

Integration of migrant students in Dutch society; a way to success? of Different Groups of Migrants have Different Chances at Educational Success in Higher Education

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Abstract

Introduction

Equal participation in tertiary education by migrants and children of migrants is often regarded as a good indicator of assimilation and the non-existence of an ethnic stratification. In this paper we analyze both: the degree of assimilation and the selection in enrolment in higher education.

First, we will analyze differences in assimilation of different groups of migrant students. The research questions are:
Which factors influence the cultural integration of students in Dutch society?
Are these factors also important in the selection process in higher education?
Does cultural integration add to the explanation of success in higher education?

Theory

assimilation/integration/marginalisation: Berry, Veen, Ledoux, en vele anderen
Policy reasons: Target groups to improve the position of migrants in society. For this, often, the definition of the Ministry of Inner Affairs based on the country of birth of the student and its parents, is used.

Cultural integration: Beekhoven, et al en anderen : we use the self-definition of the student as being a member of an ethnic group. Another aspect of integration in the main stream of a country's culture is the use of the standard language. To measure this we use the language spoken at home.

geographical origin of family: Cultural integration can be influenced by the geographical region. The difficulties to learn a new language is among other factors dependant on the geographical distance to the new country. So we think, the origin of the family may be important for cultural integration.

In France Vallet en Silbermann (1999) has analyzed the effect of the time a family has stayed in France, by measuring the number of generations in France and whether one or both parents are migrant. So we will analyze how many generations the student's family have stayed in the

Netherlands.

From these theoretical notions one can derive different definitions of the concept of ethnicity of which we will consider four in this paper.

Migrants and their children differ strongly in parental social class and in their success during secondary school. It is well established in Dutch sociology that social class and success during primary and secondary school are still important factors in explaining unequal educational opportunities (Dronkers & Ultee, 1995), despite the decrease of its effects during this century (de Graaf & Ganzeboom, 1993). Some even argue that the ethnic differences in educational attainment can be mostly explained by the traditional social class characteristics and that ethnic stratification in European societies is just another form of the older social stratification. Therefore we control in our analyses for social class and success in secondary education.

In De Jong at all [De Jong, 1998 #13] it is shown there still is a strong class selection in the transition from secondary to higher education. In this paper we will analyze if ethnicity also plays an important role in this process. To indicate this transition, we use the students' choice for university (Univ.) preparing for a masters degree, versus a university of professional education (UPE) preparing for a bachelors degree. This distinction is important for future social stratification, because there are big differences between both alumni of higher education in social status and income (Need & De Jong, 2000; Webbink; 1999).

In De Jong 2000, it is shown class differences also play a role in the selection process during higher education. The retention rate after the first year is lower for students with lower class backgrounds. Ethnicity, measured by the official definition seems not to be very important.

Research questions

1. Which part of the student body belongs to a migrant group by each of the definitions?
2. Which factors influence the cultural integration of students in dutch society, measured by a dutch self identity?
3. Is there an effect of ethnicity on the transition from secondary education in higher education?
4. Is there an effect of ethnicity on the selection in the first year in higher education?

In the discussion we will turn to a last question:

5. Will educational choices and expectations of success of students of different migrant groups lead to future stratification?

Data and operationalisation

The survey

The data we use in this paper derive from two surveys among first year students in Dutch higher education, namely the 1995 cohort and the 1997 cohort. The first survey was held in November/December 1995, the second was held in January/February 1998. See for more information on the first data-set De Jong, Van Leeuwen, Roeleveld and Webbink (1998) and on the second data-set see Hop, De Jong, van Leeuwen, Roeleveld (1999) [De Jong, 1998 #18][Hop, 1999 #15]. Both surveys aimed to monitor the social and motivational characteristics of the freshmen students and to study decisions in educational choices. In

addition, they contain information on the academic success in secondary education, such as the grade point average at the final exam and whether extra years were needed to finish highschool (repetition of grades). Data of the official registration in higher education about the educational position in the second year, were added [De Jong, 2000 #21].

We pooled the data of the relevant variables of all students from both cohorts. From the 1995 cohort we have data on 4398 students and 4174 students in the 1997 survey.

Official definition, Subjective identity, Geographical origin and Language spoken at home

The respondents were asked to give their *subjective identity*, their *own country of birth* and the *country of birth of both their father and their mother* and *if they did receive their diplom of secondary education in a foreign country*. From these question we derived four variables:

- official definition of migrant
- subjective indenty
- geographical origin of family
- number of generations in the Netherlands

Although certain categories were listed in the questionnaire both on subjective identity and the country of origin, the respondents could indicate any answer they wished. We recoded these answers to these four questions into different categories for each variable.

