds is that they spend their gap-year on different types of activities. Individuals from HE backgrounds are much more likely to spend their time re-sitting upper secondary school examinations which could potentially increase their skills or improve their chances of being admitted into their programme of choice. Individuals from low educated backgrounds are more likely to spend time working. This is also evident through the fact that students from a more highly educated background to a greater extent spend a year in a Folk high school, to collect bonus points for admission. The option in the Norwegian education system of re-sitting examinations as well as collecting bonus points to enhance chances of being admitted to their preferred programme, appears to be an opportunity more often taken by individuals with parents with HE. Our results suggest that differences in both the prevalence of taking a gap year and gap year activities favours students from higher socio-economic backgrounds. Hence, this implies that the opportunities to improve admission chances in HE by improving grades and collecting bonus points is to a larger extent taken by students with HE parents.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

## ORCID

Elisabeth Hovdhaugen 🔟 http://orcid.org/0000-0002-6422-5028
Kari Vea Salvanes 🔟 http://orcid.org/0000-0002-3706-1494

## References

Bagley, S. S., & Rust, V. D. (2009). Community-Based folk high schools in Norway, Sweden and Denmark. In R. L. Raby, & E. J. Valeau (Eds.), *Community college models* (pp. 279–298). Springer.
Birch, E. R., & Miller, P. W. (2007). The characteristics of 'Gap-year' students and their tertiary academic outcomes. *The Economic Record*, *83*, 329–344.
Borgen, ST, & Borgen, N. T. (2016). Student retention in higher education: Folk high schools and educational decisions. *Higher Education*, *71*, 505–523.

Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Routledge & Kegan Paul.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory of reserach for the sociology of education* (pp. 241–258). Greenwood Press.

Bozick, R., & Deluca, S. (2005). Better late than never? Delayed enrolment in the high school to college transition. *Social Forces*, *84*(1), 531–554.

Breen, R., & Goldthorpe, J. H. (1997). Explaining educational differentials: Towards a formal rational action theory. *Rationality and Society*, *9*, 275–305.

Crawford, C., & Cribb, J. (2012). *Gap year takers: Uptake, trends and long-term outcomes. Research report DFE-RR252*. Department for Education.

Curtis, D. D. (2014). The 'Gap year' in Australia: Incidence, participant characteristics and outcomes. *Australian Economic Review*, *47*, 107–114.

Frøseth, M. W., Hovdhaugen, E., Høst, H., & Vibe, N. (2008). *Tilbudsstruktur og gjennomføring i videregående opplæring. [Upper secondary education: programmes offered and completion] Delrapport 1. Evaluering av Kunnskapsløftet. NIFU STEP report 40/2008*. NIFU STEP.

Hauschildt, K., Gwosc, C., Schirmer, H., & Wartenbergh-Cras, F. (2021). *Social and economic conditions of student life in Europe: Synopsis of indicators: Final report: Eurostudent VII 2018-2021*. W. Bertelsmann Verlag.

Hauschildt, K., Vögtle, E. M., & Gwosc, C. (2018). *Social and economic conditions of student life in Europe: Synopsis of indicators: Final report: Eurostudent VI 2016-2018*. W. Bertelsmann Verlag.

Heath, S. (2007). Widening the gap – pre-university gap years and the 'economy of experience'. *British Journal of Sociology of Education*, *28*(1), 89–103.

Heiskala, L., Kilpi-Jakonen, E., Sirniö, O., & Erola, J. (2023). Persistent university intentions: Social origin differences in stopping applying to university after educational rejection(s). *Research in Social Stratification and Mobility*, *85*, 100801.

Holmlund, B., Liu, Q., & Nordström Skans, O. (2008). Mind the gap? Estimating the effects of postponing higher education. *Oxford Economic Papers*, *60*(4), 683–710.

Horn, L., Cataldi, E. F., & Sikora, A. (2005). *Waiting to attend college: Undergraduates Who delay their postsecondary enrollment (NCES 2005–152)*. U.S. Department of Education, National Center for Education Statistics. U.S. Government Printing Office.

