

Master's thesis
Where do upper secondary school students come from?
Case: Oulu region

Elina Aikivuori
0337715
Faculty of Education
Department of General Education
Attending Professor: Kyösti Kurtakko
Master's Seminar 2014-2015

University of Lapland, Faculty of Education

Title: Where do upper secondary school students come from? Case: Oulu region

Author: Elina Aikivuori

Type of thesis: Master thesis

Page count: 85

Year: 2015

Abstract

The main goal of this study was to clarify the basic economic and social background of high school student in Oulu region. The idea to conduct this study came from the article *Maailman osaavin kansa 2020* (Kivinen, Hedman & Kaipainen, 2013). The data was collected from upper secondary school students with an online research survey. The main research method was quantitative data analysis, and the main unit of this analysis consisted of numeric and written answers in the study.

The main finding was that students come from differing backgrounds and represent different social and economical dimensions in society. The “average” student background, if one could be constructed, would be a middle-income, secular-christian, academically educated family – although other groups were represented too.

The vast majority of the students in the sample were aiming for a graduate-level university degree in their studies, roughly the same number of students aiming for a post-graduate level degree and a university of applied sciences degree.

Various factors predicting the academic plans of students were analyzed by statistical means. A relationship, albeit a weak one, was found between the level of a guardian's education and a student's educational goals. No relationships were found between a student's educational plans and the gender of a student, the marital status of a student's guardians, or the guardians' income levels.

Table of Contents

Abstract.....	2
1 Introduction.....	4
1.1 Education in Finland.....	5
1.2 Socioeconomic backgrounds of Finnish students.....	5
1.3 Previous research.....	6
2 Ethical aspects.....	10
3 Research implementation.....	11
3.1 The research task.....	11
3.2 The methodological choices in this research.....	12
3.3 Data collection.....	12
3.4 Data analysis.....	13
3.5 Representability of the sample.....	14
3.6 The reliability and validity of the study.....	15
4 Results of the research.....	18
4.1 Basic background information regarding the upper secondary school students in the Oulu region.....	18
4.2 Description of the guardians of upper secondary school students.....	20
4.3 Marital status of guardians.....	22
4.4 Educational backgrounds of guardians.....	23
4.5 Religious beliefs of guardians.....	24
4.6 Economical background and working life in the families of upper secondary school students.....	26
4.7 Goals of the upper secondary school students.....	30
4.8 Correlational analysis.....	34
4.8.1 The relationship between the education of a guardian and the educational plans of a student.....	34
4.8.2 The relationship between the marital status of guardians and the educational plans of a student.....	37
4.8.3 The relationship between the income of a guardian and the educational plans of a student.....	39
4.8.4 The relationship between the gender and educational plans of a student.....	43
5 Evaluation and conclusion.....	44
5.1 Summary of the research questions.....	44
5.2 Conclusions.....	46
5.3 Discussion.....	46
5.4 Limitations and future ideas.....	47
5.5 Final words.....	48
References.....	49
Appendix A: The questionnaire (original Finnish version).....	53
Appendix B: The questionnaire (English translation).....	57
Appendix C: Results of the questionnaire.....	61

1 Introduction

In the media, Finland is often seen as a country where everyone has a fair chance to succeed in life. Education is pretty much free of charge and social background has little to do with one's chance of success in society. The reality can be different. There are many presumptions and uncertain claims that have little scientific basis behind them.

One of these aspects in education that we are not so well aware of is the background of the students of Finland. It is claimed that there are 309 000 students in Finland whose family backgrounds haven't been scientifically widely studied (Kivinen, Hedman & Kaipainen, 2013).

When looking at the positive impact that education can bring in a nation wide area, one can easily think of a competition that takes place in an economical viewpoint as well. For instance the overall competence that higher education can bring into a working life can be seen as a competitive advantage between countries. When viewed from a larger viewpoint, small countries like Finland can participate, and metaphorically speaking keep their head above the water line, by putting resources into their people. Education is one of those factors that can boost the overall success of countries like Finland. (Schleicher, p. 4, 2006)

Yet education is not to be evaluated simply as a part of an economical need or advantage. United Nations views education also a basic human right (United Nations, n.d.). It is part of being a human to learn and to educate oneself.

1.1 Education in Finland

In Finland, education can be seen as a nation wide project where the ultimate purpose is to get a certain age group as a whole to attend a formal education that is provided by governmental institutions. By doing so, it is devised that each of these age groups achieves a certain level of basic knowledge and skills by attending in schooling (Opetushallitus, 2004, p. 9). This has been as a goal from at least the 1960s when the primal form of elementary school was formed. The whole concept of schooling and education in general has been evolving ever since and the project is still ongoing.

Basic education eventually leads to optional higher education, usually upper secondary school or vocational school. In 2012, roughly 36 000 new students entered upper secondary school education (Statistics Finland, 2013). Upper secondary school education is often followed by university or polytechnic education.

1.2 Socioeconomic backgrounds of Finnish students

From a socioeconomical point of view, it is relatively unclear where Finnish university or polytechnic students come from. As Kivinen, Hedman & Kaipainen (2013) point out, at the time the study was published, no known studies had been made about the family backgrounds of the Finnish university or polytechnic students. Later studies, such as that by Mikkonen (2013), have worked on the issue, but still the situation is quite different in other western countries. For instance, Schnabel et al. (2002, p. 178-179) studied the socioeconomic backgrounds of German and U.S. upper secondary school students, and found out that family background is a predictor in students' career decisions but not in the way the students learn, and that socioeconomic influences are more pronounced in Germany than in the U.S.

Since the typical way to Finnish university (and polytechnic, to some extent) studies is through upper secondary school education, a study of the backgrounds of upper secondary school students seems like a good starting point to understand them, and a

valuable topic of research on its own. To see if studies about the topic already existed, Statistics Finland was contacted and various academic databases (including Juolukka and EBSCO) searched, but nothing was found. Hence, a new study seemed to be in order.

Because the subject of the study affects many people – there are 309 000 university and polytechnic students in Finland (Kivinen, Hedman & Kaipainen, 2013) – but is not widely studied, a statistical approach could be useful in understanding the topic. Hence, it was decided to collect data from the upper secondary school students in a way that can be statistically analyzed (a survey) and to conduct an analysis on the collected data.

1.3 Previous research

As indicated previously (see Kivinen, Hedman & Kaipainen, 2013), the backgrounds of Finnish students is not a widely studied subject. A notable exception is the study by Mikkonen (2013) that analyzes the socio-economic backgrounds of Finnish university students in 2010 and compares them to the situation in 1990.

Various authors have also analyzed the effect of a student's background on his or her academic career, and various studies have been conducted on the subject. From a theoretical perspective, Coleman (1988) distinguishes the three components of family background when analyzing the factors of a student's academic achievements: financial capital, human capital, and social capital. In this context, financial capital means the economic status (wealth) of a family and human capital the level of education of a student's guardians. For social capital, Coleman doesn't offer a straightforward definition but instead defines it by its function: "a variety of entities with two elements in common: They all consist of some aspect of social structures, and they facilitate certain action of actors—whether persons or corporate actors—within the structure" (Coleman, 1988; Portes, 1998), providing a couple of examples of it in practice and identifying the three forms of social capital: obligations, expectations and trustworthiness of structures; information channels; and norms and effective sanctions

(Coleman, 1988). In the context of a student's family background, a simplified definition for social capital could be considered to be the willingness of the guardians to help and support the student on his or her academic path, and the expectations the guardians place on the student.

The distinction of human capital from social capital is an important one, and Coleman (1988) postulates that the latter is a more important factor on the student's academic performance: Even if the guardians are highly educated, it is of little help for the student unless the guardians are present and supportive in his or her life. Supporting this postulate are the studies of Hoffer (1986) and Coleman and Hoffer (1987), both as cited by Coleman (1988), where a correlation was found between several factors indicating a lack of social capital, and an increased upper secondary school dropout rate. Among these factors were whether the student has one or two parents, additional siblings (higher number of parents or siblings indicating higher social capital), and whether the mother of the student expected them to pursue college level education.

Apart from Coleman (1988), social capital has been analyzed by various other authors, with pioneers of the concept including Loury (1977) and Bourdieu (1986) (Portes, 1998). Loury (1977) proposes that the term be used to "represent the consequences of social position in facilitating acquisition of the standard human capital characteristics", but doesn't go on to develop the concept any further (Portes, 1998). Bourdieu (1986) provides a definition more straightforward than that of Coleman (1988), of social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition", with his other work going on to explore the concept even further (Portes, 1998).

Coleman (1988), Loury (1977) and Bourdieu (1986) all agree that social capital can be both inherited (i.e. a child gains some of his or her parents' social capital, such as social status) and transformed to other forms of capital, such as human capital and financial capital. This makes social capital an especially interesting part of students' background information for this study, and for later studies with different samples of population:

Does social capital (e.g. parents' support and expectations) play a larger role than human capital (e.g. the parents' education) in the selection and future plans of upper secondary schools? How does the level of social capital in the families of upper secondary school students compare to that of other samples, or of the general population?

Considering other research on the subject, Burt (1992, 2000) distinguishes social capital from other forms of capital by the way it's not owned by a single person, but instead shared between relationships, and places emphasis on focusing on this network structure of social capital when studying the concept. Putnam (1993, 1995), on the other hand, places importance on social capital in the well-functioning of a region, and argues that many social problems in America are caused by the decrease of social capital during the past 50 years (at the time of the study). An in-depth comparison of the ideas of social capital between Putnam and Bourdieu is provided by Siisiäinen (2000). Other reviews on the subject matter include Portes (1998), who compares the work of Coleman, Bourdieu and Loury and provides an overall view of the concept, and Ruuskanen (2001), who aims to clarify the concepts and different trends of social capital.

From a more empirical point of view, the inheritance of social and educational capital was studied by Kärkkäinen (2004) in a longitudinal study of two Finnish primary school classes, with the students being 14–15 years of age at the start of the study and 34–35 years at the end of the study. The aim of the study was to analyze the factors that predict an individual's ability to cope in life, and to study the applicability of previous theories, such as those by Bourdieu and Coleman, in an empirical setting. A significant finding of the study was that the education of a mother predicted the future education of a child, supporting the hypothesis that social capital is inherited through educational goals put forth by parents for their children. The study also found that all the children who coped well in life as adults had good relationships with both their parents, and that the least well-coping children had bad relationships with their parent of the same sex.

Continuing on the subject of the inheritance of education, Kauppinen (2007) states that the higher a parent's education is, the higher chance there is for a child to finish upper secondary school rather than vocational school. He also points out other factors in

family background that have a similar (albeit usually weaker) positive correlation, such as the net income in the household. Kuusela (2003) points out that a parent's educational background directly correlates with their children's scores in abitur examinations. This gives us some incentive to study the effect of a student's socioeconomic background on their success on their academic path. Still, Kuusela's study focused primarily on the grades of the students, leaving other aspects with little attention. The purpose of this study is to extend the focus to other aspects, such as the academic goals and placement of students.

2 Ethical aspects

In Finland, political thinking in education has been long driven by the idea that the same kind of education must be available for everyone regardless of socioeconomic background (Virtanen, 2002). One of the ideas behind the study is to see how this idea works in practice in the upper secondary school setting, for an instance, whether some groups are over or underrepresented. By this very nature, the study deals with a sensitive topic to begin with. Equality between humans is a difficult subject, and care has to be taken not to segregate any group and not to put any group on a pedestal.

The study also deals with questions of a sensitive sort. For an instance, it's often consider a taboo in Finland to discuss levels of income, which is however one of the more interesting aspects of socioeconomic backgrounds and as such something that has to be taken into account in the study. Special sensitivity measures have to be taken when constructing and presenting such questions, for an instance, the questions were peer reviewed in the master's thesis seminars of University of Lapland.

Because the subjects in the study represent an age group where many are still underage, the study must be designed so that parental permissions are required for underage respondents. The aspect of underage respondents has to also be taken into account when designing the questions for the study.

Finally, as the survey dealt with data that can be deemed as personal by many (for an instance the income levels and religious beliefs of one's guardians), care has to be taken not to expose the data to so that individual responses may be recognized and linked to any single individual. Strong information security of the survey program is a requirement, as is sensitivity when presenting the data in the study.

In addition to other measures taken into account when designing and conducting the study, the University of Lapland ethical code of research (University of Lapland, n.d) will be followed in all aspects of the study. This is to further ensure that the study follows good ethical practices.

3 Research implementation

3.1 The research task

As with all research in general this research too has its pursuit. The aim of this research is to survey the social and economical background of upper secondary school students and also to give an explanation to the educational segregation in Finland regarding the students' backgrounds. The main goal of this study is to clarify where upper secondary school students come from. The research questions of the study are:

- 1 Where do upper secondary school students come from?
 - 1.1 Who are the main guardians of the students?
 - 1.2 What kind of religious backgrounds do the upper secondary school students come from?
- 2 What is the profile of a guardian of an upper secondary school student?
 - 2.1 What are the basic economical backgrounds of the students' guardians?
 - 2.2 What are the educational backgrounds of the students' guardians?
 - 2.3 What is the working life of the students' guardians like?
- 3 Do the upper secondary school students feel like their background affects their future choices?

When trying to figure out where the educational segregation happens one can try to find special places branches in educational path. In Finland this segregation becomes visible in a larger scale right after an individual has completed the compulsory education. Students are then normally 16 years old and they have completed the mandatory amounts of studies required by the law. Until then students typically attend the school closest to their home.

Including religious backgrounds in the study was motivated by the fact that the role of religion in the Finnish society has changed during past years, and because there are various active religious groups in the Oulu region of Finland, where the study was conducted.

3.2 The methodological choices in this research

To be able to achieve the pursuits stated in chapter 3.1, there is a need for methodological choices. Since there is relatively little knowledge in general regarding the backgrounds of upper secondary school students in Finland, a quantitative research method was chosen. Quantitative research methods are convenient when there is a need to form a basic understanding of some existing phenomenon that can be described statistically.

The most natural way to shed some light on social and economical background of Finnish upper secondary school students who live in a city was to compose a survey where they can describe their backgrounds. Students in the Oulu region of Finland were chosen as the target group for the study because they were deemed as a typical example of the general population of Finnish urban-area upper secondary school students. This doesn't necessarily mean that all of them live in tightly populated areas such as cities and towns. In Finland it's possible choose and travel into an upper secondary school that's not necessarily close to one's home.

3.3 Data collection

At first Statistics Finland was contacted and asked if they had any data that could have been used in this pursuit to try to find out more about social and economical backgrounds of upper secondary school students in Finland. They looked into this matter and came up with an answer that, unfortunately, they didn't have such data that could have been used to solve the research task in this case.

After this, it was planned was to search for such data from the archives of the upper secondary schools in Oulu. However, there were two major problems with using these archives as research material. First and foremost, the archives didn't have enough data when it came to the possibility of making conclusions regarding the students economical and social backgrounds. The other difficulty that occurred was the protection of privacy. After asking from schools I contacted the city archives and asked

if they had the records regarding the backgrounds of upper secondary school students. They had some data but they stated out that there was the problem of how to link the data of an upper secondary school student and their that of their guardian together.