For *subjective identity (SI)*, we recoded the answers into a dichotomy: Dutch or non Dutch identity.

Geographical origin of family (GEO) was recoded into 14 categories:

- 1 Netherlands,
- 2-3 Turkey, Morocco,
- 4-6 Surinam, Dutch Antilles, Indonesia,
- 7-8 China, Asia outside Turkey,
- 9 Africa outside Morocco (including South Africa),
- 10 North America and Australia (including New Zealand),
- 11 Latin America (including Caribic outside Dutch Antilles),
- 12 South Europe (Iberian Peninsula, Italy, Greece),
- 13 East Europe (including Balkan outside Greece and Turkey),
- 14 West Europe (including Scandinavia and Austria).

We chose for these categories, because of the Dutch colonial history in Asia and America (4-6), the 'migrant-workers' migration of the '60s and '70s from South Europe (12), later from Turkey and Morocco (2-3) and the Dutch position within Europe.

Generation was derived from these question and recoded into a five catogory variable:

- 1 all Dutch: both student and parents born in the Netherlands
- 2 second generation- 1 parent: student born in the Netherlands; one parent born outside Neth
- 3 second generation- 2 parents: student born in the Neth.; both parents born outside Neth
- 4 first generation: student and (1or 2) parent(s) born outside Neth; dutch diplom of secondary education
- 5 foreign student: student and both parents born outside Neth; foreign diplom of secondary education.

And finally, we have constructed a variable *Official definition* [De Jong, 1997 #14] based on a definition of the Ministry of Inner Affairs. This definition takes the country of birth of the students' parents as a starting point. The first category *Dutch students* are students whose parents are both born in the Netherlands. The second category *Migrants* are students who have one or two parents who are born in a country that does not belong to the OECD, exept Turkeye and the eastern European countries. These countries belong to OECD, but the

students with a geographical origin in one of these countries are considered to be migrant students. Another exception is Indonesia, a non-OECD country. Students who have one or two parents born in Indonesia are not migrant students, but belong to the third category. The third category *other foreigner* consists of all other students whose parents were born outside the Netherlands.

Respondents were also asked about the language they spoke with their parents at home. We constructed a dichotomous variable: *Standard Dutch language*. If the respondent answered they spoke a foreign language or another officially recognized Dutch language or a dialect (Frisian, xxSaksisch? Limburger) in their parental home, we coded this as non-standard Dutch language.

Parental education was recoded into four classes: 1. Junior secondary education or less; 2. Senior secondary education; 3. Vocational college or unfinished university; 4. University. In the logistic analyses we add a fifth class 'parental education unknown'.

Parental income net pro month combines the income of father and mother and is recoded into six classes: 1. Less than fl. 1500; 2. fl. 1550-3000; 3. fl. 3000-4500; 4. fl. 4500-6000; 5. fl. 6000-7500; 6. More than fl. 7500. One Euro is fl. 2.20. xxIn the multinomial logistic regression analyses we add a seventh class 'parental income unknown or missing'. In the multivariate regression analyses we gave the respondents with an unknown parental income the average score of the known cases and we an extra dichotomous variable 'parental income unknown'.

Earlier educational success

Earlier educational success in secondary education influences and predicts partly the success in tertiary education. The history and identity of migrants affects also their success in secondary education and so indirectly their success in tertiary education. In order to control for these differences we control for two indicators of success in secondary education: *repeated classes in secondary education* (Rep.seced) and *grade point average (GPA) at final examination of secondary school* (nationally proscribed curriculum with partly national tests).

Transition into higher education: choice between vocational college or university

Just like in many other European continental societies the Dutch educational system has a dual structure: general education with university as its top and vocational education with vocational colleges (universities for professional education) at its top (Dronkers, 1993). However, both streams are not severely separated from each other: vocational college is open to graduates from pre-university education, senior secondary general education and senior secondary vocational education; university is open to graduates from pre-university education and vocational college. The main difference between vocational college and university is the orientation of the former at concrete professions and the orientation of the latter on more abstract, academic knowledge and research. As a consequence the social economic status of university is higher than that of vocational college. But this distinction became somewhat blurred the last decade.