Hovdhaugen, E. (2011). Do structured study programmes lead to lower rates of dropout and student transfer from university? *Irish Educational Studies*, *30*(2), 237–251.

Hovdhaugen, E., Sandsør, A. M. J., Rønsen, E., & Carlsten, T. C. (2020). Opptak til høyere utdanning: En studie av konsekvensene av kvote og poengberegning med fokus på psykologi, medisin, jus og grunnskolelærerutdanning. NIFU report 2020:4. Oslo: Norway.

Isopahkala-Bouret, U. (2020). University non-admittance and anomie: Reconsidering the promise of an egalitarian society. *British Journal of Sociology of Education*, *41*(3), 361–376.

Johan, N. (2009). Gap year travel: Youth transition or youth transformation? In R. Brooks (Ed.), *Transitions from education to work. New perspectives from Europe and beyond* (pp. 136–149). Palgrave MacMillan.

Jones, A. (2004). *Review of gap year provision*. Department of Education and Skills.

Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using stata (2nd edition)*. Stata Press.

Lund, R. L., & Klausen, T. B. (2016). Lang vej at gå: Social baggrund og studerendes alder på danske universiteter. *Dansk Sociologi*, *27*(2), 9–34.

Martin, A. J. (2010). Should student have a gap year? Motivation and performance factors relevant to time out after completing school. *Journal of Educational Psychology*, *102*(3), 561–576.

McDonough, P. M. (1994). Buying and selling higher education: The social construction of the college applicant. *Journal of Higher Education*, *65*(4), 427–446.

McDonough, P. M. (1997). *Choosing colleges. How social class and schools structure opportunity*. State University of New York Press.

Meld.St. no. 31. (2023-2024). *Perspektivmeldingen 2024 [long-term perspectives on the Norwegian economy 2024]*. Kunnskapsdepartementet.

NOU 2001:16. (2001). *Frihet til mangfold – om folkehøgskolens rammevilkår. [Freedom to diversity – framework conditions for the Folk High Schools]*. Kirke-, utdannings og forskningsdepartementet.

Orr, D., Gwosc, C., & Netz, N. (2011). *Social and economic conditions of student life in Europe: Synopsis of indicators: Final report: Eurostudent IV 2008-2011*. W. Bertelsmann Verlag.

O'Shea, J. (2011). Delaying the academy: A gap year education. *Teaching in Higher Education*, *16*(5), 565–577.

Rowan-Kenyon, H. T. (2007). Predictors of delayed college enrolment and the impact of socioeconomic status. *The Journal of Higher Education*, *78*(2), 188–214.

Salvanes, K. V., Grøgaard, J. B., Aamodt, P. O., Lødding, B., & Hovdhaugen, E. (2015). *Overganger og gjennomføring i de studieforberedende programmene, NIFU report 13/2015*. NIFU.

Sandsør, A. M. J., Hovdhaugen, E., & Bøckmann, E. (2022). Age as a merit in admission decisions for higher education. *Higher Education*, *83*, 379–394.

Stehlik, T. (2010). Mind the gap: School leaver aspirations and delayed pathways to further and higher education. *Journal of Education and Work*, *23*(4), 363–376.

St.Meld no. 27. (2000-2001). *Gjør din plikt – Krev din rett. [Do your duty—demand your rights]*. Kirke-, utdannings og forskningsdepartementet.

Støren, L. A., Helland, H., & Grøgaard, J. B. (2007). *Og hvem sto igjen … ? Sluttrapport fra prosjektet gjennomstrømning i videregående opplæring blant elever som startet i videregående opplæring i årene 1999-2001. [And who was left behind … ? Final report from the project completion in upper secondary education among pupils who started in the years 1999-2001] NIFU STEP report 14/2007*. NIFU.

Van de Werfhorst, H. G., & Hofstede, S. (2007). Cultural capital or relative risk aversion? Two mechanisms for educational inequality compared. *The British Journal of Sociology*, *58*(3), 391–415.

