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## **Educational endeavors: children of immigrants in education in the Netherlands, 1980-2020**

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## Chapter 6 - School dropout rates among second-generation youth

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### Introduction

Rates of school dropout among children of immigrants has been substantially higher than among the majority peers in the Netherlands (Bosma & Cremers, 1996; de Graaf & van Zenderen, 2009; Kalmijn & Kraaykamp, 2003). These statistics are especially alarming given the far-reaching consequences of school dropout: children who drop out of school have higher risks of being unemployed in low-skilled and low-paid jobs (Beckers & Traag, 2005). These life-course consequences of dropping out are perhaps even gloomier for children of immigrants, for whom educational disparities have been found regardless of dropout rates. The Dutch government has therefore been keen on decreasing and monitoring the causes of school dropout over the last decades through plentiful policy initiatives.

This chapter addresses the third sub-research question of this dissertation: “how does migration background interact with other student characteristics in affecting the educational trajectories of children of immigrants?”. The role of various student and contextual characteristics in school dropout among youth with a migration background is studied in this chapter. Specifically, I aim to answer the research questions: (1) “what are the patterns in school dropout among the second generation with regards to gender, migration background, education type, and degree of urbanization?” and (2) “how can differential dropout occurrences be explained?”.

The four largest and most studied groups of children of immigrants in the Netherlands are of Turkish, Moroccan, Surinamese, and Antillean ancestry. In this chapter, students with these migration backgrounds are studied as well as the now sizeable group with a Chinese migration background. These students are compared to their peers without a migration background. Much less is known about the Chinese second generation, partly because the size of the group has made it difficult to conduct structured research. In 2011, the Social and Cultural Planning Office (*Sociaal en Cultureel Planbureau, SCP*) provided some insight into the Chinese second generation and their educational

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<sup>1</sup> van der Heijden, E., & de Valk, H. A. G. (2018). Schooluitval onder tweede generatie jongeren. In *Jaarrapport Integratie 2018* (pp. 191-219). Centraal Bureau voor de Statistiek (CBS).

pathways (Gijsberts et al., 2011). This group is interesting for further study because previous research in the Netherlands but also in other countries, for example in the United States, suggests that children of Chinese migrants are relatively often highly educated and employed (Portes & Hao, 2004). This implies that a migration background per se, including when parents have low educational levels, will not automatically result in educational barriers for their children. However, so far it is unclear whether their schooling trajectory is more successful overall or whether we also see school dropouts among this group during their school career.

In recent years, government policy has focused heavily on reducing early school leave, to prevent that young people from entering the labor market without a diploma and a 'start qualification'. A start qualification regards enrolment in education compulsory for students up until the age of 16 and students up until the age of 18 have to be in school unless they have obtained a start qualification. A diploma of one of the following education types are considered a start qualification by the Dutch government: HAVO, VWO or MBO level 2 or higher. Early school leaving has been addressed in previous research (Meng, Verhagen, and Huijgen in Huijnk et al., 2014b; Hartgers & Besjes in Centraal Bureau voor de Statistiek, 2014) which looked at the labor market position of youth who dropped out of school as well as at their position in terms of education level, employment, income, benefits, and crime six years after dropping out of school. They showed that early school leave hurts outcomes across these different life domains.

School dropout among students with a migration background is studied in the context of urbanization in this chapter. This is especially relevant in the context of the Netherlands in big cities like Amsterdam and Rotterdam. In these cities the populations are becoming 'super-diverse': as of 2022, around a quarter of the Dutch population has a migration background, yet already in 2011, more than half of the population in Amsterdam had a migration background. The same is true of Rotterdam since 2017.

In this chapter, we look at pupils and students who at some point leave secondary education (VO), adult secondary education (VAVO), or vocational tertiary education (MBO) without a diploma. They could have obtained a starting qualification at a later stage. I therefore speak of *school dropouts*, rather than early school leave.

## Theoretical background

Three contexts – each on another aggregation level - are crucial in understanding the occurrence of school dropout: the students' characteristics, the family background, and the institutional characteristics of the school and the living environment. *Individual characteristics* refer to the student-level features that affect school achievement and school dropout. Of these, cognitive abilities, effort and participation in school, and gender are found to be the main influential characteristics. The higher the cognitive abilities, the higher the school achievement. Higher cognitive abilities are related to higher grades, higher attainment and achievement levels, and a higher education level overall. The inverse effect of cognitive abilities has been found for school dropouts, where these students had lower cognitive ability levels and performance levels than peers who remained in school (Audas & Willms, 2001; Cairns et al., 1989; Ensminger & Slusarcick, 1992).

Students' attitudes and behavior regarding school and learning included motivation, effort, and participation. Again, students who were motivated, put in the effort, and had high participation levels, generally, had higher educational performance levels. For students who dropped out of school, the inverse pattern has been found (Audas & Willms, 2001). The causal inference of the cognitive ability and motivational and participatory attitudes on the one hand, and the school performance and dropout, on the other hand, is ambiguous. The question is whether school dropout is the consequence of lower ability and motivational levels, or whether these relations are merely correlational rather than inferential.

Gender is the last individual-level factor. Over the last decades, a trend of upward mobility for girls in education took place. Girls have higher performance levels such as grades and track placement in secondary education, and more girls than boys start higher education. Moreover, boys tend to drop out of school more frequently than girls (Traag & van der Velden, 2011). Hence, I expect to find a positive effect of gender on school dropout. In other words, boys are expected to drop out more than girls do (*Hypothesis 1*).

In addition to these three individual-level factors, school dropout should also be seen from a decision-making perspective: the decision of dropping out versus continuing school can be contextualized from the rational choice perspective. From this perspective, the idea prevails that the costs and benefits of education are weighed by the student – and potentially their family - and that in the case of school dropout, the costs of continuing education outweighed the benefits. Similarly, students might act risk averse when it comes to education: students aim to achieve an education level that consolidates or even improves their socio-economic standing. In line with the relative risk aversion, students from higher socio-economic status families are less likely to leave school, because

they value the benefits of education over the costs and perceive school as a way to sustain their socio-economic standing. Hence, the decision to quit or to continue is not made in a micro-level vacuum: family background and institutional characteristics such as school context and living environment play a substantial role too.

It may not come as a surprise that socio-economic background is an influential *family characteristic* for school dropouts. Four elements of socio-economic background – i.e., four types of capital - can be distinguished in influencing school dropout: human capital, cultural capital, social capital, and economic capital (de Graaf & de Graaf, 2002; Kloosterman, 2010; Traag & van der Velden, 2011). Human capital refers to the cognitive abilities and support available in the family. Cultural capital concerns the dominant culture and mores prevailing in the school system and the degree to which parents socialize and equip their children. The underlying idea is that children from families whose cultural capital corresponds with what is positively evaluated in the school system will benefit (Bourdieu & Passeron, 1977; DiMaggio & Paul, 1982). Social capital refers to the social embeddedness of the student and the family in society and with one another (Bourdieu, 1977; Putnam, 2000). A tight-knit support network and a safely attached parent-child relationship are examples of this. Two different types of social capital can be distinguished: bonding capital and bridging capital (Putnam, 2000). The former refers to the tight-knit support network in family and direct surroundings, and chiefly within the own ethnic or migrant community. Bridging capital reaches out of the own community and relies on more superficial trust, such as interethnic networks and contacts. Economic capital, finally, refers to the financial resources of the family. Parents with higher incomes can better help their children in education by providing support such as learning materials, electronics, and private tutoring. These negative effects of socioeconomic background on school dropout are likely to affect children of immigrants disproportionately. Immigrant families more often lack these kinds of capital. Migrant children often lack these kinds of capital, as their first-generation parents work disproportionately lower-skilled jobs, may lack the language skills to help their children with their homework and may have trouble understanding the school system and what is expected, have relatively few bridging contacts with families who are better off in these regards, and simply do not have the money to compensate for these arrears.

