The Social Relativity of Higher Education

The Influence of Social Capital on the Probability of Commencing Tertiary Studies

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Abstract

The decision of whether to enter higher education or not is strongly structured by social background, i.e. parents’ social class. This paper examines if and to what extent enrolment in tertiary education also is related to social capital, and furthermore, if social capital can account for differences in social background. Two aspects of social capital are examined: extended network resources, operationalized as family acquaintances holding different occupations, and peer influences, assessed as the number of friends already engaged in higher educational studies. The sample consists of two subsequent surveys of Swedish adolescents, divided in three strata based on parents’ country of birth: Iran, former Yugoslavia and Sweden. The findings suggest that resources and returns of extended social networks enhance the probability of enrolment to university studies. The results concerning peer influences seem to indicate an impact on the probability of university admission, however, there might be causal and analytical problems of measurement involved.

Keywords

Social capital, educational attainment, inequality, class, stratification.
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Introduction

Educational attainment is a central factor of social inequality. It structures inequality across individuals by limiting and giving access to jobs and labour market rewards. From an intergenerational perspective, education is the central resource in social mobility (Ball, 2003; Behtoui, 2013: 46, 54; Bourdieu, 1986: 54; Eriksson and Jonsson, 1993; Eriksson and Jonsson, 1996; Haller and Portes, 1973). But what is it that influences educational attainment? The literature has identified relevant factors in class background, gender and race/ethnicity. A common feature for these factors is that they structure individual life in both a social and spatial way, e.g. via the principle of homophily – i.e. that individuals tend to cluster in groups where they share similar features. This produces constraints upon what social groups the individual is exposed to in his or her social environment, reaching from the childhood neighbourhood community to local “hang-outs”, schools, universities and workplaces. The social preconditions will shape what kind of peers the individual will form relations with, and further on social networks will play a significant role when the individual confront higher education and the labour market. The contacts that provide information, influence, support and referrals for the individual will be of great importance in shaping the individual’s life chances. These components and their potential impacts are an essential part of what the concept of social capital is trying to grasp. In this sense, social capital could be understood as a resource that is embedded in the relation between individuals. With some exceptions, most studies of inequality in education have tended to ignore factors of social network and peer influence on the probability of higher educational enrolment. Accordingly, the aim and the focus of this study is to analyse how social capital is related to class and how social capital effect the likelihood of enrolling in tertiary studies. Controls will be made for significant and relevant background and mediating variables. Consequently, the objective results in three research questions:

• How is extended network social capital related to the likelihood of enrolment in university schooling?

• Does extended network social capital mediate effects of class background on tertiary enrolment?
• To which extent do peer influences (of alters commenced university studies) associate with the ego’s probability of university enrolment?

Theory and previous research

Class inequality in educational attainment

Class origin is a strong determinant of educational attainment, partly because individuals of more advantaged origins perform better in school, but also because they differ in educational choices and orientation (Erikson, Goldthorpe, Jackson, Yaish and Cox, 2005: 9730). Shavit and Blossfeld (1993: 22) argue that this association has been persistent in western societies, despite institutional change aimed at reducing educational inequality, such as educational expansion. However, Breen, Luijkx, Müller and Pollak (2009: 1513-1514) state that a decline in inequality has occurred mainly during 1950 to 1975. This primarily refers to working and agricultural classes’ increased access to secondary education, while inequalities in transition to the tertiary level tend to persist. In a subsequent study Breen, Luijkx, Müller and Pollak (2010: 39) claim that the decline of class inequalities in relation to educational attainment is a general tendency over the course of the previous century. On the other hand, Eriksson and Jonsson (1996: 90) argue that the Swedish level of educational inequality (in regard to class) has been stable from the early 1970’s to the 1990’s. Müller (1996: 178) examines class effects on educational attainment and states that Sweden, in a European comparative perspective, is located in an intermediate position regarding inequality in the distribution of higher educational goods and credentials. Müller (1996: 156-157) further shows that 51% of the offspring of the service class obtain a higher educational attainment, while the corresponding value for working and agricultural classes are 9.8%.

In a further examination on why inequality in educational attainment persists despite national variation in mobility regimes, Jæger and Holm (2007) suggest disaggregating the impact of class background. Implying that there might be concealed qualitative differences resulting from the institutional variation between countries, the effect of class background could be divided in several inequality inducing dimensions (economic, cultural and social capital).
Hence, the class effect on educational attainment might work according to a special logic in the Scandinavian mobility regime (Jæger and Holm, 2007: 739-740). In regard to educational attainment, the results suggest that other non-monetary forms of capital (i.e. cultural and social capital) are of a greater importance in the Scandinavian countries, in comparison to countries that belong to the “liberal mobility regime” (e.g. USA, Australia and UK). This would be an effect of the redistributive character of the Scandinavian welfare state, rendering economic capital in relation to education less valuable, since education is free and further supported through universal student loans and subsidies. In a similar argument, Bourdieu (1992: 119) uses Sweden as an example to emphasize the relative value of different capital forms in different societies. Social capital might be turned into a political capital, which could generate returns in a more effective way than economic capital usually does in other fields.

Ball (2003) studies how the middle class reproducers its advantage in the British school system. Results show that adolescents with service class backgrounds early on are able to grasp how the relationship between school, higher education and work is connected in a series of choices, steps and moves (Ball, 2003: 84). This includes insights in how hierarchies of a profession and a career might be structured, resulting in an awareness of the choices that have to be made and how they might influence possibilities in the future. Middle class privileges might include parents stepping in when the child experiences an educational difficulty, this could involve getting a private tutor, buying and knowing of additional literature or evoking emotional support (Ball, 2003: 92-93). Further aspects of relevant and mobilized middle class social capital consist of parental awareness and participation in school policies and practices, as well as access to interpersonal information (rather than formal “brochures”) of school reputation and choices (Ball, 2003: 95, 98-100).

Ball, Reay and David (2002: 353) state that there are indications of higher education dropout rates being higher among ethnic minority students. This could be an effect of having a working class background and/or belonging to an immigrated minority group, which in turn might imply that proceeding to higher education represents a break with family history (Ball et al., 2002: 354). Coming from a social background where higher education is unusual (at least in the new country of residence), this step can be perceived as risky, uncertain and problematic (in terms of not holding appropriate economic, cultural or social capital).
Even though some prior literature has analysed the impact of social network relations on educational achievements, for example Jæger and Holm (2007) and the Wisconsin model of status attainment (Haller and Portes, 1973), most studies on class inequality and higher educational attainment have tended to ignore social-relational and interpersonal factors.

Social capital

In this paper, social capital is understood as an individual level resource embedded in a social network, which the actor could obtain by investing in social relations, given a structural access.\textsuperscript{1} According to Lin (2000: 786) social capital may be defined as:

\textit{“(…) investment and use of embedded resources in social relations for expected returns.”}

Thus, Lin (2000) proceeds from an individual level of analysis, pointing to the importance of access and return on social capital.

Bourdieu (1986; 1992: 119), who adopts a similar perspective, views social capital as the aggregate of concrete or potential resources linked to a specific group. The amount of social capital available to the agent (which of course presupposes a group membership or relation) is a function of the size of (a potentially mobilized) network and the accessible volume of economic, cultural or symbolic capital possessed by the members that are connected.