After these phases, the upper secondary school activity director in Oulu was contacted , and the possibility of sending a link to an online to upper secondary schools in Oulu was discussed. The idea was to distribute a link to this survey among the upper secondary schools in Oulu so that they could pass it on to their students. The activity director agreed to this proposal, and it was agreed that the upcoming survey would be evaluated and discussed in the next upper secondary school activity meeting where all the principals who decided to took part in this survey could gain information ask questions and give feedback regarding this project.

The actual survey questions were invented based on the research task. The survey questions were evaluated by students in master's thesis seminar and of course also by the professor who is in charge of this seminar.

3.4 Data analysis

The program that was used to collect the data for this study was custom-built for this purpose, using the PHP programming language. The actual program ran online. Both me and the programmer took part in the program's design process. I was the one who designed the questions. The program was tested by standard security procedures. The program was designed to protect the user's anonymity. For instance there was an option to enroll in a lottery to be able to win a book store gift card and to win some movie tickets. The program was designed so that this enrollment can't be possibly traced to any single answer, even if one has access to the program's database..

After some user testing (that was conducted with university students) and consulting with the professor who instructed my master's thesis, I made the suggested changes to the program and questions that it contained. Then I contacted the head of the Oulu's upper secondary school department. They gave me permission to send this survey out to

upper secondary schools. Before the URL to this study was handed down to students there was a meeting of upper secondary school principals where one of the principals presented the summary and purpose of this study. After this meeting the URL was handed down to the students via each school's information systems.

3.5 Representability of the sample

The study material was got from a self-selected sample from upper secondary school students from Oulu. The respondents were born between 1994 and 1997. 74,6% of those who took part in this study were women and the rest (25,4%) were men. Altogether there were 355 valid answers in this evaluation. Overall there were 372 answers in this study but some were lost due to a bug in the program that was used to conduct this study.

When regarding the representability of the sample compared to the general population of upper secondary school students in Finland, two factors have to be taken into account:

Location: This research surveyed only the upper secondary school students around the Oulu region of Finland. This makes for a nice case study, but means that the sample does not necessarily represent the upper secondary school students of other regions in Finland.

Gender distribution: The female-to-male distribution of the respondents of the study was 74,6% – 25,4%. Compared to the actual gender distribution of students of upper secondary schools in Finland (Statistics Finland, 2013), 57% – 43%, it seems like women were a bit overrepresented in the sample.

3.6 The reliability and validity of the study

The aim of this study was to gain insight into the socio-economical backgrounds of the upper secondary school students in Oulu, and to analyze the degree with which the students feel that their backgrounds affect their future educational choices. As the reliability of a study is defined as the degree with which the study can be repeated with the same results (Metsämuuronen, 2006; Litwin, 1995), the repeatability (and, thus, reliability) of this study faces the following challenges:

Sample selection and volunteerism: The study was conducted with a self-selecting sample, where a link to the survey was sent to the headmasters of all upper secondary schools in Oulu, whose responsibility it was to forward it to the students in the school, who in turn could answer it on a volunteer basis. This was arguably the easiest way to conduct the study and allowed for a bigger sample size than other methods, but also resulted in a couple of problems. First, while the headmasters agreed to the arrangement verbally, there were delays in the distribution of the message in a couple of occasions, which resulted in some schools being more presented in the sample than others, and a couple of schools being left out altogether. Second, the fact that the students volunteered to answer the questionnaire can itself bias the sample – what if students who easily volunteer for this kind of work represent different traits and backgrounds than other students?

Interpretation of questions: In many cases, the same question can be understood differently by different people, and even by the same person depending on the contextual setting they answer the question in. In the case of this survey, the aim was to gain a general insight in the student's backgrounds and as such most of the questions were in the form that can be answered exactly by the student, such as the year of birth or the type of accommodation of the student, or the types and ages of the student's guardians. These questions directly measure real-world properties of the students' backgrounds, and it didn't make much sense to construct more complex meters for them, as it can be assumed that the students know the answers to them and the answers are not greatly dependent on personal interpretations.

Another set of questions in the study is formed by the ones which the students should be able to answer with a reasonable degree of accuracy, but which may depend on personal interpretations a bit more. A good example of such a question is the income level of a guardian. A student doesn't necessarily know the exact income levels of their guardians, and to gain more insight in the real-world income level of a student's guardians, two questions were dedicated to measure the property, with one asking the guardian's monthly income in euros and the other asking a category (e.g. "low income"). Future studies should however consider different ways of measuring a the property, as the Cronbach's alpha between the two questions (using the data set generated at part 4.2) was only 0,543, indicating that they together don't form a very good meter.

Finally, a handful of questions were in the Likert scale form. One question measured the importance of a religion to a guardian (or a student's estimate of it), and three measured different ways the students felt their family had influenced them in the past or influenced them in the future. For the first question, a meter consisting of more than one questions could have been used instead to gain more reliable insight on the actual importance of religion on the guardian, which would have however made the questionnaire bigger, and the aspect was only a part of the research question on hand. For the other three questions, the Cronbach's alpha between them is 0,752 which indicates that they form a suitable meter when analyzing the degree with which a student's guardians affect their educational choices.

Because of the multiple dimensions of the research questions analyzed in the study and the way the study was conducted, it's hard to calculate a precise measure of reliability for the study. Internal consistency measures such as Cronbach's alpha tend to require that several questions are used to form meters that measure a single property in a study (Metsämuuronen, 2006). This study doesn't aim to analyze complex properties, but instead, as outlined before, to gain basic insight in the backgrounds of upper secondary school students that can be measured with simple questions that don't leave much for interpretation. As such, these measures don't seem directly applicable. Another way to calculate reliability for a study would be to utilize a test-retest measure, where the same

survey would be conducted multiple times, for the same answerers, with a time interval in between (Metsämuuronen, 2006). However, because the answers to the questionnaire were anonymized, it is not possible to pair the answers to the correct respondents and as such it is neither possible to use this measure.

Because all of the questions asked in the survey were constructed based on the research questions of the study and because they generally didn't involve complex measures, it can be argued that the study succeeds in answering the questions it set out to answer. As such, and with the considerations outlined before in mind, it can be argued that the study is valid.

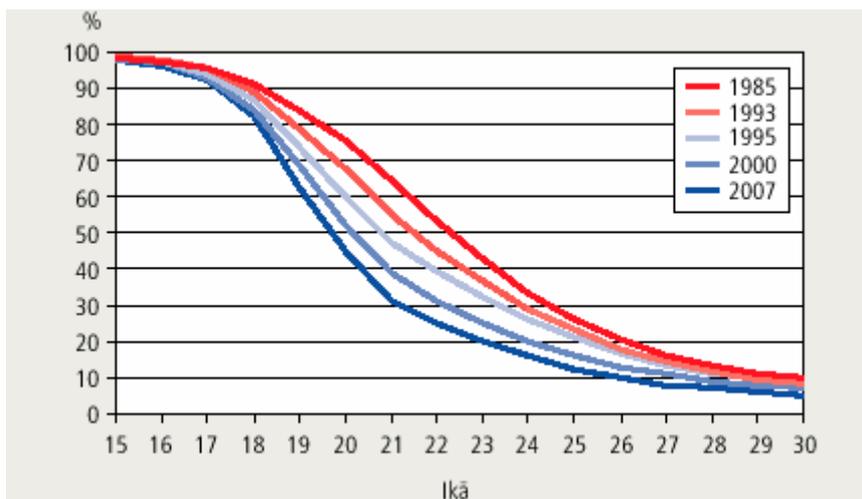
4 Results of the research

4.1 Basic background information regarding the upper secondary school students in the Oulu region

The upper secondary school students that took part in the study were born between 1994 and 1997, which means that the age distribution was 16 to 20 years, with the age group 18-19 years being the most common (44,2%). The students were studying between their first and fourth year in upper secondary school. This distribution comes as no surprise, since the Finnish upper secondary school education typically lasts for three years, but there is a possibility for a student to finish it in two to even five years. All the students taking part in the study were studying in “standard” Finnish upper secondary schools, which excludes students from upper secondary schools offered primarily for adults.

The most common type of accommodation for an upper secondary school student was to be living with two parents (64,3%). The next most common form of living was with one parent. 18,4% of those who answered in this study belonged in this group. Almost ten percent (9,6%) stated that they lived alone. The rest lived with room mates, other guardians, siblings or with partners in cohabitation.

The trends are rather typical according to Statistics Finland (2009). In the past 30 years, the age at which young people move away from their parents has decreased steadily, and the age group of the students partaking in this study represents a point where the derivative of the moving-out function starts to rapidly increase negatively. From this, it can be deduced that the latter years of upper secondary school are a typical time for students to move away from home.



Percentage of people aged 15 to 30 years living with their parents in years 1985, 1993, 1995, 2000 and 2007. Source: Statistics Finland (2009).

Most of the students responding to this study were female (74,6%). This is slightly different from the gender distribution of Finnish upper secondary schools, where 57% of all students are female (Statistics Finland, 2013).

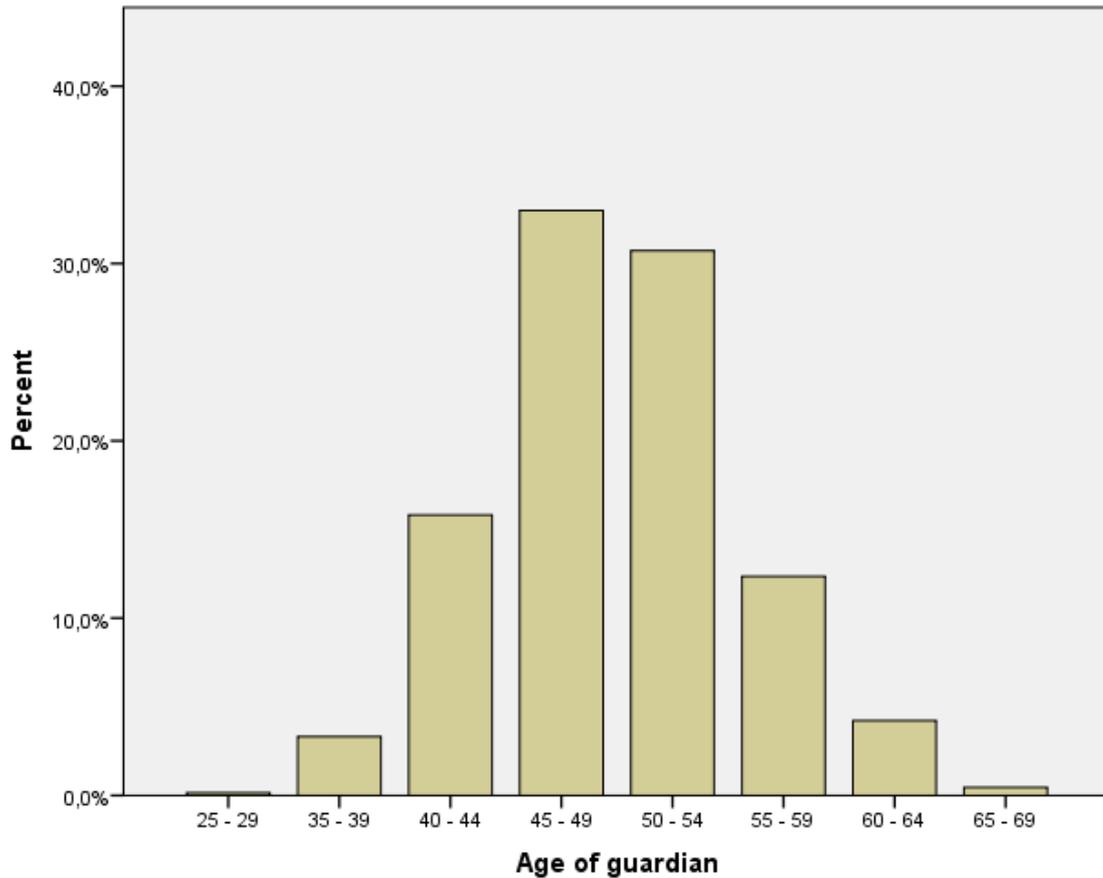
4.2 Description of the guardians of upper secondary school students

The upper secondary school students taking part in the study were asked to fill out questions regarding one or two of their guardians. The students first chose the type of the guardian and then answered more specific questions regarding the guardian, such as their income level and religious beliefs. 342 (96,3%) of the respondents reported having two guardians, the remaining reporting only one. Altogether, the respondents reported 697 guardians.

To further analyze the backgrounds of the guardians of upper secondary school students, a second data set was created based on the primary one by creating one case per a guardian given in the study. Thus, a single case on the primary research data set with two guardians given was transformed into two cases in the second data set, so that the first case had the data from the first guardian, the second case had the data from the second guardian, and both replicated data from the student.

The most common guardian type was mother (49,8% of all guardians reported in the study), closely followed by father (48,2%). The rest (2%) were other relatives, partners of guardians, or not specified. Interestingly, 88% of the responses had “mother” as the first guardian, while 84,2% had “father” as the second one.

The respondents were asked to fill in the years of birth of their guardians. For 33 guardians, the answers were left blank or nonsensical data was filled in. These answers were treated as missing data regarding this question. For the remaining answers, the years of birth were converted to ages by subtracting them from the year the study was conducted on (2014), and grouped into groups of five years each to keep the accuracy reasonable.

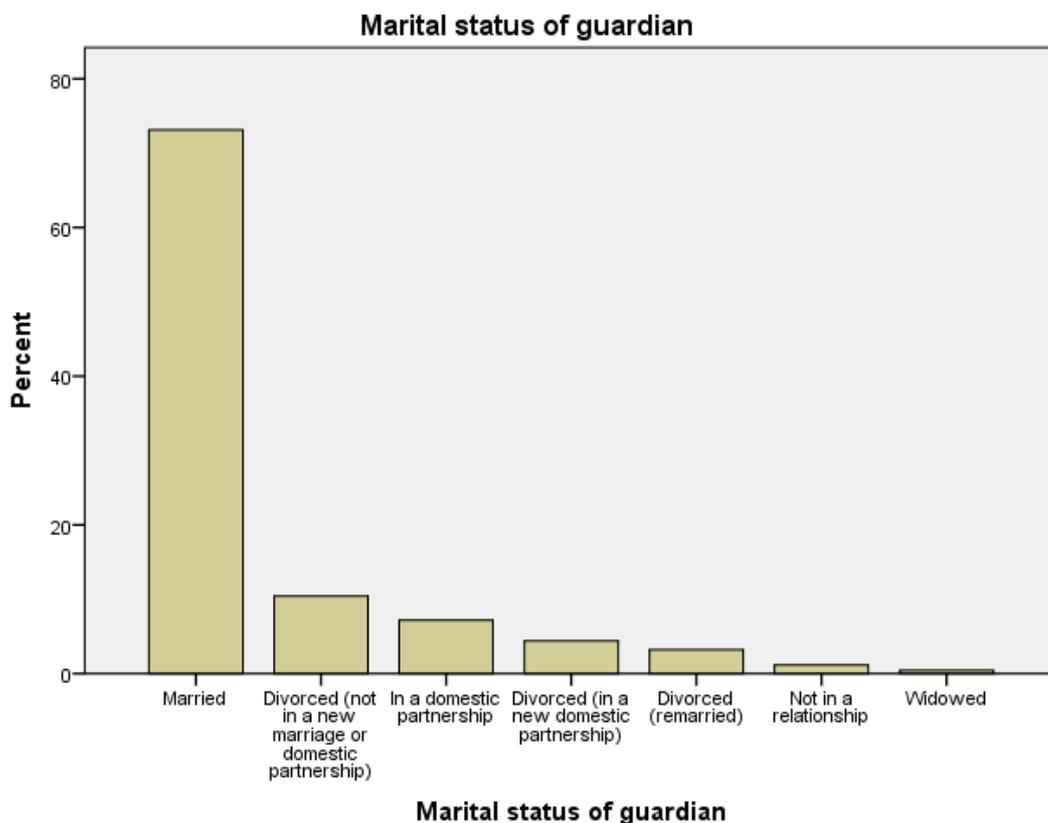


Most of the respondents' guardians were aged between 45 and 54 years (33,0% being in the 45-49 years group, and 30,7% in the 50-54 years one), and only 8,2% were either under 40 or over 60 years old. In light of the results, and taking into account the fact that 98% of the guardians in the study were biological parents (mothers and fathers) it also seems, though an accurate estimate can't be made from this data only, that there weren't many “young parents”, who had their children at an early age, among the respondents' guardians.