In other words, the socioeconomic background may interact with migration background which in various ways can result in capital deficits. First, the measurement of human capital potentially neglects the cognitive abilities of immigrant parents. Human capital is often measured by education level. As far as parents are educated in their country of origin, the fruits of their education may be less functional in the country of destination because it has a different meaning than in the country of origin. Moreover, in some countries of origin, the possibility to employ cognitive abilities by means of

education relies heavily on access to education which in turn is often unequally distributed. First-generation immigrant parents might be less likely to have employed their cognitive abilities through education level. Second, immigrant parents have been socialized in the country of origin, in which - most likely - different forms of cultural capital, i.e. mores and customs, were valued than in the country of destination. Hence, the cultural capital that their children will be equipped with may not match the highly valued cultural capital in the country of destination. Third, the social capital in immigrant families may be disturbed by the event of migration. Social networks must be built up and established in the country of destination; and the parent-child relationship may be disrupted through migration (Nauck, 2001a). Fourth, immigrant families may have lower economic capital due to working lower-skilled jobs and experiencing financial precarity. Hence, having a migration background is expected to positively affect school dropout. Put differently, children of immigrants are expected to drop out of school more frequently than peers without a migration background (*Hypothesis 2a*).

Differentiation within the broad category of children with migration backgrounds should be acknowledged too, as immigrant parents can vary in their capital to support their children's education, based upon migration-related grounds and/or on the position in the country of destination. For example, coming from a - former - Dutch colony where Dutch was the instruction language at school and school methods resembled those in the metropole, as in Suriname and the Antilles, is assumed to positively impact the context-specific capital of these migrants in the Netherlands. First-generation Surinamese and Antillean parents are expected to have more Dutch context-specific cultural and linguistic capital because of the colonial Dutch-oriented education system in Suriname and the Dutch Antilles and the orientation towards the Netherlands, especially when it came to entering tertiary education. Many of these first-generation parents were educated in the Netherlands (van Amersfoort & van Niekerk, 2006). First-generation parents with a Surinamese and Antillean migration background could better support their children's education than their peers in non-colonial immigrant communities. In the Turkish and Moroccan communities, by contrast, the socio-economic positions plummeted because of the economic recession in the early 1970s. The parents who came to the Netherlands as "guest workers" were especially affected by this economic recession resulting in high unemployment rates in the 1970s and 1980s (Hartog & Zorlu, 2001). This is assumed to affect the economic capital available in these families to support their children's education. Moreover, first-generation parents with a Turkish or Moroccan migration background are assumed to - already - have lower levels of cultural capital to support their children's education, in contrast to Surinamese and Antillean families. So, I expect that children of immigrants from Suriname and the Dutch Antilles had more support in their education due to the beneficial capital their parents had than the children of Turkish and Moroccan immigrants. Hence, students with a Surinamese and Antillean migration

background are expected to drop out of school less frequently than students with a Turkish or Moroccan migration background (*Hypothesis 2b*).

The Chinese second generation is assumed to have different positions. In education, children of Chinese immigrants have educationally outperformed other migrant groups. More human capital, in terms of parental education, and economic capital have been offered as explanations for this. Portes and Hao (2004) described a discrepancy between high-grade point averages and dropout rates for Chinese, Korean, and Vietnamese students in the United States. These children had a significantly higher GPA, but no significant association was found with school dropout (Portes & Hao, 2004). This means that these children do not drop out of school significantly more frequently. Moreover, these authors describe different modes of incorporation between immigrant communities in the country of destination as a potential explanation for this. In the Netherlands, students with a Chinese migration background are more often enrolled in general secondary education (HAVO) or pre-university education (VWO) in secondary school than in vocational secondary education (VMBO) (Gijsberts et al., 2011). The argument of more human capital and economic capital that benefits their children's education could apply to the case of the Netherlands too. Hence, students with a Chinese migration background are least likely to drop out, out of the students with a migration background (*Hypothesis 2c*).

An important note to these background-centered explanatory factors is that school dropout takes place in an *institutional context*, i.e., schools. Two school-related factors are key in understanding dropout rates among students: the type of education and school composition. In the Netherlands, for students up until the age of 16 education is compulsory. After age 16, but under age 18, students must still be in school unless they have obtained a HAVO, VWO, or MBO level 2 diploma. Hence, dropping out of school is mainly monitored in secondary school (VO) and vocational tertiary education (MBO). Students enter secondary school around the age of 12. The Dutch school system is stratified, as described in chapter 2. Three main tracks are distinguished in secondary education: VMBO, HAVO, and VWO. Students with a VMBO diploma enter vocational tertiary education consecutively around the age of 16 since these students must obtain an MBO level 2 degree when under the age of 18. Another feature of the Dutch school system in the stage of secondary education is the sole track school, also called categorical schools. These schools only offer one track, often-times either exclusively VMBO or only VWO. Contrary to the schools that offer the three tracks, dropping out of a certain track may mean dropping out of school altogether. Students who did not obtain a diploma in secondary education, beyond the age of 18 and sometimes the age of 16, have the option to follow adult secondary education (VAVO). This is to obtain a secondary school diploma after all. Students in adult secondary education are a specific crowd, and moreover a relatively small group of

students. Hence, I expect that school dropout will mainly occur in secondary education (VO) and vocational tertiary education (MBO) (*Hypothesis 3*).

The school composition is often used in research into students' performance and dropout rates as a euphemistic term to refer to segregated schools. The proportion of students with a migration background is linked to the performance of students (Van der Slik et al., 2006). The recurring idea is that performance levels are lower and that dropout levels are higher in schools with a relatively high percentage of students with a migration background than in those with lower percentages. The underlying mechanisms are threefold. First, Dutch language levels are assumed to be lower among students with a migration background, due to relatively short residence in the case of the first generation or to speaking another language as the first language in the case of the second generation. Lower Dutch language skills would negatively impact language test scores but also have spill-over effects on other subjects. Remarkably, this was found to negatively affect majority children but less so for children of immigrants (Veerman et al., 2013). This line of reasoning is applied to primary schools mostly rather than to secondary or vocational tertiary education. Second, socio-economic resources are scarcer among peers in these segregated schools. This would for example hinder students from benefiting from their peers' cultural capital. Third, school resources are often linked to the number of students with a migration background. Schools with many students with a migration background suffer from teaching staff shortages and inadequate funding to support their students properly. In addition to the school segregation argument, the context of the living environment of the students plays a role too. De Witte and colleagues (2015) showed that variation in types of urbanized contexts matters in explaining school dropout: "new" cities like Almere or Lelystad have different populations than "old" cities like Amsterdam and Rotterdam in their socio-economic and migration characteristics (De Witte et al., 2015). They argued that cities themselves are not to blame for higher dropout rates but rather that the underlying characteristics of the populations in the cities play an important role. In other words, cities, or urbanization, are a proxy for socio-economic positions, income, migration background, and a plethora of other underlying variables that affect school dropout. I take a similar approach in order to study the role of urbanization in school dropout. Rather than approaching cities or the urban living environment as the root of the problem, it should be seen as a proxy for the multidimensional features of populations in cities that suffer from higher dropout rates, as also elaborated upon in the downward path in segmented assimilation. Hence, students in more urbanized vicinities are expected to be more likely to drop out when compared to those who live in less urbanized contexts (*Hypothesis 4*).