Portes (1998: 6) suggests that a growing consensus in research literature seems to use the term to define an actor’s ability to obtain benefits by virtue of membership in networks and/or other social structures. Obviously, Lin, Portes and Bourdieu stress the importance of access to

\textsuperscript{1} However, the term is used with different meanings by a number of scholars, and elaborated by different theoreticians from various disciplines ranging from economics to political science and sociology. For example, some scholars emphasize the collective good of social capital (Coleman, 1988). Though, Lin (1999: 33-34) departs from this perspective, since it distorts and widens the scope of the term, potentially turning all collective goods (e.g. norms, culture and trust) into social capital. Portes (1998: 5) also stresses the importance of distinguishing between the resource in itself and the ability to acquire it by virtue of a group membership. Portes (1998:5), furthermore, implies that Bourdieu explicitly makes this distinction, even though Bourdieu (1986: 52-53; 1992: 119) stresses the function of the group in relation to social capital. Nonetheless, the analysis of social capital on group level will be left out of this study since the methodological approach focuses on individual profitability and inequality in the distribution of social capital.
networks – which allows us to explore how mechanisms of group formation, inclusion and exclusion operate.

The principle of homophily and access to social capital

Social capital is not formed in a vacuum, but contingent on segregation and stratification processes. Research on interpersonal networks unanimously shows that networks tend to be homogenous in regard to demographic and social properties. This notion is labelled homogeneity (McPherson, Smith-Lovin and Cook, 2001). Additionally, McPhersons et al. (2001: 416) refer to homophily as a principle inducing contact between similar people at a higher rate than contact among dissimilar people. Homophily, as a preference, therefore implies homogeneity in social relations, based on demographic and psychological characteristics. A distinction is made between baseline homophily, the demographic and structural preconditions of the potential tie “pool” the individual is exposed to (i.e. which people are “available” for contact), and inbreeding homophily, which tries to capture tie formation over and above the baseline – including induced relations through foci of activities (i.e. voluntary organizations) as well as personal preferences. Feld’s (1981) notion of the foci describes how individuals organise their relations in social environments around an abstract or concrete entity. This entity is understood as a social focus or a focused activity – for example the family, workplace, voluntary associations and hangouts. A focus is an entity that structures social exposure, integration, as well as segregation of possible ties. Following the thoughts of Lazarsfeld and Merton (1954), an additional distinction is made between status homophily and value homophily (McPherson et al., 2001: 419). Status homophily indicates ascribed statuses that refer to similarity in formal or informal properties, ranging from demographic variables such as ethnicity/race, class, sex, age to acquired attributes, i.e. religion\(^2\), education and occupation. Value homophily refers to internal and orientation-shaping qualities such as values, attitudes and beliefs (for example political orientation and “intelligence”). However, regarding the latter form of homophily, similarity can in a way

\(^2\) In a Swedish context the categorization of religion as a demographic variable might seem unexpected. It is probably explained by the fact that Sweden is more secularized and religion is conceived as more of an “individual property” than in the U.S.
become forced upon the interaction by excluding conversational topics that might contain indifferences (McPherson et al., 2001: 428-429).

Homophily is a guiding principle in determining access to social capital in both Lin’s and Bourdieu’s respective theory. Lin (2000: 786-787) states that the formation of relations is based on a similarity of properties (homophily) that will reflect the structural locations of individuals. The structural location is of course related to (social) properties, such as class and education, as well as other group memberships, i.e. ethnic/racial, gender etc. Hence, structural location (enabling or disabling access) should be understood as a dividing principle in accessing and thereby attaining valued social capital. Central to Lin’s (2000: 787) theoretical reasoning, is the acknowledgement that historical and institutionalizing processes of class, gender and ethnicity/racialization provide different structural opportunities for different social groups in society, based on ascribed or constructed characteristics. In so far as individuals from resource-poor environments succeed in establishing social ties with more advantaged groups, Lin (2000: 787) states that they will be exceptions. Homophily and structural constraints will effectively limit these mobile excursions into being exceptions.

Bourdieu’s (1986: 51) view of access to social capital also implies homophily since the tie-formation presupposes a minimum of homogeneity, in regard to economic and cultural capital. In this perspective, class and education are central in structuring these relations. Consequently, in Bourdieu’s (1986: 51; 1992: 119) perspective access to social capital is dependent on an (class-based) understanding of taste and a “proper” recognition of what and how different objects and phenomena should be valued. Bourdieu (1986: 52) argues that institutions, e.g. the “family”, produce seemingly random occasions for exchange (ranging from parties, trips and exclusive clubs to neighbourhoods, select/private schools and cultural events) that bring together homogenous individuals and thus reproduce the group. Hence, social foci are not random, they are rather produced in regard to structural social patterns of interactions with similar people.

To sum up, both Lin and Bourdieu seem to regard similarity in properties (being both status and value homophily) as essential in establishing possibilities to form relationships, and thus accessing social capital. To expand the argument, the issue at hand is what the access entails, namely, the resources or the effects of social capital.
The effects of social capital

Lin (1999: 31) state that the resources of social capital can be split up into four elements that represent mechanism or positive returns:

- **Information**: Social ties located in strategically and/or hierarchically advantaged positions may provide specific and/or better-informed knowledge about a phenomenon that is of importance to the individual.\(^3\)

- **Influence**: A social tie could exert influence on a decision, either directly (by being positioned as a decision maker) or indirectly (by guiding other actors who have a decisive role). Influence is therefore about accessing power over decision-making processes.

- **Social credentials**: An acknowledged social tie, as conceived by an actor or organization, might serve as a certification of the individual’s social credentials. These social credentials reflect the individual’s social capital, what kind of resources that are accessible to the individual through relations and networks.

- **Reinforcement**: Recognition through social relations has two, often implicit, functions. It rewards the individual with emotional support and public acceptance of claims to certain resources. Lin argues that this is essential in order to maintain mental health and authorize entitlement to resources.

According to Lin, this way of understanding social capital helps explaining how it differs from other forms of capital, such as the economic or human capital (Lin, 1999: 31). Lin (2000: 787) also notes that resource-rich networks, in contrast to their resource-poor counterparts, are characterized by heterogeneity in forms of accessible resources. These “highly valued” networks seem to be reaching beyond socioeconomic stratum and positions, enabling information and influence in a much more diverse form than the restricted variety produced in resource-poor networks. Finally, Lin (1999: 39-40) defines two forms these outcomes might take on: *Instrumental* and *expressive* returns. Instrumental returns are seen to

\(^3\) This is quite consistent to Coleman’s (1988: 104) notion of information as a useful social capital resource. Coleman states that the acquisition of information is costly. A minimal requirement is attention, which in itself is a scarce resource – and if that attention has to be qualified, e.g. in an educational or occupational sense, it is even more costly.
add a previously not possessed resource to the individual, while the expressive return or action is supposed to preserve resources that are already maintained by the individual.

Using the concept of the *invisible hand of social capital*, Lin (2000: 791-792) explicates how the quality of information in regard to job search and/or instrumental actions differ and varies depending on the value of social capital. The quality of the information and the influence exchange in a given network is hypothesized to be a function of the value of embedded resources. This might be perceived as quite an obvious argument, however, the point is that the routine flow of information in the resource rich network is of a more heterogeneous and thus useful character, since it related to a wider social range of resources (Lin, 2000: 787). Consequently, resource rich networks present the connected individuals with valuable knowledge and opportunities (e.g. to change job) on a regular basis (Lin, 2000: 792). From this follows a kind of routinely and relative improvement (or at least reproduction) of informational, influential, credential and reinforcing advantages for the resource rich networks and individuals. Individuals who are part of resource poor networks instead have to mobilize their social ties more actively in order to gain somewhat useful information. The invisible hand of social capital then seems to be a mechanism that maintains and constantly reproduces inequality in important material and immaterial (i.e. psychological) aspects.

