



FACULTY OF EDUCATION  
DEPARTMENT OF EDUCATION AND SPECIAL EDUCATION

# FACTORS THAT INFLUENCE 9<sup>th</sup> GRADE STUDENTS' HIGHER EDUCATION ASPIRATIONS IN SWEDEN

The role of gender, parental nationality,  
parental education and academic self-concept

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## Abstract

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**Aim:** The purpose of this study is to explore the influence of gender, parental nationality, parental education, and academic self-concept on the HE aspirations of 9<sup>th</sup> grade students in Sweden.

**Theory:** The various factors influencing HE aspirations—the extent to which 9<sup>th</sup> grade students regard future HE learning as a reasonable forecast for themselves—are here considered as indicators of *social capital*, as value that accrues through one's social ties and achievements. Hence social capital theory has been used to interpret the results. Shavelson and Gottfredson's theory of academic self-concept is used to give empirical form to the notion of academic self-concept.

**Method:** A secondary data analysis was conducted on the 1992 ETF-cohort (Evaluation Through Follow-Up), which consists of 5678 students who were in 9<sup>th</sup> grade or else in the last level of the upper stage of compulsory school in Sweden. That means that in 2008, when the last questionnaire took place, students were approximately 15 years old. Multinomial regression analysis was used in order to rank-order the influence of gender, parental nationality, parental education and academic self-concept on the students' higher education aspirations.

**Results:** Among the factors tested, theoretical self-concept was found to be the most influential predictor of educational aspirations, followed by parental nationality, parental education and gender. Social capital functions in two ways when it comes to aspirations: it is either a motive to maintain or expand the existing social capital or a way to overcome it and enter wider networks that hold more power.

## **Acknowledgements**

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## Abbreviations

ETF:	Evaluation Through Follow-Up
EU:	European Union
HE:	Higher Education
OECD:	Organisation for Economic Co-operation and Development
SCB:	Statistiska centralbyrån (Statistics Sweden)
SweSat:	Swedish Scholastic Aptitude Test

## Introduction

The importance and value of education to both individuals and to society has been highlighted over the years by philosophers, educationalists, psychologists, sociologists, as well as by major political or other organizations (e.g. OECD, European Union, Unesco). Global movements (e.g. Declaration of Human Rights, 1948; World conference on Education for all, 1990; World Education Forum, 2000) have taken place in the last decades to promote equality in education and the opportunity for everyone to participate in basic education, as well as in higher education, ensuring that it is a basic right that has to be offered to everyone without any distinction. In this era of globalization and the rise of the so-called ‘knowledge economy’ in global policy discourse, an expanding higher education sector is considered to be a key condition for boosting innovation, development, competitiveness, productivity and progress. According to Article 14 of the EU Charter of Fundamental Rights, “Everyone has the right to education and to have access to vocational and continuing training” (European Union, 2012, Article 14). One out of the five European Union’s objectives by 2020 concerns education and two of the targets are 1) “rates of early school leavers to be below 10%” and 2) “at least 40% of people aged 30–34 having completed higher education” (Europe 2020 strategy, 2010). It is the individual responsibility of each European country though to decide on the curriculum and general structure of the school system, with respect to Europe’s goals concerning education.

In accordance with the European Union’s (hereinafter referred to as EU) country-specific recommendations, the Swedish National Agency for Education (i.e. Skolverket) has a goal to offer equal opportunities for education to everyone. Specifically, the Swedish educational act, issued from 23 June of 2010 (Skollag 2010:800, chapter 7, §2, p.26) states that all children living in Sweden are entitled to free basic education in public school” which will function as a basis for higher education. Specifically, it is mentioned that “the education in secondary schools will form a base for the national and regional supply of skills to the labor market and a base for recruitment in the higher education sector” (Skollag 2010:800, chapter 15, §3, p. 63, my own translation). Moreover, in Sweden “university colleges were established to meet the growing needs of local labour markets” (Haley, 2016, p.480). About the same time however, according to a recommendation of the Council of the EU on 18 of May 2016 “Sweden experienced the sharpest decline in the educational performance of 15-year-olds of any OECD country over the past decade in the PISA survey, and is now performing below both the EU and OECD averages” (European Union, 2016, p.55). The EU recommendation document

underlines that competitiveness and innovation capacity is at risk in Sweden. This is of great importance as educational performance is taken to be a reliable indication of higher education aspirations.

Levels of participation in higher education are of great concern for Sweden and the EU. Policies directed toward of dealing with social disadvantage in education have been created in order to widen the participation in higher education (Spohrer, 2011). Policies at both the national and transnational level aim to widen participation in higher education for young people in order to adapt to “increased demands for a more highly educated and skilled workforce in a knowledge-dependent economy” (Spohrer, 2011, p.53). Attwood and Croll underline the importance of appropriate, in the sense of suitable, orientation to education in order for the students to “fulfill their educational potential” (Attwood & Croll, 2011, p.270). Furthermore, in light of the country’s own consistent focus on equal opportunities that it offers to students, it is of great interest to examine which groups of students aspire to enter higher education in Sweden. Uncovering the underlying factors that lead to higher education aspirations should therefore contribute to the knowledge necessary for planning educational policies.

The rising demand of higher education, which is set as a policy goal in Sweden, as well as in many other countries, lead the researchers and the educationalists to examine the educational aspirations of the students, videlicet their intentions to enter or not higher education. At the personal level of individual educational trajectories, the educational aspirations that one has defines to a great extent one’s actions towards educational goals. Previous research has shown that educational aspirations play a vital role for the later well-being in a person’s life (Asby and Schoon, 2012). Although there is not a generally accepted definition of the term, this thesis refers to educational aspirations as, according to Trebbels definition, the plans or goals a person has within an academic setting (Korhonen et al., 2016). To be more specific, educational aspirations in this thesis are conceived as whether or not 9<sup>th</sup> grade students in Sweden plan to enter higher education. Factors affecting that aspiration do not reduce to actual educational performance alone, however. One’s social origins and social situation are known variables. Hence the interest in this study is in students’ gender, the nationality of students’ parents, their parents’ educational level, and students’ own academic self-concept. All these affect how likely individual students will be to consider HE learning as a suitable option for them, and so each of these variables is present as social *value* (or capital) in that judgment being made. It is in this way that this thesis aspires, through social capital theory, to

identify those groups of students amongst whom there is scope for further increasing educational participation.

The relationship between educational aspirations and academic achievement has been noted in the past (Korhonen et al., 2016). It has also been found that by raising aspirations the future educational behaviour and path can be raised as well (Khattab, 2015). This leads to the question what are the factors that shape aspirations? Previous research has shown that factors relating to social capital, such as gender, racial or socio-economic background characteristics -which are constant in their effect on education- as well as academic self-concept, which can be influenced by school and policies, can influence educational aspirations. Thus, in order to improve our ability to predict aspirations from what is known about school achievement, it seems of great importance to also further investigate the social capital factors that exert an influence on aspirations. The present study contributes to that investigation. It is based on previous research (Berggren, 2013; Bygren & Szulkin, 2010; Bunchman & Dalton, 2002; Croll, 2009; Dreby & Stutz, 2012; Dupriez et al., 2012; Flores, Padilla-Carmona & Suarez-Ortega, 2011; Fraser & Garg, 2011; Guo et al., 2015; Korhonen et al., 2016; Nagy et al., 2006; Payne, 2003; Perry et al., 2016; Reynolds & Pemberton, 2001; St-Hilaire, 2002), in attempting to model the HE aspirations of 9<sup>th</sup> grade students in Swedish education in relation to gender, parental nationality, parental education and academic self-concept (both theoretical and aesthetic). This thesis makes two primary contributions to the existing literature. First, it adds to the relatively small amount of research in Sweden -that is published in English and- that examines higher education (hereinafter referred to as HE) aspirations with regards to parental nationality. Second, the results of the study indicate the differences between further divisions of academic self-concept in influence on HE aspirations. The alternative/multiple types of academic self-concept are not commonly used in Swedish literature on HE. Thereafter the inclusion of these two aspects of academic self-concept in research and their importance has not been used a lot in publications written in English that regard Swedish higher education.

## **Aims and Research Question**

The purpose of this thesis is to explore the HE aspirations of 9<sup>th</sup> grade students in Sweden and rank the extent to which gender, parental nationality, parental education, and academic self-concept influence these aspirations. This study aims to provide an overview and add to previous research on how gender, parental nationality, parental education and academic self-



concept influence their higher education aspirations. The single research question of this thesis is:

—How does parental education, parental nationality, gender and academic self-concept influence 9<sup>th</sup> grade Swedish students' intention to study at university?

This research question is modelled into a test of two alternative hypotheses:

Ho =there is no difference between model without independent variables and the model with independent variables, videlicet the parental nationality, parental education, gender and academic self-concept do not influence students' educational aspirations.

H1 =there is a difference between model without independent variables and the model with independent variables, videlicet the parental nationality, parental education, gender and academic self-concept influence students' HE aspirations.

## Background

The period of adolescence is the one where aspirations play the most vital and decisive role in one's life, as it is exactly in that period that people think most concerning their future than any other period in one's life. Fraser and Garg have characterized adolescence as “the most critical for forming aspirations for the future, especially with regard to career aspirations (Schulenberg et al. 1991)” (Fraser & Garg, 2011, p.807). Croll in his longitudinal research on post-secondary educational aspirations at different points during adolescence (i.e. at ages of 11,12 and 16) notes that adolescents are able to express their educational aspirations very early in time (by the beginning of secondary school) with an increasing certainty as children move through secondary school (Croll, 2009). It is that period of time when students adopt a more “probabilistic” approach (Dumora, 1990, cited from Dupriez, 2012), videlicet “the expression of educational and professional aspirations breaks free from idealistic considerations and gradually takes on a more pragmatic cast” (Dupriez et al., 2012, p.505). Having this in mind, the questionnaires in grade 9 (age16), where students expressed their intentions concerning higher education, were chosen as the base of the present study.

School plays an important role in influencing young peoples' behavior and attitude, as it is there where “they have their most extensive experience of life outside the immediate confines of home and family and where they first encounter relatively formalized roles and relationships and begin to meet the demands and expectations of a wider society” (Attwood &

Croll, 2011, p.270). Yet, it has always been clear that pupils bring inequalities with them into education—their homes are different—and also that these inequalities persist through education: it has been noted that education *reduplicates* inequalities. This has been theorized by Bourdieu and Passeron (1977). The theory has also been found valid in Netherlands (Luyten et al., 2003) and in Sweden (Giota et al., 2009).

In order to erase inequalities in educational system, many policies have been implemented (Fägerlind and Strömqvist, 2004). But still the differences are more than the similarities. So, what are the factors that shape a young person's aspirations? Why same educational system and even same school does not produce students with identical or even similar aspirations? These differences go beyond school's influence on students and must be searched in characteristics that form one's social capital. Nevertheless, a description of the organization of the Swedish secondary school system and higher education, that is described below, would be useful. Additionally, there is a brief description of some policies (e.g. The Education Act, Curriculum for the Non-compulsory School System (upper secondary and municipal adult education) that aspire to eliminate inequalities by “offering equivalent education to all, regardless of social background and geographical location and by including all students in “undifferentiated classes” (Collinge, 1992, p.303), as well as by creating universities in several cities in order to be more geographically accessible for young people , who might otherwise not choose to continue into higher education (Hudson, C. 2006) . In addition to school and policies, research has also shown other factors as well to influence HE aspirations that lies in one's, inherited by parents, social capital such as parental education (Berggren,2013; Reynolds & Pemberton,2001; Dupriez et al., 2012; Bunchman & Dalton, 2002, Croll, 2009). A review of this literature is also included in the sections below.

## Swedish educational system

The Swedish National Agency of Education (i.e. Skolverket), which was founded in 1991, oversees all public educational institutions in Sweden. From 1991 the Swedish educational system has been decentralized with municipalities holding the majority of both responsibilities and decision- making with regards to achieving the aims and basic guidelines forth by The Ministry of Education.

Sweden introduced compulsory comprehensive school in 1962 (Skolöverstyrelsen 1962). The Swedish educational system is comprised of four levels of education:

Preschool, Compulsory School, Upper secondary School and HE. Preschool starts from age 1 till 6. There is an intermediate level before compulsory school, which is called preschool class. This is for one year. Both are voluntary. Their goal is to provide learning opportunities through play, exploration and creativity. Compulsory school starts from age 7 until age 15. In total there are 9 years of schooling and this is further divided into three stages: Lower level (years 7-9), intermediate level (years 10- 12) and upper level (years 13-15) (Skolverket, 2017). Secondary education is comprised of the same subjects for all “with the possibility of choosing between levels of difficulty in only a few of those subjects (Marklund & Bergendal 1979)” (Berggren, 2013, p.136). According to the Swedish National Agency of Education (Skolverket, 2017) compulsory education includes the Sami school, which consists of 6 years of education (where the syllabus is in sami and Sami children can study sami as a mother tongue) and the Special School, which consists of 10 years of schooling (where children who have visual impairments and other functional impairments, who are deaf or blind or have a severe speech disorder can attend). Upper Secondary school (Gymnasium) is a three-year education, from age 16 to age 19. It is voluntary and it is divided into two categories. One category consists of 18 national programs and the other category consists of five introductory programs for students that are not eligible for the national programs. The highest level of education in Sweden is higher education, which is voluntary. In Sweden there are universities and university colleges with three levels of education: Basic level (three years), Advanced level (one to two years) and Research level (two to four years).

## Educational policies and reforms

A comprehensive organization (Högskolan) including different types of post-secondary education, subordinated to Higher Education Ordinance was introduced in 1977. Its goal was to promote and widen, among others, participation in HE (Fägerlind and Strömqvist, 2004). It was then, after nine years of planning that followed the recommendations of a planning commission on higher education, appointed by the Swedish government in 1968 (the Swedish 1968 Educational Commission called U-68) when a government-induced policy reform that transformed Swedish higher education took place.

The Higher Education Ordinance led to the incorporation of several new initiatives, which lead to an increase in the number of places in higher education (Berggren, 2006). Among others, a new admission system was introduced, the Swedish Scholastic Aptitude Test

(Högskoleprovet, hereinafter referred to as SweSat). SweSat served as a selection system concerning the entrance to higher education institutions, in order for the government to deal with the problem of more applicants for fewer positions in universities (Berggren, 2006). That was also a way for the government to “influence the composition of the students’ population” (Berggren, 2006, p.15). Initially, the SweSat gave the opportunity for entering higher education to individuals, who did not have a certificate from upper secondary school, but who were 25 years old and had at least four years work experience (Stage, 2001). That resulted in the “increase of prospects for entry of adults over the age of 25 and with 4 years’ work experience” and “there has been widespread access to HE” (Osborne, 2003, p.7). SweSat became accessible to everyone by 1991, and by 1994, with the introduction of the new curriculum (Utbildningsdepartementet) even individuals that have already completed upper secondary school could participate, in order to improve their grades (Beggren, 2006).

## Higher education

Last ten years there is an ever-growing interest for higher education. Due to globalization and the raised job-skilled requirements, who resulted the decline of employment opportunities the need of higher education qualifications has become a prerequisite for a “place” in the labor market and especially for a successful career (Bynner, 2001, p.19). Access to higher education is a major issue, ranked very high in educational policy agendas in most countries. Sweden is not an exception (Sohlman, 1995). This is the underlying reason of the ever-growing interest of research in students’ educational aspirations, as the latest have been characterised “the bedrock of career development and choice” (Brown & Lent, 2005).

*“Globalization has brought a shift in the mission of education from that which focuses on philosophy, science and the development of high culture to developing the capabilities of students to meet the needs of local surroundings, such as labor markets (Kerr, 1995; Standing, 2009)”* (cited from Haley, 2016 p.480).

The transformation of the labor market, that followed the technological expansion and globalization increased pressure for young people to enter tertiary education and acquire formal qualifications (Schoon & Parsons, 2002), to cope with the increasing competitiveness in the labor market, achieve higher incomes and more prestigious careers. Higher education is considered to be essential for the global economy as it retains sustainability, competitiveness,

innovation and productivity. “Higher education represents a critical factor in innovation and human capital development and plays a central role in the success and sustainability of the knowledge economy (Dill and Van Vught, 2010)” (Tremblay, Lalancette & Roseveare, 2012, Vol.1, p.16).