Results

Which part belongs to a migrant group by each of the definitions.

In table 1 to table 5 one can see that by each of the indicators there is a varying part of migrant or non-dutch students in Dutch higher education, but by all the indicators the percentage has significantly increased between 1995 and 1997. The percentage is lowest according to the x

Migrant history and parental education and income

If in table 2 we take only those categories respondents into consideration with more than 10 persons, we find perhaps surprised that the category students Dutch-Dutch-Dutch has not the highest educated or richest parents.

Students from the categories Dutch/Africa/Dutch (4.3), Dutch/Dutch/North America (4.1), West Europe/West Europe/West Europe and Dutch/Dutch/Latin America (4.0) have on the average higher educated parents¹ than students from the category Dutch/Dutch/Dutch, while students from the categories Morocco/Morocco/Morocco (2.2), Turkey/Dutch/Turkey (2.3), Morocco/Dutch/Morocco (2.4), China/Dutch/China, Turkey/Turkey/Turkey (2.5) and China/China/China (2.6) have on the average lower educated parents.

Students from the category Dutch/Africa/Dutch (5.1) have on the average richer parents² than students from the category Dutch/Dutch/Dutch, while students from the categories East Europe/East Europe/ East Europe (1.9), Turkey/Turkey/Turkey, Morocco/Morocco/Morocco (2.0), China/China/China (2.2), Turkey/Dutch/Turkey, China/Dutch/China (2.3), Morocco/Dutch/Morocco (2.4), Surinam/Surinam/Surinam (2.7), Surinam/Dutch/Else, Antilles/Antilles/Antilles, South Europe/Dutch/South Europe (3.2) and Surinam/Dutch/Surinam (3.4) have on the average the poorer parents.

These categories with the higher educated parents than the Dutch/Dutch/Dutch category reflect both the international orientation of parts of the higher classes of Dutch society to whom living abroad is more or less a normal part of their life course (Dronkers, 1994) and the openness of the Dutch society as a trading society for the surrounding European societies. Therefore, with one exception (West Europe), the respondents with higher educated parents identify themselves as Dutch.

The categories with lower educated and poorer parents than the Dutch/Dutch/Dutch category reflects mainly the older influx from the former colonies³ (Surinam, Antilles, China⁴) and the more recent influx of unskilled labor migration, first from South Europe, later from Turkey and last from Morocco. The category with the poorest parents (East Europe/East Europe) is the most recent influx of migrants, coming from Eastern Europe, probably as a consequence of the political economic upheavals in East Europe. The parents were poor, but rather well educated. All the respondents with lower educated parents and poorer parents do not identify themselves as Dutch but still identify themselves with their own native country or that of their parents. Only three categories respondents with poorer or lower educated parents are born in the Netherlands (Surinam/Dutch/Else, South Europe/Dutch/South Europe, Surinam/Dutch/Surinam), the respondents of all other categories with poorer or lower educated parents are still born in the native country of their parents.

Migrant history and home language

Table 2 also indicates the proportion of respondents that speak standard Dutch language in their parental home. The differences between the categories with 10 or more persons reflect the differences in their migration history. Respondents from the unskilled migration countries (Turkey, Morocco, South Europe) speak seldom Dutch in their parental home, contrary to respondents from the former Dutch colonies Indonesia, Surinam and Antilles where Dutch has

been or even still is the official school language. Respondents who identify themselves as Dutch also often speak the Dutch standard language in their parental home. Respondents of the category West Europe/West Europe/West Europe seldom speak Dutch language in their parental homes, despite the high education of their parents. The same holds for respondents in the Chinese categories: they also hardly speak Standard Dutch in their parental home. Thus table 2 shows a clear difference between language in their parental home and the Dutch language used in teaching at the university and vocational college for quite a number of children of migrants.

Preference for university or vocational college

Table 3 Shows the results of the analyses with logistic regression of the difference in choosing between university or vocational college, but only for the categories with 10 or more respondents and with Dutch/Dutch/Dutch as reference category.

Model 1 of table 3 is without control for parental characteristics or success during secondary school. Some categories choose significantly more often for a university education, while other categories prefer more often the vocational college. These preferences seem to coincide with the parental income and education: categories with high parental education or income tend to prefer the university while categories with low parental education and income choose more often vocational college.