Bourdieu is not as explicit as Lin in concretely describing the actual or potential content of social capital. However, two aspects might be distinguished. Firstly, to Bourdieu (1986: 51) social capital is a kind of mediating form of capital allowing the holder to access other people’s resources, such as economic, cultural and symbolic capital. The second quality of social capital resides in the “worthy of being known” (Bourdieu: 1986: 53). This enables individuals, who carry a relatively valuable amount of social capital, to exert a higher productive sociability (since the demand for their sociability is high) – they seem to transform circumstantial relations into lasting connections through the virtue of being “sought after”. Bourdieu (1993: 279-280; 286) exemplifies social capital as a mean for the bourgeoisie to claim “support”, implying a reputational, prestigious and respectable effect, which resembles Lin’s conception of social credentials and reinforcement.
Inequality in social capital

In a Swedish context, Behtoui (2013: 55) notes that a favourable class background combined with educational merits and civic organization membership tends to increase social capital. Furthermore, Behtoui and Neergaard (2015: 16) find socioeconomic background as the main predictor of extra-familial social capital (i.e. measured as: Adolescents’ own friendship networks, parental social networks and adolescents’ activity in social organisations). When studying class and racial/ethnic effects on the social capital of Swedish adolescents, Andersson, Edling and Rydgren (forthcoming) show that a privileged parental class background is associated with higher levels of social capital. In particular, this effect is significant regarding upper service-class contacts.

As previously mentioned, the Wisconsin model suggests that the effect that class background has on the individual’s educational and occupational attainment is mostly due to interpersonal influences (significant others) received in adolescence (Haller and Portes, 1973: 62).

Short range social capital: Peer influence

Social capital may also operate in short range, within more intimate and strong tie relations, i.e. between peers. There is an extensive literature on peer effects within education, analysing to which extent friends and classmates influence each other in the process of studying and learning, and consequently, in educational outcomes (e.g. Sacerdote, 2011). The basic idea is that these friends are part of the individual’s intimate social environment and, thus, exert a form of influence on the individual. In regard to this thesis, however, the question concerns whether close friends studying at a tertiary level influence the ego via the contribution of valuable information and/or (psychological) reinforcement (Lin, 1999: 31).

Talcott Parsons’ theory of influence (1963) is a good point of departure to understand peer effects. The theory aims at explaining how close friends might affect the individual’s beliefs and, consequently, change or reproduce attitudes and opinions. Hallinan and Williams (1990: 122) argue that Parsons’ theory, in contrast to other theories of influence, helps to clarify who is vulnerable to influence and who has the power to influence. Parsons (1963: 48) states that influence is equal to means of persuasion, hence, indirect guiding a decision on the alter’s part to act in a certain way and experiencing it as a “good thing” for him or her. Persuasion
can operate through communicating facts, or information. Informational value is of course dependent on situation and intention, but if circumstances are favourable it is certainly efficient in influencing decisions. A component of influence is trust. The alter must consider the ego to be trustworthy in order to believe him or her, since an independent confirmation of facts might be impossible or judged as too demanding. Parsons (1963: 49) proposes an answer to the question of how trust emerges. Trust is an effect of solidarity, i.e. a confiding mutual relation or a form of Gemeinschaft. This kind of relation implies that the ego, as long as the tie is sustained, could not have an interest in trying to mislead the alter. Of course, the source of influence has to justify his or her right to state guiding information. This can be done in a formal way (e.g. credentials, such as a doctor license/“white coat”) or an informal way (e.g. via reputation). Being a member of a group enhances the possibility of influence, since attempting to influence is in some sense an effort to invoke a common bond of solidarity. At least in the sense that the ego and alter “stand together” in an opinion, belief and/or attitude relative to others differing from them. To sum up, influence can be described as a capacity to convince (Parsons, 1963: 52) and this capacity seems to be, partly, reliant on close friendship.

To relate this line of argument to the purpose of this study, the following circumstances are hypothesized: (1) The ego’s reported alters are close friends and close friends are trusted; (2) the alters’ undertakings (studying or not studying) are understood as an indicator of whether they approve of tertiary studies and whether this activity is communicated to the ego as a good thing and if it is feasible or not.

In regard to previous research on peer influences, Hallinan and Williams (1990: 128) report that best friend college plans and actual attendance had a strong positive association with the respondent’s own aspiration and attendance. They further note that the alter’s positive influence on the ego’s college plans increased if their friendship was mutual, i.e. if the alter also reported the ego as his or her close friend (1990: 128). In coherence with Parsons’ theory of influence (1963), high-school seniors are more exposed to friends’ influence regarding college decisions, than younger students – possibly because the need for information is more critical (Hallinan and Williams, 1990: 129).

The Wisconsin model (Haller and Portes, 1973) suggests interpersonal influences (such as significant others) as an essential factor together with educational and occupational
aspirations, as well as parental status, in order to explain outcomes in status attainment (Haller and Portes, 1973: 58, 70-71). Among parents and teachers, best friends are mentioned as a kind of “significant others” influencing the decision process (Haller and Portes, 1973: 71). Bozick, Alexander, Entwisle, Dauber, and Kerr (2010) return to the Wisconsin model with a life-course longitudinal perspective. They find that the process of forming college aspirations begins as early as in primary school (Bozick et al., 2010: 2047-2048), rather than in secondary school as it was assumed in the Wisconsin model. Furthermore, the researchers state that social economic conditions result in different home and school experiences, i.e. dissimilar long-term socialization processes. These processes entail a forming of habits, preferences and tastes – resulting in natural college expectations early on for privileged children, while youths with middle or low socioeconomic status background prolong their decision or find their social experience pointing them away form tertiary education (Bozick et al., 2010: 2047). Ball et al. (2002: 337) nuance these results by reporting that for “first generation” applicants to tertiary education (with a working class and/or a migration background) the decision about proceeding in their studies is made at a late stage, at the end of secondary education.

Concluding remarks

Based on the literature review, the following is expected:

1) Socioeconomic segregation in structural locations (such as neighbourhoods and other forms of social foci) and the tendency for homophily in social network relations leads to differences in social capital by class background.

2) By accessing other forms of capital as well as (mainly) informational and reinforcing means, social capital is important in underpinning the choice of whether to commence tertiary education or not.

3) By influencing the ego’s beliefs, peers help the ego to decide whether or not to enrol in higher education.

4) Social capital explains some of the educational differences, in regard to class background.

For a conceptual model describing the proposed predictors and the time order in the process of enrolment in higher education, see figure 1 in the appendix.
Methods and Data

Methodological approach

This study examines the association between different social phenomena, therefore regression analysis is a useful method because it allows controlling for alternative explanations, i.e. other independent variables. Hence, this quantitative approach enables a method that attributes variation in an outcome to different explanatory variables. It also allows the research to generalize the results to the population. In regard to the specified research questions, and thus the research interest, a quantitative approach is the most suitable. However, questions arising from both theoretically contradictory and (non)expected results in the statistical analysis might be further investigated using qualitative methods.

Data

The data that is used in this thesis is collected from the panel “Social capital and labour market integration”, where Swedish individuals, born in 1990, were interviewed by telephone concerning their social relations, labour market and educational careers. The sampling scheme contains three different sub-stratums: Parents born in Iran, in former Yugoslavia or in Sweden. The strataums with Iranian and former Yugoslavian backgrounds were oversampled to establish two homogenous and sufficiently large subpopulations in order to identify specific group effects. Each subgroup was sampled according to a simple random sampling method (OSU) in order to maintain an independent, randomized and national representative material. In this study two subsequent waves are used. The first survey was carried out in 2009 and the second in 2013, with respondents being 18-19 years old in the first wave and 22-23 years old in the subsequent. Variables originating from the first wave will be denoted with t_{2009}, and those originating from the second wave by t_{2013}. In order to assure a basic causal

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4 Clearly, simply sampling respondents with “immigration background” would result in a particularistic and heterogeneous group, with a lot of internal differences that would increase the “white-ethnic minority divide” and potentially distort the analysis.
In the first wave, t\textsubscript{2009}, the gross sample consisted of 5,695 individuals with a corresponding response rate of 51.7\%, resulting in a t\textsubscript{2009} net sample of 2,942 respondents. However, the attrition rate following the combination of individuals who responded to both the waves, amount to 46.4\% (1,365 respondents), resulting in a total of 1,577 individuals. The main reason is that it has been very difficult to establish the telephone numbers of the respondents due to a frequent use of cash-card cell phones. Furthermore, the internal omission in the combined (t\textsubscript{2009} + t\textsubscript{2013}) dataset adds up to 369 respondents, resulting in a final net sample of 1,208 individuals. In the summary of internal omission in regard to each variable, it is noted that 346 respondents are excluded through the upper secondary track group variable, probably because several respondents have not enrolled and/or graduated from upper secondary school. Partly, this might reflect that some of the immigrated individuals have had to start from a relatively lower level in the Swedish educational system. Hence, their age might not be matched with the regular age of native upper secondary graduates and they might still have been attending school when the survey was conducted. Furthermore, the GPA-variable omits 4 respondents. The corresponding figure for the class background variable is 15 individuals. Additionally, the variable of social capital omits 3 respondents and the parents’ educational level variable result in 1 respondent with a missing value.