Vibe, N., Frøseth, M. W., Hovdhaugen, E., & Markussen, E. (2012). *Strukturer og konjunkturer. Evaluering av Kunnskapsløftet. Sluttrapport fra prosjektet «Tilbudsstruktur, gjennomføring og kompetanseoppnåelse i videregående opplæring». [Study structures and business cycles, final report from reform evaluation] NIFU report 26/2012*. NIFU.

Vogt, K. C. (2018). The timing of a time out: The gap year in life course context. *Journal of Education and Work*, *31* (1), 47–58.

Wells, R. S., & Lynch, C. M. (2012). Delayed college entry and the socioeconomic Gap: Examining the roles of student plans, family income, parental education and parental occupation. *The Journal of Higher Education*, *83*(5), 671–697.

# Appendix

**Table A1.** Frequencies for background variables used in regressions.

| Variable | Values | Observations | Percentage |
|---|---|---|---|
| Parent's educational level | Compulsory education | 21432 | 9.4% |
| | Upper secondary education | 60593 | 26.7% |
| | Short higher education | 97045 | 42.7% |
| | Long higher education | 48112 | 21.2% |
| | | 227182 | |
| Gender | Female | 133700 | 58.9% |
| | Male | 93482 | 41.1% |
| | | 227182 | |
| Immigrant background | Native | 207439 | 91.3% |
| | Immigrants | 11875 | 5.2% |
| | Descendants | 7868 | 3.5% |
| | | 227182 | |
| Type of aca. upper secondary programme | General academic programme | 189022 | 83.2% |
| | Athletics | 23540 | 10.4% |
| | Aesthetics | 14620 | 6.4% |
| | | 227182 | |

| Grade point average (GPA – in quartiles in the regression) | | | | |
|---|---|---|---|---|
| Observations | Mean | Std.dev | Min | Max |
| 227182 | 4.27 | 0.64 | 2.04 | 6.00 |

**Table A2.** Multinomial logistic regression on direct vs. delayed transition to higher education.

| | 1 gap year vs. direct transition | | 2 gap year vs. direct transition | |
|---|---|---|---|---|
| | B | S.E. | B | S.E. |
| Intercept | **−0.226** | 0.012 | **−1.983** | 0.021 |
| Parent's edu level (long HE = 0) | | | | |
| Compulsory edu | **−0.421** | 0.019 | **−0.045** | 0.028 |
| Upper secondary | **−0.375** | 0.014 | **−0.452** | 0.021 |
| Short HE | **−0.142** | 0.012 | **−0.158** | 0.018 |
| Grade point average (4th quartile = 0) | | | | |
| 1st quartile | **0.394** | 0.013 | **1.110** | 0.021 |
| 2nd quartile | **0.217** | 0.013 | **0.699** | 0.021 |
| 3rd quartile | **0.014** | 0.013 | **0.412** | 0.021 |
| Control variables | | | | |
| Immigration background (native = 0) | | | | |
| Immigrant | **−0.574** | 0.021 | **−0.684** | 0.034 |
| Descendent | **−0.941** | 0.028 | **−1.347** | 0.053 |

*(Continued)*

**Table A2.** Continued.

|  | 1 gap year vs. direct transition | | 2 gap year vs. direct transition | |
|---|---|---|---|---|
|  | B | S.E. | B | S.E. |
| Type of upper secondary (general $= 0$) |  |  |  |  |
|   Sports | **0.207** | 0.015 | **0.502** | 0.021 |
|   Music, dance, drama | **0.432** | 0.019 | **0.788** | 0.027 |
|   Gender (female $= 0$) | **0.249** | 0.009 | **0.612** | 0.014 |
| Number of observations |  | 227 182 |  |  |
| Initial loglikelihood |  | −223190.58 |  |  |
| Final loglikelihood |  | −217593.08 |  |  |
| Pseudo R2 |  | 0.0251 |  |  |