In Model 2 we control for parental characteristics and gender. The increase in the explained variance indicates that these variables are important. Women prefer vocational college, just like students whose parent have a low educational level or a low income. Respondents who don't speak Standard Dutch at home also prefer vocational college. These differences in preference make sense, because vocational colleges have an orientation at concrete profession instead of more abstract, academic knowledge of the universities. Respondent with a lower social background and who are less familiar with the academic knowledge of the university will therefor prefer vocational college as the next rational step into tertiary education. Despite this control for parental characteristics and gender, we still find some significant differences in preferences for university or vocational college between some categories. Respondents of the Dutch/Dutch/West Europe, Dutch/Dutch/Antilles, China/China/China and China/Dutch/China categories prefer university more often than the Dutch/Dutch/Dutch, while respondents from the Surinam/Surinam/Surinam category prefer vocational college more often.

In model 3 we control also for success in secondary education, because this success might influence the preferences of respondents. University is regarded as academically more challenging than vocational college, thus students with less success in secondary school will prefer vocational college. Respondents who repeated classes and had a low grade point average for the final examination of secondary school prefer significantly vocational college and the increase of the explained variance indicates that success in secondary school is another important factor in preferences for vocational college or university. But these controls don't change the higher preferences of respondents of the categories Dutch/Dutch/West Europe, Dutch/Dutch/Antilles, China/China/China and China/Dutch/China for the university and it adds the category Dutch/Dutch/Indonesia to this list. The preference of the category Surinam/Surinam/Surinam for vocational college becomes insignificantly by this control.

A very interesting aspect of the analysis presented in table 3 is that some categories migrants realize higher ambitions in tertiary education than the category Dutch/Dutch/Dutch. A perfect fit between culture at home and culture of society at large does not always seem to be the best guarantee for the realization of the highest ambitions in education.

The differences between the last column of table 3 and the results of table 4 can help to answer the question whether these combination of the four separate indicators into a new variable *migrants' history and identity* is an improvement. Judged by the explained variance, there is no difference in explaining power of the separate indicators or the combination. But one indicator produces other results than another indicator, as one can see in the upper part of table 4. Indonesia as your fathers' native country increases your preference for the university, but that is not true if your subjective identity is Indonesian. West Europe as your mothers' native country increases your preference for the university, but not if your father has been born in West-Europe or if you feel yourself as a West-European.

Self-estimated chances to finish university or college successfully

Choosing university or college is one step, far more important is whether one can finish it successfully. As an indicator of this success we use the self-estimation of the student of the probability of their success, given at the start of his/her study.

Table 5 shows that, if categories of respondents of a migration history deviate in their success estimation from the Dutch/Dutch/Dutch category, they are more pessimistic (with the Dutch/Dutch/Antilles as exception). This is only partly caused by their parental education (parental education effects the estimation positively) and their success in secondary school (repeating classes has a negative effect, while a high grade point average at the final examination has a positive effect).

If we control for those variables respondents from the categories Turkey/Turkey/Turkey and China/Dutch/China are still more pessimistic, while respondents of the Dutch/Dutch/Antilles category remain more optimistic.

Table 6 show that the use of the separate indicators does not produce a lower explained power. Turkey as the subjective identity or as the native country of the student or of its parents decreases the estimation, while the optimism of the Antilles is related only the mothers' native country. With these separate indicators we don't find a significant effect for Chinese respondents as we did with the combined indicator.

Commitment for the study

The degree of commitment for the study is an indicator of student's actual investment in terms of behavior. Investments have to do with the balance between the costs and benefits of the study. If a student does not have to deal with limited means, whether this be financial, time or intellectual, investments in terms of hard and efficient working behavior are not a prerequisite for study success. So there may be groups to whom a high commitment may be more a prerequisite for study success, such as students with less affluent parents and students who culturally do not smoothly fit in the world of higher education (see Breen & Goldthorpe 1997). But history will repeat itself: human behavior also has a constant element. So we expect students who did not work hard or efficiently in secondary education will be students with lower grade point average and who will have repeated classes more often.