Iranians and (former) Yugoslavians represent two of the five largest immigrant/minority groups in Sweden (SCB, 2011: 2).\textsuperscript{5} Former Yugoslavians have been immigrating to Sweden in two distinct waves. The first wave was during the economical boom and “golden age” of the Swedish welfare state in the late 1960’s and the beginning of the 1970’s, thus forming the final part of a long-term labour immigration trend in Sweden (Nilsson, 2004:19-20; 23). The second wave was during the Yugoslav wars and the following humanitarian crisis in the 1990’s (Nilsson, 2004: 37-38). The immigration of Iranians occurred mainly between 1985

\textsuperscript{5} When measured according to country of birth, Iranians are listed as the fifth largest minority group and “Yugoslavians” as the third largest (SCB, 2011: 2). The sixth largest group consists of individuals born in Bosnia and Herzegovina (meaning that they have migrated after the collapse of the Yugoslavian state).

**Measurement of class**

The EGP (Erikson-Goldthorpe-Portocarero) perspective on class structure is used to measure class. It is based on the categorization of employment relations in *labour contract* and *service relations* (Erikson and Goldthorpe, 1992; Goldthorpe, 2000). The two dimensions determining the different categories are: (1) monitoring problems; and (2) specificity of human capital assets. The latter refers to employee skills, expertise and knowledge. Labour contract occupations are characterized by low levels of qualifications (human capital) and, consequently, that the production output is quite easy for the employer to monitor. On the contrary, employees with service relations possess higher levels of qualification, which in turn render the nature of their work more complicated for the employer to monitor. Finally, Goldthorpe (2000: 221-223) proposes that mixed forms of contracts are likely to be observed as well. These include either difficulties in monitoring but low human capital specificity, or the reverse, no difficulties in monitoring but a rather high qualification. A domination principle will be applied, which will determine the class background by cancelling out a “lower level” parent if the other parent is categorized as a higher class-member. To supplement the analysis of class background, a variable concerning parental education is included, again coded according to a domination principle.

**Measurement of social capital**

First of all, it should be recognized that social capital is difficult to measure, partly since it is interpersonal and thus resides *in* as well as *on* social relations rather than being an independent property of the individual. Additionally, social capital is in this study examined as a latent phenomenon, which means the analysis “miss” the actual moment when individual agency mobilize the resource and make it observable (Hällsten, Edling and Rydberg, 2015: 55-56). However, one of the analytical advantages, on the other hand, resides precisely in the fact that this implies a plausible causal order, i.e. *before* the mobilization of resources. Hence, social capital is measured via proxies and by estimating access to potential social resources. The concept of social capital is split and measured in two variables – extended network and peer influence.
The extended network variable is measured according to the position generator (Lin and Dumin, 1986; Lin, 1999: 38-39). The position generator indicates whether an individual have access to specific salient structural locations, in this study these positions are represented by occupations. Hence, in the survey the respondent was confronted with a list of 40 occupations, which each was given individual hierarchical prestige scores (SIOPS). The respondent reported which positions that were accessed by stating if he or she knew anyone with the specific occupation. Consequently, access to occupations is then assumed to constitute a proxy of value and resources potentially available to the individual. In an outline of the position generator Lin et. al (2001: 63) suggest three guiding dimensions of social capital:

- **Range**: Implying the width of accessibility to hierarchical positions, meaning the difference, or the distance, from the lowest to the highest prestige value/position.
- **Extensity**: Captures the number of positions accessed.
- **Upper reachability**: States the single highest prestige or status location that is accessed.

In order to avoid possible problems of multicollinearity (since these three dimensions tend to show high measures of intercorrelation), a factor analysis is conducted on the transformed variables. This turns the three-dimensional data into a unidimensional variable. In this study the understanding of Bourdieu’s (1986: 51) conception of social capital (size of the potentially mobilized network and the volume of other forms of capital that is accessed) is assumed to be coherent with the position generator method in using occupation as an indicator of status and possession of capital.

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6 The occupations are quite representative of Swedish society, when comparisons are made with census statistics on prestige distribution and monthly wages. However, the selected occupations represent more of labour market “extremes” in order to tap whether contact are reported in less common occupations, and thus being subject to higher discriminatory values (in both ends of the hierarchy).

7 For a reference on the SIOPS prestige scores and measures of occupational status, see Ganzeboom and Treiman (1996).

8 The variables are “transformed” in the sense that they are discrete in their “raw” data form and then made approximate continuous by summing up the individual’s information on all of the occupations.

9 The position generator method is quite consistent and similar to the Bourdieusian approach of Behtoui (2013), Behtoui and Neegaard (2015) and Savage et. al, (2013).
A two-folded reflection on the “generality” of the position is that the returns of social capital might work differently on different (included and pre-specified) occupations and that the list of occupations should be adapted to the structure of the labour market, social context and time (Hällsten et al., 2015: 62).

Apart from embedded resources, the other aspect of Lin’s (1999: 36-37) conception of social capital and the position generator method is network locations (i.e. the relative strength of ties and bridging qualities between networks). However, due to time constraints this factor will be neglected in this study. For the sake of transparency it should, nevertheless, be noted that Lin (1999: 37) comments on the importance of network location in order to access embedded resources.

The **peer influence** variable is based on whether friends have entered tertiary education. Information is collected using a name generator (Lin, Fu and Hsung, 2001: 62), where the respondent is asked to state the friends with whom he/she spends the most time. A maximum of five alters are reported by the ego and considered to serve as the individuals intimate social environment. Since no data is available on ego and/or peer educational aspiration, the actual activity of the alter (i.e. studying or not) is used as a proxy of peer influence. Parents (if they are reported as alters) are removed. This is because, firstly, parents’ educational influence on their children will be controlled for via class or educational background and, secondly, because the main rationale for the variable is to study effects of influential friends. However, it should be noted that few of the respondents actually reported one of their parents as a close friend. The peer variable sums up how many of the ego’s alters that are reported to be studying at a tertiary educational level.

Three assumptions are made concerning the measurement of peer influence: 1) alters are close friends and close friends are trusted; 2) trust enables the alter to influence the ego’s beliefs and guide opinions; 3) the alter studying at the university approves of the activity and thus communicates this to the ego (and the other way around). One problem with this assumption is that alters studying at the tertiary level might not believe (and communicate) that this is a feasible, good thing for the ego to pursue.
Measurement of national background

The measure of national background is determined by the foreign or domestic background of the individual’s parents, i.e. their country of birth. The individual is categorized according to the sampling criterion of the three strata: Sweden, Iran or (former) Yugoslavia. This criterion entails different principles for domestic and foreign background respondents. At least one of the parents has to be born in Iran or (former) Yugoslavia for respondents with foreign background, but correspondingly for individuals with domestic background both the parents have to have been born in Sweden. Secondly, the variable “First generation” designates whether the respondent is born in Sweden or not.