## Methods

### Data and population

The dropout rates among the second generation are compared with those of their peers without a migration background. I used CBS data on school leave in secondary and vocational tertiary education. These data are part of the administrative register data from the System of Social Statistical Datasets (SSD) which are compiled and provided by Statistics Netherlands (Bakker et al., 2014). The SSD combines a large number of registers, such as the population registers (*Basisregistratie Personen*, BRP) and information on enrolment in education. This resulted in a longitudinal dataset containing individual-level demographic information including birth date, migration background, gender, and information on education. The individual-level data of the children are linked to the information of the parents and living environment.

I used data on early school leave to examine whether someone dropped out of school. These data showed whether a person has left school prematurely, is still enrolled, or has obtained a starting qualification. The data are available from the 2003/2004 school year for secondary education (VO) and adult secondary education (VAVO) and from 2005/2006 for vocational tertiary education (MBO). The last observation I had at my disposal is from December 31, 2016.

Nearly 1.8 million individuals were born between 1990 and 1998 and were still living in the Netherlands at the end of 2016. About 20 percent of the population born between 1990 and 1998 had a second-generation migration background. On December 31, 2016, over 160 thousand people with a second-generation Turkish, Moroccan, Surinamese, Antillean, or Chinese migration background were living in the Netherlands. In total, these five groups account for about half (55 percent) of the total second-generation population. The total research population was 1 501 085 individuals. This number included individuals born between 1990 and 1998 without a migration background or a Turkish, Moroccan, Surinamese, Antillean, or Chinese second-generation migration background for whom data were available. For most bivariate and multivariate analyses, the research population consisted exclusively of students from these backgrounds who dropped out (N = 209 035). So, the analyses only concern those who dropped out, and not the totality of these groups.

### Variables

*School dropout* is the dependent variable and is defined as young people who at a given time during their school career have left one of the following types of education without receiving a diploma at that time: secondary education (VO): VMBO, HAVO or VWO; adult secondary education (VAVO): VMBO, HAVO or VWO; MBO-level 1 or MBO-level 2; and MBO-level 3 or MBO-level 4 if they started

with a VMBO diploma. If someone has ever left one of the above courses without a diploma, I define this as a school dropout in this chapter, even if someone later re-entered education and obtained a diploma and/or start qualification. Young people who have an MBO-2 diploma and drop out at the MBO-3 level or those who have an MBO-3 diploma and drop out at the MBO-4 level are not included as school dropouts. This definition is thus not the same as that of early school leave (*Voortijdig Schoolverlaten, VSV*). Early school leave means that pupils leave education without a starting qualification (diploma at HAVO, VWO, MBO-2 level or higher). In this chapter, however, I look at school dropout as an event, the patterns, timing, and differences by migrant group and urbanization, but not whether the person obtained a starting qualification or not.

The main independent variable was migration background. *Migration background* is defined by the country of birth of the child and the country of birth of the parents. People who were born in the Netherlands and have at least one parent born abroad are considered to be part of the second generation. On January 1, 2017, almost 1.8 million people had a second-generation migration background. This is almost 11 percent of the Dutch population. The second generation refers specifically to children with a second-generation Turkish, Moroccan, Surinamese, Antillean, or Chinese migration background. People without migration backgrounds are included in the research population, as well as the second generation. Children born in the Netherlands whose parents and grandparents also were born in the Netherlands are considered to have no migration background. The Chinese migration background excludes Hong Kong and Macau.

Additional independent variables were urbanization, birth cohort, and gender. As a reference for *urbanization*, the residential addresses at age 15 are used. The degree of urbanization of the residential address is determined by CBS based on the number of addresses per square kilometer. The CBS classification of degree of urbanization was condensed into four categories because of the low numbers of migrants in the less urban areas: not or barely (less than 1,000 environmental addresses per square kilometer), moderate (1,000 to 1,500 environmental addresses per square kilometer), high (1,500 to 2,500 environmental addresses per kilometer), and very high (2,500 environmental addresses or more per kilometer). An overview of the distribution of the population by the degree of urbanization of the residential environment can be found in Appendix D, Table 2. Some patterns can be observed in this distribution. Students without a migration background live - relatively speaking - mostly in non or barely urban environments and least often in very urban environments. For students with a migration background, the opposite pattern is observed. Students with a second-generation Turkish, Moroccan, Surinamese, and Antillean background live mostly in very urban environments and least often in non or barely urban environments. Students of second-generation Chinese descent live

mostly in high or very urban environments but remarkably live more often in non or barely urban environments than other students with a migration background.

In the multivariate analyses, the *birth cohort* years are divided into older and younger cohorts: birth years 1990 to 1994 for the older group and 1995 to 1998 for the younger group. *Gender* had two options: men or women. In the multivariate analyses, women were the reference category.

## Method

The analyses are conducted in two steps. First, bivariate analyses are conducted on how school dropout occurs among youth divided by type of education, gender, and migration background. Next, multivariate analyses are conducted to examine the influence of gender, migration background, birth cohort, and degree of urbanization of the living environment on the probability of dropping out of school. In the multivariate analyses, binary logistic regression with the binary outcome measure – to drop out or not to drop out – was employed. The regression analyses are conducted separately for the three types of education: secondary education, adult secondary education, and vocational tertiary education.

## Results

### Descriptive analyses

A critical proviso to the results presented here is that the vast majority of students do not drop out of school. The lowest rate of dropping out of school at least once by December 2016 was among Chinese women (7.9%) and the highest among Moroccan men (33.4%), see Appendix D, figure 1. Hence, one ought to keep in mind that the results presented here concern the dropout rates of a minority of students in secondary education and vocational tertiary education. Among the students who dropped out remarkable differences by gender and migration background were observed, see Table 6.4.1. Men dropped out of school more frequently than women (Traag & van der Velden, 2011). Among students without a migration background, 11 percent of men and 15 percent of women dropped out at some point during their school trajectories. Students with a second-generation Turkish, Moroccan, Surinamese, or Antillean migration background dropped out more frequently than peers without a migration background; this was the case for both men and women. These findings preliminary align with the first hypothesis that boys dropped out more frequently than girls.