4.3 Marital status of guardians

The respondents were asked to answer select the marital statuses of their guardians from a list of options, select “prefer not to answer”, or select “other” and provide the marital status in textual form.

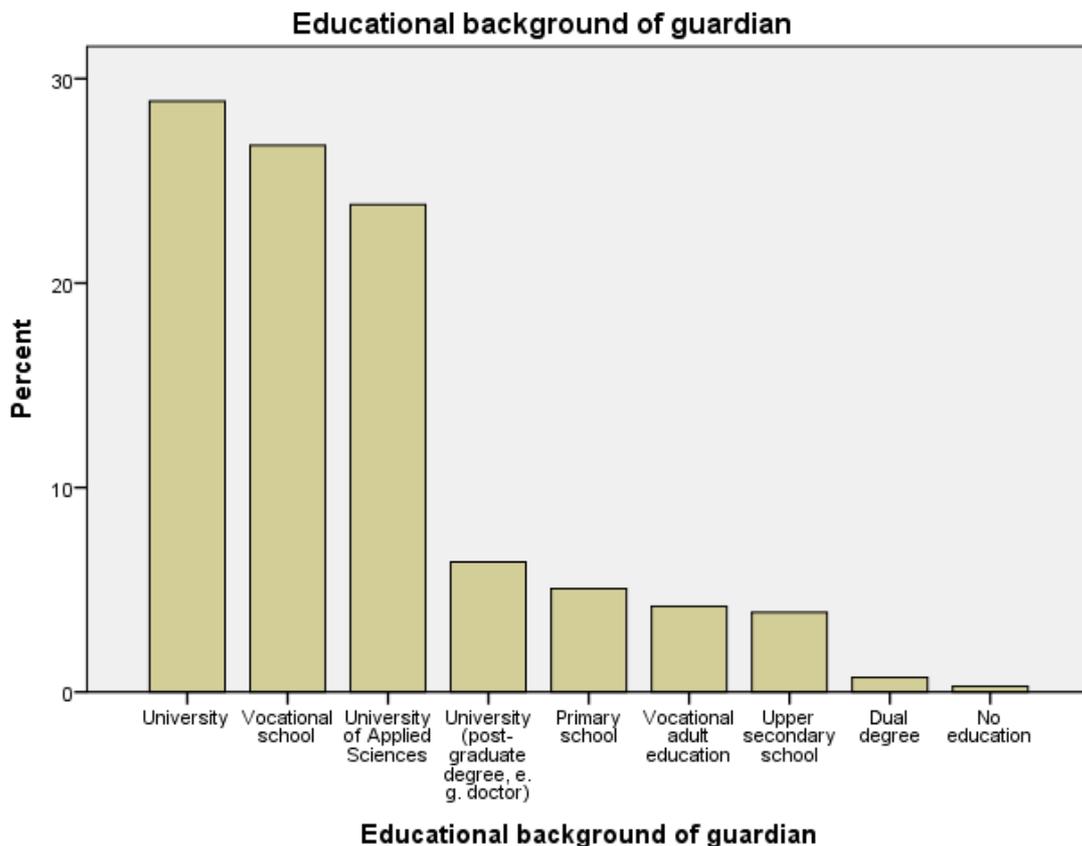
The majority (73,1%) of guardians in the study were married, with next largest portions being “Divorced (not in a new marriage or domestic partnership)” (10,4%) and “In a domestic partnership” (7,2%). Altogether, 18% of the guardians were divorced. The percentage of married compared to divorced guardians seems a little high when taking into account the fact that there have been roughly half as many divorces as new marriages in the recent years (Statistics Finland, 2014a). This could indicate support for the theories of Coleman (1988) about the importance of social capital of family on a student's academic performance.



4.4 Educational backgrounds of guardians

The respondents were asked to select their guardians' educational background from a list of options. The biggest group (28,9% of all guardians) was university (without post-graduate degree), which was, perhaps surprisingly, followed by vocational school (26,5%) and university of applied sciences (23,7%). The other groups comprised just over 20% of all the results, but most notably 6,4% of the guardians had received a post-graduate degree from university.

All in all, 59% of the guardians in the study had completed a higher education degree (university or university of applied sciences). In 2010, the percentage of the general population of 15 years of age who had done so is only 28% (Statistics Finland, 2012b), which could indicate an overrepresentation and further support the idea of inheritance of education, already supported by various studies such as Kärkkäinen (2004), Kauppinen (2007), and Kuusela (2003).



4.5 Religious beliefs of guardians

Finland has been historically strongly a Lutheran country. For instance back in 1970s, 92,4% of Finland's population belonged in Lutheran National Church, 1,4% belonged in Greek Orthodox Church in Finland, 5,7% held no religious affiliations and 0,7% of population belonged to other religions (Statistics Finland, 2014b). Yet past 30 years the status of religion has changed. In 2013 75,3% belong in Lutheran National Church, 1,5% of population are members of Greek Orthodox Church in Finland, 1,5% of population belong among other religions and 22,1% of population have no religious affiliations (Statistics Finland, 2014b).

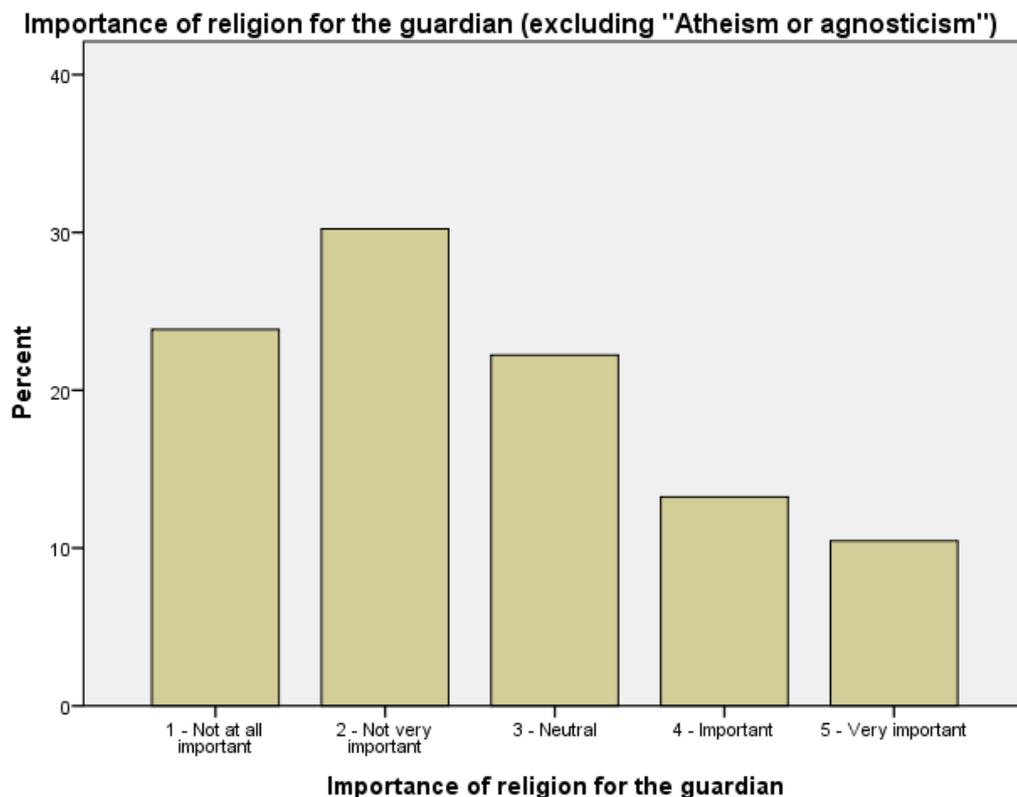
The upper secondary school students taking part in the study were asked two questions about their guardians' religious affiliations. For the first question, the students selected the religious affiliations of a guardian among given options, selected "prefer not to answer", or selected "other" and gave the answer in textual form. For the second question, the students estimated the importance of religion to the guardian on a Likert scale from 1 – "Not at all important" to 5 - "Very important".

The majority (86,4%) of guardians in the study belonged to the Lutheran National Church. The next largest group (11,4%) consisted of guardians with no religious affiliations, atheists and agnostics. The other religious groups – Islam, Orthodox Christianity, Adventism and Hinduism – had 1% or less of all guardians each.

It should be noted that these numbers are likely influenced by the strong position of the Laestadianism, a revival movement inside the Finnish Lutheran church, in the Northern Ostrobothnia region of Finland (Nykänen, 2012).

In light of the results of the respondents estimates, religion doesn't seem very important to the majority of guardians. The options on the scale received answers in ascending order regarding the importance level, with 1 – “not at all important” receiving the most (30,5%), “not very important” receiving 28,2%, “neutral” receiving 20,1%, “important” receiving 11,9% and “very important” receiving just 9,3%. The median importance was 2,0 (“Not very important”).

Because of the percentage of atheist or agnostic guardians (11,4%), the importance of religion was also analyzed separately for the guardians with religious affiliations other than “Atheism or agnosticism.” For this set of guardians, there was a fewer amount of those with a religious importance of “Not at all important”, but otherwise the results didn't differ too much. The median was still “Not very important” and 75% had an importance lever of “Neutral” or less.



4.6 Economical background and working life in the families of upper secondary school students

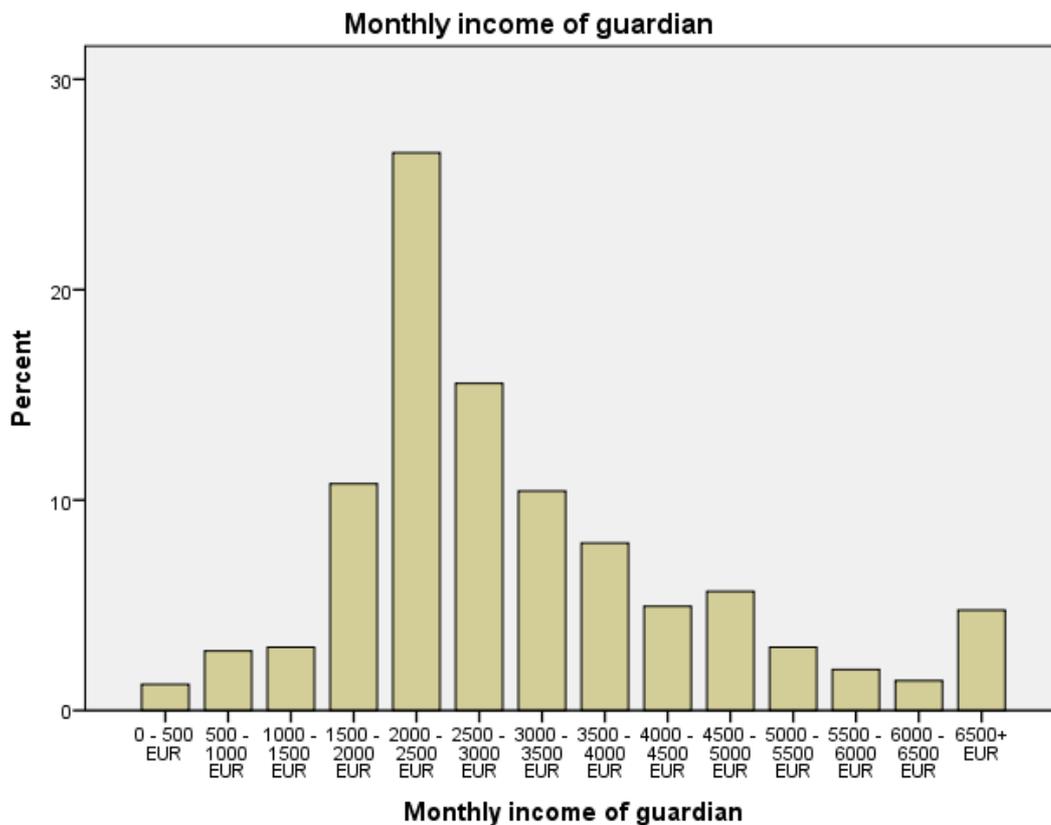
One of the main goals in this study was to find out about the economical background in high school students home. Historically a student who attended higher education in Finland needed some economical support to be able to next degree after compulsory education. For instance back in 1975 only 50% of those Finnish citizens who were between 25 and 34 years had completed a medium or a high level in education but in 2005 85% of Finnish citizens who were between 25 and 34 years had achieved the medium or high level in education (Statistics Finland, 2007).

Education or the lack of it is often used as an explanation when people try to explain the over all economical quality of living. The current economical situation is also causing a lot of strain in society.

The respondents were asked two questions about their guardians income. For the first question, the respondents entered their guardian's monthly income. 14 choices were offered, the lowest being 0–500 EUR and the highest being 6500+ EUR. A “prefer not to answer” option was also offered.

A significant percentage (18,8%) of the questions about the monthly income of a guardian were answered “Prefer not to answer”. This may be explainable by the fact that some of the respondents found it hard to answer the question, expressing their concerns in the free word section at the end of the survey. One thing that might affect this is that it's often considered a taboo to discuss income in the Finnish culture.

From the answers to the questions, the median monthly income was 2500–3000 EUR, which is in line with the 2012 median monthly income of full-time employees in the Norther Ostrobothnia region of Finland, 2787 EUR (Statistics Finland, 2012a).