Measurement of track group and school performance

In measuring what upper secondary track group (in Swedish: “Gymnasieprogram”) the individual attended, four categories apply: Academic, semi-academic, vocational and “other”. The last category is quite heterogeneous and includes track groups for low performance pupils as well as specialised programs. To complement the school environment with a measure of individual performance, the average primary grades are included. The primary grades are chosen over the upper secondary grades since the former are assumed to represent a more robust or stable measure of school performance. The upper secondary grades might be subject to a measurement bias since they depend partly on what schools and track groups the individual has enrolled in, as well as which freely chosen courses the respondent has went with.\(^{10}\) The latter could include courses of a more leisure or artistic character which are assumed to depart from the research interest of “conventional academic” performance.

\(^{10}\) Courses range from those with an academic profile such as math or history, but can also consist of a more leisure focus, such as “cooking” or preparation for driving license theory.
Descriptive statistics

Table 1. Descriptive statistics of included variables.

<table>
<thead>
<tr>
<th>Qualitative variables</th>
<th>Quantitative variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Name</td>
</tr>
<tr>
<td>Any Tertiary enrolment</td>
<td>GPA</td>
</tr>
<tr>
<td>(2013)</td>
<td>Social capital</td>
</tr>
<tr>
<td>Yes</td>
<td>Peer influence</td>
</tr>
<tr>
<td>No</td>
<td>(nr. of alters entered university)</td>
</tr>
<tr>
<td>Class</td>
<td>Social capital</td>
</tr>
<tr>
<td>Unskilled manual</td>
<td>Class</td>
</tr>
<tr>
<td>(reference)</td>
<td>Unskilled manual</td>
</tr>
<tr>
<td>Skilled manual</td>
<td>Skilled manual</td>
</tr>
<tr>
<td>Routine non-manual</td>
<td>Routine non-manual</td>
</tr>
<tr>
<td>Lower service</td>
<td>Lower service</td>
</tr>
<tr>
<td>Upper service</td>
<td>Upper service</td>
</tr>
<tr>
<td>Entrepreneurs</td>
<td>Entrepreneurs</td>
</tr>
<tr>
<td>Farmers</td>
<td>Farmers</td>
</tr>
<tr>
<td>National background</td>
<td>National background</td>
</tr>
<tr>
<td>Sweden (reference)</td>
<td>Sweden</td>
</tr>
<tr>
<td>Former Yugoslavia</td>
<td>Former Yugoslavia</td>
</tr>
<tr>
<td>Iran</td>
<td>Iran</td>
</tr>
<tr>
<td>First generation</td>
<td>First generation</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Parents Education</td>
<td>Parents Education</td>
</tr>
<tr>
<td>Non-secondary</td>
<td>Non-secondary</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>Upper secondary</td>
</tr>
<tr>
<td>(reference)</td>
<td>Post-secondary</td>
</tr>
<tr>
<td>Gender</td>
<td>Gender</td>
</tr>
<tr>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>Track group</td>
<td>Track group</td>
</tr>
<tr>
<td>Academic</td>
<td>Academic</td>
</tr>
<tr>
<td>Semi-academic</td>
<td>Semi-academic</td>
</tr>
<tr>
<td>(reference)</td>
<td>Vocational</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
</tr>
</tbody>
</table>

n (total number of respondents) 1208
Method

The aim of the study is to analyse a dichotomous outcome, i.e. commenced or not commenced university studies, and its associations with social capital and peer influence controlling for class, gender and ethnic/racial background. A suitable technique that allows controlling for variables is multiple regression analysis. However, Edling and Hedström (2003: 174) state three main reasons why a linear or OLS (Ordinary Least Squares) regression analysis might be inappropriate when the dependent variable is categorical and the model is probabilistic: 1) The predictions often exceed the distance 0 to 1 (the correct probability interval); 2) Due to the construction of the linear model, heteroscedasticity (heterogeneity of variance)\(^{11}\) will cause problems for the model estimation of \(\beta\)-coefficients and non-expected value estimate of standard error; 3) The assumptions of linearity and additivity are unsuitable, since non-linear (for example S-shaped) associations are likely.\(^{12}\) In order to obtain a more suitable model, logistic regression is used.

\(^{11}\) The variances of the residuals are expected to vary systematically with the predicted value, according to Edling and Hedström (2003: 176) being equal to: \(P_i(1 – P_i)\). The implication would be that observations close to \(P_i\)-values 0 or 1 will display relatively small error terms while the opposite would be true for \(P_i\)-values close to 0,5.

\(^{12}\) That is, likely to describe the relationship between the independent variables and the probability of the outcome-variable to be equal to 1.
How does logistic regression work? First of all, the outcome-variable (or output) in this kind of model is called the logit (Edling and Hedström, 2003: 178). The logit is the natural logarithm of the odds denoted as: $\ln\left(\frac{P_i}{1-P_i}\right)$. The odds are the probability of an event occurring ($P_i$) divided by its opposite or the inverted probability ($1-P_i$). Hence, the logistic regression works with probability and a categorical dependent variable (a variable that either is or is not – i.e. commenced tertiary schooling or not commenced tertiary schooling). In contrast to the OLS or linear regression, logistic regression relies on maximum likelihood as an estimation of model fit. This modelling process can be described as an iterative procedure (i.e. a repeated, automated and systematic “exploration”).

There are several determination coefficients, Pseudo $R^2$, available in logistic regression, the one used in this essay is McFadden's $R^2_{MF}$ (McFadden, 1973: 121). Pseudo $R^2$ measures the percental reduction in log-likelihood value that the applied model (the combined independent variables) brings about compared to a model simply including the intercept (Edling and Hedström, 2003: 192).

**Denotation and statistical models**

The logistic function is denoted as following:

$$P(Y = 1) = \frac{1}{1+e^{-z_i}}$$

where $z_i$ denotes a standard regression function,

$$z_i = a + b_1 * X_{1i} + b_2 * X_{2i} + (…) + e_i$$

The dependent variable was measured in 2013 and the independent variables were collected in 2009. Four different models with the same dependent variable (enrolment in tertiary education) will be presented sequentially in the analysis section. Model 1 includes background and control variables, while the social capital variables are tested in model 2 and 3. Additionally, potentially mediating variables are included in model 4.

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13 Automated in the sense that this procedure quickly becomes demanding and in need of intense computational resources, thus hard to handle with manual calculations, which means statistical software is preferred.

14 The corresponding equations that will be tested include the following independent variables: **Model 1**: Class, national background, foreign born, parents education and sex; **Model 2**: Model 1 + extended network resources; **Model 3**: Model 2 + peer influence; **Model 4**: Model 3 + upper secondary track group and 9th grade GPA.
Results and analysis

The result of the logistic regression is reported in table 3.\textsuperscript{15} In order to interpret the results the direction of correlation and the odds ratios will be addressed. However, since the general probability of tertiary enrolment is rather high (≈63\%) it is not possible to interpret the odds ratios as probabilities (Edling and Hedström, 2003: 178-179). The odds ratio will denote the relative (\%) difference in odds when the independent variable differs one unit while the other variables are controlled for. To obtain the odds ratio one raises the constant $e$ to the logistic coefficient ($=e^b$).

In the first model, two of the class categories (lower and upper service) are statistically significant in having higher rates of enrolment, compared to the reference of unskilled workers. The odds of enrolling in tertiary education are on average 1.69 times larger for the lower service class than the corresponding odds of unskilled manual workers when all other variables are controlled for. The comparable value for upper service background is 2.33 times larger. Having an Iranian or (former) Yugoslavian national background significantly differ from the Swedish reference. The coefficients are positive, implying that having a foreign national background increases the likelihood of enrolling in tertiary education, when the other variables are held constant. The odds of commencing higher education are roughly the same for (former) Yugoslavians (2.27) and Iranians (2.05) in relation to domestic national background. Regarding the impact of parents’ educational attainment on the individual level of enrolment, degrees that exceed secondary level show higher rates of tertiary enrolment than the secondary level. The odds of enrolment in tertiary education are on the average 2.3 times higher if the individual has at least one parent with a post-secondary education, again, when the other variables of the model are controlled for. Being female is positively and significantly associated with commencing higher education, all other things being equal.