**Table 6.4.1**

*School dropout rates among study population by background, and sub-share of drop-out by education, by December 31, 2016*

		Total % of drop-outs, out of total population	Drop-outs by type of education		
			secondary education	adult secondary education	vocational tertiary education
no migration background	Women	10.70%	31.40%	4.10%	64.40%
	Men	14.80%	35.20%	3.70%	61.10%
Turkish migration background	Women	16.40%	22.10%	4.10%	73.90%
	Men	29.30%	25.20%	5.20%	69.70%
Moroccan migration background	Women	17.10%	23.10%	4.00%	72.90%
	Men	33.40%	25.40%	5.00%	69.60%
Surinamese migration background	Women	18.40%	26.80%	5.20%	68.00%
	Men	27.60%	28.50%	5.80%	65.70%
Antillean migration background	Women	20.90%	27.60%	3.40%	69.00%
	Men	28.40%	29.60%	4.80%	65.60%
Chinese migration background	Women	7.90%	34.00%	10.40%	55.70%
	Men	10.70%	33.10%	17.60%	49.30%

Students with a Turkish or Moroccan migration background, specifically men, dropped out most frequently. Over a quarter of men with a Turkish, Moroccan, Surinamese, or Antillean second-generation migration background had dropped out of school. Women with the same migration backgrounds dropped out less frequently, yet still between 16 and 21 percent. Students with a Chinese second-generation migration background had lower dropout rates than students of all migration backgrounds, i.e. 11 percent for men and 8 percent for women. These students dropped out even less frequently than those without a migration background. Hypotheses 2a, 2b, and 2c - about the differences by migration background - were preliminarily supported. The only deviation from these hypotheses was that the dropout rates among students with a Chinese migration background were lower than among peers without a migration background.

As the overwhelming majority of students dropped out only once, I examined the type of education at the first occurrence of dropout. Approximately 80 percent of the cases of school dropout

were a one-time occurrence in the educational trajectory of the students (see Appendix D, figure 3). Most students who dropped out left vocational tertiary education, i.e. over 60 percent of the students with and without a migration background as can be seen in Figure 6.4.1. Only students with a Chinese migration background deviated from this pattern: around half of these students dropped out of vocational tertiary education. Although the majority of dropouts in this group of students still occurred in vocational tertiary education, they dropped out of secondary education and adult secondary education more frequently than peers with other migration backgrounds. This may be related to the larger proportion of the second generation with a Chinese migration background enrolled in general secondary education (HAVO) or pre-university education (VWO) course (Gijsberts et al., 2011).

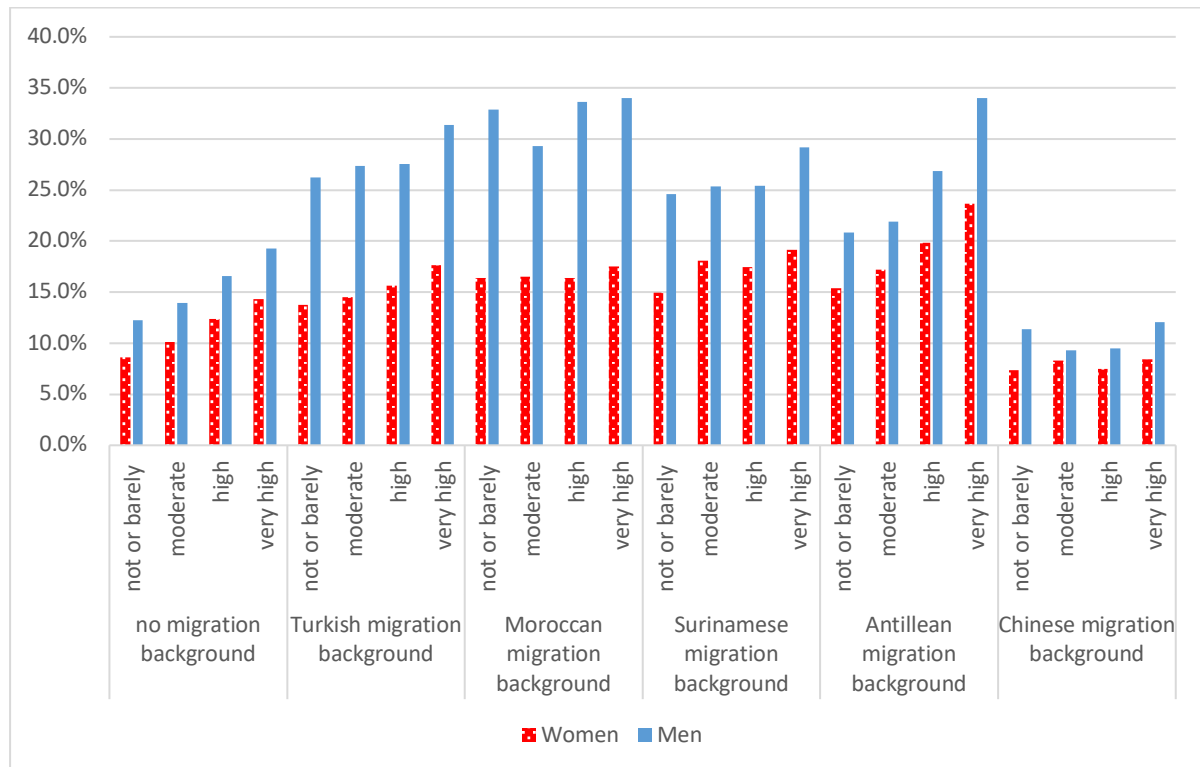
Between 20 and 30 percent of all school dropouts occurred in secondary education for students of all backgrounds. These bivariate findings preliminarily align with the third hypothesis: school dropout occurred mostly in vocational tertiary education and secondary education. Women with Turkish and Moroccan migration backgrounds dropped out least frequently from secondary education: around 25 percent, as compared to approaching or a little over 30 percent for women with other backgrounds. In vocational tertiary education, however, women with a Moroccan or Turkish migration background dropped out most frequently compared to women with other backgrounds. A similar pattern was observed among men. School dropout among men with a Turkish or Moroccan migration background occurred predominantly in vocational tertiary education with 74 percent and 73 percent respectively, and to a lesser extent in secondary education with 22 percent and 23 percent respectively. These findings corresponded with figures showing that early school leave was most frequent among students in vocational tertiary education in the national registration of dropout rates. Differentiation in enrolment should be considered when examining these figures as previous research showed that more students with a migration background were enrolled in vocational tertiary education (Huijnk & Andriessen, 2016). Additional figures on the average age at the first dropout and cohort differences can be found in Appendix D.

Figure 6.4.3 presents the school dropout rates by gender, migration background, and degree of urbanization. Among women, the differences by migration background stand out. For women without a migration background, the more urbanized the vicinity, the more dropout occurred. Though in relatively small percentages: between 8 percent to 14 percent. For women with a Turkish, Moroccan, or Surinamese migration background the differences in the degree of urbanization of the living environment were minimal. Whilst for women with an Antillean migration background, the differences between school dropouts in the low urban residential environments – about 15% - and high urban residential environments – almost one in four - were substantial. In residential areas with high degrees of urbanization, women with an Antillean migration background dropped out most often

of women of all backgrounds. School dropout rates among women with a Chinese migration background differed marginally by the degree of urbanization.