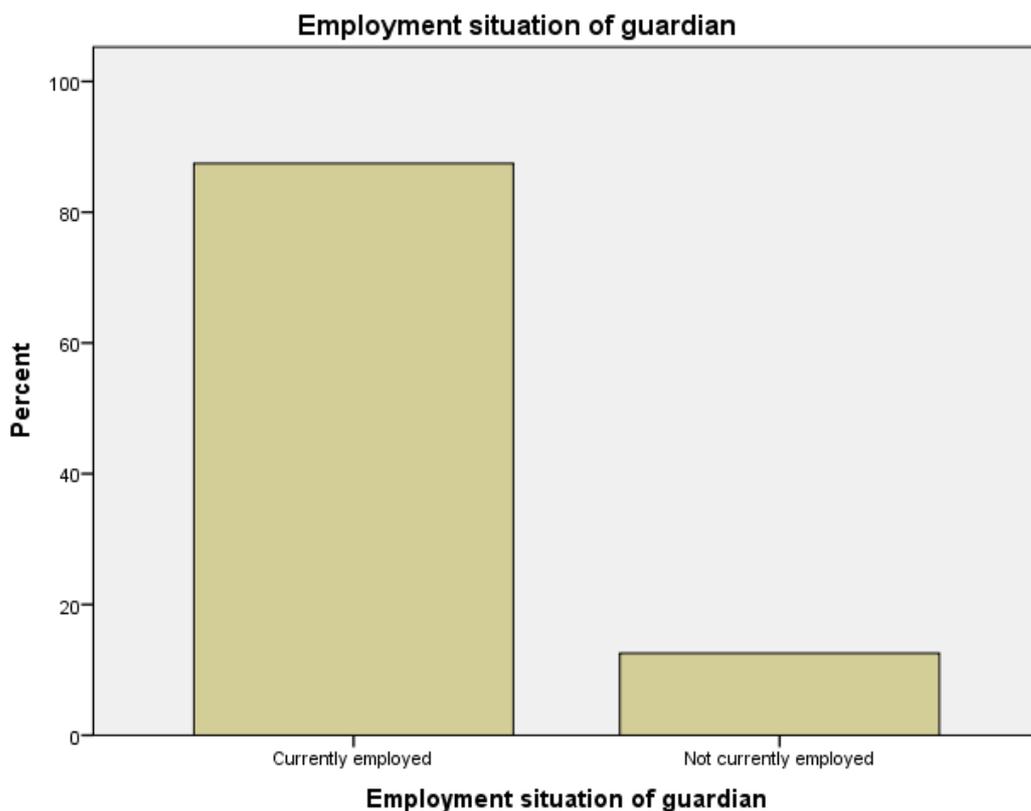


The second question was to select a verbal estimation of the guardian's income level. Four options (low, middle, high, very high income) were provided with a “prefer not to answer” option. Interestingly, for this question only 4,9% of all answers were in the “prefer not to answer” category (compared to the 18,8% of the previous question). It may be easier for students to estimate the general income level of a family in a verbal form than in the more exact numeric form, which may be in part because of everyday cultural associations, e.g. associating one's family with a certain income class - as one respondent remarked in the free word section (translated): “I've only recently come to realize that I'm pushing for an academic career from an almost laborer background. It's been peculiar to compare my own family to my boyfriend's highly educated parents and notice the radical difference in the level of civilization. I've never even thought about doing anything else than going to a gymnasium and a university, and it feels perfectly natural. I think it's because of the good economical situation in my family, with which we've always stood out from my parents' laborer backgrounds.”

Both the median and the mode of the answers to the question were “middle income”,

which is in line with answers to the previous question.

The respondents were also asked whether their guardians were working, and to categorize their guardians occupations. For the former question, 2,9% of guardians were marked as “prefer not to answer”, 12,2% as “not currently employed” and 84,9% as “currently employed”. This means that the employment rate among the guardians of with answer data was 87,4% and the unemployment rate 12,6%. The unemployment rate is a bit lower than the general unemployment rate in the Northern Ostrobothnia region of Finland (14,5%; Centre for Economic Development, Transport and the Environment, 2014). However, care has to be taken when making conclusions based on this data because of the specific nature of the analyzed group.



For the latter question, the ten top-level categories from the Statistics Finland Classification of Occupations 2010 (Statistics Finland, 2010) were given as options, as was an option to specify an other occupation in textual form. An option of “prefer not to answer” was also given. The textual answers to the occupations were reclassified using the Statistics Finland (2010) classification during the analysis phase. Most of the textual answers fit to the top-level categories neatly, but some caused some problems. Most notably, 14 of the 697 guardians in the study were classified as “entrepreneurs” by the respondents, which itself is not a category in the classification. To alleviate this, these were classified in the “managers” category, as was the case in the 1997 version of the classification (Statistics Finland, 1997). The 30 (4%) of the answers that were in the “other” category but were left blank were classified as “prefer not to answer”.

Of the answers to the question, 17,9% were in the “prefer not to answer” category. When speculating the reason for this, possible reasons include the heightened pace of the post-modern work-life, where people may have more jobs through their career than in past times; and the possible awkwardness of the given categories. From the rest of the answers, the occupational groups were in order of highest to lowest amount of guardians: managers (19,6% of answers outside the “prefer not to answer” category), service and sales workers (19,2%), technicians and associate professionals (17,8%), clerical support workers (15,0%), professionals (14,2%) craft and related trades workers (7,7%), skilled agricultural forestry and fishery workers (3,3%), plant and machine operators and assemblers (2,1%) armed forces (0,5%), elementary occupations (0,3%) and students (0,2%). The distribution is in line with the the current social structural change, where we are moving towards an information society. There could also be some differences in the results if the study was repeated in another socioeconomic context, for an instance in the countryside.

4.7 Goals of the upper secondary school students

For the final part of the survey (before the free word section), the upper secondary school students were asked a couple of questions about their future plans and the extent to which they think their guardians have influenced their current and future educational choices. The questions (translated to English) were:

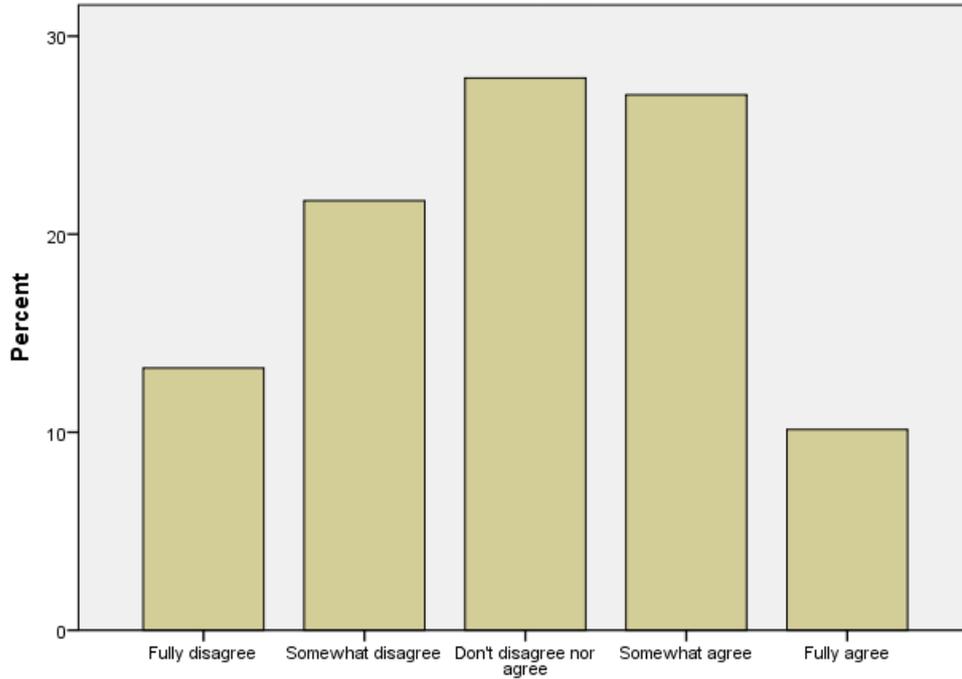
- 1) My family members affected my choice of going to upper secondary school
- 2) My family members affected my choice of upper secondary school
- 3) To what level of education are you aiming for?
- 4) My family members affect my future plans of education

Questions 1, 2 and 4 were of the Likert scale type, where choices 1-5 were given with 1 meaning “Fully disagree” and 5 meaning “Fully agree”. For question 3, seven options (upper secondary school, vocational school, vocational adult education, dual degree, university of applied sciences, university and university (post graduate degree)), were given, along with an “other” option where the respondent specified their choice in textual form.

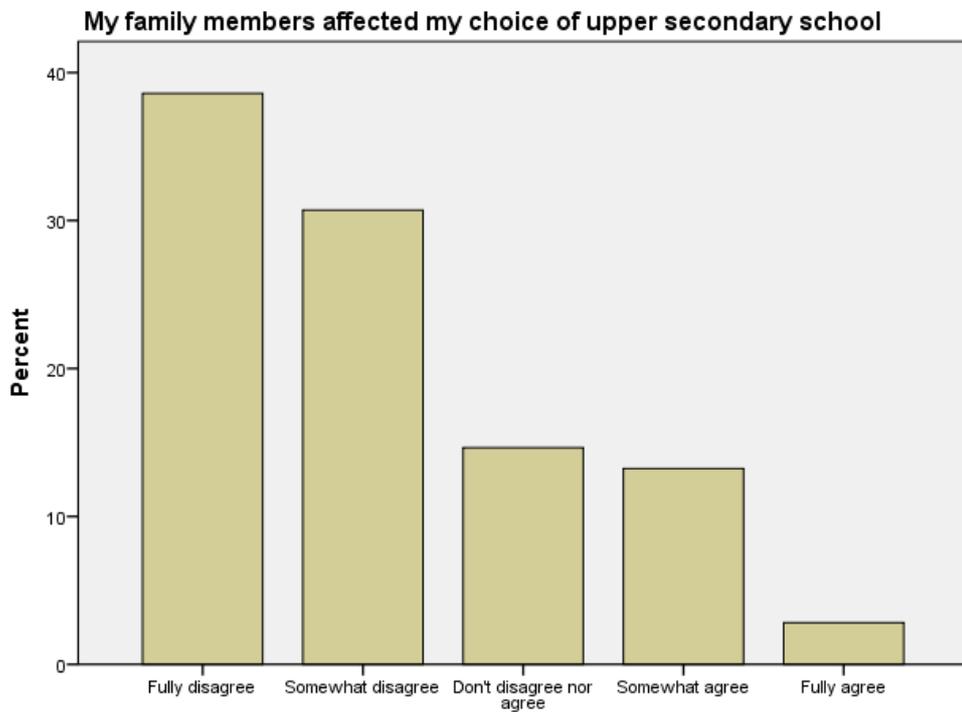
The median answer to the question "My family members affected my choice of going to upper secondary school" was 3,0 (Don't disagree nor agree). The rest of the answers were distributed quite evenly. 37,1% of all students answered either "fully agree" or "somewhat agree", with 34,9% answering either "fully disagree" or "somewhat disagree".

In the light of the results, it seems that the majority of upper secondary school students don't put great emphasis on the degree of which their guardians affect their choice of a particular upper secondary school. Of the students taking part in the study, a combined percentage of 69,3% either fully disagreed (38,6%) or somewhat disagreed (30,7%) with the premise "My family members affected my choice of upper secondary school", with 14,6% remaining undecided and only 16% either somewhat agreeing (13,2%) or fully agreeing (2,8%). The median answer was 2,0 – "Somewhat disagree".

My family members affected my choice of going to upper secondary school



My family members affected my choice of going to upper secondary school



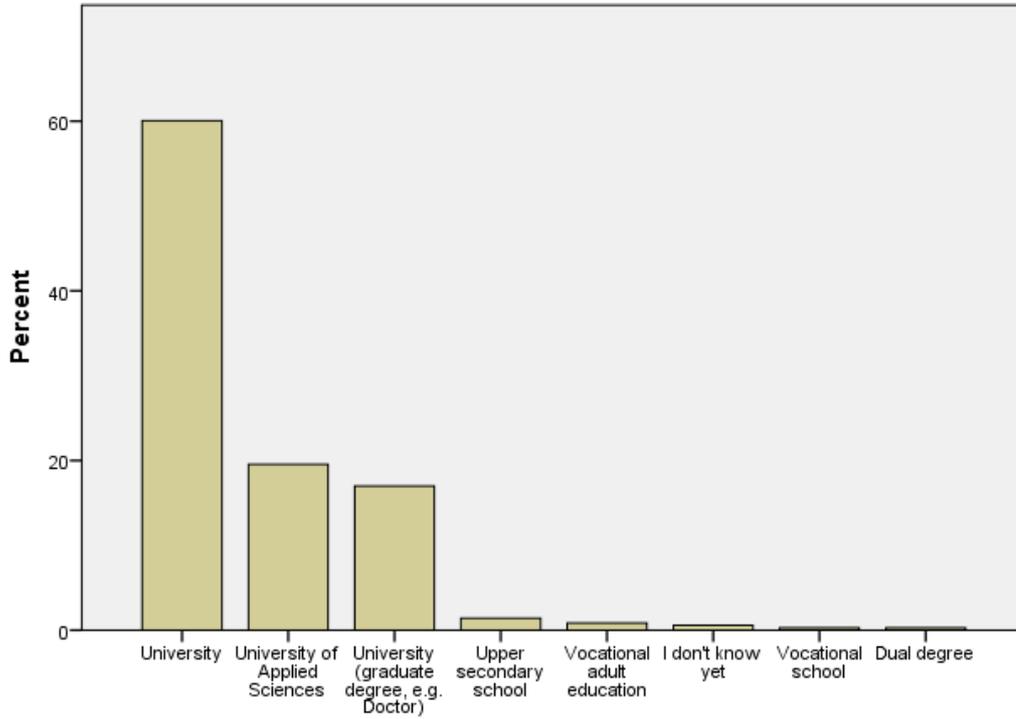
My family members affected my choice of upper secondary school

The results came as a bit of surprise. From my previous experiences when working in an upper secondary school, I would have expected family to play a bigger role in the decision, especially when taking into account that answers to previous questions show that most of the upper secondary school students taking part in the study still live with their parents. On the other hand, upper secondary school students are generally in the phase of their growth where independence starts to play a bigger role in their lives.

The majority of the students taking part in the study are aiming for a university-level education, with 60,1% of the respondents answering "university" and 17,0% answering "university (post graduate degree, e.g. doctor)" to the question "To what level of education are you aiming for?" The second most popular choice was "university of applied sciences" (19,5%). Only 1,4% answered that they are only aiming for an upper secondary school degree, and the other choices combined were chosen only by 2% of the respondents. The results seem to validate the view that upper secondary school is a passing ground to a higher degree, usually university, not an end stop for one's education.