## The benefits of education

Individually, education can offer a person an understanding of the world and him or herself, can introduce and guide him or her to critical thinking and decision making, can develop his or her knowledge and skills, can improve economic prospects and can lead to fulfillment. Stacey reviewed previous research that examined educational impact on health and concluded “education has a positive causal effect on good health” (Stacey, 1998, p.56). Past research underlines the fact that education can lead to a healthier and happier life (Groot & Van den Brink, 2006; Feinstein, 2006). An OECD 2011 report also mentions “Relatively high levels of education are often related to higher earnings and productivity, better career progression, health, life satisfaction as well as to better investments in education and health of future generations (OECD, 2010a)” (Meeting of the OECD Council at Ministerial Level Paris, 2011). Reynolds and Pemberton also point out that is considered to be related with desirable jobs, higher income jobs as well as with the general wellbeing of people (Reynolds & Pemberton, 2001).

The benefits of education extend to sociological sphere as well. Early philosophers such as Aristotle and Plato have pointed out the benefits of education not only for individuals, but also for the society at large. Previous research has found that education offers to a better economy through higher employment opportunities and income and subsequently reduces social problems, such as crime and poverty (Huang et al., 2004; Lochner and Moretti, 2004). Education can enhance social development and welfare. Additionally, it increases civic and social engagement and active citizenship and subsequently democratic procedures (Cambell, 2006; Helliwell & Putnam, 2007). Alheit mentions that it is empirically proved that civilization and democratization of societies are directly linked and influenced from education of its members (Alheit, 2009).

## Current situation in higher education in Sweden

According to the OECD and the Unesco Institute for Statistics, there has been a great expansion of the population that pursue higher education worldwide (Tremblay, Lalancette & Roseveare, 2012). Specifically for Sweden, SCB reports that from 2000 to 2008 (2008 is the year of interest for this thesis, as it was then when the students born in 1992 were on 9<sup>th</sup> grade), there has been an increase of 62.764 students. Specifically, there were 319.035 newly registered students in the 1999-2000 academic year and 381.799 in the 2007-2008 academic year. Higher education in Sweden is divided into universities and university colleges. The differentiation between them is hierarchical, meaning that universities offer more prestigious study programmes in comparison to the ones offered by university colleges (Berggren, 2011). From 1977 and on several reforms for higher education were introduced in Sweden. New higher education institutions (universities and university colleges) were created and university colleges were turned into universities (Holmberg & Hallonsten, 2013). Nowadays, in Sweden there are 16 universities and 22 university colleges (Ljungberg et al., 2015).

## Previous research

The educational aspirations of students have been addressed in educational research many times with researchers examining several factors that may influence them. This verifies the complexity of the issue.

Concerning gender, the majority of research has mentioned the increase of female students participating in higher education (Pemberton; Croll, 2009; Atwood & Croll, 2011, Payne 2002). The vast majority of research on gender and HE aspirations has found that females have significantly higher academic aspirations (Croll, 2009; Reynolds & Pemberton, 2001, Dreby & Stutz, 2012; Flores, Padilla-Carmona & Suarez-Ortega, 2011, Payne, 2003, Guo et al., 2015). A gender difference concerning indecisiveness towards HE aspirations, where male students appear to be more indecisive, has also been identified (Gutman et al., 2012).

Previous research has also highlighted the primacy of parents by examining factors such as parents' education, occupation, beliefs and expectations in shaping the educational aspirations of their children (Gutman et al., 2012). Among these factors parental education appears to play a much larger role (Reynolds & Pemberton, 2001). The influence of family background

and especially parental education, many times reported as cultural capital, and its positive effect on students' HE aspirations has been extensively documented (Berggren, 2013; Reynolds & Pemberton, 2001; Dupriez et al., 2012; Bunchman & Dalton, 2002, Croll, 2009). Specifically, Berggren in a study where she examined gender, parental education and ethnicity, concluded that parental education was of the highest importance, as "there was a two to three times higher likelihood that students with an academic family background would complete 2 years of tertiary education compared with those from less schooled backgrounds" (Berggren, 2013, p.139).

Other research suggests that the most influential factor in students' HE aspirations is the academic self-concept (Fraser & Garg, 2011; Korhonen et al., 2016; Nagy et al., 2006; Guo et al., 2015). Fraser and Garg (2011) mention that over 50% of the variance in educational aspirations is explained by the self-schema of students. Korhonen et al. (2016) draw the same conclusion, in their research on 1152 students in Swedish speaking areas in Finland, where the academic self-concept was found to be the strongest predictor of educational aspirations. Nagy et al. (2006) also highlighted the paramount power of self-concept in their research on 12<sup>th</sup> grade students in Germany. Their results observed that gender differences in course selection did not remain after controlling for self-concept among others (i.e. achievement, intrinsic values). Guo et al. (2015) examined, among others, the effect of math self-concept in both achievement and aspirations on three different cohorts of 8<sup>th</sup> grade students in Hong-Kong. They report: "the results suggest that higher self-concept, higher utility value, and their positive interaction, all contributed to higher math achievement and educational aspiration" (Guo et al., 2015, p.165). Lower academic self-concept has also been connected with uncertainty in educational aspirations (Gutman et al., 2012).

In the literature reviewed for the present thesis no research in English language on either parental or student's nationality related to HE aspirations for Sweden was found. The majority of the research done in this field, concerns countries that are traditionally multicultural such as the United States or the United Kingdom. Nevertheless, most research on ethnicity related to educational aspirations indicates that national background plays an important role in higher education aspirations (St-Hilaire, 2002, Perry et al., 2016). While some researchers have found that minority youth have higher educational aspirations (Reynolds & Pemberton, 2001) with further differentiation though among the minority groups (Perry et al., 2016), other researches indicate the opposite. In other words, it has been found minority groups have lower

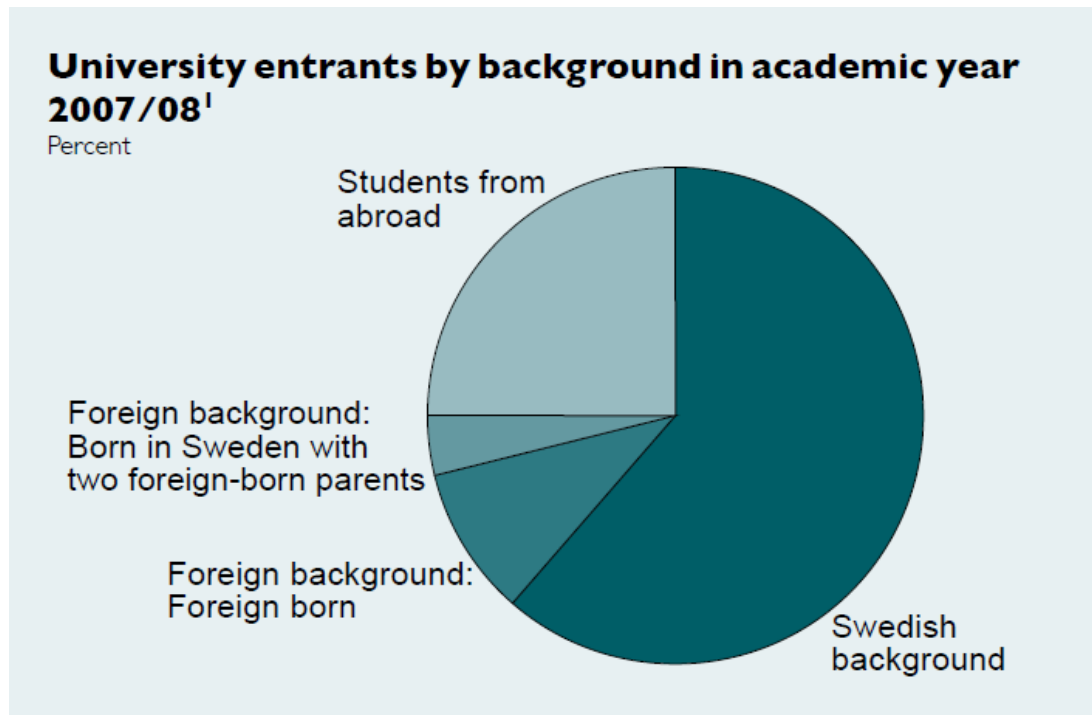
educational aspirations in comparison to natives (St-Hilaire, 2002; Archer & Hutchings, 2000), even though they recognize the potential benefits of higher education.

While there is a large number of research studies from the US context that examine the influence of ethnic background (Reynolds & Pemberton, 2001, St-Hilaire, 2002, Portes & MacLeod, 1996, Perry et al., 2016), few Swedish studies incorporate ethnic background in research on educational aspirations. Bygren and Szulkin (2010) investigated the effect of ethnic environment on educational attainment of immigrant children in Sweden. They found that “interaction within an ethnic group in a neighborhood may influence levels of aspirations, study habits and norms concerning the value of education for an individual” (Bygren & Szulkin, 2010, p.1324). Grönqvist’s study (2006) on immigrant children in relation to ethnic enclaves indicated that ethnic enclaves negatively affect the probability of both first and second-generation immigrants to graduate from university. Even though this research does not refer to aspirations, but to academic achievement, it still provides information that is indirectly connected to the topic of this thesis, indicating that there is low probability for first generation immigrants to graduate from high school, while this does not apply to second-generation immigrants.

It is worth mentioning though that this thesis takes into account parental nationality, and quite explicitly not students’ ethnic origins. Given the quite contradictory results of previous research on students’ ethnicity, as well as the political and ethical unpopularity of research that focuses on students’ ethnic status in Sweden, no hypothesis in relation to ethnicity is here attempted. Although the aim of this thesis is to examine HE aspirations and not the actual rate of entrance in university, it is nevertheless useful to include SCB report’s results on the student origins (See Figure 1) in order to get a clear image of the educational map of Sweden with respect to student origins.



Figure 1: University Entrants by background in academic year 2007/2008



*1. "Foreign background" refers to individuals who were born outside Sweden and individuals who were born in Sweden but whose parents were both born outside of Sweden. For adopted students, their adoptive parents have been prioritised before the biological parents.*

Figure 1. University Entrants by background in academic year 2007/2008. Reprinted from Statistics Sweden, Education in Sweden 2009, p.54. Retrieved September 16, 2017 from [http://www.scb.se/statistik/publikationer/UF0527\\_2009A01\\_BR\\_UF08BR0901.pdf](http://www.scb.se/statistik/publikationer/UF0527_2009A01_BR_UF08BR0901.pdf).

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The Swedish National Agency for Higher Education and Statistics Sweden reports that, after controlling for highly educated parents, persons with Swedish background enter higher education to a greater extent than do those with foreign background. The reverse though is the case for those students whose parents lack higher education qualifications (SCB, 2010).

## Conceptual Framework

By now it should be clear that equal educational opportunities are treated as important in Sweden. Several policies and movements have underlined the importance of it and work towards this situation. This aspiration could itself be interpreted as an indicator of inequality still existing in society. Even though attempts towards equal opportunities in education may well have had good impact, the ongoing pursuit of equality policy itself alerts to further gains being deemed needed, videlicet some groups of students will still seem advantaged when it comes to them making educational choices.

One could argue that these differences are due to individual characteristics, personal traits and preferences. But the patterns repeatedly found in research, where specific groups of people usually aspire to study, where others choose not to—even though they may too recognize the value and potential benefits that can be acquired from education—imply that there is something more and far deeper in play than individual preferences. Subsequently, to answer to the question why, despite collective political will for equality in education, is it not accomplished, one needs to get in closer and examine background and personal factors that may influence one's educational decisions—factors that go deeper than educational attainment, as such. The question acquires a deeper, more sociological form that is less focussed on educational outcomes; factors that affect students' HE aspirations may be either more social (human capital, economic capital, cultural capital, social capital), or more individual (motivation, ambition, self-concept), but either way, they will unquestionably be influenced and shaped by social factors. In order to explore these deeper factors, the theoretical framework of the present thesis therefore has turned to social capital theory.

### **Social capital theory**

The concept of social capital, though existent for many years and used broadly within many theories and disciplines, has been defined as a term, described and studied in detail relatively recently. Bourdieu, Coleman, Lin, Granovetter and Putnam theorised social capital and formed social capital theory with others focusing on its benefits on a community (Putnam) and others on its benefits at individual level (Bourdieu, Coleman). Initially, Mincer (1958) and Becker (1964) introduce the term human capital as the total of one's knowledge, habits, social and personality attributes. Later on, Bourdieu broke down human capital and distinguished three forms of it: economic, cultural and social, where the first is institutionalised in the forms of property rights, the second one is institutionalised in the

forms of educational qualifications; and last but not least *social capital*, which is institutionalized in the forms of a title of nobility, meaning “a particular form of social relationship in a lasting way” (Bourdieu, 1986). The present thesis has adopted Bourdieu’s concept of social capital as a mean that produces or reproduces persistent inequality in society.

Social capital is typically defined as “resources embedded in a social structure that are accessed and/or mobilised in purposive actions” (Lin, p.41). By resources it is meant material or symbolic goods. Social capital is a multi-dimensional concept, in the way there are many further categorisations within the definition. So, the evaluation of resources is implemented through different procedures (persuasion, petition, coercion), social structures can be divided in two further categories (formal or informal) and the actions can be further differentiated according to their purpose (maintain existing resources or gain new ones). Needless to say, that despite the distinction in forms of capital, they overlap each other. Social capital cannot be seen entirely independent from the other forms as it does not depend only to the size of the network, but also to the economic and cultural capital each of the agents in the network possess (Bourdieu, 1986).

In conclusion, social capital theory seems to be the appropriate approach to explain the inequalities or differentiations between the groups of students that benefit or not. Social capital theory focuses on people’s access to resources within several social networks and the benefits that can be acquired from them (Lin, 2001). The benefits can be social, psychological, emotional and economical (Lin, 1986). But crucially for this thesis, children significantly and lastingly derive social capital from the social attributions, conditions and circumstances in which their parents already find themselves—social capital thus becomes critical whenever a family migrates and so enters a new social context in which new, frequently less positive, attributions of capital tend to be made. The choice of the groups and the base upon which the categorisation was done in the present thesis followed social capital theory.

### **Educational aspirations**

Sirin et al have defined aspirations “as the educational and vocational ‘dreams’ adolescents have for their future work lives” (Sirin et al. 2004, p.438). Educational aspirations encourage, motivate and define to a point the actions taken towards a goal. “Educational aspirations are

important because they guide individuals in what they learn in school, how they prepare for adult life, and what they eventually accomplish (Walerg, 1989)” (Rojewski, 2005, p.147). At this point, it would be useful to acknowledge a significant differentiation of the term, that of realistic and idealistic aspirations—in terms of social capital theory, aspirations that are more or less connected with realizable potential, and taking into account social status and conditions. Lewin first made this differentiation in 1939 when he separated “ideal goals”, as ones’ dreams or wishes from “real goals”, which depict ones expectations (Lewin, 1939). The term was further developed by Haller (1968) to realistic and idealistic aspirations and later adopted by many researchers (e.g. Gottfredson, 1981; Reynolds and Pemberton, 2001; Guo et al., 2015; Stocke, 2011). Stocke (2011) provides us with a distinct differentiation of the term on occupation aspirations: “Realistic aspirations represent forecasts of educational careers that take all factors facilitating or constraining educational attainment into account. In contrast, idealistic aspirations entail either self-commitment or a normative expectation to reach a certain educational level” (Stocke, 2011, p.107). Specifically, for educational aspirations, Reynolds and Pemberton mention “educational aspirations refer to the level of education that an individual would ideally like to obtain” (Reynolds & Pemberton, 2001, p.74).

Educational aspirations can be influenced by several factors both individually and socially. Students’ social capital can influence their decisions and aspirations in both direct and indirect way. As direct way can be considered the social factors and as indirect way the individual traits that are affected from one’s social capital (self-concept, motivation, competitiveness). Specifically, realistic aspirations can be influenced by social factors such as family resources, the socioeconomic state of parents (Haller, 1974, p.114), the accessibility of opportunities (Gottfredson, 1981, p.548) and by individual factors such as educational attainment. Idealistic aspirations can be influenced by individual factors such as the self-concept both general and academic, gender, age and personality characteristics, such as competitiveness, diligence, motivation. As it has been pointed before though, individual characteristics are not independent from social factors, as a person by being part of a society is influenced by it and shapes characteristics through interactions with others within the social environment. Furthermore, idealistic aspirations can also be influenced by “purely” social factors such as the social capital, as this appears to apply in both categories of aspirations, the belonging or not in a minority, the neighborhood or the greater community within they fall in, the relationship with peers and teachers, as well as the local economic context, meaning the unemployment rates and qualifications of the local labor market (Gottferdson, p.570).