**Figure 6.4.3**

*School dropout rate by the degree of urbanization of the residential area, background, and gender for those born between 1990 and 1998, measured up until December 31, 2016*



Among men another picture arose. Men who lived in more urbanized environments dropped out more, except among men with a Moroccan migration background. The differences were most apparent among men with an Antillean migration background. In a very urban environment, 34 percent of these men dropped out of school at some point compared to 21 to 27 percent in lower urbanized vicinities. For men with a Moroccan migration background, there appeared to be no link between dropout and urbanization: approximately one in three men with a Moroccan migration background dropped out of school regardless of where they lived. Among men with a Chinese migration background, small differences in school dropout rates were found in the degree of urbanization as well as for co-ethnic women. Regardless of the urbanization of their vicinity, students with a Chinese migration background dropped out the least.

Circling back to the fourth hypothesis, which was: students in more urbanized vicinities are expected to be more likely to drop out when compared to those who live in less urbanized contexts, the bivariate analyses only aligned partially with this hypothesis, as a gendered divide arose. Higher dropout rates were found among men living in more urbanized vicinities when compared to co-ethnic women. Only for women with an Antillean migration background, was there evidence that dropout rates increased substantially with higher degrees of urbanization. For women with a Turkish, Moroccan, or, Surinamese migration background and for women with a Chinese migration background, dropout showed no gradient increase with urbanization.

Students with a migration background are overrepresented in vocational tertiary education (Huijnk & Andriessen, 2016). Among students born between 1990 and 1998, 844 536 students started vocational tertiary education, 446 561 were men and 397 975 were women. Figure 6.4.4 shows that men dropped out more often than women, regardless of their migration background. The gender difference was sizeable among students with a Moroccan migration background: over twice as many men dropped out than for this group.

**Figure 6.4.4**

*School dropout rates among students born between 1990 and 1998 who started vocational tertiary education by gender and migration background*

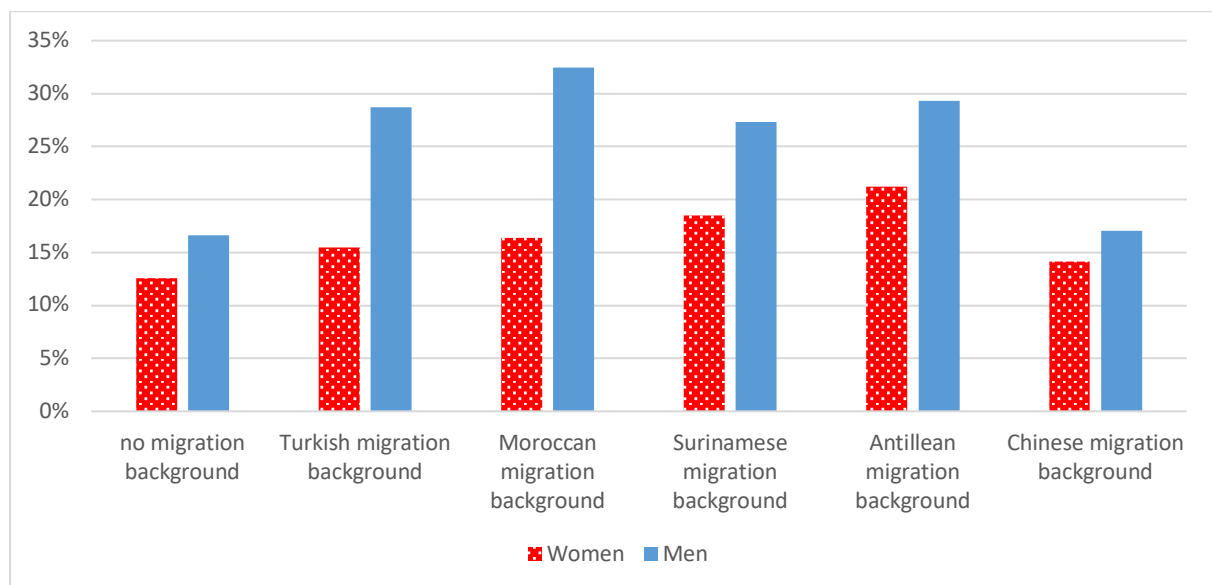
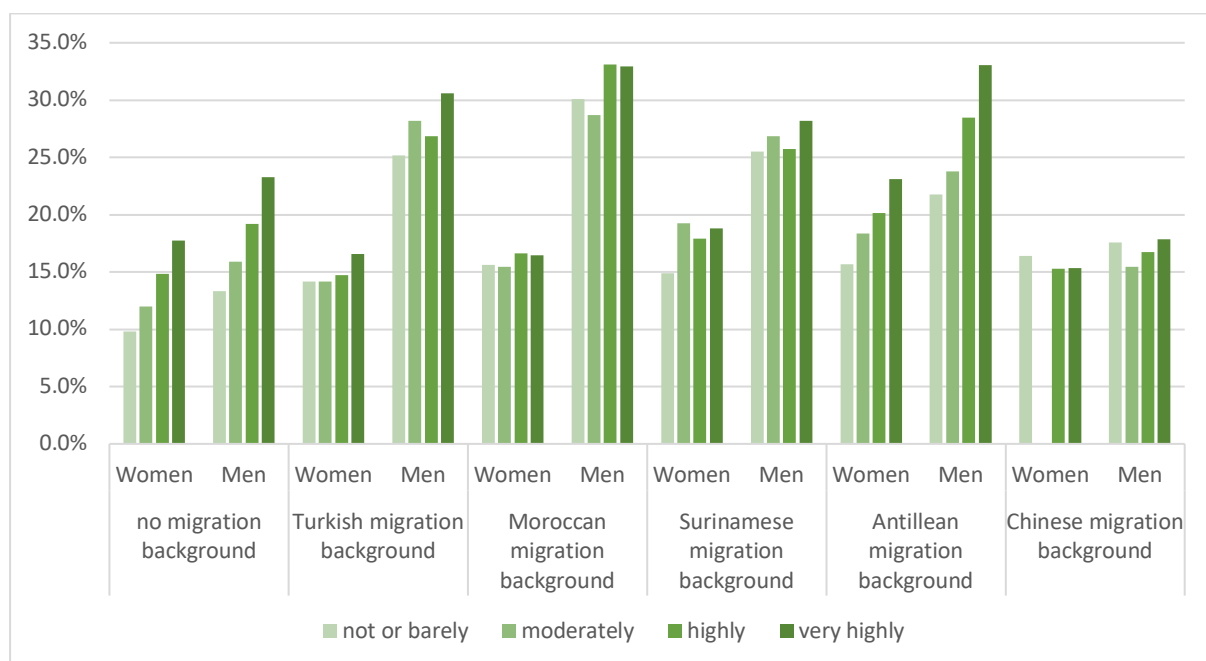


Figure 6.4.5 shows how dropout rates increased when the degree of urbanization increased. This trend was most apparent among men with an Antillean migration background. Almost 22 percent of them dropped out in non or barely urbanized areas whereas 33 percent dropped out in vicinities with

high degrees of urbanization. Among men with a Turkish, Moroccan, or Surinamese migration background, however, this increase with urbanization level was gradient. Around or more than one in four men with a Turkish, Moroccan, and Surinamese migration background who started vocational tertiary education dropped out, irrespective of the degree of urbanization. In addition, for men with a Chinese migration background, school dropout by the degree of urbanization was smaller than for the other groups.