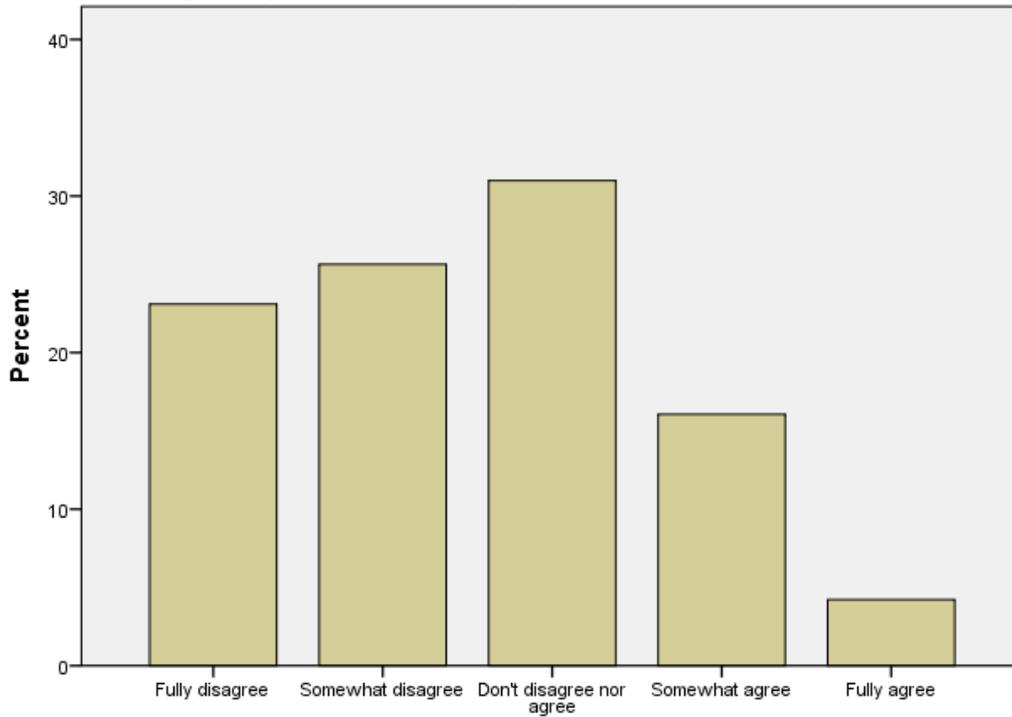
The answers to the question "My family members affect my future plans of education" were tilted a bit towards the "not agreeing" side. The most popular answer (31,%, also the median) was "Don't disagree nor agree", with a combined 48,7% either fully (23,1%) or somewhat disagreeing (25,6%) and 20,3% either fully (4,2%) or somewhat agreeing (16,1%).

To what level of education are you aiming for?



To what level of education are you aiming for?

My family members affect my future plans of education



My family members affect my future plans of education

4.8 Correlational analysis

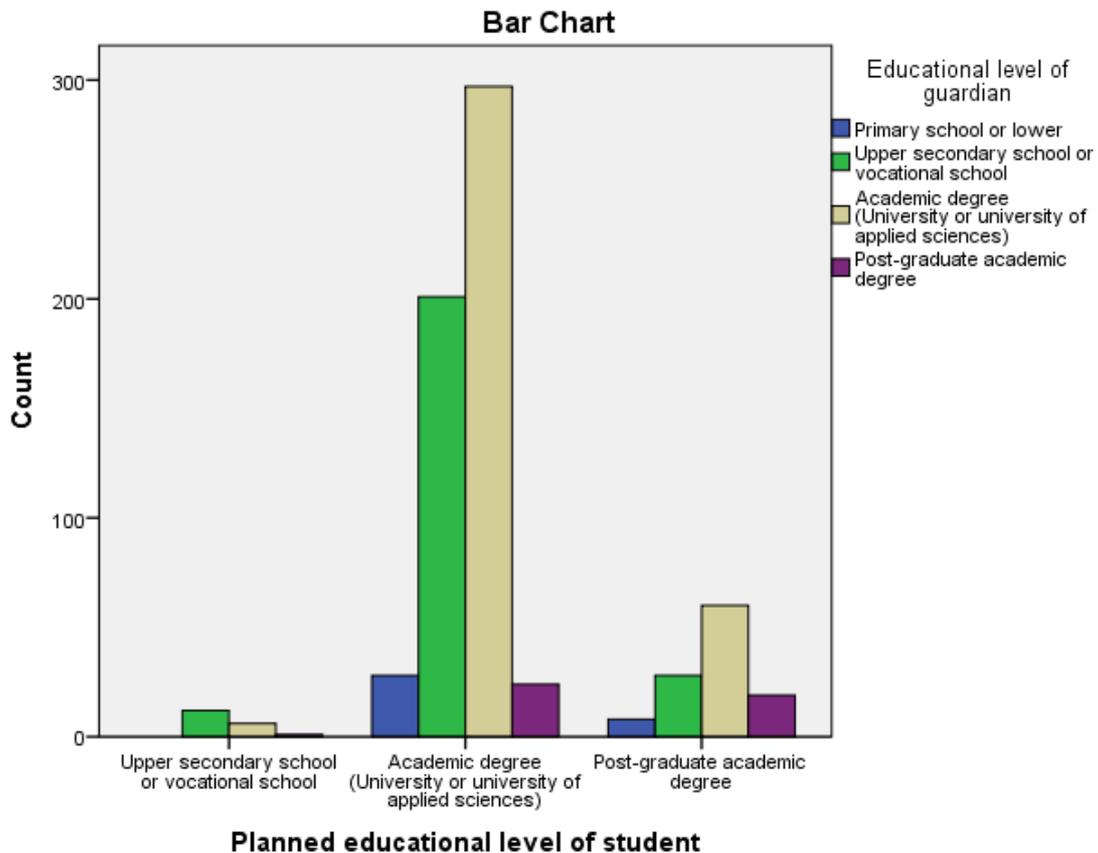
The previous parts of this chapter have described the socioeconomic and educational backgrounds of upper secondary school students and their guardians, and the future plans of the students. However, this alone doesn't show how the different aspects studied are related to each other. In this chapter, a couple of aspects were selected for further study, and the relationships between them were analyzed by statistical means.

4.8.1 The relationship between the education of a guardian and the educational plans of a student

The first analyzed relationship was how the educational background of a guardian affects the educational plans of a student. The data set generated at part 4.2 was used as the basis for this. The hypothesis for the analysis was: “Students who aim for a higher level of education have higher educated guardians.” Because both the background of the guardian and the plans of the students were given in nominal form, they were transformed to ordinal form by grouping the options to the following groups:

- 1) No education or primary school (only present in of guardians' education backgrounds)
- 2) Upper secondary school or vocational school (including dual degree and vocational adult education)
- 3) University or university of applied sciences
- 4) University (post graduate degree)

Looking at the bar chart in the figure, it seems that there could be some correlation between the education level of a guardian and the planned educational level of a student. Namely, guardians who are educated higher seem to have a proportionally higher amount of students who aim for an academic degree or a post-graduate academic degree. However, it is also obvious that students who are aiming for an academic degree are vastly overrepresented in the sample, regardless of the guardians' education.



The relationship was analyzed further with cross tabulation. From the results, a relationship was found between the education level of a guardian and the planned educational level of a student ($p < 0,001$), indicating confirmation for the hypothesis and support for the studies about the inheritance of education (e.g. Kärkkäinen, 2004). However, the strength of this association is only minimally acceptable (Cramér's $V = 0,157$). This is likely caused for this by the vast overrepresentation of students who aim for an academic degree (and especially the small size of the group of students who don't aim for a higher education), and the fact that upper secondary school students only have so many choices left regarding their further educational plans, having necessarily already completed primary level of education.

Planned educational level of student * Educational level of guardian Crosstabulation

		Educational level of guardian				Total	
		Primary school or lower	Upper secondary school or vocational school	Academic degree (University or university of applied sciences)	Post-graduate academic degree		
Planned educational level of student	Upper secondary school or vocational school	Count	0	12	6	1	19
		%	0,0%	63,2%	31,6%	5,3%	100,0%
	Academic degree (University or university of applied sciences)	Count	28	201	297	24	550
		%	5,1%	36,5%	54,0%	4,4%	100,0%
	Post-graduate academic degree	Count	8	28	60	19	115
		%	7,0%	24,3%	52,2%	16,5%	100,0%
Total		Count	36	241	363	44	684
		%	5,3%	35,2%	53,1%	6,4%	100,00%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	33,657 ^a	6	,000	,000		
Likelihood Ratio	29,462	6	,000	,000		
Fisher's Exact Test	28,192			,000		
Linear-by-Linear Association	9,893 ^b	1	,002	,002	,001	,000
N of Valid Cases	684					

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 1,00.

b. The standardized statistic is 3,145.

Symmetric Measures

		Value	Approx. Sig.	Exact Sig.
Nominal by Nominal	Phi	,222	,000	,000
	Cramer's V	,157	,000	,000
N of Valid Cases		684		

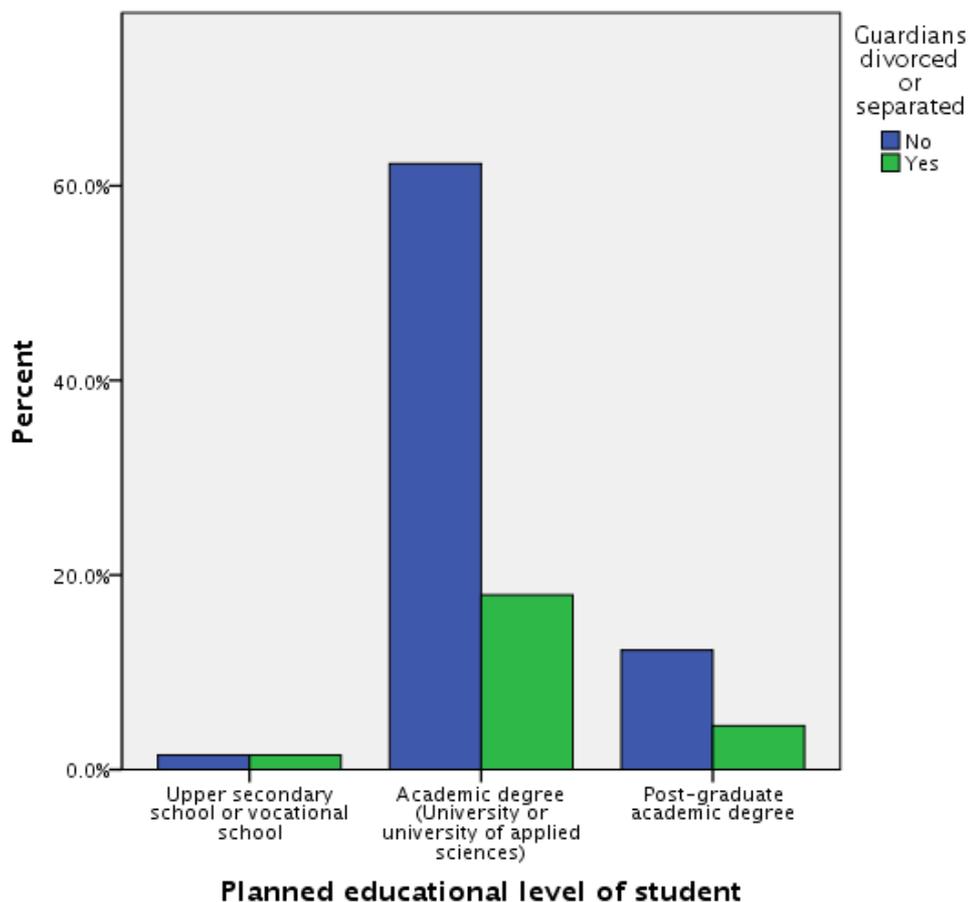
a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

4.8.2 The relationship between the marital status of guardians and the educational plans of a student

The second analyzed relationship, continuing with the same theme, was that between the marital status of a student's guardians and the educational plans of the student. In particular, it was analyzed whether the students whose guardians had separated or divorced had different plans than those whose guardians did not.

Because the questionnaire separately asked the marital statuses for both guardians, a separate "guardians divorced or separated" variable was created, with the value set to "yes" if the marital statuses of both guardians were either married or in a domestic relationship" and "no" if either was divorced. A handful of cases that didn't fit either criteria were handled manually. The scale from the previous chapter was used to rank the educational plans of students.



An independent samples t-test was chosen to analyze the relationship. From the results of the test we see that no statistically significant relationship was found between the two variables ($p = 0,758$).

Previous studies, such as that by Coleman (1988), have found a link between decreased amount of guardians or siblings and decreased academic performance, theorizing that the former could indicate a lack of social capital in a family which indicates less support for a student's academic studies. The marital status of one's guardians doesn't necessarily mean the same thing, as in the study the vast majority of respondents reported having two guardians despite the fact that some were divorced.

Group Statistics

	Guardians divorced or separated	N	Mean	Std. Deviation	Std. Error Mean
	Yes	80	3.13	.487	.054

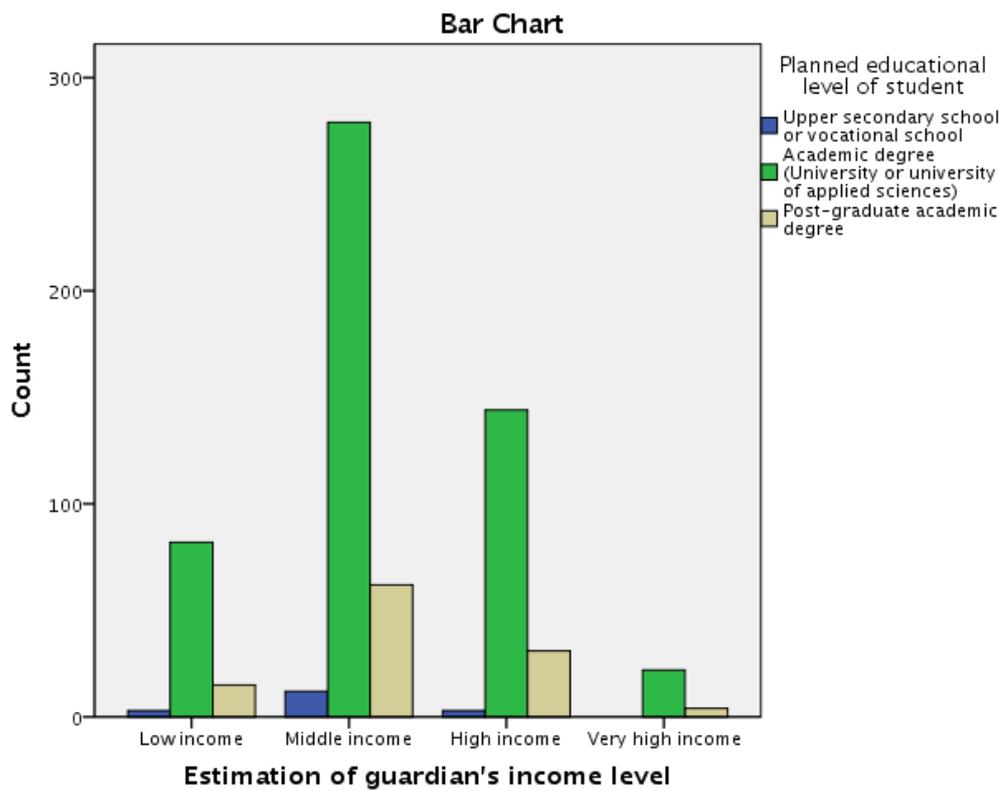
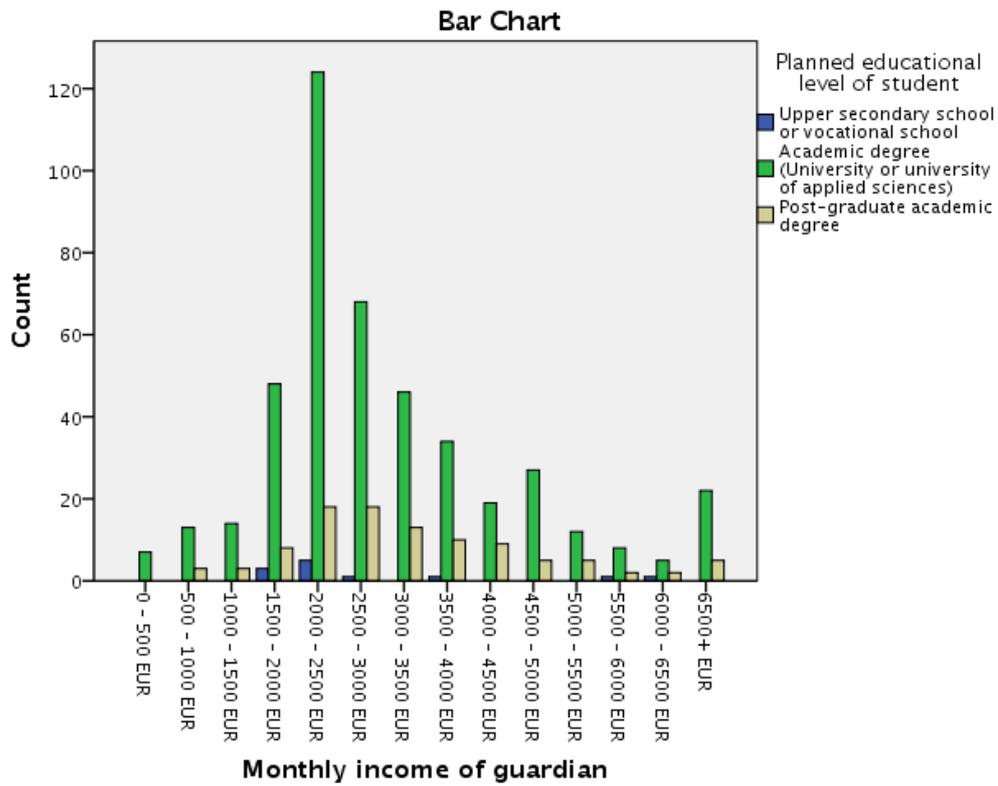
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Planned educational level of student	Equal variances assumed	1.669	.197	.308	332	.758	.017	.054	-.090	.124
	Equal variances not assumed			.279	114.878	.781	.017	.060	-.102	.136