In this thesis, HE aspirations reflect the educational ambitions and intentions a student is setting for her or his future within an academic setting. The aspirations here refer to the idealistic ones—the sort of aspirations by which students may rise above the social capital collected in the lives of their parents, for example. Actual grades that could influence the realistic ones are not taken under consideration, but concepts that can influence the “idealistic” goals as mentioned above are included (self-concept, parental nationality and education as indicators of social capital). The choice of this perspective (idealistic aspirations) was based on its applicability to the present study, as well as on the interest in focusing on certain factors, such as self-concept.

The students have expressed their HE aspirations in the 9<sup>th</sup> grade, when they were approximately at the age of 16. Previous research indicates that aspirations formed and expressed at the age of 16, are much likely to be realized in the future, as well as that teenagers’ aspirations are the best predictor of occupational status later in life (Schoon & Parsons, 2002). So, even though idealistic aspirations are taken into account, the point of time that these were expressed is important and can function as an indicator of realistic ones also. In Sweden, after completing compulsory secondary education (*grundskolan*), students choose between upper secondary education (*gymnasieskolan*), which ultimately will lead to higher education or vocational education. This decision is of great importance, as it will define to a great extent the educational qualifications students will obtain.

In conclusion, previous research has shown that the factors that can influence students’ educational aspirations can vary also along the lines of social capital. The frequency with which background characteristics appear in research (alongside educational outcomes as such), suggest their importance to HE aspirations. Based on predictors indicated by previous research on educational aspirations, this thesis examines gender, parental education, parental nationality and academic self-concept. In agreement with Alheit’s belief that “education is - like social capital- embedded in the dominant structures of power and rule” (Alheit, 2009, p.33), social capital theory will be used to explain differentiations observed in educational aspirations reported in the ETF cohort analysis. The assumption is that students’ HE aspirations are in part formed by social capital held by the students, as indicated by their gender, their academic self-concept, and their parents’ nationality and education. It is to a description of each of these factors and their role as social capital, that the text now turns.

## Predictors of educational aspirations

### Parental education

Parents' role "in shaping young peoples' attitudes towards education" is considered to be highly important (Payne, 2003, p.2). They can affect students' motivation, interest, ambitions and their HE aspirations in many ways. One way that they can affect their children's choices is by being role models to them, through their personal educational attainments. Another way is by advising and helping them with their educational decisions (Payne, 2003) or by providing them access to different kind of resources, such as materials, information about different options and networks (Berggren, 2006). Guo et al. note "parents provide social-emotional influences on children's motivation beliefs which in turn influence children's educational performance and aspirations (Eccles, 2007, 2009)" (Guo et al., 2015, p. 162). These various claims present, so to speak, as actual realisations of the more abstract ideas contained in social capital: in theoretical terms, they are examples of the ways in which social capital actually transfers from parents to their offspring.

From the social capital theory's perspective, family can be considered as a close, dense network with strong ties, which are accrued from intensity, intimacy and frequency of contacts. The homophily principle -relations between units that have similar resources, sentiment and interaction- that usually characterize families, assumes that members share similar characteristics, values and lifestyles. According to Lin (2001) denser networks are more advantageous when it comes to preserve or maintain resources, as the access to social capital by the members of the specific network is easier and many times given. Open networks can be more advantageous when it comes to access non-presently possessed resources or extend the existing ones. But this concerns more the nationality factor and will be examined later in the nationality section. Even though the value assignment of resources can differ geographically or historically, hence the value of education that has been mentioned in the previous part allows the assumption that education can be conceived as a resource with enduring and universal value. The parental education can be considered as the human capital of the parents individually, but also as the social capital of all the members of the family. That derives from the fact that the members of the family have access to information, educational routes, opportunities and resources concerning education and provide each other with social support towards a goal. Additionally, the investment in education for expected returns in the marketplace, is considered social capital (Lin, 2001). According to social capital theory, the members of a family, the children, in the specific study, are expected to act towards the

direction of maintaining the existing resources of the family, such as education, meaning that they are expected to aspire entering higher education, if their parents are also holders of higher education degree. One of the theoretical proposition of social capital theory refers to the “position of origin” concerning the resources. The positions can be either ascribed or attained. In the present study, ascribed position is the one of interest, since this is a social position in the structure that is inherited from parents. The assumption here is that those in higher social positions the more likelihood of having access to better social capital.

The maintenance of the existing resources, also called motive of status maintenance is the conclusive factor that influences the educational decisions of both parents and children, in their attempt to maintain at least the same socio-economic status as their own (Obermeier & Schneider, 2015).

The status maintenance argument, introduced by Boudon (1974) and later formed by Breen and Goldthorpe (1997) postulates that students aspire to at least reach or even overcome the educational status of their parents (Becker & Tuppatt, 2013; Weiss & Steininger, 2012). There is a higher probability for students with parents that have higher education to enter university themselves as “they perceive a higher benefit of higher education because “only higher education ensures status maintenance” (Becker & Tuppatt, 2013, p.746).

The assumption with parental education—and following the logic of status maintenance in capital theory—is that students with well-educated parents are more likely to choose to study right after secondary school, as “the well-educated parents, who have an experience of higher education themselves can guide and help their children to choose a suitable educational track” (Kivinen & Rinne, 1996, cited from Berggren, 2006). Subsequently that means that these students-using this parental help and resources- are likely to have clarified their aspirations for attending HE before finishing 9<sup>th</sup> grade, by the time they take SweSat.

### **Parental nationality**

Over the last decades the composition of the population in Sweden has changed a lot. Swedish society went from being nearly ethnically homogenous with 2.5% of foreign citizens in 1960's, to a society comprised of approximately 8.5% first generation immigrants. In 2000 14.5% of people living in Sweden had a foreign background. By 2016 the population with a foreign background has increased to 23.2% (SCB, “Foreign citizens by region, age in ten year group and sex. Year 1973-2016”). A change in the composition of the population is not lacking interest in many domains, including education. Moreover, the increasing

heterogeneity of the composition of students in Swedish schools warrants further investigation of nationality as a factor in educational aspirations.

As noted by Biterman and al. the term immigrants in Sweden “encompass groups that are often demarcated in a very narrow way (e.g. immigrants who are not refugees) or defined in a way that is both broad and imprecise (e.g. all immigrants, their children and their grandchildren)” (Biterman et al, 2007, p.136). They also highlight the fact that this term does not include a homogeneous group, but rather a group of people with common a characteristic that they moved to Sweden. The characteristics of ethnic communities though can vary a lot. Among other things, there are different educational traditions in each country.

From social capital theory’s perspective, as network can be considered the one of the native, same national origin and another, that of having at least one “newcomer” parent. Here, the social networks are open. They probably have more differentiations than similarities (sex, class etc). Nevertheless, in the present study they are conceived as social networks and the focus is on similarities within its members (nationality, raised in Swedish society, meaning that they share approximately the same values imposed by the society vs at least one parent of different nationality, part of a minority, different cultures or values). The choice of examining the parental nationality instead of the child’s is that it gives a wider variation to the group. Having in mind that a child with at least one parent of Swedish nationality can get a Swedish passport as well, if the focus was on students’ nationality only, this would eliminate to a great extend the sample. The proposition here is that when a child has at least one parent with nationality other than Swedish, although raised here, he/she differs from the implied homogenous group of the students with both parents of Swedish nationality. The similarity between the actors of such a heterogenous group, that of students with at least one non-Swedish parent, is the one that is in focus and interests us in the present thesis. This similarity lies to the fact that the people that came to Sweden, for whatever reason, under whichever conditions and wherever they came from they are all newcomers, new citizens in a foreign country. It is obvious that their economic and cultural capital can vary a lot, hence as newcomers their social capital is considered to be very similar. Thus, the inclusion of this variable in the study was based on the belief that parental nationality could be seen as an indicator of social capital. Nevertheless, a limitation that should be mentioned concerns the group of students with both parents of Swedish nationality): even though the categorisation may seem to appear them as natives, we must keep in mind that there are many students there of different origin but with Swedish nationality. Likewise, although the group with at least



one parent with other nationality than Swedish is not culturally homogenous, it is suggested that the group is—in terms of their social capital—likely to share social attributes with the group in which *neither* parents are Swedish. The difference lies with the social “norm”, or to put it in another way, the majority of Swedish students, who are the ones with *both* parents having Swedish nationality and the minority group, who are the students whose at least one parent is not Swedish. The theory suggests that certain social groups, such as minorities, have fewer opportunities to mobilise better social resources (Lin p.95). No matter, what is the composition of the group of non-Swedish parents, it is suggested that they are the ones, whose at least one parent is a social unit of minority. Hence big status and social capital differences may be assigned within this group, on the basis of the parental country of origin being closer to, or further removed from, the cultural set associated with ‘North-Western Europe’ where Sweden is located. It is in that respect of course important to acknowledge that parents from other Western nationalities, who share more common characteristics concerning mentality and culture with Swedish parents, than parents from non-Western nationalities, are much more likely to evade negative social attributions. Nevertheless, the measure available to this study was a discrete variable only indicating ‘Swedish’ or ‘Other’ nationality. Hence the present research takes it as given that despite obvious further differentiations being relevant within this latter group, it is in general terms of its ‘otherly’ status, lacking social capital in comparison with being native Swedish. It will still be interesting to examine the differences between these two parent groups concerning students HE aspirations.

Traditionally the perspective that is dominant in social sciences concerning immigrants is the “assimilation perspective”. “Proponents of this perspective have traditionally emphasized the importance and desirability of a process resulting in the gradual, but preferably speedy, fusion of immigrants into their new environment and in their becoming “like everyone else” (Gordon 1964; Chiswick 1978; Zhou 1997)” (Bygren and Ryszard, 2010 ,p.1306). The majority of research that examines nationality/ethnicity in educational outcomes mentions the “assimilation perspective” and that HE aspirations differ, depending on the integration of ethnic groups to the host country. Assimilation aspires a greater homogeneity of the society and it is defined as “the decline, and at its endpoint the disappearance, of an ethnic/racial distinction and cultural and social differences that express it (Alba & Nee, 1997, p. 863)” (Levisoh, 2013, p.54). According to Gordon assimilation appears in two distinct forms. It can be either “structural assimilation” (in the realms of social relations and participation in the opportunity structure), or “acculturation” (in the realms of language, values, and social

identifications) (Qin, 2004, p.3). Nevertheless, the Swedish National Agency for education (Skolverket) values the multicultural nature of the school by trying to preserve the ethnic and cultural characteristics of the several ethnic groups through mother language teaching (Skollag 2010:800 (2010), capital 11, 10 §). Nationality can shape educational aspirations in several ways. For example, educational aspirations can be forged as an antidote to previous traumatic experiences from the country of origin (Mosselson, 2002) or depending on the educational situation in the country of origin, aspirations can be either the prerequisite before moving to another country (Mossayeb & Shirazi, 2006) or a result of it (Qin, 2004).

Being an immigrant or an immigrant's child can influence the motivation of a student and in their attempt to be assimilated/integrated in the new environment, to achieve the goals perceived as valuable by the society and to gain new resources and subsequently alter their social capital, they are expected to aspire entering higher education. Education is a path through which students can compensate for the lack of social capital they already hold. Seen as such, students with at least one non-Swedish parent are expected to have higher aspirations of entering higher education in comparison with the ones with both parents of Swedish nationality.

## **Gender**

Gender is handled in the present study as a social phenomenon, even though the ETF cohort measure available to the study is the discrete binary (male/female) given by biological reductionism of gender to sex. Gender is conceptualized as “an institutionalized system of social practices for constituting people as two significantly different categories, men and women, and organizing social relations of inequality on the basis of that difference” (Ridgeway & Corell, 2004, p.510). Even though the dichotomy made here is based on biological sex, an interpretative analysis is attempted that is based on the belief that while there may not be enormous psychological differences given by the biological categories themselves, there are inevitably marked social differences in roles attributed to gender identities within society (Hyde, 2005)—so that gender too involves ascriptions of social capital. Evidence from meta-analyses of research on gender differences show that the similarities are way more than the differences, when the social influence of the gender roles is removed (Hyde, 2005). The rationale that lies behind the present study is that gender as a social construct is being presented in virtually all social environments as a background identity characteristic shaping our behavior and that “it typically acts to bias in gendered directions the performance of behaviors undertaken in the name of more concrete,

foregrounded organizational roles or identities” (Ridgeway,2009). Students consciously or subconsciously are trying to correspond to the normative role attributed from society to their gender. Ridgeway also argues that institutional and organizational frameworks are organized based on the mechanism of the background gender frame. It is interesting to examine how it appears in educational system (e.g. schools, higher education institutions) in general and especially the Swedish system, which is a country that ranks among first in Gender Gap Report last years and takes pride of gender equality (Arnesen, 2008).

Worldwide, female enrollment in higher education has grown rapidly over the last four decades (World Atlas of Gender Equality in Education, 2012). For Sweden, gender equality in all domains is one of the cornerstones. Concerning education there have been many reforms in the educational system towards this goal. For example, in 1842 public education became compulsory for both men and women. By 1927 women were allowed to enter public secondary education. The 1962 Educational Act intended to provide education with same courses-subjects for both sexes, contrary to previous education policy, where schools were educating girls and boys for different roles. Furthermore, a curriculum reform in 1969 towards this direction was formulated by the National Board of Education (Elgqvist-Saltzman, 1992). In the early 1970’s a new form of secondary school was introduced, where the main goal was “to reduce the difference in status between “practical” and academic study programs” (Elgqvist-Saltzman, 1992, p.44) by integrating theoretical and vocational studies, where the latter were traditionally dominated by women. Later, in 1988 a 5-year national action plan for equality was introduced that would promote “equal distribution of boys and girls (40%-60%) in each of the study programs in secondary level as well as in higher education” (Elgqvist-Saltzman, 1992, p.44). In the 1990’s the Swedish government took several initiatives to balance the unequal representation of gender in higher education (Numhauser-Henning, 2015, p.14). All reforms that have been made from then support gender equality as a goal, and this support was renewed by the Discrimination Act (2008:567), which intended “to stop discrimination and promote equal rights and opportunities regardless of sex, gender identity or expression, ethnicity, religion or other belief, disability, sexual orientation or age” (Lag (2014:958), my own translation).

Even though many policies have been adopted that focus on gender equality, research has shown that educational aspirations are still affected by prevailing gender stereotypes (Sikora and Pokropek, 2011; Kao and Tienda, 1998; Odell, 1981). Odell in a literature review of previous research mentions that many researches on the subject have controversial results,

with the majority of them though indicating that gender stereotypes limit to an extent students' educational aspirations (Odell, 1981). Fuller recognizes that even though there is an increase in women's aspirations in comparison with the past, their aspirations are still constrained and limited by gender and that "the gender remains, despite some ideological shifting, very salient within the aspirations and related future identities of young girls, defined as they are by a reflexive understanding of their gendered self" (Fuller, 2009, p.28). The still existent, salient role of gender in goals and aspirations lead to the inclusion of this variable in the present study.

Social capital theory has been criticized that it does not take into account gender (Bank, 2007; Ahl, 2008). Nevertheless, research that has been done within the social capital theory in association with gender indicated that social capital is often gendered. The differentiation can lie to different structures of networks or to the way social capital is used. Bruegel mentions that "men use their social capital to exclude; to maintain the status quo while women use it to challenge it". Hence, it has been noted that women lack social capital in comparison with men, because they, like members of minority groups, are "less likely than men to be embedded to networks that can provide opportunities for status, income and occupational advancement" (Smith, 2000, p. 517).

Of course, the differentiation of social capital and the networks that men and women build is not to stand alone. It must be seen also in connection with other characteristics in general and with parental nationality in the present thesis. The conception of women's position differs a lot across the world. So even though Sweden takes pride of gender equality that in return affects the social capital that women holds as a group the present thesis also includes students from social environments that differ a lot from Swedish norm.

### **Academic Self-concept**

A growing body of research debates on the aspects of this concept, hence its importance is widely acknowledged. Marsh and Martin note: "Self-concept is regarded as a highly important and influential factor in that it is closely associated with people's behaviors and various emotional and cognitive outcomes" (Marsh & Martin, 2011, p.59). Many attempts have been made to define self-concept in clear terms. According to Shavelson et al.'s (1976) widely accepted definition "self-concept in general terms, is one's perception of self and that these perceptions derive from interactions with significant others, self-attributions and overall experiential aspects of the social environment (Byrne & Shavelson, 1986, p.474). The importance of this construct as a predictor of one's actions has been highlighted by several

researchers. Shavelson et al. (1976) have pointed out a bidirectional relationship between self-perception and actions. Marsh also underlined the consequences of self-beliefs on “future choice, behavior and performance” (Marsh et al., 2015, p.170). According to Shavelson’s well-established and widely accepted theory, the features that identify this construct are the following: organized, multifaceted, hierarchical, stable, developmental, evaluative and differentiable. It is organized in that an individual’s experiences around one’s family, friends and school are recoded into simpler forms or categories, in order to deal with and reduce their complexity (Shavelson et al, 1976, p.411).