Table 7 reflects these differences in student investment as a prerequisite the for different groups students. Respondents with parents higher education and income have a lower commitment. But it also reflects the constant element in human behavior. Respondents who repeated classes or who had a lower grade point average at their final examination have a lower commitment. The former reflects students from the higher social classes do have access to necessary means, because their parents have sufficient resources to help them to finish the

study successfully. The higher degree of commitment of female students to their studies reflects both student investment as a prerequisite for women because they have less family history in higher education in the female line and the constant element in behavior: they tend to be more adapted to the requirements of studying. Students from the categories Morocco/Morocco/Morocco, Surinam/Surinam/Surinam and Antilles/Antilles/Antilles have significant higher levels of commitment to their studies than the students from the Dutch/Dutch/Dutch category, while students from the categories Dutch/West Europe/Dutch and China/Dutch/China have significant lower levels. The higher level of commitment of the former categories fits with their need for personal investment (these categories have a weaker relation with the Dutch culture). The lower level of commitment of the Dutch/West Europe/Dutch category can also be explained by the lower perceived costs, because they believe their parents will support them generously. But the lower level of commitment of the China/Dutch /China category is less explainable.

Table 8 shows that the use of separate categories does not produce a lower explained power. Morocco and the Antilles both as native country of the respondent and the parents and as subjective identity increase commitment, while Surinam as mothers' or own native country and subjective identity increases commitment. We don't find clear significant results for the others categories.

Discussion

In this paper we examined three questions. In this section we will briefly discuss the results of the analyses.

The first question was which part of the student body belongs to a migrant group by each of the definitions. The proportion students who belong to a migrant group vary by the definitions of migrant between 9.3% (mother's native country) and 5.9% (students own native country). From the total group of student 6.9% have a subjective ethnic identity which is not Dutch. In this group the native country of the student, of the mother and of the father more often is not the Netherlands. There are a few important exceptions to this general pattern. First students with a subjective identity Surinam often are born in the Netherlands and so are their mother and their father. The second exception is the group with parents born in Indonesia. This group mainly has a Dutch subjective identity, which is quite understandable, because many of these parents are the offspring of former colonist workers.

The second question was if there is a relationship between membership of a migrant group and success in tertiary education. In the analyses we found membership of a migrant group as such is not an important indicator for success in higher education. However, again, there are some relevant exceptions to this general pattern. First, the results show certain migrant groups more often prefer a vocational college to a study at a university, like students from Surinam, Morocco and Turkey. But after controlling for parental educational level, parental income and language spoken at home the difference no longer is significant from the Dutch-Dutch-Dutch group. After controlling for intellectual capacities and other social backgrounds we find there are a few groups who prefer university to vocational college more than do the Dutch-Dutch-Dutch group. These groups are Dutch-Dutch-west Europe, Dutch-Dutch-Indonesia, Dutch-Dutch-Antilles, China-China-China, China-Dutch-China. In the expected chance of study success we find after controlling for intellectual capacities and other social backgrounds only an effect for a few migrant groups. All Turkish students give themselves a lower chance of graduation, as do China-Dutch-China and Dutch-Dutch-Antilles do the opposite. In commitment we found some differences related to migrant groups. The all Morocco group,

the all Surinam group and the all Antilles group have a significantly higher commitment to their study than do the all Dutch group have. The effects for the offspring of other migrant workers groups are not significant, but show the same positive tendency. We think, these groups need a high commitment to the study as a prerequisite for success in higher education. These results put forward the question if educational choices and expectations of success of students of different migrant groups will lead to future stratification. We think only small negative effects can be expected for future stratification as the result of the preference of certain migrant groups for a vocational college. Alumni from vocational colleges compared to alumni from university from the same sector have a net monthly income which is on an average thousand guilder less. But the dropout rate from the migrant groups will not be drastically be lower, maybe also due to their higher commitment for the study.

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Notes

¹ Half of the standard deviation (1.1) as criterium.

² Half of the standard deviation (1.5) as criterium.

³ Indonesia, the oldest and most important Dutch colony, obtained its independence earlier than Suriname and the AntilleSouth Therefore, the migrants of Indonesia got more time to integrate into Dutch society than migrants from Suriname or AntilleSouth

⁴ The Dutch have not occupied parts of China as colony after the 18th century. But many Chinese migrated as unskilled workers in the 19th and 20th centuries to Indonesia and after its independence to the Netherlands

Table 1 Participation in Higher Education according to the official definition

	1995	1997	sign.
Dutch	88.4%	85.4%	
Migrant	7.0%	8.7%	
Other foreigner	4.6%	5.9%	
Total	4171	4341	**