\textsuperscript{15} Concerning regression diagnostics, all models have been examined for multicollinearity through correlation matrices and $R^2_c$-tests. Additionally, specification errors have been controlled for in each model using \textquotedblleft linktests\textquotedblright in STATA (Pregibon, 1979). Finally, the data has been checked for outliers.
Table 3. Likelihood of enrolment in tertiary education by $t_{2013}$.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class background (Ref=Unskilled manual)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled manual</td>
<td>0.079</td>
<td>0.035</td>
<td>0.144</td>
<td>0.116</td>
</tr>
<tr>
<td></td>
<td>(0.361)</td>
<td>(0.157)</td>
<td>(0.623)</td>
<td>(0.444)</td>
</tr>
<tr>
<td>Routine non-manual</td>
<td>0.527</td>
<td>0.497</td>
<td>0.489</td>
<td>0.355</td>
</tr>
<tr>
<td></td>
<td>(1.864)</td>
<td>(1.739)</td>
<td>(1.641)</td>
<td>(1.050)</td>
</tr>
<tr>
<td>Lower service</td>
<td>0.526*</td>
<td>0.433</td>
<td>0.511*</td>
<td>0.404</td>
</tr>
<tr>
<td></td>
<td>(2.364)</td>
<td>(1.916)</td>
<td>(2.160)</td>
<td>(1.518)</td>
</tr>
<tr>
<td>Upper service</td>
<td>0.847***</td>
<td>0.681**</td>
<td>0.707**</td>
<td>0.477</td>
</tr>
<tr>
<td></td>
<td>(3.348)</td>
<td>(2.632)</td>
<td>(2.631)</td>
<td>(1.579)</td>
</tr>
<tr>
<td>Entrepreneurs</td>
<td>0.258</td>
<td>0.122</td>
<td>0.060</td>
<td>-0.011</td>
</tr>
<tr>
<td></td>
<td>(0.868)</td>
<td>(0.405)</td>
<td>(0.191)</td>
<td>(-0.031)</td>
</tr>
<tr>
<td>Farmers</td>
<td>0.177</td>
<td>0.134</td>
<td>0.079</td>
<td>-0.588</td>
</tr>
<tr>
<td></td>
<td>(0.339)</td>
<td>(0.253)</td>
<td>(0.144)</td>
<td>(-0.971)</td>
</tr>
<tr>
<td><strong>National background (Ref=Sweden)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Former Yugoslavia</td>
<td>0.820***</td>
<td>0.775***</td>
<td>0.699***</td>
<td>0.766***</td>
</tr>
<tr>
<td></td>
<td>(5.208)</td>
<td>(4.876)</td>
<td>(4.246)</td>
<td>(4.105)</td>
</tr>
<tr>
<td>Iran</td>
<td>0.716***</td>
<td>0.643***</td>
<td>0.537**</td>
<td>0.308</td>
</tr>
<tr>
<td></td>
<td>(3.849)</td>
<td>(3.426)</td>
<td>(2.760)</td>
<td>(1.404)</td>
</tr>
<tr>
<td>Foreign born</td>
<td>0.006</td>
<td>-0.042</td>
<td>-0.051</td>
<td>0.341</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(-0.129)</td>
<td>(-0.153)</td>
<td>(0.899)</td>
</tr>
<tr>
<td><strong>Parents’ education (Ref=Upper secondary)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-secondary</td>
<td>-0.581</td>
<td>-0.575</td>
<td>-0.559</td>
<td>-0.278</td>
</tr>
<tr>
<td></td>
<td>(-1.862)</td>
<td>(-1.818)</td>
<td>(-1.700)</td>
<td>(-0.715)</td>
</tr>
<tr>
<td>Post-secondary</td>
<td>0.833***</td>
<td>0.799***</td>
<td>0.716***</td>
<td>0.588***</td>
</tr>
<tr>
<td></td>
<td>(5.595)</td>
<td>(5.318)</td>
<td>(4.603)</td>
<td>(3.394)</td>
</tr>
<tr>
<td>Female</td>
<td>0.621***</td>
<td>0.597***</td>
<td>0.522***</td>
<td>0.161</td>
</tr>
<tr>
<td></td>
<td>(4.829)</td>
<td>(4.609)</td>
<td>(3.888)</td>
<td>(1.045)</td>
</tr>
<tr>
<td>Extended network</td>
<td>0.286***</td>
<td>0.195*</td>
<td>0.025</td>
<td></td>
</tr>
<tr>
<td>(Social capital)</td>
<td>(3.848)</td>
<td>(2.514)</td>
<td>(0.282)</td>
<td></td>
</tr>
<tr>
<td>Peer influences</td>
<td>0.572***</td>
<td>0.375***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Social capital)</td>
<td>(8.413)</td>
<td>(4.916)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Upper secondary track group (Ref=semi-academic)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>0.418</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.952)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational</td>
<td>-1.150***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-5.446)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>-0.501*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-2.108)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GPA (9th grade)</strong></td>
<td>1.101***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(8.933)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.884***</td>
<td>-0.770***</td>
<td>-1.237***</td>
<td>-0.710*</td>
</tr>
<tr>
<td></td>
<td>(-4.411)</td>
<td>(-3.761)</td>
<td>(-5.586)</td>
<td>(-2.483)</td>
</tr>
<tr>
<td>n</td>
<td>1.208</td>
<td>1.208</td>
<td>1.208</td>
<td>1.208</td>
</tr>
<tr>
<td>Pseudo $R^2_{adj}$</td>
<td>0.099</td>
<td>0.109</td>
<td>0.162</td>
<td>0.307</td>
</tr>
</tbody>
</table>

* p<0.05, ** p<0.01, *** p<0.001; b-coefficients reported with t-values within brackets.
The McFadden pseudo $R^2$ indicates that the first model explains approximately 10% of the variation in enrolment.

Turning to the second model and including the first variable of social capital, it shows that those with higher levels of extended network capital have, on the average, higher rates of enrolment. This is a significant association and holds when controlling for all of the independent variables in the first model. Regarding the values of the coefficients, no major changes appear in model two, except for the class background variable, where the lower service category no longer is significantly different to individuals of unskilled worker background. The upper service-class coefficient also displays a 20% loss, in comparison to the reference category on the probability of higher education registration. This result indicates that the extended network could contain mediating effects of class background on the likelihood of enrolment in tertiary studies. Furthermore, but to a lower degree, Iranian and former Yugoslavian, in comparison to Swedish origin, show some lower $b$-values when extended network is added to the equation.