As a multifaceted concept, self-concept has been depicted in a model, commonly cited as the Shavelson model (see figure 2). The hierarchy feature refers to “facets of self-concept may form a hierarchy from individual experiences in particular situations at the base of the hierarchy to general self-concept at the apex” (Shavelson et al, 1976, p.412). As such, self-concept can be divided into academic and non-academic. Furthermore, academic self-concept can be divided into subject areas (e.g. math, verbal). Non-academic self-concept subsequently is divided into 1) social self-concept, which is based on one’s relationships with peers and significant others, 2) emotional self-concept, which is formed by particular emotional states and 3) physical self-concept, which is formed by physical appearance and physical ability. Self-concept is also defined as stable, *videlicet* ‘to change general self-concept, many situation- specific instances, inconsistent with general self-concept, would be required” (Shavelson et al., 1976, p.413).

Moreover, it is developmental, as while it starts shaping from early years as “global, undifferentiated and situation-specific...with increasing age and experience (especially acquisition of verbal labels), self-concept becomes increasingly differentiated” (Shavelson et al., 1976, p.414). Self-concept is described as evaluative, as along with the formation and development of self-descriptions, comes also the evaluation of these descriptions, *videlicet* as an individual develop self-concept through self-description in specific situations, he/she evaluates that description “against absolute standards, such as “the ideal”, and “against relative standards such as “peers” or perceived evaluations of “significant others” (Shavelson et al., 1976, p. 414). Last but not least, self-concept is differentiable, as due to the fact that it is influenced by specific experiences, a distinction can be made from other theoretically related constructs.

Nevertheless, it is worth mentioning that while self-concept is one’s sense or view of self, “it may not coincide with an outsider’s objective assessment of that person’s personality”

(Gottfredson, 1981, p.547). Going further, Gottfredson recognizes four stages in the development of general self-concept. First stage (at age 3-5) is the orientation to size and power, when children start to conceive size as a measure of power. In the second stage (age 6-8), where orientation to gender roles lies, children start conceptualizing the sex-roles and the behaviors attributed to each sex (Gottfredson, 1981). The third stage (age 9-13) is that of social valuation, videlicet “youngsters begin to recognize prestige differences, as well as social class and ability differences among people”(Gottfredson, 1981, p.561). In the fourth and last stage (age 14 and over), youngsters come in touch and meet the internal, unique self. At that stage, while they have already clarified the social roles for themselves as well as for the people within their social circle, adolescents appear to make a shift in internal definition of oneself. “They begin to develop more complex and integrated views of themselves and reality” (Gottfredson, 1981, p.567). The pattern of interiority is underlined by the recognition of personal traits and uniqueness. It is in this stage when self-description of abilities increases and academic self-concept becomes more predictive of course grades in specific subjects. Nevertheless, adolescents assess their abilities not specifically in each academic subject, but more generally “according to a variety of somewhat independent intellectual capabilities, such as mathematical, mechanical and verbal skills and abstract reasoning” (Gottfredson, 1981, p.567).

Other researchers have underlined the above mentioned multifaceted “nature” of self-concept as well. According to Byrne and Shavelson (1986) “multidimensionality implies that self-concept facets, although intercorrelated, can be measured as separate constructs’ (Byrne & Shavelson, 1986, p.600). The conceptualization of self-concept used in this thesis is based on the concept of subject-specific self-concept and on the belief that more information can be gained this way. However, the categories of subject-specific self-concept are further aggregated, as was suggested by ETF researchers and specifically Reuteberg (Giota et al., 2006). The division used in this thesis lays in two broad thematic categorizations: theoretical self-concept and aesthetic self-concept. Consequently, certain modifications have been applied to the initial model, in order to fit the Swedish curriculum. This resulted into two categories of self-concept: the academic and the aesthetic. In Swedish grade 9 the knowledge areas/courses are Swedish, English, Mathematics, Social Sciences subjects, Science subjects, Sport and physical education, Art, Music and Handicraft. The theoretical self-concept (SCTh), contains Swedish language, English Language, Mathematics, Social Sciences and Sciences and the aesthetic self-concept (SCAe) contains Art, Music and Handicraft.

Figure 2: Shavelson's model of self-concept

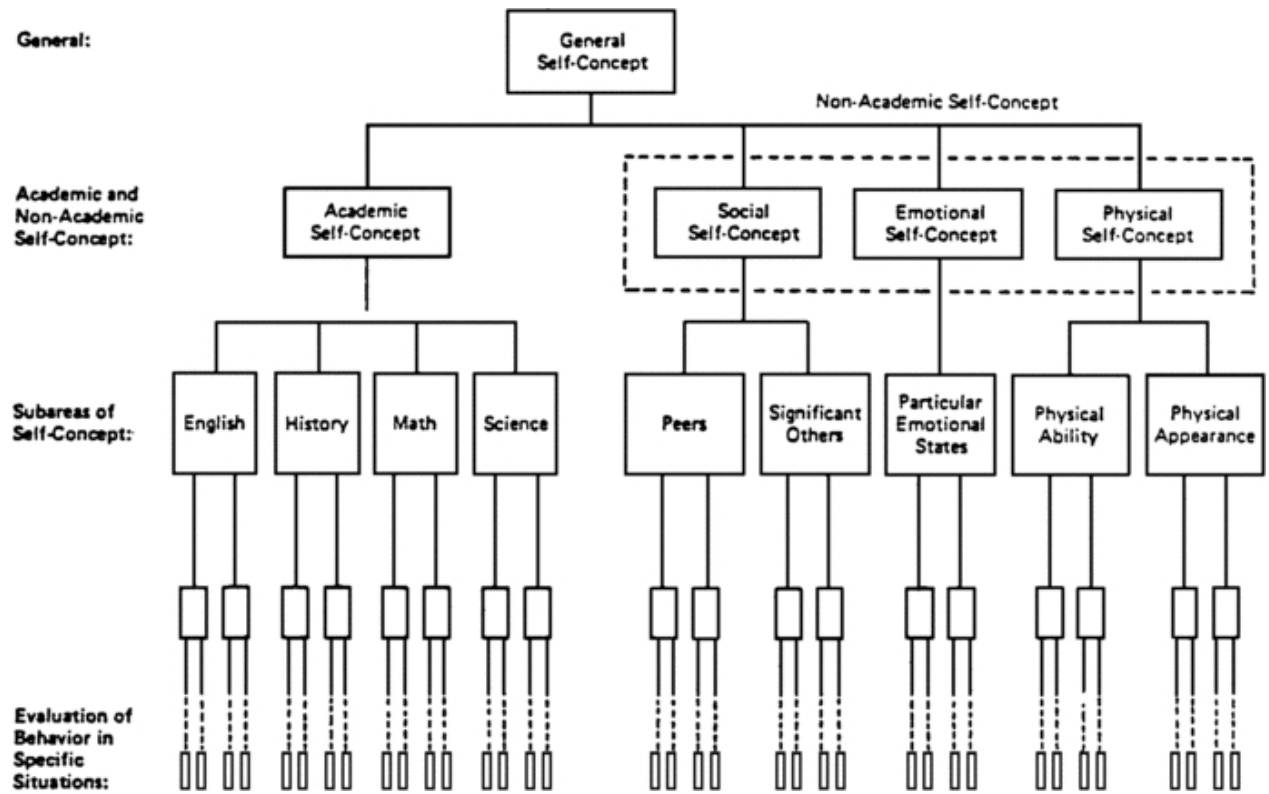
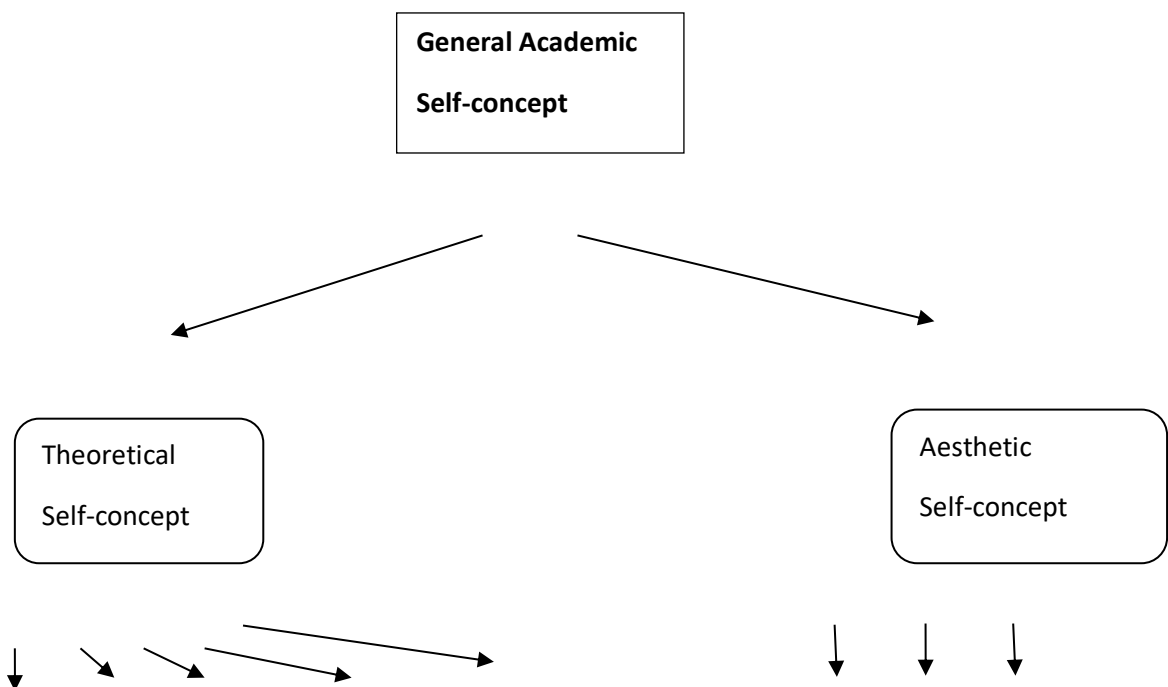


Figure 3: Revised self-concept model



Giota et al., 2008, p.23

In relation to social capital theory, previous research has found a link between social capital and self-concept. Thomason and Kuperminc mention that increased social capital, networks and social support have a positive impact on self-concept. Belonging to a social network can increase opportunities, provides in many cases social acceptance, as well as psychological and emotional support in such a “sensitive” period of life as adolescence is, where many risks concerning self-image and self-esteem lies (Thomason & Kuperminc, 2013). Self-concept is a multifaceted concept, as noted before, with the different facets being intercorrelated with each other. Even though this thesis includes only one facet of self-concept, the academic one with further differentiation, it still remains a trait intercorrelated with the others and influenced by social capital as a whole.

## Methodology

### Data Source

Data used in this thesis derives from an existing dataset called ‘Evaluation Through Follow up’ (hereinafter referred to as ETF). The ETF project was created by the merger of two previous Swedish longitudinal projects: The Individual Statistics Project (ISP), which was started in 1961 by the Department of Education at University of Gothenburg and The Evaluation Through Follow-up, which has started in the late 1970’s by the Department of Education, in the School of Education in Stockholm (Härnqvist, 2000). The project offers a large cohort-sequential database which includes nine cohorts, including individuals born between 1948 and 1998. The Swedish identification system (personal number) was used in collecting the data. Everyone born on the 5th, 15th and 25th in any month of the 1992 year was included in the sample. This produced 10 percent samples of whole birth cohorts (Giota, 2006). An important addition to the initially basic data collection was the parents’ questionnaire to 1967 cohort and the teachers’ questionnaire to 1982 cohort and on (Härnqvist, 2000). The 1992 cohort is analyzed in this thesis. The present study aspires to be



contemporary and draw a picture of the present situation, so the latest cohort seemed the most appropriate. One could argue though that this is the 1998 cohort, which hence was not selected. The selection of the specific cohort, that of 1992 born students was based to the fact that the students by the time that this study began (2016) would have been already adults. This means that this study could function as a starting point/base for further research, and specifically a comparative study of results of the specific study and the entrance rates of students in HE, meaning that follow-up data could be obtained for these students, whether they actually entered higher education and what role the aspirations had in the actual pathways that these students followed.

### **Population (The 1992 cohort)**

The 8th cohort in the project is comprised of 10.153 students, where 5178 are male (51%) and 4969 are female (49%). Most of them were born in 1992 (i.e. more than 95%). The sample design consisted of a stratified random two-stage cluster sampling based on the number of school districts when students were enrolled in grade 3 during the 2001/2002 school year. The sample includes 35 municipalities with 869 school districts and 227 principal areas (Teknisk Rapport SCB, 2005-08-26).

### **Basic data used in the present research**

#### ***Administrative data***

Administrative data for the 8<sup>th</sup> cohort began to be collected by Statistics Sweden in 2002, when the students were in grade 3 of compulsory school and after that yearly and as long as the students were attending an educational institution (i.e. until they finished upper secondary school). These data were collected from the schools and refer to data included in different school records, such as the student's grade, class, school marks in different subjects (if available), scores on standardized achievement tests (if available).

#### ***Questionnaire data from parents***

Data on family background were taken from interviews with their parents. These information were collected in the spring term of 2005, by the Department of Education at Gothenburg University, concerning, among other things, parents' education status and nationality.

### **Questionnaire in grade 9**

The questionnaire in grade 9 was given to the students first in week 10 of 2008, when students were already in grade 9. Reminders were sent in weeks 11,14 and 16. The final collection of the questionnaires was culminated in week 22 of 2008.

### **Missing data**

Missing values are an obstacle that this research came across. The reasons behind missing data can vary. It might be the respondents refuse to answer questions in the questionnaires or that they neglect to answer the questions or even maybe they just do not know what to answer. Another reason that can appear in longitudinal studies is that respondents might be present at the first questionnaire and then move away before the next one. Nevertheless missing data is a problem that a researcher is called to solve before proceeding to statistical analysis, in order not to risk the validity of the analysis. Many methods to deal with missing data have been developed over the last years. Unfortunately “none of the missing data methods can be described as good” (Allison, 2011,chapter 1, p.3).

The number of students that participated in the data collection in 2008 was 9890 (out of 10153 that initially participated in grade 3). According to ETF, the loss of 263 students was due to several reasons, but the most common was that these students moved away from Sweden (Giota et al., 2008, p.11, my own translation). 6010 or 59% of the 9890 students responded to the questionnaires (IPD rapport 2008:10) The researchers got back the questionnaires from 2832 boys and 3178 girls, meaning that there was a loss of 45% among the boys respondents and 36% among the girls respondents that initially took part in the survey (Giota et al., 2008, p.14, my own translation). According to ETF there has been no indication about why the survey was not answered, but the loss was equally distributed between the six sample groups of municipalities (Giota et al., 2008, p.14, my own translation). This is of great importance as the remaining sample still mirrors the whole population. Of the 6010 students who responded to the questionnaire in grade 9, 5922 students responded to the question pertaining to higher education aspirations, which is the dependent variable in this research study. Those who did not respond to this question were excluded from this study. So, the researcher used listwise deletion, also known as complete case analysis (Alison, 2011, chapter 1, p.2) for the missing cases. Alison mentions that among the attractive statistical properties that listwise deletion has, as well as the wide use and acceptance that holds among statisticians, especially for regression analysis, which is the case

in the present master thesis “listwise is even more robust than other sophisticated methods” (Alison, 2011, chapter 3, p.3).

Given the fact this research hopes to generalize to the whole population of students in 9<sup>th</sup> grade in Sweden, weighted data for grade 9 were used. The use of weights can compensate for a loss in respondents, as it can provide more accurate and robust estimates for the whole population, as “they account for the fraction of the population represented by each stratum and reflect the probability that an element of the stratum is selected to be in the sample” (Ciol, Hoffman, Dudgeon, Shumway-Cook, Yorkston, & Chan. 2006, p.300). Concerning the present dataset, calibration weights have been used so that the results can be generalized to the whole population and not just the respondents and to compensate for possible different distributions between the responses rate among the groups of the sample (SCB, Teknisk rapport, *Hur tycker du skolan fungerar*, Enkätundersökning 2008, Kohort 1992). The descriptive statistics and regression results presented in the following sections use the weighted data. Statistics for the unweighted data are provided in Appendix

## Variables

This section describes how the variables are operationalized in the study. The dependent variable in the present research is educational aspirations (EducAsp).