Estimates and standard errors in Figure 2, based on regression above

|  | direct transition | | 1 gap year | | 2 gap years | |
|---|---|---|---|---|---|---|
|  | Margin | S.E | Margin | S.E | Margin | S.E |
| Compulsory edu | 0,52 | 0,0035 | 0,36 | 0,0034 | 0,11 | 0,0022 |
| Upper secondary | 0,52 | 0,0020 | 0,37 | 0,0020 | 0,11 | 0,0012 |
| Short HE | 0,46 | 0,0016 | 0,41 | 0,0016 | 0,13 | 0,0011 |
| Long HE | 0,42 | 0,0022 | 0,44 | 0,0023 | 0,14 | 0,0017 |

**Table A3.** Multinomial logistic regression on direct vs. delayed transition to higher education, interaction between parent's education and grades.

|  | 1 gap year vs. direct transition | | 2 gap year vs. direct transition | |
|---|---|---|---|---|
|  | B | S.E. | B | S.E. |
| Intercept | **−0.305** | 0.011 | **−2.090** | 0.019 |
| Interaction term, parents edu*grades (0 = Parents HE*4th quartile) |  |  |  |  |
|   Parents HE*3rd quartile | **0.143** | 0.015 | **0.434** | 0.024 |
|   Parents HE*2nd quartile | **0.188** | 0.016 | **0.708** | 0.024 |
|   Parents HE*1st quartile | **0.337** | 0.017 | **1.063** | 0.024 |
|   Parents no HE*4th quartile | **−0.319** | 0.022 | **−0.277** | 0.039 |
|   Parents no HE*3rd quartile | **−0.196** | 0.019 | 0.020 | 0.032 |
|   Parents no HE*2nd quartile | **−0.085** | 0.018 | **0.321** | 0.028 |
|   Parents no HE*1st quartile | **0.108** | 0.017 | **0.796** | 0.025 |
| Control variables |  |  |  |  |
| Immigration background (native $= 0$) |  |  |  |  |
|   Immigrant | **−0.570** | 0.021 | **−0.675** | 0.034 |
|   Descendent | **−0.949** | 0.027 | **−1.348** | 0.053 |
| Type of upper secondary (general $=0$) |  |  |  |  |
|   Sports | **0.198** | 0.015 | **0.491** | 0.020 |
|   Music, dance, drama | **0.428** | 0.019 | **0.784** | 0.026 |
| Gender (female $= 0$) | **0.255** | 0.009 | **0.618** | 0.014 |
| Number of observations |  | 227 182 |  |  |
| Initial loglikelihood |  | −223190.58 |  |  |
| Final loglikelihood |  | −217659.73 |  |  |
| Pseudo R2 |  | 0.0248 |  |  |

Estimates and standard errors in Figure 3, based on regression above

|  |  | Direct transition | | 1 gap year | | 2 gap years | |
|---|---|---|---|---|---|---|---|
|  | Grades | Margin | S.E | Margin | S.E | Margin | S.E |
| Parents HE | 4th quartile | 0,51 | 0,0023 | 0,41 | 0,0023 | 0,09 | 0,0013 |
|  | 3rd quartile | 0,46 | 0,0025 | 0,42 | 0,0025 | 0,12 | 0,0016 |
|  | 2nd quartile | 0,43 | 0,0027 | 0,42 | 0,0027 | 0,15 | 0,0019 |
|  | 1st quartile | 0,39 | 0,0029 | 0,43 | 0,0029 | 0,19 | 0,0023 |
| Parents no HE | 4th quartile | 0,58 | 0,0043 | 0,34 | 0,0042 | 0,08 | 0,0024 |
|  | 3rd quartile | 0,54 | 0,0036 | 0,36 | 0,0035 | 0,09 | 0,0022 |
|  | 2nd quartile | 0,51 | 0,0033 | 0,37 | 0,0032 | 0,12 | 0,0021 |
|  | 1st quartile | 0,44 | 0,0030 | 0,39 | 0,0030 | 0,16 | 0,0022 |