In the third model, the other variable of social capital, peer influence is included. In this model lower service class background, rather unexpected, again shows a significant impact (in comparison to the reference) on probability of tertiary enrolment. However, it should be noted that the lower service class category is subject to a fluctuation very close to the significance level (i.e. the threshold t-value of 1.96) over model one, two and three. This fluctuation could be a result of suppression between the independent variables. Correspondingly, the upper service class coefficient also displays an increase of about 4% in $b$-value, when peer influences are controlled for. In contrast, the coefficient of the extended network variable displays a 32% loss in $b$-value compared to model two, suggesting that some of the impact of extended network resources is mediated or correlated to peer influences. Anyhow, peer influence, ceteris paribus, displays a positive association with the likelihood of university enrolment. The odds of enrolment are 1.77 higher for every close friend studying at the university, all else equal. For a bivariate crosstab of number of peers that have commenced university studies over tertiary enrolment, see table 2. The Pseudo $R^2_{MF}$ display a value of 16.2%, i.e. the improvement in log likelihood compared to a baseline, or an intercept model.
Finally, in the fourth model every category of class background looses its significance on the probability of commencing university studies. The same non-significant association holds for Iranian national background in comparison to the reference category, as well as being female, in relation to being male. The upper service coefficient display a 33% loss in relation to the previous model, furthermore, the lower service coefficient also show a substantial decrease of about 21%. Iranian national background shows a loss of 43% and looses its statistical significance, while the coefficient for (former) Yugoslavian background increases with about 10%. The coefficient regarding parents’ post-secondary education still maintains a significant value, but there is a reduction in the b-value from the previous model of about 18%. Similarly, but to a higher extent, the b-value of peer influences results in a 35% loss, compared to model three. Additionally, in this model, the likelihood of tertiary enrolment is not related to the individual’s extended network capital. The extended network variable looses about 87% of its previous b-value. This means that higher social capital and higher-class background is mediated through school performance and educational choice (of track group). This explanation also holds for females, who perform better than their male peers in school on the average. However, when examining the loss of significance of the background variables, as well as the extended network variable, one might hypothesize that the added control variables of track group and GPA contain mediating effects. In the case of the former, this could consist of information, emotional support and reinforcement on what track group to pursue in order to guide the adolescent towards tertiary education. If this impact is related to the family network, higher educated friends of the family could be expected to have valuable, interpersonal school related knowledge. Likewise, high network social capital might include exposure to social foci where a more academic milieu or habitus is taught and experienced. Again, in an assessment of the potentially mediating effects of GPA on extended network resources, one could suggest that social capital influences adolescents’ performance through mechanisms of information and reinforcement. Notable, though, is that the variable of peer influence remains significant in model four, when all other variables are controlled for. Regarding the added school related control variables, two of the three categories of track group (vocational and other) significantly differ from the semi-academic program in lowering probability of university enrolment. Having attended a vocational track group, in comparison to the semi-academic, lowers the likelihood of tertiary registration with a matching odds ratio of 0,32. Ninth grade GPA displays a positive and significant association, meaning that a higher value of GPA is associated with higher enrolment rates, all else equal. Throughout all of the models,
tertiary enrolment seems to be positively influenced by a parental post-secondary education, as well as Yugoslavian national background. This means that having a parent with a post-secondary education (in comparison to having a parent with only upper secondary qualification) has a positive difference on the likelihood of commencing studies at the university level even when controls are made for all other variables. The same holds for (former) Yugoslavian national background, in relation to having two parents born in Sweden. This implies that, even though variables of stratified parental backgrounds and individual performance are accounted for, having a former Yugoslavian national background still exerts a positive association with university enrolment. The Pseudo $R^2_{MF}$ amount to 30.7%, which denotes the relative improvement in log likelihood compared to a baseline intercept model.

Discussion and Conclusion

The first research question focus on how extended network social capital is related to the likelihood of enrolment in tertiary education. When the suggested mediating variables are left out, social capital has a significant and positive influence on probability of tertiary enrolment. As mainly Lin (1999, 2000) and Ball (2003) suggest, appropriate information is an essential return of social capital. In relation to probability of tertiary enrolment, this could imply support in the struggle with homework, discipline, internship, (academic) creativity and educational strategy throughout primary and secondary school. Furthermore, an extended network of friends and family with a lot of individuals holding academic credentials seems not only to contain essential information regarding tertiary studies, but could also evoke an emotional support. This support helps to justify the ego’s social claims (concerning university studies and a “good” job) and makes them publically acknowledged and expected (Lin, 1999: 31; Bourdieu, 1993: 279-280, 286). Moreover, if one proceeds from the argument that track group attendance and GPA mediate the impacts of social capital, it seems as if social capital does not have an impact over and beyond this influence, on the probability of tertiary enrolment.
Furthermore, it should be noted that the above stated mechanisms that make up the “content” of social capital are not directly measured, and doing so would probably entail a lot of measurement difficulties. These mechanisms, or rather the results of them, tend to be difficult to separate. For example, is academic discipline an effect of appropriate information, socially accepted (and expected) claims or psychological reinforcement and emotional support? The answer would probably be a combination. The risk of confusing different effects in relation to the different concepts is apparent in the case of social capital, since these mechanisms tend to be related to “class” in a wider sense, child rearing, cultural, economic and social capital. Stating that social capital has a mediating or facilitating quality (e.g. Bourdieu, 1986: 51), might be useful in a heuristic way, but is quite difficult to convert into empirical examination. Whether one proceeds from Bourdieu’s mediating perception of social capital or Lin’s (2000: 786) more calculating actor perspective, the distinction and definition of the term is crucial not only to the interpretation of the results but also the questions asked. Hence, in relation to future studies, further work on conceptual distinction of social capital would aid the research process.

If one changes perspective to the macro level, there are indications of social capital being even more important in Scandinavia. This would be an effect of the extended welfare state, which partly attempts to reduce the value of economic capital in relation to education (Jæger and Holm, 2007: 739-740). This hypothesis might be strengthened by the fact that even though higher education is free and subsided in Sweden, tertiary outcomes are historically stable and unequal in regard to class (Eriksson and Jonsson, 1996: 90; Jæger and Holm: 719-720) and only seem to put Sweden in a mediocre comparative perspective (Müller, 1996: 178). The empirical results of this study give a tenuous support to this argument, in the sense that resources and returns of extended social networks enhance the probability of enrolment to university studies. However, a more refined examination of this hypothesis, in regard to the results of this study, is limited since detailed controls for cultural and economic capital, as well as a comparative analysis concerning relevant countries exceeds the scope of this thesis.

The second research question asks whether social capital mediate effects of class background on the probability of tertiary enrolment. In coherence with previous research (Andersson et al., forthcoming; Behtoui, 2013; Behtoui and Neergaard, 2015) that suggest class background to be highly associated with social capital, this study reports results of social capital mediating
effects of class background on the likelihood of university admission. The process of socialization and decision-making that guides educational attainment is a development reaching over many years in the individual’s childhood and adolescence (Bozick et al. 2009). The resources of social capital impact several stages, from early levels of ambition and support to the choice of track group and further studies (Ball, 2003). In regard to the temporal order, it seems as the results suggest that school performance and choice of track group both mediate class background and extended network social capital. To further analyse these complex processes, one has to make fine-graded examinations of the different stages of educational attainment. One way of doing this could be to identify how social capital interacts in (late) primary school performance, in the process of choosing secondary orientation and, finally, in regard to commencing tertiary studies. Moreover, the proposed time order (i.e. the impacts of extended social capital precede the educational performance and track group attendance) could be criticised in the sense that the individual and the family might have acquired influential friends (e.g. pushing the extended network value upwards) after the 9th grade and the subsequent choices of track group. However, a scenario in which the family abruptly change their relations to the extent that it affects the extended network value in a systematic way is unlikely.

The third research question concerns to which extent peer influences affect the ego’s own probability of tertiary enrolment. The peer influence variable yields robust statistical significance and positive result, meaning that for every close friend studying at university, the probability of own tertiary enrolment increases. The conclusion of this result is that even when rigorously controlling for class and national background (as well as parental education and school related variables) there is still an independent effect of peer influence on the individual’s probability of enrolling in tertiary education. In the theoretical outline of this study, peer influences are understood as being a part of the overall individual social capital. Hence, it does not come as a surprise that information is an important aspect in this subcategory. As Parsons (1963: 48) states, influence is a form of persuasion originating from the transmitter (alter) and then guiding the receiver’s (ego) decision to act in a certain way, experiencing it as a subjectively “good thing”. The mechanism of persuasion can, and is presumed in this case to function via communication and communicative facts, i.e. information. The ego not studying at university then has limited information on how this works, if it is possible and the level of difficulty in tertiary studies. Assuming that the ego
trusts the reported alters, their information is valuable to the ego since the alter is expected not to mislead the ego because of their confiding social relation. Finally, the justification of playing a transmitting and influencing part (alter) seems to be simply the fact that the alter is studying at university and thus have first hand information of this activity. When extending the argument, in relation to the results, one finds that one or more alters that are university students seem to influence the ego in a cumulative and positive way, further increasing the probability for the ego to enrol in tertiary studies. The crosstab (see table 2) summing tertiary enrolment over number of alters reported studying at the university shows an almost perfect linear correlation.