The other variables, Gender, Parental Nationality (ParNat), Parental Education (ParEduc), Theoretical Self-Concept (Theoretical SC), and Aesthetic Self-Concept (Aesthetic SC) are treated as independent variables.. These control variables have been included in line with earlier research upon the educational aspirations, because they are assumed to have associations with the outcome variable.

### **EducAsp**

The dependent variable, EducAsp, refers to students’ aspirations of entering higher education (“Are you considering studying at university?”) in the questionnaire (See Appendix A). It was divided into three categories – students who intend to proceed to higher education, students who do not intend to proceed to higher education and students who have not made a decision yet.

## **Gender**

The Gender variable depicts the biological sex of the students. This variable consists of two categories: male and female.

## **PEduc**

ParEduc is a variable with two categories that depicts the education of parents. ParEduc was created from questions QP62A and QP62B from parent's questionnaire in 6<sup>th</sup> grade questionnaire (see appendix B). The newly created variable ParEduc has two values: 0= parents or parent with no tertiary education and 1=at least one parent with tertiary education, 2= No information available. The percentage of the missing is 12.5%. As this percentage goes beyond 5% (Cheema, 2014, p.502), for that could be acceptable listwise deletion, the researcher decided to create a new category of the missing, in order not to lose further data. This is a simple solution to handle missing data, which can be applied when the variable of interest is categorical and independent (Alison, 2011, chapter 3, p.6). It is necessary though to mention that relative literature on missing values suggest multiple imputation as the best way of handling missing data when missing data varies between 5% to 15% (Young et al, 2011, cited from Cheema, 2014, p.502). Nevertheless this goes beyond the goals of the present research.

## **ParNat**

ParNat depicts the nationality of the parents. The ParNat variable was created from RFNAT2 and RMNAT2 from the background characteristics questionnaire in grade 3 (see appendix C and D), which depict the father and mother's nationalities respectively. It has two values, where 0=both parents are Swedish and 1= at least one parent is not Swedish. Concerning missing values, the variable ParNat that depicts the nationality of the parents has 5794 valid cases and 128 missing values. The missing cases are 2.2%, so we can choose to omit them through listwise deletion, as literature concerning the missing values problems suggest listwise deletion when the percentage that is missing is less than 5% (Garson, 2015, Cheema, 2014).

## **SCTh**

Creating the variable SCTh was a multi-step process. The survey questions used to construct the theoretical self-concept variable derive from ETF'S 3rd question (see Appendix 5), which was designed as an indicator of students' estimation of their overall school performance (Giota et al., 2008, p.22, my own translation).

First, SCTh (theoretical self-concept) has been calculated to give an overall rating of self-concept and is based on 5 sub questions: How good do you think you are in the following subjects: Swedish, English, Mathematics, Social science subjects, Science subjects, to which students were asked to rate their performance to 5-point Likert scale, where 1= Very good, 2= Quite good, 3= Either good or poor, 4= Quite poor and 5= Very poor. Firstly, the values of the variables were reversed, so that the bigger the value the higher the self-concept. The new values are 1=Very poor, 2= Quite poor, 3= Either good or poor, 4=Quite good and 5= Very good. Out of the 5 items that created SCTh, I noticed that there are 32 missing values for SCSwedish (0.5%), 35 for both SCEnglish and SCSciences (0.6%), 36 for both SCMaths and SCSocialSciences (0.6%). Due to the small number of the missing cases in each of the above categories, these cases were excluded using listwise deletion from the data set. This is an acceptable way of handing missing data when the sample is large (De Vaus, 2006, p.194).

In order to check how much the items correlate with each other, an inter-item reliability test was run (See table 2) that showed modest relationships between Swedish and mathematics (.220), between English and mathematics (.177), between English and Sciences (.264) and between mathematics and Social Sciences (.272), moderate relationships between Swedish language and English language (.430), between Swedish and social sciences (.412), between English and Social Sciences (.413) and between Swedish and Sciences (.316), between science and social science which is strong (.440) and between mathematics and science (.477) (Mujis, p.145). The strength of these relationships (with only the exception of the one between English and maths) allowed the researcher to proceed into combining these variables into one (SCTh). These 5 items have been summed to form a single scale with reliability coefficients (Cronbach's alpha) of .707, which indicates strong internal reliability (Bryman and Cramer, 2011). Below in Table 1 are the descriptive characteristics of the weighted variables.

Table 1: Descriptive statistics of subject specific theoretical self-concept

	<b>Very poor</b>	<b>Quite poor</b>	<b>Either poor or good</b>	<b>Quite good</b>	<b>Very good</b>	<b>Total</b>
<b>Swedish</b>	42	208	1774	4937	2193	9154
(N)						
(%)	0.5	2.3	19.4	53.9	24.0	100

<b>English</b>	(N)	133	532	1833	4003	2653	9154
	(%)	1.5	5.8	20.0	43.7	29.0	100
<b>Maths</b>	(N)	226	817	2547	3780	1784	9154
	(%)	2.5	8.9	27.8	41.3	19.5	100
<b>Social Sciences</b>							
	(N)	79	321	2191	4377	2186	9154
	(%)	0.9	3.5	23.9	47.8	23.9	100
<b>Sciences</b>	(N)	197	687	2769	3940	1561	9154
	(%)	2.2	7.5	30.2	43.0	17.1	100

Subsequently, the researcher proceeded in adding the scores of the survey responses for these subjects in order for the new construct variable ScTh to be created. The values of the new variable vary from 5 to 25. Subsequently, these values have been collapsed into three categories (high, moderate, low). Having variables with few categories has the benefit not only to make the results easier to read and understand, but also “can highlight patterns in the data that might otherwise not stand out” (De Vaus, 2014, p.162). The variable was trichotomized by using a distributional approach (De Vaus, 2014). So, values 5 to 18 were transformed to 1, depicting low theoretical self-concept, values 19 to 21 were transformed to 2, depicting moderate theoretical self-concept and 22 to 25 were transformed to 3, depicting high theoretical self-concept.

Table 2: Reliability correlations among items of theoretical self-concept

How good do you think you are in Swedish	How good do you think you are in English	How good do you think you are in Maths	How good do you think you are in Social Sciences	How good do you think you are in Science Subjects
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<b>How good do you think you are in Swedish</b>	1.000	.430	.220	.413	.316
<b>How good do you think you are in English</b>	.430	1.000	.177	.311	.264
<b>How good do you think you are in Maths</b>	.220	.177	1.000	.272	.477
<b>How good do you think you are in Social Sciences Subjects</b>	.413	.311	.272	1.000	.440
<b>How good do you think you are in Science Subjects</b>	.316	.264	.477	.440	1.000

## SCAe

The construct variable SCAe (aesthetic self-concept) is based on 3 sub questions: How good do you think you are in the following subjects: Art, Music, and Handicraft. The subject Sport and Health was excluded because the correlation with the other subjects was very low (.011), indicating according to Giota that this subject also measures another dimension beyond the aesthetic one (Giota et al., 2008, p.23, my own translation). The procedure followed was the same as with the variable SCTh. Out of the 3 items that created SCAe there are 34 missing values for ScArt (0.6%), 34 For SCMUSIC (0.6%) and 25 for SCHandicraft (0.6%). The percentages of the missing allow the researcher to omit them from the final dataset. So listwise deletion was chosen

Table 3 shows the descriptive statistics for subject specific aesthetic self-concept.

Table 3: Descriptive statistics of subject specific aesthetic self-concept

	<b>Very Poor</b>	<b>Quite poor</b>	<b>Either good or poor</b>	<b>Quite good</b>	<b>Very good</b>	<b>Total</b>
<b>Art (N)</b>	247	746	2285	3506	2370	9154
(%)	2.7	8.1	25.0	38.3	25.9	100
<b>Music (N)</b>	180	592	2463	3546	2373	9154
(%)	2.0	6.5	26.9	38.7	25.9	100
<b>Handicraft (N)</b>	118	373	1724	3946	2993	9154
(%)	1.3	4.1	18.8	43.1	32.7	100

These 3 items have been summed to form a single scale with reliability coefficients (Cronbach's alpha) of .621. The correlation test (See table 4) indicated modest relationship between music and Handicraft (.271) and moderate relationships between Art and Music (.400) and between Art and Handicraft (.386). The strength of the relationships allowed the researcher to combine them into one. Following the same procedure as above, the researcher reversed the values of ScArt, ScMusic and ScHandicraft. There were 31 missing values for the ScArt, 33 for ScMusic and 22 for ScHandicraft. The missing values were handled by excluding them as in ScTh. The new variable's values vary from 3 to 15. The variable was trichotomized by the distributional approach. Values 3 to 10 were transformed to 1 (low aesthetic self-concept), values 11 to 12 were transformed to 2 (moderate aesthetic self-concept) and 13 to 15 were transformed to 3 (high aesthetic self-concept).

Table 4: Reliability correlations among items of aesthetic self-concept

	<b>How good do you think you are in Art</b>	<b>How good do you think you are in Music</b>	<b>How good do you think you are in Handicraft</b>
<b>How good do you think you are in Art</b>	1.000	.400	.386



<b>How good do you think you are in Music</b>	.400	1.000	.271
<b>How good do you think you are in Handicraft</b>	.386	.271	1.000

## Descriptive Statistics

The general characteristics of the variables after implementing weights can be seen in table 5 below.

Table 5: Descriptive Characteristics of the independent variables and the dependent variable (weighted)

	%	N
<b>Gender</b>		
Male	51.5	4714
Female	48.5	4440
Total	100	9154
<b>Parent's Education</b>		
At least one parent with tertiary education(3 years and more)	55.9	2875
No tertiary educations	31.4	5115
No answer	12.7	1164
Total	100	9154
<b>Parent's Nationality</b>		
Swedish	82.9	7588
Other	17.1	1566
Total	100	9154
<b>Self-concept Theoretical</b>		
Low	40.0	3663
Moderate	38.5	3527
High	21.5	1964
Total	100	9154
<b>Self-concept Aesthetic</b>		
Low	28.5	2611

Moderate	36.5	3343
High	35.0	3200
Total	100	9154
<b>Educational Aspirations</b>		
Plans for university	31.4	2871
Indecisive	46.7	4276
No plans for university	21.9	2007
Total	100	9154

### **Cross-tabulations**

Possible differences in aspirations among different groups of students will be presented. For this purpose, cross tabulations between the variable EducAsp and each of the independent ones will be run (See table 6 below). Weights have been used for the tests. Nevertheless, the unweighted contingency tables can be found in the Appendix section (Appendices F-J). For the cross tabulations that follow I have used chi-square tests, since it is suggested as the most suitable test for checking the relationships among the variables for large samples as is used in the present study (Fields, 2009, p.690). Furthermore, the assumptions that should be met are the independence of data, meaning “each person, item or entity contributes to only one cell of the contingency table” (Fields, 2009, p.691), as well as the expected frequencies should be greater than 5 (Fields, 2009, p.692). The first assumption is fulfilled in all cases as the design of the study is not repeated-measure. Concerning the second assumption and given the fact that the contingency tables of cross tabulations to follow are either 3x2 or 3x3, the assumptions that should be met is “All expected counts should be greater than 1 and no more than 20% of expected counts should be less than 5” (Fields, 2009, p.695). The minimum expected number of cases in each of the cross-tabulations for educational aspirations and the independent variables was met in all cases (i.e. gender: 973.46, parental nationality: 343.34, parental education: 255.21, theoretical self-concept: 430.60, aesthetic self-concept: 572.46).

Table 6: Contingency table showing the HE aspirations of students in relation with the independent variables

	<b>Plans for HE (n)</b>	<b>(%)</b>	<b>Indecisive (n)</b>	<b>(%)</b>	<b>No plans for HE (n)</b>	<b>(%)</b>	<b>Total (n)</b>	<b>(%)</b>
<b>Male</b>	1110	12.1%	2170	23.7%	1434	15.7%	4714	51.5%
<b>Female</b>	1761	19.2%	2106	23%	573	6.3%	4440	48.5%
Total	2871	31.4%	4276	46.7%	2007	21.9%	9154	100%
<b>Parents with no HE</b>	1230	13.4%	2466	26.9%	1419	15.5%	5115	55.9%
<b>Parents with HE</b>	1332	14.6%	1228	13.4%	315	3.4%	2875	31.4%
<b>No answer</b>	309	3.4%	582	6.4%	273	3.0%	1164	12.7%
Total	2871	31.4%	2138	46.7%	2007	21.9%	9154	100%
<b>Swedish Parent(s)</b>	2205	24.1%	3634	39.7%	1749	19.1%	7588	82.9%
<b>Non Swedish parent(s)</b>	666	7.3%	642	7.0%	258	2.8%	1566	17.1%
Total	2871	31.4%	4276	46.7%	1566	21.9%	9154	100%
<b>Low self- concept</b>	548	6.0%	1882	20.6%	1233	13.5%	3663	40.0%
<b>Moderate self-concept</b>	1200	13.1%	1730	18.9%	597	6.5%	3527	38.5%
<b>High self- concept</b>	1123	12.3%	664	7.3%	177	1.9%	1964	21.5%
Total	2871	31.4%	4276	46.7%	2007	21.9%	9154	100%
<b>Low aesthetic self-concept</b>	708	7.7%	1264	13.8%	639	7.0%	2611	28.5%

<b>Moderate aesthetic self-concept</b>	1055	11.5%	1538	16.8%	750	8.2%	3343	36.5%
<b>High aesthetic self-concept</b>	1108	12.1%	1474	16.1%	618	6.8%	3200	35.0%
Total	2871	31.4%	4276	46.7%	2007	21.9%	9154	100%

## Method

The method chosen to answer the research question is multinomial regression, videlicet to predict the factors that influence the students' educational aspirations of entering the higher education. The analysis was carried out with SPSS version 24. Multinomial regression is suitable when one wants to predict an outcome variable with several categories (Field, 2009, p.198) and logistic regression is suitable when the outcome variable is categorical/ordinal (Field, 2009, p.265). There are five predictors in the created model and the dependent variable has three categories. As a reference category the researcher has chosen the first one ("I am considering studying at university"). That choice was based on the fact that the category of students asked that responded that they plan to study in university has the highest number (unweighted) (Fields, 2009, p.280). The three categories can reasonably be regarded as being ordered from the desired to less desired. Also, the fact that the outcome/dependent variable is categorical means that it cannot really be checked for linearity, except if the data are transformed logarithmically. This is done with the multinomial logistic regression as "it expresses the multiple linear regression equation in logarithmic terms (called the logit) and thus overcomes the problem of violating the assumption of linearity" (Field, 2009, p.267).

The assumptions that must be checked before proceeding into running the test are 3, according to Fields: 1) Linearity, which "assumes that there is a linear relationship between any continuous predictors and the logit of the outcome variable (Fields, 2009, p.273), 2) Independence of errors, meaning that "cases of data should not be related" and 3) Multicollinearity, which in few words means that "predictors should not be too highly correlated" (Fields, 2009, p.273). As far as the first assumption, it does not apply in the

present model, as there are no continuous predictors. Concerning the second assumption of independence of errors, a Durbin-Watson test was conducted. The Durbin-Watson was 2.005, meaning that the residuals are uncorrelated (Fields, 2009, p.220). Field mentions that “the closer to 2 that the value is, the better” (Field, 2009, p.236), so the assumption is met and the researcher can proceed. Nevertheless, the limitation here is that the Durbin-Watson tests provides more robust results, when the variables are ordered (for example in time), which is not the case here, as well as the fact that SPSS does not provide the significance value of the test (Field, 2009, p.229). So, the results should be interpreted with caution. The third condition that the data should meet before the test is multicollinearity. This is tested through collinearity diagnostics test (Table 8). The results of the test do not indicate any multicollinearity (See table 7). To cite Fields “Menard (1995) suggest that a tolerance value less than 0.1 almost certainly indicates a serious collinearity problem. Myers (1990) also suggests that a VIF value greater than 10 is cause for concern” (Fields, 2009, p.297). Furthermore, the eigen values are not much larger than others (See table 13), which means that “the derived model is likely to be unchanged by small changes in the measured variables” (Field, 2009, p.297).

Table 7: Collinearity Statistics

Dependent variable: Are you considering studying at university?