4.8.3 The relationship between the income of a guardian and the educational plans of a student

The third analyzed relationship was that between the income of a guardian and the the educational plans of a student. To analyze this relationship, two crosstabulations were performed, tabulating the students' educational plans against both the verbal and numeric estimations of the guardians' income levels. Again, the data set generated at part 4.2 was used to create a case for each guardian (instead of each student) for the analysis. In line with the previous analyses, it was hypothesized that the students with higher educational aspirations would have guardians with higher income levels.

Again, the outcome of the analysis was that no statistically significant relationships were found between the analyzed variables ($p = 0,390$ and $p = 0,863$).



Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly income of guardian * Planned educational level of student	560	80.3%	137	19.7%	697	100.0%
Estimation of guardian's income level * Planned educational level of student	657	94.3%	40	5.7%	697	100.0%

Monthly income of guardian * Planned educational level of student

Count		Planned educational level of student			Total
		Upper secondary school or vocational school	Academic degree (University or university of applied sciences)	Post-graduate academic degree	
Monthly income of guardian	0 - 500 EUR	0	7	0	7
	500 - 1000 EUR	0	13	3	16
	1000 - 1500 EUR	0	14	3	17
	1500 - 2000 EUR	3	48	8	59
	2000 - 2500 EUR	5	124	18	147
	2500 - 3000 EUR	1	68	18	87
	3000 - 3500 EUR	0	46	13	59
	3500 - 4000 EUR	1	34	10	45
	4000 - 4500 EUR	0	19	9	28
	4500 - 5000 EUR	0	27	5	32
	5000 - 5500 EUR	0	12	5	17
	5500 - 6000 EUR	1	8	2	11
	6000 - 6500 EUR	1	5	2	8
	6500+ EUR	0	22	5	27
Total		12	447	101	560

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.368 ^a	26	.390
Likelihood Ratio	28.531	26	.333
Linear-by-Linear Association	3.449	1	.063
N of Valid Cases	560		

a. 21 cells (50.0%) have expected count less than 5. The minimum expected count is .15.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.221	.390
	Cramer's V	.156	.390
	Contingency Coefficient	.216	.390
N of Valid Cases		560	

Estimation of guardian's income level * Planned educational level of student

Count		Planned educational level of student			Total
		Upper secondary school or vocational school	Academic degree (University or university of applied sciences)	Post-graduate academic degree	
Estimation of guardian's income level	Low income	3	82	15	100
	Middle income	12	279	62	353
	High income	3	144	31	178
	Very high income	0	22	4	26
Total		18	527	112	657

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.551 ^a	6	.863
Likelihood Ratio	3.349	6	.764
Linear-by-Linear Association	.461	1	.497
N of Valid Cases	657		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .71.

Symmetric Measures

	Value	Approx. Sig.
Nominal by Nominal	Phi	.062
	Cramer's V	.044
	Contingency Coefficient	.062
N of Valid Cases	657	

4.8.4 The relationship between the gender and educational plans of a student

Lastly, the the gender of a student was crosstabulated against the level of education the student is planning for. Again, no statistically significant relationship was found between the two variables ($p = 0,756$), indicating that factors other than gender play a more important role in an upper secondary school student's educational plans.

Planned educational level of student * Gender Crosstabulation

Count		Gender		Total
		Male	Female	
Planned educational level of student	Upper secondary school or vocational school	3	7	10
	Academic degree (University or university of applied sciences)	68	212	280
	Post-graduate academic degree	17	43	60
Total		88	262	350

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,559 ^a	2	,756
Likelihood Ratio	,547	2	,761
Linear-by-Linear Association	,172	1	,678
N of Valid Cases	350		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 2,51.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,040	,756
	Cramer's V	,040	,756
N of Valid Cases		350	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

5 Evaluation and conclusion

In this chapter, the data presented in the previous chapter will be analyzed, with the aim of answering the research questions presented at the beginning of the study, conclusions made based on it, and topics for further discussion provided. Limitations of the study will be also discussed and ideas for future studies provided. Finally, a couple of words will be said to conclude the study.

5.1 Summary of the research questions

The first research question of this study was “*Where do the upper secondary school students of Oulu come from?*”, which in turn was divided into two sub-questions:

Who are the main guardians of the students?

According to the results of the study, the main guardians of the upper secondary students were mothers (49,8% of all guardians) and fathers (48,2%).

What kind of religious backgrounds do the upper secondary school students come from?

In light of the results, the students seem to mostly come from secular evangelical lutheran christian homes, where the guardians hold religious affiliations but don't deem religion as very important. While the overwhelming majority (86,4%) of all guardians were affiliated with the evangelical lutheran christian religion, a significant group (11,4%) of atheists or agnostics was also present. Other religions we're not represented to a great extent among the students guardians.

The second research question was “*What is the profile of a guardian of an upper secondary school student?*”, which was again divided into three sub-questions:

What are the basic economical backgrounds of the students' guardians?

The income levels of the guardians of the students taking part in the study were distributed around the “middle income” level, according to both numerical and textual estimations given by the students. However, the degree of which the estimations are correct can be questioned. The questions related to income levels of guardians were generally hard for the students to answer, with many preferring not to answer (especially to the numeric estimation question) and some raising complaints in the free word section of the survey.

What are the educational backgrounds of the students' guardians?

The guardians of upper secondary school students taking part in the study came mostly from university (35,3%, including post-graduate degrees), vocational school (26,7%) or university of applied sciences (23,8%) backgrounds. Hence, 59,1% of the guardians had at least an academic degree, and conversely, 40,9% had at most an upper secondary school or a vocational school degree. 6,4% had a post-graduate academic degree.

What is the working life of the students' guardians like?

The employment rate of the guardians of upper secondary school students taking part in the study was 87,4%, which is close to the general employment rate in the Northern Ostrobothnia region of Finland (the unemployment rate is 14,5%, according to Centre for Economic Development, Transport and the Environment, 2014). The guardians were working in various different fields, the largest occupational groups being managers (19,6%), service and sales workers (19,2%), technicians and associate professionals (17,8%), clerical support workers (15,0%) and professionals (14,2%).

The third research question of the study was “*Do the upper secondary school students feel like their background affects their future choices?*” In light of the results, the students are somewhat undecided on the effect their family members have on their future education, with a bit more disagreeing than agreeing with the premise that their

family members affect their future educational choices. A bit more agreed on the premise that their family affected their choice of going to an upper secondary school. The students didn't generally agree that their family members affected the choice of the particular upper secondary school they went to.

Some students also commented in the free word section of the survey that while their guardians didn't put any pressure on their choices of future education, they still looked up to them, which in turn affected their own educational goals.

A small but statistically significant correlation was found between the level of education of a guardian and the planned future education level of a student. The majority of the guardians also had a background from either a university or a university of applied sciences, which could indicate that their education had already affected the choice for the student to go to an upper secondary school. No statistically significant correlations were found between the educational plans of a student and the students' genders or income levels or marital statuses of the students' guardians.

5.2 Conclusions

The main purpose of the study was to survey the general background information of Finnish upper secondary school students, with the means of a case study concentrating on students in the Oulu region of Finland. The students were surveyed about a wide area of their socioeconomic background information, as seen in Chapter 4, Appendix C and the previous summarization.

5.3 Discussion

Previous studies, such as that by Kärkkäinen (2004), indicate that the education of a guardian (especially that of a mother) is indeed often inherited by a student. Even though the students didn't place much emphasis on the effect their guardians have on their educational goals, the results of this study show moderate support for the findings

of previous studies.

Other studies (see Coleman, 1988; Portes, 1998; and other studies in Chapter 1.3) have concentrated on the role of social capital in the context of family backgrounds and academic achievement. Some of the findings in this study, such as that 73,1% of the respondents' guardians were married and that 96,3% of the respondents reported having two guardians (instead of one) could indicate a healthy level of social capital in the families of upper secondary school students, which could have possibly influenced the decision of the students to attend upper secondary school, normally seen as a gateway for higher education as indicated by the student's educational plans. Obviously, care has to be taken when making conclusions based on this data, and future studies are needed to analyze such hypotheses in a more rigorous manner.

5.4 Limitations and future ideas

There are a couple of known limitations and shortcomings with this study. Firstly, as outlined in the previous part of the chapter, despite efforts to promote the study in all upper secondary schools of Oulu, some schools were more represented in the answers than others, and a couple were missing altogether. A more equal representation would have been ideal for statistical validity. Further studies could perhaps try other sampling methods to avoid this problem.

Secondly, to classify the occupations of the respondents' guardians, the classification from Statistics Finland (2010) was used. In some cases, it can be questioned if the classification was detailed enough. For an instance, the classification groups engineers, musicians and most types of teachers all in the “professionals” category. The classification also puts police officers in the “service and sales workers” category, the accuracy of which can be questioned. Also, the classification doesn't take students and unemployed people into account.

For future studies it would be interesting to extend the study, for an instance by taking into account all upper secondary schools in Finland, by including vocational schools

and comparing them with the upper secondary schools, or by conducting a long-term study and analyzing how the backgrounds and future plans of upper secondary school students change with the ever-changing socioeconomic situation.

5.5 Final words

This study set out to fill the gap in the research on the backgrounds of Finnish upper secondary school students. Now that the study has finished, the gap is a tiny bit smaller. In the progress of the study, various aspects of the backgrounds of the upper secondary school students in Oulu were analyzed and valuable insight was gained on them. Conducting the study has been a long but worthwhile process, and it is the hope of the author that more research on the subject matter will follow.

References

- Bourdieu, P. (1986). The forms of capital. *Cultural theory: An anthology*, 81-93.
- Centre for Economic Development, Transport and the Environment (2014) *Työttömyys Pohjois-Pohjanmaalla 14,5 % - työnhakijoiden aktiivointi kasvussa (Pohjois-Pohjanmaan ELY-keskus)*. Retrieved 13.5.2014 <https://www.ely-keskus.fi/web/ely/-/tyottomyys-pohjois-pohjanmaalla-14-5-tyonhakijoiden-aktiivointi-kasvussa-pohjois-pohjanmaan-ely-keskus->
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, S95-S120.
- Coleman, J. S., & Hoffer, T. (1987). *Public and private high schools: The impact of communities* (p. 213). New York: Basic Books.
- Hoffer, T. B. (1986). *Educational outcomes in public and private high schools*. Ph.D. dissertation, University of Chicago, Department of Sociology.
- Kauppinen, T. M. (2007). *Neighborhood effects in a European city: Secondary education of young people in Helsinki*. *Social Science Research*, 36(1), 421-444.
- Kivinen, O., Hedman, J. & Kaipainen, P. (2013) *Yhdenvertaiset koulutusmahdollisuudet ja Suomen menestys koulutustasokilpailussa – OECD-tilastot evidenssipohjaisen politiikan lähteenä*. Maailman osaavin kansa 2020 – Koulutuspolitiikan keinot, mahdollisuudet ja päämäärät. Koulutustukifoorumin julkaisu. Noudettu 7.5.2014 osoitteesta http://www.oph.fi/download/151447_maailman_osaavin_kansa_2020.pdf.
- Kuusela, J. (2003). *Koulujen paremmuusjärjestyksestä*. Opetushallitus.
- Kärkkäinen, T. (2004). *Koulutuksen ja lapsi-vanhempisuhteen yhteys elämässä selviytymiseen. Sosiaalinen perimä ja koulutuskulttuurisen pääoman periytyminen*

sukupolvesta toiseen. Väitöskirja, Helsingin yliopisto, Helsinki.

Litwin, M. S. (1995). *How to measure survey reliability and validity* (Vol. 7). Sage.

Loury, G. (1977). A dynamic theory of racial income differences. *Women, minorities, and employment discrimination*, 153, 86-153.

Metsämuuronen, J. (2006). *Tutkimuksen tekemisen perusteet ihmistieteissä: tutkijalaitos*. International Methelp.

Mikkonen, H. (2013). *Yliopisto-opiskelijoiden sosioekonominen tausta Suomessa vuonna 2010 ja taustassa tapahtuneet muutokset verrattuna 1990-lukuun*. Helsingin yliopisto. Abstract retrieved 7.3.2015 from <https://helda.helsinki.fi/handle/10138/40987>.

Nykänen, T. (2012). *Kahden valtakunnan kansalaiset: vanhoillislestadiolaisuuden poliittinen teologia*. Lapin yliopistokustannus.

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *LESSER, Eric L. Knowledge and Social Capital*. Boston: Butterworth-Heinemann, 43-67.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of democracy*, 6(1), 65-78.

Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton university press.

Ruuskanen, P. (2001). *Sosiaalinen pääoma: käsitteet, suuntauksset ja mekanismit*. Helsinki: Valtion taloudellinen tutkimuskeskus.