**Figure 6.4.5**

*School dropout rate among vocational tertiary education students born between 1990 and 1998 by the degree of urbanization of vicinity, gender, and migration background*



For women with a Turkish, Moroccan, or Chinese<sup>2</sup> migration background, the degree of urbanization of the living environment made little difference in their school dropout rates: all were around 15 percent. By contrast, for women with a Surinamese or Antillean migration background who enrolled in vocational tertiary education, an upward trend can be seen: the more urban the living environment, the more students dropped out. This was similar to the gradient trend among women without a migration background. Women with an Antillean migration background in areas with a very high degree urbanization were relatively most likely to drop out, at over 23 percent.

<sup>2</sup> There were too few women with a Chinese migration background living in a moderately urban setting who dropped out of school after starting an MBO course to present them here.



When trying to understand the relationship between urbanization and school dropout, it is important to consider the extent to which the population in different areas has a different composition. The differences in dropout rates may be explained by compositional effects, meaning that youth in urban areas could have characteristics that increase the likelihood of dropping out of school even if they had lived in a non-urban context. To test this, a multivariate analysis of the predictors, i.e. determinants of dropout is presented.

## Multivariate analyses

Earlier research (Pijpers, 2010) analyzed school dropout in secondary education and vocational tertiary education combined but remarked that analyzing school dropout in secondary education and vocational tertiary education separately could provide new insights. Therefore, dropping out of secondary education, adult secondary education, and vocational tertiary education were examined separately. Predictors for the dropout rate may play different roles in the three types of education. Moreover, examining education types separately is important as different students follow different educational trajectories and someone can only drop out of the type of education they are enrolled in.

### *School dropout rates in secondary education*

The first model examined the influence of gender, migration background, and birth cohort on the probability of dropping out of secondary school (see Table 6.5.1). Two birth cohorts were distinguished: youth born between 1990 and 1994 and youth born between 1995 and 1998. The number of students with a Chinese migration background was too small for a meaningful analysis, hence only the students without a migration background and students with a Turkish, Moroccan, Surinamese and Antillean migration background were included. Table 6.5.1 presents the odds ratios of each of the predictors as well as the regression coefficients and standard errors corresponding with the table presenting the odds ratios. Model 1 included gender, birth cohort, and migration background, and in model 2 degree of urbanization was added, and in model 3 the interaction term between migration background and urbanization was added. When the odds ratio exceeded 1, this meant that the probability of having dropped out of school was higher, a value lower than 1 indicated that the probability was lower. All predictors in the models were statistically significantly associated with the probability of dropping out of school.

**Table 6.5.1**

*Logistic regression for dropout of secondary education (N = 1 497 235)*

	(1)		(2)		(3)	
	B(SE)	OR	B(SE)	Exp(B)	B(SE)	Exp(B)
Men	0.247(0.008)***	1.281	0.249 (0.008)***	1.282	0.248 (0.008)***	1.282
Moroccan migration background ( <i>ref. non-migrant</i> )	0.391 (0.020)***	1.479	0.168 (0.020)***	1.183	0.770 (0.078)***	2.159
Turkish migration background	0.249 (0.020)***	1.283	0.050 (0.020)***	1.051	0.282 (0.082)***	1.326
Surinamese migration background	0.430 (0.021)***	1.537	0.200 (0.022)***	1.221	0.687 (0.087)***	1.988
Antillean migration background	0.540 (0.034)***	1.717	0.399 (0.035)***	1.491	0.894 (0.098)***	2.446
Cohort 1995 -1998 ( <i>ref. cohort 1990-1994</i> )	-0.425 (0.008)***	0.654	-0.424 (0.008)***	0.654	-0.424 (0.008)***	0.654
Moderately urbanized ( <i>ref. not urbanized</i> )			0.211 (0.012)***	1.235	0.216 (0.013)***	1.241
High urbanized			0.373 (0.011)***	1.452	0.385 (0.011)***	1.470
Very high urbanized			0.581 (0.012)***	1.787	0.622 (0.013)***	1.862
Moroccan * moderately urbanized					-0.488 (0.103)***	0.614
Moroccan * high urbanized					-0.630 (0.087)***	0.533
Moroccan * very high urbanized					-0.678 (0.082)***	0.507
Turkish * moderately urbanized					-0.282 (0.104)**	0.754
Turkish * high urbanized					-0.207 (0.089)*	0.813
Turkish * very high urbanized					-0.287 (0.086)**	0.750
Surinamese * moderately urbanized					-0.209 (0.112)	0.811
Surinamese * high urbanized					-0.462 (0.096)***	0.630
Surinamese * very high urbanized					-0.597 (0.091)***	0.550
Antillean * moderately urbanized					-0.330 (0.141)*	0.719
Antillean * high urbanized					-0.566 (0.115)***	0.568
Antillean * very high urbanized					-0.616 (0.111)***	0.540
Constant	-3.089 (0.007)***		-3.336 (0.009)***		-3.348 (0.010)***	
R-squared	0.010		0.016		0.016	

\*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05

The probability of men dropping out is higher compared to women. In line with the bivariate findings and the first hypothesis, men were more likely to drop out of school than women. Moreover, students with a migration background were more likely to drop out of secondary education than students without a migration background. This supported hypothesis 2a for secondary education. However,

hypothesis 2b on the difference between children of colonial immigrants and those of guest worker immigrants, was not supported. Frankly, the situation seemed to be the inverse of H2b. When compared to students without a migration background, students with an Antillean or a Surinamese migration background had a higher probability to drop out of secondary education. Moreover, these students had a higher probability of dropping out than children of Turkish and Surinamese immigrants.

Younger cohorts were less likely to drop out of secondary school than the older cohort. These effects remained the same, even when the degree of urbanization was added, as can be seen in model 2. However, the effect of migration background in particular became smaller in Model 2. This indicated that some of these effects were associated with a difference in the residential environment. School dropout increased as urbanization increased. An additional model was estimated in which the interaction between migration background and degree of urbanization was explored. In the third model, I examined whether the influence of urbanization is the same for students with different migration backgrounds. The general pattern was that the probability of dropping out was higher for students living in a more urban context than in more rural contexts. This provided support for the fourth hypothesis when it comes to secondary education.

#### *School dropout rates in adult secondary education*

A similar analysis was conducted for students in adult secondary education, see Table 6.5.2. For the most part, the findings were similar to the multivariate analysis on secondary education. In adult secondary education, men were more likely to drop out than women. Students with a migration background were also more likely to drop out of adult secondary education than their peers without a migration background. Contrasted with students without a migration background, students with a Surinamese migration background had the highest probability of dropping out, whereas students with an Antillean migration background had the lowest probability of dropping out of adult secondary education. The younger cohort born between 1995 and 1998 had a lower probability of dropping out of adult secondary education.

A clear independent effect of urbanization was found. The probability of dropping out increased with urbanization. The influence of migration background on school dropout decreased when the degree of urbanization was added in Model 2. Hence, the influence of migration background on dropping out of adult secondary education decreased when urbanization came into the picture. However, migration background still had a significant impact, i.e., students with a migration background had a higher probability of dropping out than peers without a migration background, even

when the urbanization was included. This suggests that school dropout for migrant youth is related to the degree of urbanization. Hence, in the third model, the interaction terms between migration background and urbanization were added. The findings were that the degree of urbanization was associated with a pattern of higher rates of dropout in all origin groups.