Table 2 Participation in Higher Education according to Self identity

	1995	1997	sign.
Dutch	93.1	90.5	
else	6.9	9.5	
Total	4395	4153	**

Table 3: Geographical origin of family

	1995	1997	sign.
Turkey	3.1	2.7	
Morocco	1.0	1.1	
Surinam	2.3	2.8	
Dutch Antilles	1.1	1.1	
Indonesia	1.4	1.7	
China	0.5	0.8	
Asia	0.7	1.4	
Africa	0.2	0.7	
N. America & Oceania	0.2	0.3	
M.& S. America	0.2	0.4	
S. Europe	0.6	0.5	
E. Europe	0.5	0.9	
W. Europe	2.3	2.8	
Netherlands	86.0	83.0	
	4405	4180	**

Table 4: Number of generations in the Netherlands

	1995	1997	sign.
foreign student	0.5	0.7	
first generation-dutch sec.ed.	3.9	4.9	
second generation- 2 parents	2.5	3.7	
second generation-1 parent	4.6	5.1	
all Dutch	88.4	85.6	
Total	4375	3744	**

Table 5: Language spoken at home

	1995	1997	sign.
dutch	94.9	91.4	
else	5.1	8.6	
	4378	4148	**

Selection in secondary education

selection of students of cohort 1995 with a dutch diplom of pre-university education (vwo) and general secondary education (havo) and a selection of students of cohort of pupils who started in secondary education in 1989 in pre-university education (vwo) and general secondary education (havo) – VOCL 89 -

	cohort 1995	VOCL 89
Dutch	88.8%	88.6%
Migrant & Other foreigner	11.2%	11.4%

Selection in enrolment into higher education

	cohort 1997	SKM 97
Dutch	86.3	86.5
Migrant & Other foreigner	13.7	13.5

% Hbo = university for professional education= UPE

% Univ= University

Table x selection in enrolment in Higher Education according to the official definition

	UPE	Univ.	sign.
Dutch	70.3	29.7	
Migrant	61.3	38.7	
Other foreigner	75.3	24.7	
Total	70.2	29.8	**

Table x selection in enrolment in Higher Education according to Self identity

	UPE	Univ.	sign.
Dutch	69.6	30.4	
else	77.7	22.3	
Total	70.3	29.7	**

Table x: selection in enrolment Geographical origin of family

	UPE	Univ.	sign.
Turkey	78.2	21.8	
Morocco	66.3	33.7	
Surinam	63.3	36.7	
Dutch Antilles	79.6	20.4	
Indonesia	85.7	14.3	
China	50.9	49.1	

Asia	71.1	28.9	
Africa	82.1	17.9	
N. America & Oceania	11.8	88.2	
M.& S. America	63.6	36.4	
S. Europe	78.7	21.3	
E. Europe	66.7	33.3	
W. Europe	62.1	37.9	
Netherlands	70.2	29.8	
Total	70.2	29.8	**

Table x: selection in enrolment - Number of generations in the Netherlands

	UPE	Univ.	sign.
foreign student	66.0	34.0	
first generation-dutch sec.ed.	75.8	24.2	
second generation- 2 parents	76.5	23.5	
second generation-1 parent	60.0	40.0	
all Dutch	69.9	30.1	
Total	69.9	30.1	**

Table 10: selection in enrolment Language spoken at home

	UPE	Univ.	sign.
dutch	69.6	30.4	
else	77.8	22.2	
Total	70.2	29.8	**

Could be caused by background variables: paternal income, parental education, gender, Gpa-secondary education

table 11 Official definition

	parental income	% parents MA-degree	% girls	Gpa sec ec
Dutch	4383	15%	52%	6.79
Migrant	4681	31%	55%	6.80
Other foreigner	3066	12%	52%	6.64
Total	4295	16%	53%	6.78
Sign.	**	**	ns	**

table 12 subjective identity

	parental income	% parents MA-degree	% girls	Gpa sec ec
Dutch	4397	16%	53%	6.79
else	3152	12%	54%	6.65
Total	4293	16%	53%	6.78
Sign.	**	*	ns	**

table 13 geographical origin of family

	parental income	% parents MA-degree	% girls	Gpa sec ec
Turkey	3706	11%	58%	6.70
Morocco	4092	21%	73%	6.55
Surinam	4699	26%	52%	6.74
Dutch Antilles	2358	3%	48%	6.53
Indonesia	2574	4%	52%	6.71
China	2929	3%	44%	6.64
Asia	3452	29%	54%	6.66
Africa	3108	40%	34%	6.74
N. America & Oceania	5006	45%	55%	7.17
M. & S. America	4353	29%	61%	6.64
S. Europe	3579	24%	63%	6.74
E. Europe	3720	24%	49%	6.82
W. Europe	4692	32%	55%	6.83
Netherlands	4378	15%	52%	6.79
Total	4289	16%	53%	6.78
Sign.	**	**	**	**