Schleicher, A. (2006). *The economics of knowledge: Why education is key for Europe's success*. Retrieved 24.5.2014 from <http://www.oecd.org/education/skills-beyond->

[school/36278531.pdf](#)

Siisiainen, M. (2003). Two concepts of social capital: Bourdieu vs. Putnam. *International Journal of Contemporary Sociology*, 40(2), 183-204.

Statistics Finland (1997) *Classification of Occupations 1997 (Finnish)*. Retrieved 11.5.2014 from <http://stat.fi/meta/luokitukset/ammatti/001-1997/1313.html>

Statistics Finland (2010) *Classification of Occupations 2010*. Retrieved 11.5.2014 from http://www.stat.fi/meta/luokitukset/ammatti/001-2010/index_en.html

Statistics Finland (2007) *Education in Finland: more education for more people*. Retrieved 14.5.2014 from https://www.stat.fi/tup/suomi90/marraskuu_en.html

Statistics Finland (2012a) *Kokoikaisten palkansaajien keskimääräiset kuukausiansiot ja ansioiden hajontaluvut maakunnittain vuonna 2012*. Retrieved 10.5.2014 from http://www.stat.fi/til/pra/2012/pra_2012_2014-04-08_tau_001_fi.html

Statistics Finland (2014a) *Number of marriages entered into clearly lower, slightly more divorces*. Retrieved 14.5.2014 from https://www.stat.fi/til/ssaaty/2013/ssaaty_2013_2014-04-17_tie_001_en.html

Statistics Finland (2013) *Number of students in upper secondary general education decreased further*. Retrieved 14.5.2014 from http://www.stat.fi/til/lop/2012/lop_2012_2013-06-12_tie_001_en.html

Statistics Finland (2009) *Nuoret muuttavat omilleen yhä nuorempina*. Retrieved 14.5.2014 from http://www.stat.fi/artikkelit/2009/art_2009-03-16_004.html?s=0

Statistics Finland (2014b) *Population structure 2013, Appendix table 2. Religious affiliation of the population, share of population, % 1950–2013* Retrieved 14.5.2014 from http://www.stat.fi/til/vaerak/2013/vaerak_2013_2014-03-21_tau_002_en.html

Statistics Finland (2012b) *Uudet sukupolvet entistä koulutetumpia*. Retrieved 7.3.2015 from http://stat.fi/artikkelit/2012/art_2012-03-12_009.html?s=0

Tähtinen, J., Laakkonen, E. & Broberg, M. (2011) *Tilastollisen aineiston käsittelyn ja tulkinnan perusteita*. Turun yliopiston kasvatustieteiden tiedekunnan julkaisuja C: 20. Painosalama Oy, Turku

United Nations (n.d.) *The Universal Declaration of Human Rights*. Retrieved 25.5.2014 from <http://www.un.org/en/documents/udhr/>

University of Lapland (n.d.) *Tutkimuseettiset ohjeet*. Retrieved 25.5. from <http://www.ulapland.fi/Suomeksi/Yksikot/Taiteiden-tiedekunta/Opiskelu/Opintoja-koskevat-yleiset-ohjeet/Tutkimuseettiset-ohjeet>

Virtanen, A. (2002). *Uudella koulutuksella uudelle vuosituhannele-Suomen 1990-luvun koulutuspolitiikka*.

Appendix A: The questionnaire (original Finnish version)

(Page 1)

Lukiolaisten taustat – Gradukysely

Hei arvon lukiolaiset! Toivon, että mahdollisimman moni teistä vastaa tähän gradukyselyyn. Kyselyn tarkoituksena on kerätä tietoa Oulun lukiolaisten sosioekonomisista taustoista.

Kyselyyn vastaaminen vie aikaa vajaat 10 minuuttia.

Kyselyn lopussa on mahdollisuus osallistua arvontaan, jossa jaetaan palkintona elokuvalippuja ja kirjakaupan lahjakortti. Arvontaan osallistumista ei voida yhdistää kyselyn vastauksiin.

Antamianne tietoja voidaan käyttää gradututkimuksen osana. Kyselyyn vastaaminen on täysin vapaaehtoista ja kyselyn voi keskeyttää missä vaiheessa tahansa. Vastauksia ei voi jäljittää keneenkään yksittäiseen henkilöön.

[] Vakuutan olevani vähintään 18-vuotias, tai että minulla on huoltajani suostumus osallistua kyselyyn

(Page 2)

Pakolliset kysymykset on merkattu tähdillä (*)

Taustatietosi

- Sukupuoli* (Nainen / Mies)
- Syntymävuosi*
- Lukio, jossa opiskelet* (Haukipudas / Karjasilta / Kastelli (myös urheilulinja) / Kiiminki / Laanila / Madetojan musiikkilukio / Merikoski / Oulun aikuislukio / Oulun Lyseon lukio / Oulunsalo / Oulun Suomalainen Yhteiskoulu / Pateniemi /

Oulun normaalikoulu / Oulun steinerkoulu / Svenska Privatskolan i Uleåborg /
eLukio / Muu)

- Vuosiaste* (1 / 2 / 3 / 4 / Muu)
- Tämänhetkinen asumismuoto* (Yksin / Yhden vanhemman kanssa / Kahden vanhemman kanssa / Muun huoltajan/muiden huoltajien kanssa / Muu)
- Asuinpaikkakunta* (Oulu / Muu paikkakunta)
- Työskenteletkö lukion ohessa?* (Kyllä, Ei)

(Page 3)

Pakolliset kysymykset on merkattu tähdillä (*)

Tietoja perhetaustastasi

Huoltajan 1 tiedot

- Huoltaja on* (Äiti / Isä / Äidin puoliso / Isän puoliso / Muu)
- Asun tämän huoltajan kanssa* (Kyllä / Ei)
- Huoltajan syntymävuosi*
- Huoltajan parisuhdetilanne* (Avoliitossa / Avoliitossa / Leskenä / Ei parisuhteessa / Eronnut (ei uudessa avio- tai avoliitossa) / Eronnut (uudessa avoliitossa) / Eronnut (uudessa avoliitossa) / En halua vastata / Muu)
- Huoltajan koulutustausta* (Ei koulutusta / Perusaste (myös kansakoulu, sekä oppikoulu) / Lukio / Ammattikoulutus (myös opistoaste) / Ammatillinen aikuiskoulutus / Kaksoistutkinto / Ammattikorkeakoulu / Yliopisto / Yliopisto (akateeminen jatkotutkinto, esim. Tohtori))
- Työtilanne* (Töissä tällä hetkellä / Ei töissä tällä hetkellä / En halua vastata)
- Huoltajan ammattiluokka* (Johtajat / Erityisasiantuntijat / Asiantuntijat / Toimisto- ja asiakaspalvelutyöntekijät / Palvelu- ja myyntityöntekijät / Maanviljelijät, metsätyöntekijät ym. / Rakennus-, korjaus- ja valmistustyöntekijät / Prosessi ja kuljetustyöntekijät / Sotilaat / En halua vastata / Muu)
- Huoltajan kuukausitulot (EUR)*
- Arviosi huoltajan tulotasosta*
- Huoltajan uskontokunta* (Kristinusko (evankelis-luterilainen) / Kristinusko

(ortodoksinen) / Islam / Ateismi tai agnostismi / Juutalaisuus / Buddhalaisuus / Hindulaisuus / Bahailaisuus / En halua vastata / Muu)

- Arviosi uskonnon merkittävydestä huoltajalle (1 (Ei lainkaan merkittävä) / 2 / 3 / 4 / 5 (Erittäin merkittävä))

Huoltajan 2 tiedot

- Huoltaja on* (Äiti / Isä / Äidin puoliso / Isän puoliso / Muu)
- Asun tämän huoltajan kanssa* (Kyllä / Ei)
- Huoltajan syntymävuosi*
- Huoltajan parisuhdetilanne* (Avoliitossa / Avoliitossa / Leskenä / Ei parisuhteessa / Eronnut (ei uudessa avio- tai avoliitossa) / Eronnut (uudessa avoliitossa) / Eronnut (uudessa avoliitossa) / En halua vastata / Muu)
- Huoltajan koulutustausta* (Ei koulutusta / Perusaste (myös kansakoulu, sekä oppikoulu) / Lukio / Ammattikoulutus (myös opistoaste) / Ammatillinen aikuiskoulutus / Kaksoistutkinto / Ammattikorkeakoulu / Yliopisto / Yliopisto (akateeminen jatkotutkinto, esim. Tohtori))
- Työtilanne* (Töissä tällä hetkellä / Ei töissä tällä hetkellä / En halua vastata)
- Huoltajan ammattiluokka* (Johtajat / Erityisasiantuntijat / Asiantuntijat / Toimisto- ja asiakaspalvelutyöntekijät / Palvelu- ja myyntityöntekijät / Maanviljelijät, metsätyöntekijät ym. / Rakennus-, korjaus- ja valmistustyöntekijät / Prosessi ja kuljetustyöntekijät / Sotilaat / En halua vastata / Muu)
- Huoltajan kuukausitulot (EUR)*
- Arviosi huoltajan tulotasosta*
- Huoltajan uskontokunta* (Kristinusko (evankelis-luterilainen) / Kristinusko (ortodoksinen) / Islam / Ateismi tai agnostismi / Juutalaisuus / Buddhalaisuus / Hindulaisuus / Bahailaisuus / En halua vastata / Muu)
- Arviosi uskonnon merkittävydestä huoltajalle (1 (Ei lainkaan merkittävä) / 2 / 3 / 4 / 5 (Erittäin merkittävä))

(Page 4)

Pakolliset kysymykset on merkattu tähdillä (*)

Omia arvoitasi perheesi vaikuttavuudesta ja tulevaisuuden suunnitelmistasi

- Perheenjäseneni vaikuttivat lukioon hakeutumiseeni
(1 (Täysin eri mieltä) / 2 / 3 / 4 / 5 (Täysin samaa mieltä))
- Perheenjäseneni vaikuttivat siihen, mihin lukioon hakeuduin
(1 (Täysin eri mieltä) / 2 / 3 / 4 / 5 (Täysin samaa mieltä))
- Mille koulutusasteelle asti arvoit kouluttautuvasi? (Lukio / Ammattikoulutus
(myös opistoaste) / Ammatillinen aikuiskoulutus / Kaksoistutkinto /
Ammattikorkeakoulu / Yliopisto / Yliopisto (akateeminen jatkotutkinto, esim.
tohtori) / Muu)
- Perheenjäseneni vaikuttavat kouluttautumissuunnitelmiini
(1 (Täysin eri mieltä) / 2 / 3 / 4 / 5 (Täysin samaa mieltä))

(Page 5)

Kommenttiosuus

Tähän voit kommentoida vapaasti tätä tutkimusta ja halutessasi tarkentaa vastauksiasi

- Vapaa sana

(Page 6)

Kiitos osallistumisestasi!

Voit vielä täyttää yhteystietosi alle osallistuaksesi arvontaan. Arvontaan osallistuminen on täysin vapaaehtoista, eikä osallistumistietoja voida yhdistää kyselyn vastauksiin. Jos et halua osallistua arvontaan, voit sulkea sivun.

- Nimi
- Sähköposti
- Puhelinnumero

Appendix B: The questionnaire (English translation)

(Page 1)

Backgrounds of upper secondary school students – Survey for master's thesis

Hi, upper secondary school students! I hope that many of you will answer this master's thesis survey. The purpose of the survey is to collect information about the socioeconomic backgrounds of upper secondary school students of Oulu.

Answering the survey takes about 10 minutes.

At the end of the survey there's a possibility to take part in a lottery, where the movie tickets and a gift card to a book store will be given as prizes. Participating in the survey can't be traced into the answers to the survey.

The information given by you can be used as a part of the master's thesis research.

Answering the survey is fully optional and can be interrupted at any point. The answers can't be traced back to any single individual.

[] I'm at least 18 years old or have my guardian's permission to participate in the survey

(Page 2)

(*) Compulsory questions are marked with asterisks

Taustatietosi

- Gender* (Female / Male)
- Year of birth*
- Upper secondary school* (Haukipudas / Karjasilta / Kastelli (incl. sports) / Kiiminki / Laanila / Madetoja / Merikoski / Oulu aikuislukio / Oulun Lyseon lukio / Oulunsalo / Oulun Suomalainen Yhteiskoulu / Pateniemi / Oulun normaalikoulu / Oulun steinerkoulu / Svenska Privatskolan i Uleåborg / eLukio / Other)

- Grade* (1 / 2 / 3 / 4 / Other)
- Type of accommodation* (Alone / With one parent / With two parents / With another guardian or guardians / Other)
- Residence* (Oulu / Other)
- Are you working alongside upper secondary school?* (Yes, No)

(Page 3)

(*) Compulsory questions are marked with asterisks

Information about your family background

Guardian 1 information

- Type of guardian* (Mother / Father / Mother's partner / Father's partner / Other)
- I'm currently living with this guardian* (Yes / No)
- Year of birth of the guardian*
- Marital status of guardian* (Married / In a domestic partnership / Widowed / Not in a relationship / Divorced (not in a new marriage or domestic partnership) / Divorced (remarried) / Divorced (in a new domestic partnership) / Prefer not to answer / Other)
- Educational background of guardian* (No education / Primary school / Upper secondary school / Vocational school / Vocational adult education / Dual degree / University of applied sciences / University / University (post graduate degree, e.g. doctor))
- Employment situation of guardian* (Currently working / Not currently working / Prefer not to answer)
- Classification of guardian's occupation* (Managers / Technicians and associate professionals / Professionals / Clerical support workers / Service and sales workers / Skilled agricultural, forestry and fishery workers / Craft and related trades workers / Plant and machine operators, and assemblers / Armed forces / Prefer not to answer / Other)
- Monthly income of guardian (EUR)*
- Estimation of guardian's income level*
- Religious affiliations of guardian* (Christianity (evangelical lutheran) /

Christianity (orthodox) / Islam / Atheism or agnosticism/ Judaism / Buddhism / Hinduism / Baha'i / Prefer not to answer / Other)

- Estimation of the importance of religion to the guardian (1 (Not at all important) / 2 / 3 / 4 / 5 (Very important))

Huoltajan 2 tiedot

- Type of guardian* (Mother / Father / Mother's partner / Father's partner / Other)
- I'm currently living with this guardian* (Yes / No)
- Year of birth of the guardian*
- Marital status of guardian* (Married / In a domestic partnership / Widowed / Not in a relationship / Divorced (not in a new marriage or domestic partnership) / Divorced (remarried) / Divorced (in a new domestic partnership) / Prefer not to answer / Other)
- Educational background of guardian* (No education / Primary school / Upper secondary school / Vocational school / Vocational adult education / Dual degree / University of applied sciences / University / University (post graduate degree, e.g. doctor))
- Employment situation of guardian* (Currently working / Not currently working / Prefer not to answer)
- Classification of guardian's occupation* (Managers / Technicians and associate professionals / Professionals / Clerical support workers / Service and sales workers / Skilled agricultural, forestry and fishery workers / Craft and related trades workers / Plant and machine operators, and assemblers / Armed forces / Prefer not to answer / Other)
- Monthly income of guardian (EUR)*
- Estimation of guardian's income level*
- Religious affiliations of guardian* (Christianity (evangelical lutheran) / Christianity (orthodox) / Islam / Atheism or agnosticism/ Judaism / Buddhism / Hinduism / Baha'i / Prefer not to answer / Other)
- Estimation of the importance of religion to the guardian (1 (Not at all important) / 2 / 3 / 4 / 5 (Very important))

(Page 4)

(*) Compulsory questions are marked with asterisks

Your own estimates of your family's influence and your future plans

- My family members affected my choice of going to upper secondary school
(1 (Fully disagree) / 2 / 3 / 4 / 5 (Fully agree))
- My family members affected my choice of upper secondary school
(1 (Fully disagree) / 2 / 3 / 4 / 5 (Fully agree))
- To what level of education are you aiming for? (Upper secondary school / Vocational school / Vocational adult education / Dual degree / University of applied sciences / University / University (post graduate degree, e.g. doctor))
- My family members affected my future plans of education
(1 (Fully disagree) / 2 / 3 / 4 / 5 (Fully agree))

(Page 5)

Comments

You can use this section to freely comment the study and to further specify your answers, should you wish so

- Free word

(Page 6)

Thanks for your participation!