**Table 6.5.2**

*Logistic regression for dropouts out of adult secondary education (N = 1 497 235)*

	(1)		(2)		(3)	
	B(SE)	Exp(B)	B(SE)	Exp(B)	B(SE)	Exp(B)
Men	0.397 (0.022) ***	1.487	0.400 (0.022) ***	1.492	0.400 (0.022) ***	1.491
Moroccan migration background ( <i>ref. non-migrant</i> )	0.803 (0.045) ***	2.232	0.477 (0.047) ***	1.611	0.820 (0.232) ***	2.271
Turkish migration background	0.714 (0.044) ***	2.041	0.427 (0.046) ***	1.532	0.977 (0.182) ***	2.657
Surinamese migration background	0.914 (0.047) ***	2.494	0.594 (0.049) ***	1.812	0.969 (0.232) ***	2.636
Antillean migration background	0.665 (0.089) ***	1.944	0.436 (0.091) ***	1.547	0.740 (0.318) ***	2.095
Cohort 1995 -1998 ( <i>ref. cohort 1990-1994</i> )	-0.680 (0.024) ***	0.506	-0.680 (0.024) ***	0.507	-0.679 (0.024) ***	0.507
Moderately urbanized ( <i>ref. not urbanized</i> )			0.401 (0.036) ***	1.493	0.385 (0.038) ***	1.469
High urbanized			0.669 (0.031) ***	1.952	0.686 (0.032) ***	1.985
Very high urbanized			0.899 (0.034) ***	2.457	0.962 (0.036) ***	2.616
Moroccan * moderately urbanized					0.118 (0.272)	1.125
Moroccan * high urbanized					-0.226 (0.246)	0.798
Moroccan * very high urbanized					-0.522 (0.241) *	0.593
Turkish * moderately urbanized					-0.391 (0.231)	0.677
Turkish * high urbanized					-0.530 (0.198) **	0.589
Turkish * very high urbanized					-0.675 (0.193) ***	0.509
Surinamese * moderately urbanized					-0.011 (0.283)	0.989
Surinamese * high urbanized					-0.567 (0.253) *	0.567
Surinamese * very high urbanized					-0.407 (0.240)	0.665
Antillean * moderately urbanized					0.091 (0.407)	1.095
Antillean * high urbanized					-0.364 (0.355)	0.695
Antillean * very high urbanized					-0.429 (0.345)	0.651
Constant			-5.708 (0.029) ***		-5.724 (0.029) ***	
R-squared	0.019		0.027		0.028	

\*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05

### *School dropout rates in vocational tertiary education*

The pattern of dropping out of vocational tertiary education was shown in Table 6.5.3 and was alike to school dropouts in secondary education. Men and students with a migrant background had a higher probability of dropping out of vocational tertiary education than women and students without a migrant background. Remarkably, students with a Turkish or Moroccan migration background had a higher probability of dropping out than students with a Surinamese or Antillean migration background. Contrary to the findings for secondary education and adult secondary education, hypothesis 2b was thus supported for vocational tertiary education. The younger birth cohort was less likely to drop out of school than the older cohort. The likelihood of dropping out of vocational tertiary education was also related to the degree of urbanization. Students in more urban vicinities had a higher probability of dropping out; this was in line with the fourth hypothesis.

When studying dropout rates from vocational tertiary education, the probability of dropping out, once again decreased for the students with migration backgrounds when the level of urbanization was included. Students with these four migration backgrounds still had a higher probability of dropping out than peers without a migration background, even when the factor urbanization was considered. Additional analyses in which the interaction terms between migration background and urbanization were added – see Model 3 - showed that this applied to all groups, but that the influence of a high and very high degree of urbanization on the probability of dropping out of vocational tertiary education was especially larger for students with an Antillean migration background than for the other groups. This while the effect of urbanization for the other groups remained intact but was somewhat smaller than for young people without a migration background.

**Table 6.5.3**

*Logistic regression with coefficients, standard errors, significance levels, and odds ratios for dropouts out of vocational tertiary education (N = 1 497 235)*

	(1)		(2)		(3)	
	B(SE)	Exp(B)	B(SE)	Exp(B)	B(SE)	Exp(B)
Men	0.461 (0.006)***	1.585	0.462 (0.006)***	1.587	0.462 (0.006)***	1.587
Moroccan migration background ( <i>ref. non-migrant</i> )	0.967 (0.012)***	2.630	0.814 (0.013)***	2.257	1.075 (0.052)***	2.931
Turkish migration background	0.846 (0.012)***	2.332	0.708 (0.012)***	2.030	0.913 (0.047)***	2.493
Surinamese migration background	0.746 (0.014)***	2.109	0.586 (0.015)***	1.797	0.697 (0.064)***	2.009
Antillean migration background	0.840 (0.024)***	2.316	0.706 (0.024)***	2.026	0.386 (0.088)***	1.471
Cohort 1995 -1998 ( <i>ref. cohort 1990-1994</i> )	-0.746 (0.006)***	0.474	-0.746 (0.006)***	0.474	-0.746 (0.006)***	0.474
Moderately urbanized ( <i>ref. not urbanized</i> )			0.113 (0.009) ***	1.119	0.106 (0.009)***	1.112
High urbanized			0.305 (0.008)***	1.356	0.313 (0.008)***	1.368
Very high urbanized			0.399 (0.009)***	1.490	0.419 (0.010)***	1.520
Moroccan * moderately urbanized					-0.142 (0.067)*	0.868
Moroccan * high urbanized					-0.215 (0.057)***	0.806
Moroccan * very high urbanized					-0.341 (0.055)***	0.711
Turkish * moderately urbanized					-0.024 (0.059)	0.977
Turkish * high urbanized					-0.284 (0.051)***	0.753
Turkish * very high urbanized					-0.232 (0.050)***	0.793
Surinamese * moderately urbanized					0.034 (0.081)	1.035
Surinamese * high urbanized					-0.134 (0.069)	0.874
Surinamese * very high urbanized					-0.144 (0.067)*	0.866
Antillean * moderately urbanized					0.108 (0.120)	1.114
Antillean * high urbanized					0.272 (0.097)**	1.312
Antillean * very high urbanized					0.448 (0.095)***	1.565
Constant	-2.419 (0.005)***		-2.593 (0.007)***		-2.598 (0.007)***	
R-squared	0.047		0.051		0.051	

\*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05

## Discussion

In sum, men, students with a migration background, the older cohort, and students living in more urban vicinities had a higher probability of dropping out than women, students without a migration background, the younger cohort, and those living in non-urban vicinities. These results were found for the three types of education: secondary education, adult secondary education, and vocational tertiary education. Thus, hypotheses 1, 2a, and 4 were supported in the case of these three different types of education. The expected difference between students with a Surinamese and Antillean migration background and students with a Turkish and Moroccan migration background was only found in vocational tertiary education. Students with a Surinamese and Antillean migration background had a higher probability of dropping out than peers with a Turkish or Moroccan migration background. Moreover, the role of migration background was reduced when the degree of urbanization is added. The probability of dropping out decreased for the students with a migration background when urbanization was included, even though these students still had a higher probability of dropping out than peers without a migration background. This was the case with secondary education, adult secondary education, and vocational tertiary education.