Two potential problems in regard to the measurement and analysis of peer influences will now be presented. First of all, one aspect of peer influence could be related to the principle of homophily, and thus be analytically located in a prior timeframe (i.e. social origin). The adolescents are assumed (at least to a major significant extent) to start out as friends based on homogeneity in several characteristics. As time proceeds some of the close friends might or might not choose to enrol in university studies according to social pressures, mainly related to class and national background. At this moment a causal problem to the present analysis might appear, a potential scenario will illustrate this. Consider the fact that ego has not enrolled in tertiary education by t2009, but will do so subsequently in t2013. Ego has one or several friends reported studying at the university by t2009. Now, the fact that ego enrolls in tertiary education by t2013 might not be a direct “effect” of the peers, it could be a latent or indirect effect of the social origin, thus, partly reflected in the homophily of having friends studying at the university.16 This problem could be further elaborated by taking the research of Bozick et al. (2010) into account, which imply that decision to enrol in tertiary studies is part of long term socialisation process that, at least theoretically, can be tracked down to parameters of social origin and exposure to pressure and norms. It is not possible to further study this effect because of the limitations of the data, other than to at least partially bypass the origin and homophily influence by controlling for relevant variables. The second restriction to this analysis is due to the fact that the reported ties are only studied from the ego’s perspective,

16 See Manski (1993) for further discussions of the reflection problem in social sciences, i.e. the distinction between endogenous, exogenous and correlated explanations of why individuals in a group tend to behave similarly.
which in a worst-case scenario might imply that the tie is not reciprocal, hence the argument of mutual solidarity (alters not misleading the ego) could be a false assumption. However, the fact that the ego have reported the alter as a close friend, nonetheless, entails a wish from the ego’s part to be friends with the alter. If that is the case, the tie is rather asymmetrical and the alter’s activity might be perceived as something the ego wishes to follow or imitate. To sum up, the research question regarding peer influence seems to have a relatively strong empirical support. Even though there might be causal and analytical problems regarding homophily and tie-reciprocity, rigorous controls for relevant variables seem to indicate that there is an impact of peer influence regarding probability in university enrolment. In addition to this discussion, a related issue concerns the measurable and analytical separation between peer influences and extended network resources. Theoretically, information clearly plays an important part in both these elements of social capital. Information could be assumed to be of a more direct and interpersonal character when conceived as peer influence (i.e. coming from the closest friends). However, information might also be interpersonal and equally, or even more important when coming from the extended network. In regard to the outcome, this could result in mediation or intercorrelation between the two variables of social capital.

Now, turning to the dependent variable, a two-folded critical reflection concerning enrolment to tertiary education will be pursued. Firstly, the data contains no restrictions on enrolment as early as in $t_{2009}$. In fact, some adolescents might have already registered themselves for university courses and programs at this time since the survey is conducted in the first term after the individuals are supposed to have completed secondary school. This means that when studying the outcome probability in $t_{2013}$, the individual might already have enrolled at the same time sequence that the independent variables were collected from, i.e. $t_{2009}$. If one simply is interested in whether or not the adolescents have commenced university studies, and pays no attention to when this happens, this is rather unproblematic. However, if one tries to pursue a more refined causal analysis, i.e. identifying a more or less independent cause (explanans) and a dependent effect (explanandum), this case proves difficult and might damage some of the value of using two subsequent surveys. Since the cause and the effect are not isolated, they might mix and thereby hindering an improved causal inference. In regard to peer influences, one example of this could be an individual that have enrolled in $t_{2009}$ and reports several (close) friends that he/she has met at the university. Hence, reported university studying friends have been made because the individual started tertiary studies in $t_{2009}$. In the
analysis, though, it will look like the higher amount of the individual’s friends studying at university will influence and increase the probability of enrolling in \( t_{2013} \) – this represents a counter factual assumption and a false causal assessment. The second part of this critical reflection is due to an often implicit assumption, that enrolment in tertiary education actually leads to educational attainment, and further on, upward mobility. This might of course not always be the case, since the student obviously could register him- or herself at the tertiary level but leave and never complete the educational course or program. A dropout might have several reasons, but class and race/ethnicity seem to be important factors (Ball et al, 2002; Camburn, 1990).

One of the findings that is not related to the research question but, nonetheless, is interesting is how former Yugoslavian background remains a significant and positive predictor on tertiary enrolment, over all the models. This means that an adolescent with a former Yugoslavian background will, on the average, be more likely to continue to higher education than an individual with parents born in Sweden. This result holds even when social background variables are controlled for and grades, as well as track group attendance are equal. Further research on this issue would aid the understanding of how different minority groups act in relation to different social preconditions and structural locations.

The results of this study partly point towards a need of further scientific clarifications. More fine-graded research on how social capital intervenes in the process of enrolling to tertiary education is needed, as well as distinctions between the different mechanisms and returns that operate. Central questions that remain to be answered are whether social capital is equally important or if it differs in its function between the working class and the middle class. This implies an examination or understanding of what ties are evoked and mobilized, what information is processed and how knowledge is perceived in relation to tertiary enrolment. Furthermore, what other forms of capital that is accessed via the social capital are usable when deciding upon further studies, and again how does this relate to class? How does the process of psychological reinforcement and publically accepted or expected acknowledgment on claims work in relation to enrolling in higher education? Obviously, these questions also are relevant in regard to minority groups with different national backgrounds, in contrast to the majority. In order to develop a further understanding of the transitional mechanisms
between social capital and the formation of choice concerning educational aspiration and enrolment, both qualitative and quantitative studies are needed.

In the conclusion of this study it is found that social capital, measured as extended network resources and peer influences, seems to have an impact on adolescents’ probability of tertiary enrolment. The impact of extended network resources on higher educational registration is mediated through primary GPA and upper secondary track group attendance. However, the measurement of peer influence could be biased due to problems of causality and tie-reciprocity. When perceived from an inequality perspective, the result that social capital influences the likelihood of tertiary enrolment mainly entails to two different implications. It is positive in the sense that minority groups, with different national backgrounds, seem to hold higher amounts of social capital (Behtoui and Neergaard, 2015; Andersson et al., forthcoming) and could thus theoretically use it to pursue educational attainment. This could be a technique to counter the effect of an unprivileged structural location. The consequence is negative in so far as the access to social capital is a matter of class. In combination with educational outcomes, this results in social capital being a mechanism for inducing and reproducing further inequality. If the moral objective of society is that equality and equal life chances ought to be independent of social background, then political understanding and thus political intervention should not be restricted to redistributive policies countering only the economic factors causing inequality in educational attainment. Instead a multidimensional knowledge of the several different factors and sequences that drive inequality must inform political decision making and strategies. In this approach social capital should be regarded as such a factor, as it is structuring higher educational enrolment in the short run and social inequality in the long run.
References


Appendix

Figure 1. *A conceptual model of the proposed predictors in the process of enrolment in tertiary education.*

![Conceptual model diagram]

Class background, parents’ education, ethnicity/race and gender

Formation of social ties (homophily)

Access to social capital

Resources of social capital

Peer influence

Extended network

Probability of commencing tertiary studies