<b>Model</b>	<b>Tolerance</b>	<b>VIF</b>
<b>Gender</b>	.963	1.039
<b>Parental Education</b>	.982	1.018
<b>Parental Nationality</b>	.990	1.011
<b>Aesthetic self-concept</b>	.936	1.068
<b>Theoretical self-concept</b>	.960	1.041

Table 8: Collinearity Diagnostics

**Variance proportions**

<b>Model</b>	<b>Eigenvalue</b>	<b>Condition Index</b>	<b>(Constant)</b>	<b>Gender</b>	<b>PEduc</b>	<b>ParNat</b>	<b>SCAe</b>	<b>SCTh</b>
<b>EducAsp</b>	4.483	1.000	.00	.00	.02	.01	.01	.01
<b>Gender</b>	.762	2.426	.00	.00	.00	.98	.00	.00
<b>PEduc</b>	.504	2.983	.00	.01	.97	.00	.01	.01
<b>ParNat</b>	.123	6.031	.00	.19	.01	.00	.05	.74
<b>SCAe</b>	.092	6.995	.01	.31	.00	.00	.85	.02
<b>SCTh</b>	.036	11.104	.98	.50	.01	.00	.08	.23

## Validity

Validity is a necessary condition for all research. Validity “refers to whether an instrument measures what it was designed to measure” (Field, 2006, p.43). Validity is related to the theoretical background and definition of the concepts that the research wants to measure (Mujis, 2004). As much as validity is unitary, many researchers (Mujis, Fields) have distinguished some types. Hence all these types are connected with each other and must be met in order for research to be valid. The nature of the present study has issues in construct validity, as two of the latent variables are self-reported measures (theoretical and aesthetic self-concept). These variables cannot be measured directly. The researcher tried to ensure the validity of these concepts through the theoretical knowledge mentioned above (self-concept, present thesis, p.16) and the use of same or similar measures used in previous researches (Figure 2, present thesis). Specifically, the validity of the construct scale has been checked by Reuteberg initially and later Giota (Giota et al., 2008). Another type of validity is external or as it is often called generalizability, videlicet the capability of results from a sample to be extended to the whole population of interest. Initially, in order for the results of a research to be generalizable to the whole population the sample must be representative of the population. ETF project was designed in order to ensure that (Giota et al., 2008). Nevertheless, a loss of 41% occurred. Hence, the loss is equally distributed between the sample six groups of the municipalities (Giota et al., 2008), a fact that even though it reduces the sample, still it remains representative of the population. The designers of the ETF project also tried to form questionnaires that could be applied and generalized not only vertically, in the whole population of the specific year 1992, but horizontally, in populations of other years also,

meaning that the sample is not only representative for the population of the students born in 1992, but for students born other years as well (Giota et al., 2008).

## Reliability

Reliability refers” to the ability of the measure to produce the same results under the same conditions” (Field, 2006, p.44).It applies to construct variables, so in the present research to the ones that depict theoretical and aesthetic self-concept. The reliability of these variables was estimated using Cronbach’s alpha. According to Fields (2006) a generally accepted value for Cronbach’s alpha is between .7 to .8 (Fields, 2006, p.675). The items of the scale measuring theoretical self-concept all had high reliabilities, all Cronbach’s alpha = .707. The aesthetic concept has also a sufficient reliability of the scale (Cronbach’s alpha = .621). The value of .621 has been accepted as sufficient by the researcher because the items in the scale are only three and that can affect the scale by decreasing the value. Fields, citing Cortina mentions that due to the fact that the top half of the equation of Cronbach’s alpha includes the number of items squared, means that the number of the items affect the final value of alpha (Field, 2006, p.675). Furthermore, according to Giota mentions construct scales by compiling points of different questions as well as using weighted data increase both reliability and the validity (Giota et al., 2008, p.64)

## Ethical considerations

Ethics is a cornerstone for every research. It has three basic principles: obtain consent, protect from harm and ensure privacy (Drew, 2007). ETF researchers, who have been responsible for the formation of the questionnaires and the gathering of the data have ensured that all three requirements were met (Teknisk Rapport SCB, 2005-08-26).

The researcher was given access to the specific data included in the analysis and permission to use them for secondary analysis for the specific investigated time period from the University of Gothenburg. The dataset contained no identifying information, so there were no ethical issues encountered.

## Results

A multinomial logistic analysis was conducted to predict the aspirations of students for entering higher education, using gender, parental education, parental nationality, theoretical and aesthetic self-concept as predictors. The traditional .05 criterion of statistical significance was employed for all tests. The assumptions that need to be met for the multinomial regression (independence of errors, multicollinearity) were tested. Concerning independence of errors, the results of multinomial regression came with a warning that “there are 30 (9.3%) cells (i.e. dependent variable levels by subpopulations) with zero frequencies”. Alarming as may sound, it can be ignored, as it is inevitable to have empty cells, when there are covariates (Fields, 2009). In the present case there are 9.3% of the possible combinations of variables that have no data. Nevertheless, the sample size is quite big (9154 weighted), so this warning can be ignored.

In multinomial regression, model fit is important, as it relates to interpreting the results and offers information concerning the probability of an event occurring for a given person (Fields, 2009, p.267). Therefore, test of the full model against a constant-only model was statistically significant, indicating that the predictors as a set reliably distinguished among those who plan to study in university, those who do not and those who have not made a decision yet (See table 14). The analysis revealed that the probability of the model chi-square (2372,868) was .00, less than the level of significance of .05, videlicet the model including the factors better predicts the outcome than a model without them. The null hypothesis, that there was no difference between the model without the independent variables and the model with independent variables was therefore rejected and its alternative, hypothesis 1, was accepted.

Table 9: Model Fitting Information

Model	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.
<b>Intercept only</b>	3642.691	3656.935	3638.691			



<b>Final</b>	1301.823	1430.018	1265.823	2372.868	16	.000
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The test has a good fit in the model. Specifically, the value based on Pearson (Chi-square:258.619, df=198, p=.002) is greater than one but not close to 2 (1.3), which “does not give us an enormous cause for concern that the data are overdispersed” (Fields, 2009, p.309).

The difference in -2 Log Likelihood indicates how much new variance the model has explained. In the present study there is a significant difference (3638.691-1265.823=2372.868), indicating that the researcher’s model has a better fit than the original model. Nagelkerke R<sup>2</sup> served to evaluate model adequacy. It indicates that 26% (.26) of the variation of the dependent variable can be explained. The reference group is students who plan to study in university. In the overall model, as indicated by the Likelihood Ratio Tests table, four of the predictors are statistically significant (theoretical self-concept, gender, parental education and parental nationality).

## Plans for university VS no plans for university

The gender of the student significantly predicted whether they plan or not to study at university. Male students are 5.625 times more likely to not have plans for university, in comparison to female students. Students with parents without higher education are 1.121 times more likely to plan not to study at university. Students with at least one non-Swedish parent are 2.155 times more likely to plan to study at university. Last but not least, the level of theoretical self-concept too significantly predicted whether a student plans to study at university. The odds ratio indicated that students who had low theoretical self-concept are 15.533 times more likely to no plans for studying at university, while the ones with moderate theoretical self-concept are 3.169 times more likely to not planning study at university in comparison with the students with high theoretical self-concept. However, aesthetic self-concept is not statistically significant as a predictor. The comparison furthermore showed that female students with high theoretical self-concept and at least one non-Swedish parent with more than 3 years higher education are more likely to plan to study at university.

From a social capital perspective, the results concerning parental education were anticipated as such, meaning that well educated parents hold higher social capital in comparison with non-educated, so as one could expect their children are more likely to study in university in their attempt to maintain or even increase the existing social capital. Concerning the combination of parental nationality and gender, surprising as this may seem on first reading, the results can be explained through social capital perspective as well. Keeping in mind the assimilation perspective used in research on nationalities, it highlights the fact that children with at least one non-Swedish parent, even though they lack social capital in comparison with fellow students of whom both parents are Swedish, are trying to compensate for this lack by education. This confirms that education is a means for students to enter different and more diverse networks, and as such it is probably seen as a pathway for amassing greater social capital. Concerning gender, a possible explanation of females having higher aspirations for higher education in comparison with males can be traced to the fact that career opportunities that do not require a higher education degree are more for the male students, without at the same time being less attractive economically (Öhrn et al., 2017). Another explanation suggested by a social capital perspective is that in societies like Sweden the gender gap has substantially weakened in comparison to other countries, although it still exists. With education being considered one way of increasing social capital and entering new networks with more power, women are perhaps thus socially enabled to be more ambitious, and subsequently more likely to aspire to enter higher education. With gender equity as their support, female students may thus be relatively better able to handle the social pressure of achieving also in comparison with male students still conceived as the norm (Ridgeway & Corell, 2004). Self-concept, especially theoretical self-concept as the one strong predictor, is very much related with social capital, as was pointed out in the earlier theoretical part. So, students with higher social capital have a higher self-concept: hence subsequent to their attempt to maintain or even expand their social capital, they aspire to enter higher education.

## Decisive VS indecisive plans for university

The gender of the student significantly predicted whether they have not made a decision yet concerning their educational plans. Male students are 1,991 times more likely to be indecisive rather than planning to study at university, in comparison with female students. Parental nationality appeared also to be a significant predictor. The odds ratio indicated that students with Swedish parents are 1,770 time more likely to be indecisive rather than plan to

study at university in comparison with students with non-Swedish parents. The level of theoretical self-concept significantly predicted whether a student has not made a decision yet or plan to study at university. The odds ratio indicated that students who had low theoretical self-concept are 5.829 times more likely to have not made a decision yet instead of planning to study at university in comparison with students who had high self-concept. Respectively the odds ratio indicated that students with moderate theoretical self-concept are 2.402 times more likely to have not reached a decision yet in comparison with students who had high theoretical self-concept. Parental education and aesthetic self-concept were not significant predictors of indecisiveness.

In summary, male students with low theoretical self-concept and Swedish parent(s) are more likely to have not made a decision yet concerning their educational plans.

The results on indecision are largely in agreement with the results on having HE study plans listed in the previous section. Males seem more indecisive where female students are more certain concerning their HE aspirations. This again can be explained by the fact that through their education path, and supported by an explicit policy focus on gender equity in Sweden, women can compensate for the lack of social capital in comparison for the comparatively larger social capital held by their male peers. The same goes for parental nationality. Students of whom at least one parent is not Swedish are considered to hold less social capital in comparison with students of whom both parents are Swedish. Being more certain concerning future educational aspirations indicates ambition, which according to assimilation perspective can be explained as an effort to assimilate in society and compensate for their difference and the possible lack of social capital. On the contrary students with both parents being Swedish appear to be more indecisive. This can be explained also through the social capital theory, as these students, by holding a higher social capital and subsequently by participating in stronger social networks can enjoy the “luxury” of being indecisive or deciding later in life. If education is also seen as a pathway to employment and to wider and more diverse networks by students who do not hold high social capital, the ones with high social capital do not share the same amount of stress or insecurity concerning future employment as this can be reached through access to job opportunities given by existing social networks. Theoretical self-concept as directly related with social capital appears to be also important in this comparison between these two groups. As indicated before one that holds high social capital is expected to have high self-concept in general (which depicts also in every aspect of it, subsequently in theoretical) and vice versa. So, from a social capital perspective this result is totally consistent

with the expectations raised by the theory. That means that students with high theoretical self-concept aspire to enter higher education in order to maintain or enter high-status social networks. One could argue then why the same is not happening with the aesthetic. Even though research has found that social capital is related with self-concept in general (Thomason & Kuperminc, 2013), no research was found about the influence that social capital has to specific aspects of self-concept. But this may be an interesting field theme for future research.

Table 10: Results of multinomial regression analysis

	B(SE)	Odds Ratio
Plans to study in uni vs. Not made a decision yet		
Intercept	-0.924 (0.1)***	
Low SCTheor	1.77 (0.07)***	5.829
Moderate SCTheor	.88 (0.06)**	2.402
Low SCAesth	.133 (0.07)**	.875
Moderate SCAesth	-.146 (0.06)	.864
Gender(male)	.689 (0.05)***	1.991
Nationality(Swedish)	.571 (0.07)**	1.77
ParEduc no tertiary	.040 (0.08)**	.961
ParEduc tertiary	.699 (0.09)***	.497
Plans to study in uni vs. No plans to study in uni		
Intercept	-2.997 (0.15)***	
Low SCTheor	2.743 (0.10)***	15.533
Moderate SCTheor	1.153 (0.10)***	3.169
Low SCAesth	-.301 (0.09)***	.740
Moderate SCAesth	-.164 (0.08)*	.849
Gender(male)	1.727 (0.07)***	5.625

Nationality(Swedish)	.768 (0.09)***	2.155
ParEduc no tertiary	.114 (0.10)	1.121
ParEduc tertiary	-1.375 (0.12)	.253

Note: Estimated coefficients are given with standard errors in parentheses underneath.

\*  $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

## Discussion

The results of the present study are in keeping with previous research concerning parental education, gender and theoretical self-concept. Concerning parental education, it influences educational aspirations—though perhaps surprisingly to a smaller extent than might be expected (Reynolds & Pemberton, 2001; Berggren, 2013). This may be due to the fact that research has not taken into account self-concept along with parental education - as students with parents that hold university degree and subsequently higher social capital seem to try maintain or even extend their already existing social capital. The opposite function though social capital seems to have when it comes to parental nationality, meaning that students with weaker social capital aspire entering higher education. It is found that students with at least one parent that is not of Swedish nationality aspire in a bigger percentage to enter higher education. Assimilation perspective offers an explanation to that. The lack of social capital here seems to influence students' ambition and aspirations, in order to overcome this deficiency through higher education. This way, educational aspirations can be reinforced by adding social pressure to students to work hard and succeed academically by entering higher education. Overall, parental nationality indicated that could be a predictor for educational aspirations as it made a significant contribution to the prediction. These results come to agreement with the majority of previous researches that immigrant background plays a positively important role in future educational aspirations. Nevertheless, one must be very careful when interpreting these results, as the category of non-Swedish could be very heterogeneous. Concerning gender, the findings confirm previous research that female students in a bigger percentage than male intend to study at university. Concerning indecisiveness, this study also confirms findings from previous research, where men appear to be more indecisive than women. The explanation offered by the social capital theory is that female students through higher education try to overlap for their less/worse compared to men social capital. As mentioned before, the existing literature claim that women and men tend to

form different social networks and embedded resources both in diversity and size, which are also unequal with each other. Lin mentions that “such gendered differential associations and networks may explain why males and females have different access to different hierarchical positions in society” (Lin, 2000, p.788). So, while men have larger and more beneficial networks, women tend to have smaller and less diverse networks. Education is a path through which women can overlap this. The networks build through and within higher education can be considered open and diverse. And they are exactly these kind of networks, that according to Lin are more advantageous when it comes to access non-presently possessed resources or extend the existing ones (Lin, 2001). The present study also highlighted the importance of self-concept in shaping educational aspirations. Previous research on general academic self-concept indicated that culture, gender, peer groups (Korhonen et al. 2016) or parental involvement with students’ education (expectations, concern) can affect their self-concept and subsequently their aspirations (Fraser & Garg, 2011). Further research upon Swedish students’ academic self-concept could be proved significant, as academic self-concept has proved to be positively associated with students’ academic achievements, interest and overall psychological well-being (Korhonen et al., 2016), as well as with their economic success and long-term health (Marsh et al., 2011). On the contrary poor self-concept has proved to be related with lack of motivation and behavioral problems (Payne, 2003). The further differentiation that this study did, between theoretical and aesthetic, identified high theoretical self-concept as most influential to students’ aspirations for higher education. In other words, the higher the level of theoretical self-concept is, the higher the chances for a student to aspire to study at university. By contrast, aesthetic self-concept was not found to be a statistically significant predictor of HE aspirations in this study. This finding itself raises questions for further research: what factors help to form theoretical and aesthetic self-concept? What is it about specifically having a high *theoretical* self-concept (irrespective of the level of one’s aesthetic self-concept) that would make students more likely to plan to attend HE? Could it be the types of subjects that make up these self-concepts and how valued they are in HE? Or if students with high aesthetic self-concept might be more likely to seek jobs that don’t require HE? Why is the opposite true for having a high aesthetic self-concept?

This research is important in that it has confirmed the significance of gender, parental nationality and parental education in relation to students’ aspirations for HE study. It has also established the significance of theoretical self-concept as a predictor of HE aspirations. A

more sophisticated method might be used to further examine the causal effects of self-concept and its antecedents, as well as model the interrelationships of the variables involved in the present study. Further analyses could also shed more light on the mechanisms that form the theoretical self-concept of students in Sweden and so be of significant value for policy makers, teachers and parents. On the other hand, the massification of higher education nowadays leads to the necessity of further research of students' social capital combined not only to general aspirations, but to specific fields of study, as these represent different and varying levels of status.