You can still leave your contact details below to take part in a lottery. Participating is fully optional and can't be traced to your answers to the survey. If you don't want to participate, you can close the page.

- Name
- Email
- Phone

Appendix C: Results of the questionnaire

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-17	79	22,3	22,4	22,4
	17-18	102	28,7	28,9	51,3
	18-19	156	43,9	44,2	95,5
	19-20	16	4,5	4,5	100,0
	Total	353	99,4	100,0	
Missing	Empty	2	,6		
Total		355	100,0		

Type of accommodation

		Frequency	Percent	Valid Percent	Cumulative Percent
<u>Valid</u>	With two parents	227	63,9	64,3	64,3
	With one parent	65	18,3	18,4	82,7
	Alone	34	9,6	9,6	92,4
	With a room mate	8	2,3	2,3	94,6
	With other guardian or guardians	7	2,0	2,0	96,6
	With a partner in cohabitation	6	1,7	1,7	98,3
	With a sibling	3	,8	,8	99,2
	Alternating with two parents	3	,8	,8	100,0
	Total	353	99,4	100,0	
Missing	Empty	2	,6		
<u>Total</u>		<u>355</u>	<u>100,0</u>		

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
<u>Valid</u> Female	265	74,6	74,6	74,6
Male	90	25,4	25,4	100,0
Total	355	100,0	100,0	

Type of guardian

	Frequency	Percent	Valid Percent	Cumulative Percent
<u>Valid</u> Mother	347	49,8	49,8	49,8
<u> </u> Father	336	48,2	48,2	98,0
<u> </u> Other (not specified)	4	,6	,6	98,6
<u> </u> Mother's partner	4	,6	,6	99,1
<u> </u> Father's partner	3	,4	,4	99,6
<u> </u> Grandfather	1	,1	,1	99,7
<u> </u> Deceased	1	,1	,1	99,9
<u> </u> Cousin	1	,1	,1	100,0
<u> </u> Total	697	100,0	100,0	

Age of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25 - 29	1	,1	,2	,2
	35 - 39	22	3,2	3,3	3,5
	40 - 44	105	15,1	15,8	19,3
	45 - 49	219	31,4	33,0	52,3
	50 - 54	204	29,3	30,7	83,0
	55 - 59	82	11,8	12,3	95,3
	60 - 64	28	4,0	4,2	99,5
	65 - 69	3	,4	,5	100,0
	Total	664	95,3	100,0	
Missing	Empty	33	4,7		
Total		697	100,0		

Marital status of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	498	71,4	73,1	73,1
	Divorced (not in a new marriage or domestic partnership)	71	10,2	10,4	83,6
	In a domestic partnership	49	7,0	7,2	90,7
	Divorced (in a new domestic partnership)	30	4,3	4,4	95,2
	Divorced (remarried)	22	3,2	3,2	98,4
	Not in a relationship	8	1,1	1,2	99,6
	Widowed	3	,4	,4	100,0
	Total	681	97,7	100,0	
Missing	Prefer not to answer	14	2,0		
	Don't know the answer	2	,3		
	Total	16	2,3		
Total		697	100,0		

Educational background of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	University	200	28,7	28,9	28,9
	Vocational school	185	26,5	26,7	55,6
	University of Applied Sciences	165	23,7	23,8	79,5
	University (graduate degree, e.g. Doctor)	44	6,3	6,4	85,8
	Primary school	35	5,0	5,1	90,9
	Vocational adult education	29	4,2	4,2	95,1
	Upper secondary school	27	3,9	3,9	99,0
	Dual degree	5	,7	,7	99,7
	No education	2	,3	,3	100,0
	Total	692	99,3	100,0	
Missing	Empty	5	,7		
Total		697	100,0		

Religious affiliations of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Christianity (Evangelical Lutheran)	583	83,6	86,4	86,4
	Atheism or agnosticism	77	11,0	11,4	97,8
	Islam	7	1,0	1,0	98,8
	Christianity (Orthodox)	6	,9	,9	99,7
	Adventism	1	,1	,1	99,9
	Hinduism	1	,1	,1	100,0
	Total	675	96,8	100,0	
Missing	Prefer not to answer	22	3,2		
Total		697	100,0		

Importance of religion for the guardian

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	1 - Not at all important	210	30,1	30,5	30,5
	2 - Not very important	194	27,8	28,2	58,7
	3 - Neutral	138	19,8	20,1	78,8
	4 - Important	82	11,8	11,9	90,7
	5 - Very important	64	9,2	9,3	100,0
	Total	688	98,7	100,0	
Missing	Empty	9	1,3		
Total		697	100,0		

Percentiles: 25: 1,00 (Not at all important); 50: 2,00 (Not very important); 75: 3,00 (Neutral)

Importance of religion for the guardian (excluding "Atheism or agnosticism")

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	1 - Not at all important	146	23,5	23,9	23,9
	2 - Not very important	185	29,8	30,2	54,1
	3 - Neutral	136	21,9	22,2	76,3
	4 - Important	81	13,1	13,2	89,5
	5 - Very important	64	10,3	10,5	100,0
	Total	612	98,7	100,0	
Missing	Empty	8	1,3		
	Total	620	100,0		

Percentiles: 25: 2,00 (Not very important); 50: 2,00 (Not very important); 75: 3,00 (Neutral)

Monthly income of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 - 500 EUR	7	1,0	1,2	1,2
	500 - 1000 EUR	16	2,3	2,8	4,1
	1000 - 1500 EUR	17	2,4	3,0	7,1
	1500 - 2000 EUR	61	8,8	10,8	17,8
	2000 - 2500 EUR	150	21,5	26,5	44,3
	2500 - 3000 EUR	88	12,6	15,5	59,9
	3000 - 3500 EUR	59	8,5	10,4	70,3
	3500 - 4000 EUR	45	6,5	8,0	78,3
	4000 - 4500 EUR	28	4,0	4,9	83,2
	4500 - 5000 EUR	32	4,6	5,7	88,9
	5000 - 5500 EUR	17	2,4	3,0	91,9
	5500 - 6000 EUR	11	1,6	1,9	93,8
	6000 - 6500 EUR	8	1,1	1,4	95,2
	6500+ EUR	27	3,9	4,8	100,0
	Total	566	81,2	100,0	
Missing	Prefer not to answer	131	18,8		
Total		697	100,0		

Estimation of the income level of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low income	100	14,3	15,1	15,1
	Middle income	359	51,5	54,1	69,2
	High income	178	25,5	26,8	96,1
	Very high income	26	3,7	3,9	100,0
	Total	663	95,1	100,0	
Missing	Prefer not to answer	34	4,9		
Total		697	100,0		

Employment situation of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
<u>Valid</u>	Currently employed	592	84,9	87,4	87,4
	Not currently employed	85	12,2	12,6	100,0
	Total	677	97,1	100,0	
Missing	Prefer not to answer	20	2,9		
Total		697	100,0		

Classification of guardian's occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Managers	112	16,1	19,6	19,6
	Service and sales workers	110	15,8	19,2	38,8
	Technicians and associate professionals	102	14,6	17,8	56,6
	Clerical support workers	86	12,3	15,0	71,7
	Professionals	81	11,6	14,2	85,8
	Craft and related trades workers	44	6,3	7,7	93,5
	Skilled agricultural, forestry and fishery workers	19	2,7	3,3	96,9
	Plant and machine operators, and assemblers	12	1,7	2,1	99,0
	Armed forces	3	,4	,5	99,5
	Elementary occupations	2	,3	,3	99,8
	Students	1	,1	,2	100,0
	Total	572	82,1	100,0	
Missing	Prefer not to answer	125	17,9		
Total		697	100,0		

Educational background of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	University	200	28,7	28,9	28,9
	Vocational school	185	26,5	26,7	55,6
	University of Applied Sciences	165	23,7	23,8	79,5
	University (graduate degree, e.g. Doctor)	44	6,3	6,4	85,8
	Primary school	35	5,0	5,1	90,9
	Vocational adult education	29	4,2	4,2	95,1
	Upper secondary school	27	3,9	3,9	99,0
	Dual degree	5	,7	,7	99,7
	No education	2	,3	,3	100,0
	Total	692	99,3	100,0	
Missing	Empty	5	,7		
Total		697	100,0		

Religious affiliations of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Christianity (Evangelical Lutheran)	583	83,6	86,4	86,4
	Atheism or agnosticism	77	11,0	11,4	97,8
	Islam	7	1,0	1,0	98,8
	Christianity (Orthodox)	6	,9	,9	99,7
	Adventism	1	,1	,1	99,9
	Hinduism	1	,1	,1	100,0
	Total	675	96,8	100,0	
Missing	Prefer not to answer	22	3,2		
Total		697	100,0		

Importance of religion for the guardian

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	1 - Not at all important	210	30,1	30,5	30,5
	2 - Not very important	194	27,8	28,2	58,7
	3 - Neutral	138	19,8	20,1	78,8
	4 - Important	82	11,8	11,9	90,7
	5 - Very important	64	9,2	9,3	100,0
	Total	688	98,7	100,0	
Missing	Empty	9	1,3		
Total		697	100,0		

Percentiles: 25: 1,00 (Not at all important); 50: 2,00 (Not very important); 75: 3,00 (Neutral)

Importance of religion for the guardian (excluding "Atheism or agnosticism")

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	1 - Not at all important	146	23,5	23,9	23,9
	2 - Not very important	185	29,8	30,2	54,1
	3 - Neutral	136	21,9	22,2	76,3
	4 - Important	81	13,1	13,2	89,5
	5 - Very important	64	10,3	10,5	100,0
	Total	612	98,7	100,0	
Missing	Empty	8	1,3		
Total		620	100,0		

Percentiles: 25: 2,00 (Not very important); 50: 2,00 (Not very important); 75: 3,00 (Neutral)

Monthly income of guardian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 - 500 EUR	7	1,0	1,2	1,2
	500 - 1000 EUR	16	2,3	2,8	4,1
	1000 - 1500 EUR	17	2,4	3,0	7,1
	1500 - 2000 EUR	61	8,8	10,8	17,8
	2000 - 2500 EUR	150	21,5	26,5	44,3
	2500 - 3000 EUR	88	12,6	15,5	59,9
	3000 - 3500 EUR	59	8,5	10,4	70,3
	3500 - 4000 EUR	45	6,5	8,0	78,3
	4000 - 4500 EUR	28	4,0	4,9	83,2
	4500 - 5000 EUR	32	4,6	5,7	88,9
	5000 - 5500 EUR	17	2,4	3,0	91,9
	5500 - 6000 EUR	11	1,6	1,9	93,8
	6000 - 6500 EUR	8	1,1	1,4	95,2
	6500+ EUR	27	3,9	4,8	100,0
	Total	566	81,2	100,0	
Missing	Prefer not to answer	131	18,8		
Total		697	100,0		

Estimation of the income level of guardian

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Low income	100	14,3	15,1	15,1
Middle income	359	51,5	54,1	69,2
High income	178	25,5	26,8	96,1
Very high income	26	3,7	3,9	100,0
Total	663	95,1	100,0	
Missing				
Prefer not to answer	34	4,9		
Total	697	100,0		

Classification of guardian's occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Managers	112	16,1	19,6	19,6
	Service and sales workers	110	15,8	19,2	38,8
	Technicians and associate professionals	102	14,6	17,8	56,6
	Clerical support workers	86	12,3	15,0	71,7
	Professionals	81	11,6	14,2	85,8
	Craft and related trades workers	44	6,3	7,7	93,5
	Skilled agricultural, forestry and fishery workers	19	2,7	3,3	96,9
	Plant and machine operators, and assemblers	12	1,7	2,1	99,0
	Armed forces	3	,4	,5	99,5
	Elementary occupations	2	,3	,3	99,8
	Students	1	,1	,2	100,0
	Total	572	82,1	100,0	
Missing	Prefer not to answer	125	17,9		
Total		697	100,0		

My family members affected my choice of going to upper secondary school

	Frequency	Percent	Valid Percent	Cumulative Percent
<u>Valid</u> Fully disagree	47	13,2	13,2	13,2
<u> </u> Somewhat disagree	77	21,7	21,7	34,9
<u> </u> Don't disagree nor agree	99	27,9	27,9	62,8
<u> </u> Somewhat agree	96	27,0	27,0	89,9
<u> </u> Fully agree	36	10,1	10,1	100,0
<u> </u> Total	355	100,0	100,0	

My family members affected my choice of upper secondary school

	Frequency	Percent	Valid Percent	Cumulative Percent
<u>Valid</u> Fully disagree	137	38,6	38,6	38,6
<u>=====</u> Somewhat disagree	109	30,7	30,7	69,3
<u>=====</u> Don't disagree nor agree	52	14,6	14,6	83,9
<u>=====</u> Somewhat agree	47	13,2	13,2	97,2
<u>=====</u> Fully agree	10	2,8	2,8	100,0
<u>=====</u> Total	355	100,0	100,0	

To what level of education are you aiming for?

		Frequency	Percent	Valid Percent	Cumulative Percent
<u>Valid</u>	University	212	59,7	60,1	60,1
	University of Applied Sciences	69	19,4	19,5	79,6
	University (graduate degree, e.g. Doctor)	60	16,9	17,0	96,6
	Upper secondary school	5	1,4	1,4	98,0
	Vocational adult education	3	,8	,8	98,9
	I don't know yet	2	,6	,6	99,4
	Vocational school	1	,3	,3	99,7
	Dual degree	1	,3	,3	100,0
	Total	353	99,4	100,0	
Missing	Empty	2	,6		
Total		355	100,0		

My family members affect my future plans of education

	Frequency	Percent	Valid Percent	Cumulative Percent
<u>Valid</u> Fully disagree	82	23,1	23,1	23,1
<u>=====</u> Somewhat disagree	91	25,6	25,6	48,7
<u>=====</u> Don't disagree nor agree	110	31,0	31,0	79,7
<u>=====</u> Somewhat agree	57	16,1	16,1	95,8
<u>=====</u> Fully agree	15	4,2	4,2	100,0
<u>=====</u> Total	355	100,0	100,0	