Table 14 generation in the Netherlands

	parental income	% parents MA-degree	% girls	Gpa sec ec
foreign student	2687	33%	42%	6.78
first generation-dutch sec.ed.	3070	17%	57%	6.64
second generation- 2 parents	3018	8%	50%	6.69
second generation-1 parent	4886	26%	55%	6.77
all Dutch	4372	15%	52%	6.79
Total	4288	15%	52%	6.78
sign.	**	**	ns	**

Table 15 Language spoken at home

	parental income	% parents MA-degree	% girls	Gpa sec ec
dutch	4387	16%	53%	6.78
else	3139	13%	53%	6.72
total	4304	16%	53%	6.78
sign.	**	*	ns	*

Which factors are important in the choice process: Model 1 Official definition, self identity, geo, generation, and language spoken at home. In model 2 the background variables are added to the equation.

The variable generation will have its degrees of freedom reduced from 4 to 3 because redundancy appears in the equation.

Logistic regression of Univ.

		model 1			N=7317	model 2			N=7317
Variable		B	S.E.	Sig	Exp(B)	B	S.E.	Sig	Exp(B)
Constant		-0.53	0.20	0.01		-4.87	0.38	0.00	
Official Definition	Dutch (ref.)			0.41				0.62	
	Migrant	0.40	0.33	0.22	1.50	0.34	0.36	0.35	1.40
	Other foreigner	-0.06	0.31	0.86	0.95	0.17	0.33	0.61	1.19
Subjective identity	Dutch (ref.)								
	else	-0.29	0.26	0.26	0.75	-0.14	0.28	0.62	0.87
geographical origin of family	Dutch (ref.)			0.00				0.00	
	Turkey	-0.12	0.28	0.66	0.89	-0.12	0.30	0.68	0.88
	Morocco	0.61	0.35	0.08	1.85	0.62	0.38	0.10	1.86
	Surinam	0.30	0.32	0.34	1.36	0.13	0.35	0.71	1.14
	Dutch Antilles	0.39	0.42	0.35	1.48	0.67	0.44	0.13	1.95
	Indonesia	-0.36	0.42	0.40	0.70	-0.09	0.44	0.84	0.92
	China	1.62	0.42	0.00	5.06	1.90	0.44	0.00	6.68
	Asia	0.41	0.34	0.22	1.51	0.03	0.37	0.93	1.03
	Africa	-0.27	0.47	0.57	0.76	-0.53	0.52	0.31	0.59
	N. America & Oceania	3.48	1.07	0.00	32.43	3.08	1.09	0.00	21.69
	M&S America	0.59	0.55	0.28	1.80	0.37	0.61	0.54	1.45
	S. Europe	-0.62	0.47	0.19	0.54	-0.57	0.51	0.26	0.56
	E. Europe	0.63	0.42	0.14	1.87	0.34	0.46	0.46	1.40
	W. Europe	0.15	0.30	0.62	1.16	0.03	0.33	0.92	1.03
generation in the Netherlands	Dutch (ref.)			0.29				0.46	
	foreign student	0.18	0.64	0.78	1.20	-0.33	0.66	0.62	0.72
	1st gener-dutch sec.ed.	-0.35	0.22	0.12	0.71	-0.27	0.24	0.27	0.77
	2d gener- 2 parents								
	2d gener-1 parent	-0.40	0.25	0.11	0.67	-0.42	0.27	0.12	0.66
lanquage at home	Dutch (ref.)								
	else	-0.43	0.14	0.00	0.65	-0.30	0.15	0.05	0.74
cohort	1995 (ref)								
	1997	-0.03	0.05	0.57	0.97	-0.16	0.06	0.01	0.85
interaction	1997*migrant (OD)	0.29	0.29	0.32	1.34	0.44	0.32	0.16	1.55
interaction	1997*foreign student (OD)	-0.13	0.24	0.57	0.88	-0.08	0.26	0.76	0.93
interaction	1997*migrant (SI)	0.03	0.30	0.92	1.03	-0.04	0.32	0.90	0.96
parental education	univ. masters (ref.)							0.00	
	max. 3yr sec.ed.					-1.30	0.09	0.00	0.27
	max. sec. ed. completed					-1.19	0.09	0.00	0.30
	max. bachelors					-0.77	0.08	0.00	0.47
gender	male (ref.)								
	female					-0.36	0.06	0.00	0.70
gpa sec.ed.						0.55	0.05	0.00	1.74
repetition of	no repetition (ref.)								
	repetition of class					-0.76	0.06	0.00	0.47
parental income (net Fl.)						0.00	0.00	0.00	1.00
income unknown	income not missing								
	income missing					-0.05	0.09	0.56	0.95
-2 Log Likelihood	8838.310					-2 Log Likelihood	7869.077		
Goodness of Fit	7145.859					Goodness of Fit	7259.803		
Cox & Snell - R^2	.015					Cox & Snell - R^2	.140		
Nagelkerke - R^2	.021					Nagelkerke - R^2	.196		