## Conclusion

The purpose of this study was to explore the HE aspirations of 9<sup>th</sup> grade students in Sweden and the various factors that influence these aspirations. The paramount importance that higher education can have in one's life has been proved in the "conceptual framework" section of the present thesis. With regards to the main research question, hypothesis 0 was rejected, as the variables used in the model can predict to an extent the educational aspirations of the students. The theoretical self-concept has been identified as the most important factor for HE aspirations, followed by gender, parental nationality and parental education. It is the theoretical self-concept which holds the most significant role to the decision in both cases whether or not study in university, as well as for the indecisive students. The role of the above-mentioned variables as predictors of HE aspirations have been acknowledged through the analysis conducted. Overall, the analysis also indicated that girls, students with parents with higher education, students with parents with nationality other than Swedish and students with high theoretical self-concept are more likely to aspire studying in university than boys, students whose parents have no higher education, students with Swedish parents and students with low theoretical self-concept. Social capital held by the students seems to influence their educational aspirations whether they are trying to maintain or expand their social capital, when it comes to parental education, or to enter stronger, more diverse social networks when it comes to gender and parental nationality and by having an influential and bidirectional relationship when it comes to academic self-concept.

Subsequently, it is very important for schools to implement policies that will develop programs and actions towards the optimization of school climate, where the academic, as well as the general, self-concept can be nurtured and altered. Moreover, schools can develop

programs, where the importance of the family will be highlighted and parents will be invited to involve themselves in several educational actions and advised to participate more in school life. The state can also take further action towards communicating the importance of higher education, the accessibility for all to information related to higher education's institution and the employment pathways that follow, as well as coaching students throughout the procedure of choice according to their personal interests and ambitions. Last but not least teachers can raise their expectations for underrepresented groups of students in higher education, promote students' self-concept and encourage them into this path.

The main contributions of the present study are on one hand that it has furnished impetus to further investigate HE aspirations with respect to students' background variables and personal characteristics. Furthermore, the difference in contribution that the two aspects of academic self-concept (theoretical and aesthetic) made upon HE aspirations of students, indicate on the one hand theoretical self-concept as the factor that has the biggest influence among all factors included in the test and on the other hand the lack of importance/influence in shaping students' HE aspirations that aesthetic self-concept has. Whereas previous research included only a general self-concept (Fraser & Garg, 2011; Korhonen et al., 2016; Nagy et al., 2006) or assumed a subject specific interaction with verbal self-concept (Marsh et al., 2006; Guo et al., 2015), the present study chose to adopt the theoretical/aesthetics self-concept division made by Reuteberg (Giota et al., 2006), which appeared to be a successful choice as the results indicated the different level of influence that these two have. Last but not least, this research acknowledges the big percentage in all groups of indecisive students. Although the risks of uncertainty concerning students' educational aspirations have been highlighted by Staff, Harris, Sabates and Briddell (2010), relatively little is as yet known concerning the antecedents that lead to uncertainty. This issue too needs further investigation, as the present study has highlighted.

## Limitations

Initially, the limitation that the present study came across is the fact that the data set used was not designed by the researcher for the specific purpose of this thesis, but it was obtained from ETF. Therefore, there are difficulties in interpreting a survey that the researcher hasn't designed herself, because "as is almost the case with secondary analysis, the items do not exactly match the current research purpose" (Atwood & Croll, 2011, p.278). Nevertheless, the



strength of the specific data set is its size and the quality, as it was designed by experienced researchers and as it happens with longitudinal surveys it is designed “beyond the scope of any individual study” (Atwood & Croll, 2011, p.286). The above mentioned limitation concerns mostly the parental nationality. Even though the specific questions that depict nationality have 7 possible answers in the questionnaire of ETF (0=Nordic except Swedish, 1= European except Nordic, 2=African, 3= North America, 4= South America, 5= Asian, 6= Oceanian, 7=Othercountry), the researcher was given access to a dichotomized variable (0=Swedish, 1=Not Swedish). Obviously, more information could be gained, if there was a further categorization of the background nationality. The present study furnished, as stated before, the lack of research in HE aspirations with respect to ethnic background in Sweden. Undoubtedly, it would be useful to further investigate this field. Another issue that has to be mentioned is the missing values on parental education that lead the researcher to create another category. In recent years, researchers have developed and begin to widely use advanced methods that could compensate for these values as maximum likelihood or multiple imputation, which would be more suitable in this specific case (Allisson, 2011). Future research could use more advanced techniques like factor analysis that would also increase the validity of the results thought this was beyond the scope of this master thesis.

## References

- Ahl, H. (2008). *The problematic relationship between social capital theory and gender research*.
- An overview of the Swedish educational system (Last reviewed 2017-01-13). In *Skolverket website online*. Retrieved from: <https://www.skolverket.se/om-skolverket/andra-sprak/in-english/the-swedish-education-system/an-overview-of-the-swedish-education-system-1.72184>
- Archer, L., & Hutchings, M. (2000). 'Bettering Yourself'? Discourses of risk, cost and benefit in ethnically diverse, young working-class non-participants' constructions of higher education. *British Journal of Sociology of Education*, 21(4), 555-574.
- Anne-Lise Arnesen, Elina Lahelma, & Elisabet Öhrn. (2008). Travelling discourses on gender and education – The case of boys underachievement. *Nordic Studies in Education*, (01), 1-14.
- Attwood, G., & Croll, P. (2011). Attitudes to school and intentions for educational participation: An analysis of data from the Longitudinal Survey of Young People in England. *International Journal of Research & Method in Education*, 34(3), 269-287.
- Bank, B. (2007). *Gender and education. Vol. 1 : An encyclopedia*. Westport, Conn.: Praeger.
- Becker, B., & Tuppat, J. (2013). Unequal Distribution of Educational Outcomes between Social Categories: 'Children at Risk' from a Sociological Perspective. *Child Indicators Research*, 6(4), 737-751.
- Berggren, C. (2011). Gender equality policies and higher education careers. *Journal of Education and Work*, 24(1-2), 141-161.
- Berggren, C. (2013). The influence of gender, social class and national background on education and work career? *Nordic Journal of Migration Research*, 3(3), 135-144.
- Bourdieu, P., & Passeron, J. C. (1977). *Reproduction in education, society and culture*. London: Sage Publications.
- Brown, S. D., & Lent, R. W. (Eds.). (2005). *Career development and counseling: Putting theory and research to work*. New York: Wiley
- Bygren, M. & Szulkin, R. (2010). Ethnic Environment During Childhood and the Educational Attainment of Immigrant Children in Sweden. *Social Forces*, 88(3), 1305-1329.
- Bynner, J. (2001). British Youth Transitions in Comparative Perspective. *Journal of Youth Studies*, 4(1), 5-23.
- Byrne, B., Shavelson, R., & Calfee, Robert C. (1986). On the Structure of Adolescent Self-Concept. *Journal of Educational Psychology*, 78(6), 474-481.
- Byrne, B., Shavelson, R., & Geen, Russell. (1996). On the Structure of Social Self-Concept for Pre-, Early, and Late Adolescents: A Test of the Shavelson, Hubner, and Stanton (1976) Model. *Journal of Personality and Social Psychology*, 70(3), 599-613.
- Campbell, D. T. Education's Impact on Civic and Social Engagement. In *Measuring the Effects of Education on Health and Civic/Social Engagement*, edited by R. Desjardins and T. Schuller. Paris: OECD Centre for Educational Research and Innovation, 2006, 25-126.
- Ciol, Marcia A., Hoffman, Jeanne M., Dudgeon, Brian J., Shumway-Cook, Anne, Yorkston, Kathryn M., & Chan, Leighton. (2006). Understanding the Use of Weights in the Analysis of Data From Multistage Surveys. *Archives of Physical Medicine and Rehabilitation*, 87(2), 299.

- Collinge, J. (1992). Education in Sweden: Some Recent Developments in Comparison with New Zealand Education in 1992. *New Zealand Annual Review of Education*, 2, 303-320.
- Croll, P. (2009). Educational Participation Post-16: A longitudinal analysis of intentions and outcomes. *British Journal of Educational Studies*, 57(4), 400-416.
- De Vaus, D. (2014). *Surveys in social research* (6.th ed., Social research today). London: Routledge.
- Dreby, J., & Stutz, L. (2012). Making something of the sacrifice: Gender, migration and Mexican children's educational aspirations. *Global Networks*, 12(1), 71-90.
- Drew. (2007). *Designing and Conducting Research in Education*. Sage Publications.
- Dupriez, V., Monseur, C., Van Campenhoudt, M., & Lafontaine, D. (2012). Social Inequalities of Post-Secondary Educational Aspirations: Influence of Social Background, School Composition and Institutional Context. *European Educational Research Journal*, 11(4), 504-519.
- Elgqvist-Saltzman, I. (1992). Straight Roads and Winding Tracks: Swedish educational policy from a gender equality perspective. *Gender and Education*, 4(1-2), 41-56.
- European Commission (2016), *Council Recommendation on the 2016 national reform programme of Sweden and delivering a Council opinion on the 2016 convergence programme of Sweden*, Retrieved from: <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016DC0347&from=EN>
- European Commission (2010), *Europe 2020 Strategy*, Retrieved from : [https://ec.europa.eu/info/strategy/european-semester/framework/europe-2020-strategy\\_en](https://ec.europa.eu/info/strategy/european-semester/framework/europe-2020-strategy_en)
- European Union (2012), *Charter of Fundamental Rights of the European Union*, Retrieved from: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012P/TXT&from=EN>
- Fägerlind, I., & Strömquist, G. (2004) Higher education reform in the global context - What ever happened to the Nordic model?. In I. Fägerlind & G. Strömquist (Eds.). *Reforming higher education in the Nordic countries - studies of change in Denmark, Finland, Iceland, Norway and Sweden*. International Institute for Educational Planning, UNESCO. Retrieved from <http://unesdoc.unesco.org/images/0013/001390/139015e.pdf>
- Feinstein, L., et al. (2006), *What are the Effects of Education on Health?* OECD- CERI Proceedings from the Copenhagen Symposium, Paris, France, OECD.
- Field, A. (2009). *Discovering statistics using SPSS : (and sex and drugs and rock 'n' roll)* (3.rd ed., ISM (London, England)). Los Angeles ; London: SAGE.
- Fraser, & Garg, Mark, Rashmi. (2011). Educational Aspirations. 807-812.
- Fuller, C. (2009). *Sociology, gender and educational aspirations : Girls and their ambitions* (1st ed.). London ; New York: Continuum International Pub. Group.
- Garson, G. D. (2015). *Missing Values Analysis and Data Imputation*. Asheboro, NC: Statistical Associates Publishers.
- Gil-Flores, J., Padilla-Carmona, M., & Suárez-Ortega, M. (2011). Influence of gender, educational attainment and family environment on the educational aspirations of secondary school students. *Educational Review*, 63(3), 345-363.
- Giota, J. (2006) The Swedish ETF project - A longitudinal study on children's and adolescents' educational pathways, [http://www.ips.gu.se/digitalAssets/824/824604\\_Dokument\\_UGU\\_kohorter.pdf](http://www.ips.gu.se/digitalAssets/824/824604_Dokument_UGU_kohorter.pdf)
- Giota, J., Cliffordson, C., Nielsen, B. & Berndtsson, Å. (2008). *Insamling Av Enkätuppgifter I Grundskolans årskurs 9 Våren 2008 För UGU-projektets åttonde Kohort (födda 1992)*.

- Giota, J., Svensson, A., Stahl, P., & Reuterberg, S. (1996). *UGU-projektets datainsamling i årskurs 6 våren 1995* (Rapport / Institutionen för pedagogik, Göteborgs universitet, 1996:18). Mölndal: Institutionen för pedagogik, Göteborgs universitet.
- Giota, J., Lundborg, O., & Emanuelsson, I. (2009). Special Education in Comprehensive Schools: Extent, Forms and Effects. *Scandinavian Journal of Educational Research*, 53(6), 557-578
- Gottfredson, L., & Osipow, Samuel H. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28(6), 545-579.
- Groot, W. & Brink, H.M. (2006), –What Does Education do to our Health? in *Measuring the Effects of Education on Health and Civic Engagement: Proceedings of the Copenhagen Symposium*, OECD: Paris.  
Retrieved from: <http://www.oecd.org/dataoecd/15/17/37425763.pdf>
- Grönqvist, H. (2006). Ethnic Enclaves and the Attainments of Immigrant Children. *European Sociological Review*, 22(4), 369-382.
- Guo, Marsh, Parker, Morin, & Yeung. (2015). Expectancy-value in mathematics, gender and socioeconomic background as predictors of achievement and aspirations: A multi-cohort study. *Learning and Individual Differences*, 37, 161-168.
- Gutman, L., Schoon, I., Sabates, R., & Eccles, Jacquelynne. (2012). Uncertain Aspirations for Continuing in Education: Antecedents and Associated Outcomes. *Developmental Psychology*, 48(6), 1707-1718.
- Haley, A. (2016). Through a social space lens – Interpreting migration of the tertiary educated. *European Educational Research Journal*, 15(4), 480-490.
- Haller, A. (1968). On the Concept of Aspiration. *Rural Sociology*, 33(4), 484-487.
- Haller, A., Otto, L., Meier, R., & Ohlendorf, G. (1974). Level of Occupational Aspiration: An Empirical Analysis. *American Sociological Review*, 39(1), 113-121.
- Härnqvist, K. (2000). *Evaluation through follow-up : A longitudinal program for studying education and career development*.
- Holmberg, Daniel, & Hallonsten, Olof. (2013). Analyzing structural stratification in the Swedish higher education system: Data contextualization with policy-history analysis. *Journal of the American Society for Information Science and Technology*, 64(3), 574-586
- Huang, C., Laing, D., & Wang, P. (2004). Crime and Poverty: A Search-Theoretic Approach *International Economic Review*, 45(3), 909-938.
- Hudson, C. (2006). Regional Development Partnerships in Sweden: A Way for Higher Education Institutions to Develop their Role in the Processes of Regional Governance? *Higher Education*, 51(3), 387-410.
- Hyde, J., & Anderson, Norman B. (2005). The Gender Similarities Hypothesis. *American Psychologist*, 60(6), 581-592.
- Isaac, P., Malaney, D., & Karras, G. (1992). Parental educational level, gender differences, and seniors' aspirations for advanced study. *Research in Higher Education*, 33(5), 595-606.
- John F Helliwell, & Robert D Putnam. (2007). Education and Social Capital. *Eastern Economic Journal*, 33(1), 1-19.
- Khattab, N. (2015). Students' aspirations, expectations and school achievement: What really matters? *British Educational Research Journal*, 41(5), 731-748.