The indicators of drop-out, i.e., migration background, age, gender, and degree of urbanization, were relatively stable in predicting probabilities of dropping out across secondary education, adult secondary education, and vocational tertiary education. Students dropped out most often from vocational tertiary education. This was the case across students with different migration backgrounds and for both girls and boys alike. Vocational tertiary education is tertiary education for students who completed vocational tracks in secondary school (VMBO). Secondary school degrees from the other two tracks, i.e., HAVO and VWO, qualify as a starting qualification. Therefore, students with diplomas in these two tracks are not followed in tertiary education when it comes to monitoring and gathering data on dropouts. The Dutch education system is relatively stratified, and it seems to segregate students from a young age into three different tracks with vastly different outlooks in their further educational trajectory. The students in the VMBO-MBO trajectory seem to be more prone to drop out, even when differentiated by gender and migration background, than peers in HAVO-HBO or VWO-university trajectories. More specifically, dropouts among students in the VMBO-MBO trajectory are more likely to be observed in data on dropping out than their peers in HAVO-HBO and VWO-university trajectories. Two slightly contradicting explanations can be found for this gap. On the one hand, students in HBO and university are not registered in dropout data. So, students who drop out of these types of education simply are not included in the data on dropouts. Meanwhile, students with a VMBO diploma who enter tertiary education, i.e., vocational tertiary education (MBO), are still monitored in dropout data. This seems rather arbitrary as the cut-off point for registering dropouts is

drawn along the line of starting qualifications. On the other hand, most students who start secondary education start a vocational track (VMBO). Since a VMBO diploma is not a start qualification, these students enter vocational tertiary education. Hence, more students end up in vocational tertiary education than in higher tertiary education (HBO or WO). These conclusions on the dropout rates and different types and trajectories of education are remarkably poignant as students with a migration background are overrepresented in the VMBO-MBO trajectory (Hartgers, Kuipers & in (Mooij et al., 2018).

In recent years, school dropout rates have decreased steadily. The percentage of students who left vocational tertiary education early and without a starting qualification was 7.3 percent in 2010/2011 (Nederlands Jeugdinstituut, 2022) and shrank to 5.4 in 2018-2019. For students in secondary education, a similar pattern occurred: 1.1 percent left secondary school in 2010-2011. This was only 0.5 percent in 2018-2019 (Nederlands Jeugdinstituut, 2022). Among students with a migration background dropout rates also decreased. For example, among 22-year-old students in vocational tertiary education, 15 percent of those with a Turkish migration background dropped out in 2004-2005, as compared to 8 percent in 2018-2019. A similar decrease in dropout has been found for students with other migration backgrounds between 2004-2005 and 2018-2019. The dropout rate among students without a migration background also decreased between 2004-2005 and 2018-2019: from 9.4 percent to 5 percent. The findings that younger cohorts have lower probabilities of dropping out of secondary, adult secondary, and vocational tertiary education correspond with these trends. Against the backdrop of these decreasing dropout rates, the findings that students with a migration background have a higher probability of dropout than peers without a migration background point out a differential by migration background, or lack thereof, whereas these figures should be considered in the overall decreasing trend of school dropouts among students of all migration backgrounds. Over the last decades, the Dutch government designed specific policies to combat school dropout. So far, it looks like the current decreasing dropout rates could be the fruits of these policies.

Living in a more urbanized vicinity increases the probability of dropping out for all students. Potential explanations for this are twofold. First, cities might provide more opportunities to escape from the buffering effects of social control and surveillance. On the one hand, students might be less likely to be noticed when not in school by family, friends, elders, neighbors, and others. On the other hand, other diversions or pastimes besides school might be more plentiful in cities. Moreover, the interplay between migration background and degree of urbanization stands out in this chapter. Students with a migration background have a higher probability of dropping out across all types of education than students without a migration background. However, when urbanization comes into



the picture, the probability of dropping out decreases for students of all migration backgrounds. Urbanization, therefore, seems to account for some of the initial chances of dropping out among students with a migration background. This comes as no surprise since we know that students with migration backgrounds drop out more frequently and that students with a migration background more frequently live in higher urbanized vicinities. Given the changing demographics in Dutch cities, through which former minorities, i.e. people with a migration background, become the majority population (Crul, 2016), these findings are more remarkable and once more point out that migration background as such is not the sole inferential culprit of lower education levels, performance, and higher dropout rates among student populations with a migration background. However, from other research, we know that educational performances between co-ethnic boys and girls can be rather divergent so the interaction between gender and migration background – as well as including urbanization deserve attention in future research.

Secondly, the impact of the lower socio-economic standing of migrant families in big cities like Amsterdam and Rotterdam have historically been ominous: social housing in small and older accommodation and social and residential segregation. These circumstances are part of the interplay of migration background and urbanization. Inferences about the socio-economic background of migrant communities are made in the hypotheses yet not explicitly tested in this chapter. The idea that certain migrant communities and families could have more capital at their disposal than other communities could be examined more specifically in future research.

This research suffers from a few limitations. The first limitation concerns the inclusion of various groups of students with a migration background, and its definition. This study included students with second-generation Turkish, Moroccan and Surinamese, and Antillean. These groups are widely studied in the Netherlands. To examine whether similar patterns are found for another group, second-generation students with a Chinese migration background were included as well. This is an especially interesting group to include as national and international research has shown that children of Chinese immigrants have high achievement levels in education (Portes & Hao, 2004). However, the group of students with a second-generation Chinese migration background was too limited in size to be included in the inferential analyses. This hampered purposeful comparison between these various second-generation groups. Examining school dropout among students with a migration background could be expanded to other backgrounds in future research, for example for children of refugees from Afghanistan, Iran, Iraq, and Somalia. Additionally, migration background is defined – in line with the CBS definition – by the country of birth of the research person and their parents. This definition fails to notice self-identification and intragroup differences. For example, students who are in the Netherlands may not regard themselves as having a migration background and may not be attached

to or feel like they belong to the immigrant community they are assigned to in this definition based upon country of birth. Subgroups exist in these overarching definitions of migration background. For example, people with a Turkish migration background may self-identify as Turkish, Assyrian, or Kurdish. People with a Surinamese migration background may self-identify as Hindustani, Afro-Surinamese, specifically Creoles and Maroons, Javanese, or Chinese which could potentially function as separate communities with buffering effects that are overlooked here.

Secondly, the data on dropout is bounded by the definition of starting qualification. Students in education that ought to result in a starting qualification, i.e., HAVO and VWO in secondary education and adult secondary education, vocational tertiary education in case of students who received a VMBO diploma, are included in the data. However, the students who received a starting qualification and proceeded with education are not included in the data. For example, a student may drop out of university. Since this student already obtained a VWO diploma in secondary school, they are not included in the data on school dropout.

Thirdly, this study included students born between 1990 and 1998 as later cohorts still have to finish their education. However, students born in 1990 are more likely to have finished their education path by 2017 than those students born in 1998. Moreover, this study only examined dropout patterns and does not provide insight into the educational trajectories. Whether these students re-enter education or whether they obtain a diploma in higher education is beyond the scope of this study. However, future research could map the full school careers so the critical stages for the risk of dropping out are contextualized.