Number of cases included in the analysis: 7317

Table x:

		Stop-no change				Change- no change			
		model 1		model 2		model 1		model 2	
		Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.
	Intercept		0.00		0.02		0.00		0.00
level of HE	UPE	1.51	0.00	1.28	0.01	0.56	0.00	0.68	0.00
	Univ.								
Official Definition (OD)	Dutch	1.68	0.19	1.83	0.18	0.87	0.72	1.15	0.74
	Migrant	1.68	0.33	1.95	0.26	1.92	0.20	2.90	0.05
	Other foreigner								
Subjective identity (SI)	Dutch	2.82	0.00	2.27	0.03	1.29	0.41	1.68	0.12
	else								
geographical origin of family	Turkey	3.51	0.00	3.35	0.00	1.15	0.69	1.69	0.17
	Morocco	1.59	0.35	1.03	0.96	0.55	0.23	0.66	0.43
	Surinam	1.26	0.61	1.16	0.76	0.64	0.32	0.54	0.22
	Dutch Antilles	5.74	0.00	3.45	0.04	0.91	0.85	0.84	0.78
	Indonesia	3.34	0.01	4.56	0.00	1.12	0.81	1.50	0.44
	China	1.69	0.48	2.38	0.27	1.00	1.00	1.50	0.46
	Asia	1.06	0.90	0.16	0.15	0.63	0.31	0.85	0.73
	Africa	5.84	0.00	6.31	0.00	0.95	0.94	0.92	0.91
	N. Am. & Oceania	1.31	0.75	1.69	0.55	0.52	0.41	0.29	0.19
	M&S America	0.50	0.57	0.56	0.65	0.26	0.18	0.34	0.29
	S. Europe	1.05	0.94	0.94	0.92	0.36	0.13	0.23	0.05
	E. Europe	1.53	0.51	1.90	0.41	0.28	0.06	0.46	0.27
	W. Europe	1.28	0.54	0.96	0.93	0.75	0.49	0.61	0.29
	Dutch								
generation in the N.	foreign student	2.64	0.04	0.61	0.66	1.67	0.30	1.13	0.90
	1st gener-dutch sec.ed.	1.73	0.06	1.53	0.21	1.38	0.22	2.02	0.01
	2d gener- 2 parents	0.55	0.12	0.29	0.01	1.32	0.32	1.94	0.03
	2d gener-1 parent								
	Dutch								
language at home	Dutch	1.12	0.56	1.24	0.32	1.48	0.04	1.43	0.08
	else								
cohort	1995	1.74	0.00	1.82	0.00	1.30	0.00	1.35	0.00
	1997								
interaction	1995*migrant	2.18	0.05	1.70	0.24	0.64	0.23	0.70	0.36
	1997*migrant (OD)								
interaction	1995*foreign student (OD)	1.01	0.97	0.87	0.72	1.51	0.16	1.53	0.18
	1997*foreign student (OD)								
interaction	1995*migrant (SI)	0.28	0.00	0.33	0.01	0.94	0.87	0.94	0.88
	1997*migrant (SI)								
parental education	max. 3yr sec.ed.			1.32	0.06			0.63	0.00
	max. sec. ed. completed			1.11	0.49			0.80	0.06
	max. bachelors			0.99	0.95			0.83	0.08
	univ. masters								
income unknown	income not missing			0.89	0.34			0.87	0.21
	income missing								
repetition of grades	no repetition (ref.)			0.57	0.00			0.95	0.52
	repetition of class								
parental income	(net FI.)			1.00	0.21			1.00	0.21
gpa sec.ed.				1.14	0.03			1.14	0.03
gender	female			0.90	0.20			0.67	0.00