- Kogan, M., Bauer, M., Bleiklie, I., Henkel, M., & SpringerLink. (2006). *Transforming Higher Education A Comparative Study (2nd edition)* (Higher Education Dynamics, 13). Dordrecht: Springer.
- Korhonen, Tapola, Linnanmäki, & Aunio. (2016). Gendered pathways to educational aspirations: The role of academic self-concept, school burnout, achievement and interest in mathematics and reading. *Learning and Instruction, 46*, 21-33.
- Levisohn, J. (2013). Rethinking the Education of Cultural Minorities to and from Assimilation: A Perspective from Jewish Education. *Diaspora, Indigenous, and Minority Education, 7*(1), 54-68.
- Lewin, K. (1939). Field Theory and Experiment in Social Psychology: Concepts and Methods. *American Journal of Sociology, 44*(6), 868-896.
- Lin, N. (2000). Inequality in Social Capital. *Contemporary Sociology, 29*(6), 785-795.
- Lin, N. (2001). *Social capital: A theory of social structure and action* (First paperback edition 2002 ed., Structural analysis in the social sciences, 19). Cambridge; New York: Cambridge University Press.
- Ljungberg, Daniel, & McKelvey, Maureen. (2015). Collaboration between universities in Sweden. In (p. Mergers and Alliances in Higher Education: International Practice and Emerging Opportunities).
- Lochner, L., & Moretti, E. (2004). The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports. *American Economic Review, 94*(1), 155-189.
- Luyten, H., Cremers-Van Wees, L., & Bosker, R. (2003). The Matthew Effect in Dutch Primary Education: Differences between schools, cohorts and pupils. *Research Papers in Education, 18*(2), 167-195.
- Magee, Robb, & Burbidge. (1998). On the use of sampling weights when estimating regression models with survey data. *Journal of Econometrics, 84*(2), 251-271.
- Mossayeb S. and Shirazi R., "Education and Emigration: The case of the Iranian American community", *Current Issues in Comparative Education, 9*:1, 2006.
- Mosselson, J. R. (2002). *Roots and routes: Re -imagining the identity constructions of bosnian adolescent female refugees in the united states* (Order No. 3048196). Available from ProQuest Dissertations & Theses Global. (304801838). Retrieved from <https://search-proquest-com.ezproxy.ub.gu.se/docview/304801838?accountid=11162>
- Muijs, Daniel, Dr. Doing Quantitative Research in Education, edited by Daniel, Dr Muijs, SAGE Publications, 2004. ProQuest Ebook Central, Retrieved from: <http://ebookcentral.proquest.com.ezproxy.ub.gu.se/lib/gu/detail.action?docID=254602>
- Mushquash, C., & O'Connor, B. (2006). SPSS and SAS programs for generalizability theory analyses. *Behavior Research Methods, 38*(3), 542-7.
- Nagy, G., Trautwein, U., Baumert, J., Köller, O., & Garrett, J. (2006). Gender and course selection in upper secondary education: Effects of academic self-concept and intrinsic value. *Educational Research and Evaluation, 12*(4), 323-345.
- Numhauser-Henning A., European Parliament (2015), *The Policy on Gender Equality in Sweden*, Retrieved from: <http://www.europarl.europa.eu/studies>
- Obermeier, V., & Schneider, T. (2015). Educational choice and risk preferences: How important is relative vs. individual risk preference? *Journal for Educational Research Online, 7*(2), 99-128.
- Odell, K. (1989). Gender Differences in the Educational and Occupational Expectations of Rural Ohio Youth. *Research in Rural Education, 5*(3), 37.

- OECD (2011), *Meeting of the OECD Council at Ministerial Level Paris*, Retrieved from: <https://www.oecd.org/education/48111145.pdf>
- Osborne, M. (2003). Increasing or Widening Participation in Higher Education? — a European overview. *European Journal of Education*,38(1), 5-24.
- Öhrn, E., Asp-Onsjö, L., & Holm, A. (2017). *Discourses on gender and achievement in lower secondary education*.
- Payne, J. (2003). Choice at the end of compulsory schooling: A research review. Department for Education and Skills, Research Report No 414.
- Perry, B., Martinez, E., Morris, E., Link, T., & Leukefeld, C. (2016). Misalignment of Career and Educational Aspirations in Middle School: Differences across Race, Ethnicity, and Socioeconomic Status. *Social Sciences*,5(3), 35.
- Qin, D., & Suarez-Orozco, Marcelo M. (2004). *Dragons and Phoenixes in the New Land: The Role of Gender in the Adaptation of Immigrant Chinese Children*, ProQuest Dissertations and Theses.
- Reynolds, John R., & Pemberton, Jennifer. (2001). Rising college expectations among youth in the United States: A comparison of the 1979 and 1997 NLSY.(Special Issue on Early Results from the National Longitudinal Survey of Youth, 1997 Cohort)(Statistical Data Included). *Journal of Human Resources*,36(4), 703.
- Ridgeway, C. (2009). FRAMED BEFORE WE KNOW IT: How Gender Shapes Social Relations. *Gender and Society*,23(2), 145-160.
- Ridgeway, Cecilia L., & Correll, Shelley J. (2004). Unpacking the gender system: A theoretical perspective on gender beliefs and social relations.(Author Abstract). *Gender & Society*,18(4), 510.
- Schoon, & Parsons. (2002). Teenage Aspirations for Future Careers and Occupational Outcomes. *Journal of Vocational Behavior*,60(2), 262-288.
- Shavelson, R., Hubner, J., & Stanton, G. (1976). Self-Concept: Validation of Construct Interpretations. *Review of Educational Research*, 46(3), 407-441.
- Sirin, S., Diemer, M., Jackson, L., Gonsalves, L., & Howell, A. (2004). Future aspirations of urban adolescents: A person-in-context model. *International Journal of Qualitative Studies in Education*,17(3), 437-456.
- Skollag 2010:800 (2010), *Svensk författningssamling*, Retrieved from: <http://rkrattsdb.gov.se/SFSdoc/10/100800.PDF>
- Smith, S. (2000). Mobilizing Social Resources: Race, Ethnic, and Gender Differences in Social Capital and Persisting Wage Inequalities. *The Sociological Quarterly*, 41(4), 509-537.
- Spohrer, K. (2011). Deconstructing 'Aspiration': UK policy debates and European policy trends. *European Educational Research Journal*,10(1), 53-63.
- Stacey, N. (1998). Social Benefits of Education. *The Annals of the American Academy of Political and Social Science*,559, 54-63. Retrieved from: <http://www.jstor.org.ezproxy.ub.gu.se/stable/1049606>
- Staff, J., Harris, A., Sabates, R., & Briddell, L. (2010). Uncertainty in Early Occupational Aspirations: Role Exploration or Aimlessness? *Social Forces*, 89(2), 659-683.
- Stage, C., & Ögren, G. (2001). *Högskoleprovets utveckling under åren 1977-2000 : Provets sammansättning och provdeltagargruppens sammansättning och resultat (PM : pedagogiska mätningar, 169)*. Umeå: Enheten för pedagogiska mätningar, Umeå universitet.

- Statistiska centralbyrån (2016), *Summary of Population Statistics 1960–2016*, Retrieved from: <http://www.scb.se/en/finding-statistics/statistics-by-subject-area/population/population-composition/population-statistics/pong/tables-and-graphs/yearly-statistics--the-whole-country/summary-of-population-statistics/>
- Statistiska centralbyrån (2010), *Level of parental education among university entrants 2009/10 and first time students at third circle studies 2008/09*, Retrieved from: [http://www.scb.se/en\\_/Finding-statistics/Statistics-by-subject-area/Education-and-research/Higher-education/Students-and-graduate-students-at-first-and-second-cycle-studies/Aktuell-Pong/74416/Behallare-for-Press/Level-of-parental-education-among-university-entrants-200910-and-first-time-students-at-third-circle-studies-200809/](http://www.scb.se/en_/Finding-statistics/Statistics-by-subject-area/Education-and-research/Higher-education/Students-and-graduate-students-at-first-and-second-cycle-studies/Aktuell-Pong/74416/Behallare-for-Press/Level-of-parental-education-among-university-entrants-200910-and-first-time-students-at-third-circle-studies-200809/)
- Stocké, V., Blossfeld, H., Hoenig, K., & Sixt, M. (2011). 7 Social inequality and educational decisions in the life course. *Zeitschrift Für Erziehungswissenschaft*, 14(Supplement 2), 103-119.
- St-Hilaire, Aonghas. (2002). The social adaptation of children of Mexican immigrants: Educational aspirations beyond junior high school \*. *Social Science Quarterly*, 83(4), 1026.
- Sveriges Riksdag (2008), *Diskrimineringslag*, Retrieved from: [http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/diskrimineringslag-2008567\\_sfs-2008-567](http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/diskrimineringslag-2008567_sfs-2008-567)
- Teknisk Rapport SCB, 2005-08-26, University of Gothenburg, Retrieved from: [http://www4.gu.se/compeat/FUR/UGU/Rapporter/2005\\_Teknisk\\_rapport\\_Elevak6\\_92\\_SCB.pdf](http://www4.gu.se/compeat/FUR/UGU/Rapporter/2005_Teknisk_rapport_Elevak6_92_SCB.pdf)
- The History of The Cohort-sequential longitudinal databases Evaluation through follow-up ETF, University of Gothenburg. Retrieved from: [http://ips.gu.se/digitalAssets/824/824605\\_Dokument\\_UGUx.pdf](http://ips.gu.se/digitalAssets/824/824605_Dokument_UGUx.pdf)
- Thomason, J., & Kuperminc, G. (2014). Cool Girls, Inc. and Self-Concept. *The Journal of Early Adolescence*, 34(6), 816-836.
- Tremblay, K, Lalancette, D & Roseveare, D (2012), *Assessment of Higher Education Learning Outcomes feasibility study report: volume 1 - design and implementation*, Assessment of Higher Education Learning Outcomes, OECD, Paris, viewed 12 Apr 2017, Retrieved from: <http://www.oecd.org/edu/highereducationandadultlearning/AHELOFSReportVolume1.pdf>
- Unesco (2012), *World Atlas of Gender Equality in Education*, Retrieved from: <http://uis.unesco.org/sites/default/files/documents/world-atlas-of-gender-equality-in-education-2012-en.pdf>
- Weiss, F., & Steininger, H. (2013). Educational family background and the realisation of educational career intentions: Participation of German upper secondary graduates in higher education over time. *Higher Education*, 66(2), 189-202.

## Appendix A

Students' questionnaire in grade 9, Educational aspirations, Value labels (Swedish/English translation)

- 24** Tänker du börja läsa på universitet och högskola?  Ja  
 Jag har inte bestämt mig än  
 Nej

Value labels for Cohort 1992,

Question 24 Are you considering studying at university?

### value description

- 1 Yes
- 2 I have not made a decision yet
- 3 No. I am not interested in studying at university because:



## Appendix B

Parent questionnaire in grade 6, Parental education, Value labels (Swedish/English translation)

<b>2 Vilken är föräldrarnas högsta utbildning?</b>	<b>Mamma</b>	<b>Pappa</b>
Förgymnasial utbildning 9 år eller kortare	<input type="checkbox"/>	<input type="checkbox"/>
Gymnasial utbildning	<input type="checkbox"/>	<input type="checkbox"/>
Eftergymnasial utbildning mindre än 3 år	<input type="checkbox"/>	<input type="checkbox"/>
Eftergymnasial utbildning 3 år eller mer	<input type="checkbox"/>	<input type="checkbox"/>
Annan utbildning	<input type="checkbox"/>	<input type="checkbox"/>

What is the parent's highest level of educational attainment?

- Mother

- Father

### **value description**

- 1 Secondary school education 9 years or less
- 2 Upper secondary education
- 3 Post-upper secondary education, less than 3 years
- 4 Post-upper secondary education, 3 years or more
- 5 Other education

## Appendix C

Background characteristics in grade 3, Father's nationality,

Nationalitet grupperad fader

### **värde beskrivning**

- 0 Norden utom Sverige
- 1 Europa utom Norden
- 2 Afrika
- 3 Nordamerika
- 4 Sydamerika
- 5 Asien
- 6 Oceanien
- 7 Andra länder

## Appendix D

Background characteristics in grade 3, Mother's nationality

Nationalitet grupperad moder

### **värde beskrivning**

- 0 Norden utom Sverige
- 1 Europa utom Norden
- 2 Afrika
- 3 Nordamerika
- 4 Sydamerika
- 5 Asien
- 6 Oceanien
- 7 Andra länder

## Appendix E

Questionnaire grade 9, question 3, Self-perception of competence, Value labels  
(Swedish/English translation)

### 3 Hur bra tycker du att du är i följande ämnen?

	Mycket bra	Ganska bra	Varken bra eller dålig	Ganska dålig	Mycket dålig
a) Svenska	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Engelska	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Matematik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Samhällsorienterande ämnen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Naturorienterande ämnen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Idrott och hälsa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Bild	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Musik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Slöjd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Value labels for Cohort 1992,**

### **Question 3 How good do you think you are in the following subjects?**

- Swedish

- English

- Maths

- Social science subjects

- Science subjects

- Sport and physical education

- Art

- Music

- Handicraft

#### value description

- 1 Very good
- 2 Quite good
- 3 Either good or poor
- 4 Quite poor
- 5 Very poor



## Appendix F

Contingency table showing how many male and female students aspire to study, not study to university or have not made a decision yet (unweighted)

	Male	Female	Total
Plans for HE	1110	1761	2871
% Within Are you considering studying at university	38.7%	61.3%	100%
% Within Gender	41.5%	58.6%	50.6%
% of Total	19.5%	31.0%	50.6%
Indecisive	1085	1053	2138
% Within Are you considering studying at university	50.7%	49.3%	100%
% Within Gender	40.6%	35.0%	37.7%
% of Total	19.1%	18.5%	37.7%
No plans for HE	478	191	669
% Within Are you considering studying at university	71.4%	28.6%	100%
% Within Gender	17.9%	6.4%	11.8%
% of Total	8.4%	3.4%	11.8%
Total	2673	3005	5678

( $\chi^2 = 252.667$ ,  $df = 2$ ,  $p < .001$ )

## Appendix G

Contingency table showing how many students with parents with tertiary education or not are planning studying in university or planning not to or have not made a decision yet (unweighted).

	Parent(s) with no tertiary education	Parent(s) with tertiary education	No answer	Total
Plans for HE	1230	1332	309	2871
% within Are you considering study at university	42.8%	46.4%	10.8%	100%
% Within ParEduc	41.9%	64.9%	44.7%	50.6%
% of Total	21.7%	23.5%	5.4%	50.6%
Indecisive	1233	614	291	2138
% within Are you considering study at university	57.7%	28.7%	13.6%	100%
% Within ParEduc	42.0%	29.9%	42.1%	37.7%
% of Total	21.7%	10.8%	5.1%	37.7%
No plans for HE	473	105	91	669
% within Are you considering study at university	70.7%	15.7%	13.6%	100%
% Within ParEduc	16.1%	5.1%	13.2%	11.8%
% of Total	8.3%	1.8%	1.6%	11.8%
Total	2936	2051	691	5678

( $\chi^2 = 308,070$  df = 4,  $p < .001$ ).





## Appendix H

Table: Contingency table showing how many students with Swedish parents with or non Swedish are planning studying in university or planning not to or have not made a decision yet (unweighted).

	Swedish	Non Swedish	Total
Plans for HE	2205	666	2871
% within Are you considering study at university	76.8%	23.2%	100%
% Within parental nationality	47.9%	62.1%	50.6%
% of Total	38.8%	11.7%	50.6%
Indecisive	1817	321	2138
% within Are you considering study at university	85.0%	15.0%	100%
% Within parental nationality	39.5%	29.9%	37.7%
% of Total	32.0%	5.7%	37.7%
No plans for HE	583	86	669
% within Are you considering study at university	87.1%	12.9%	100%
% Within parental nationality	12.7%	8.0%	11.8%
% of Total	10.3%	1.5%	11.8%
Total	4605	1073	5678

( $\chi^2 = 71.612$ ,  $df = 2$ ,  $p < .001$ ).



## Appendix I

Table: Contingency table showing the educational aspirations of students in relation with the level of theoretical self-concept (unweighted)

	Low self-concept	Moderate self- concept	High self-concept	Total
Plans for HE	548	1200	1123	2871
% within Are you considering study at university	19.1%	41.8%	39.1%	100%
% within theoretical self- concept	28.8%	53.0%	74.2%	50.6%
% of Total	9.7%	21.1%	19.8%	50.6%
Indecisive	941	865	332	2138
% within Are you considering study at university	44.0%	40.5%	15.5%	100%
% within theoretical self- concept	49.5%	38.2%	21.9%	37.7%
% of Total	16.6%	15.2%	5.8%	37.7%
No plans for HE	411	199	59	669
% within Are you considering study at university	61.4%	29.7%	8.8%	100%
% within theoretical self- concept	21.6%	8.8%	3.9%	11.8%
% of Total	7.2%	3.5%	1.0%	11.8%
Total	1900	2264	1514	5678

( $\chi^2 = 771,156$ ,  $df = 4$ ,  $p < .001$ )



## Appendix J

Table: Contingency table showing the educational aspirations of students in relation with the level of aesthetic self-concept (unweighted)

	Low self-concept	Moderate self-concept	High self-concept	Total
Plans for HE	708	1055	1108	2871
% within Are you considering study at university	24.7%	36.7%	38.6%	100.0%
% within aesthetic self-concept	45.6%	50.9%	54.0%	50.6%
% of Total	12.5%	18.6%	19.5%	50.6%
Indecisive	632	769	737	2138
% within Are you considering study at university	29.6%	36.0%	34.5%	100.0%
% within aesthetic self-concept	40.7%	37.1%	35.9%	37.7%
% of Total	11.1%	13.5%	13.0%	37.7%
No plans for HE	213	250	206	669
% within Are you considering study at university	31.8%	37.4%	30.8%	100.0%
% within aesthetic self-concept	13.7%	12.1%	10.0%	11.8%
% of Total	3.8%	4.4%	3.6%	11.8%
Total	1553	2074	2051	5678