

“Accessibility, Usability & Embeddedness” Social Capital and the Status Attainment Process for Men in the Netherlands



June 2011

Niek de Schipper
Wouter Quite
Bas Hofstra

In Cooperation with:
Antonie Knigge, MSc
Prof. Dr. Ir. Vincent Buskens

Bachelorthesis Sociology

Faculty of Behavioral and Social Sciences



Universiteit Utrecht

Table of Content

1. Introduction	3
2. Theoretical Framework	5
2.1. Status Attainment Model	5
2.2. Social Capital	6
2.2.1. Influence status father on Social Capital of his son	7
2.2.2. Accessed Social Capital	8
2.2.3. Embedded Social Capital	8
2.2.4. Used Social Capital	9
3. Data	10
4. Variables	11
5. Methods of Analysis	15
6. Results	15
6.1. Accessed Social Capital	16
6.2. Embedded Social Capital	19
6.3. Used Social Capital	21
7. Conclusion	24
8. References	26

“Accessibility, Usability & Embeddedness” Social Capital and the Status Attainment Process for Men in the Netherlands

Wouter Quite¹, Niek de Schipper² & Bas Hofstra³

Department of Sociology, Utrecht University, Heidelberglaan 2, 3584 CS Utrecht, The Netherlands

ARTICLE INFO

Article History:
Available printed 24
June 2011
Word count: 8909

Keywords:
Status Attainment
Social Capital
Prestige
Intergenerational
Transfer
Father
Son

ABSTRACT

This study addresses the status attainment process and the associated mobility between generations for men in the Dutch society in 2000. It does so by integrating the social resources theory (Lai et al., 1998) in the classic status attainment model by Blau and Duncan (1967). We try to answer the research question; *How does social capital contribute in the transit of status from father to son in the Netherlands?* To answer this research question, we use the Survey on the Social Networks of the Dutch. Most important results are, accessed prestige as social capital is inherited and has a significant effect on one’s status. However, also when including social capital in the status attainment model, education is the most important predictor for one’s status. Furthermore, the higher the status of the person who helps the ego getting a job, the higher the status of the attained job. Contradictory to the theory, we found no evidence of tie strength in the status attainment process.

1. Introduction

To what extent is the Dutch society a so called meritocracy? A meritocracy is desirable, since more (intergenerational) mobility leads to a higher feeling of happiness among civilians (Collins et al., 2008). Who does not want to arrange their lives according to their own will? Heemskerk and Fennema (2009) describe that high status jobs circulate among the same people in the Netherlands. How does one reach these networks; through education or with a little help from his father? Thus, do ascribed attributes, such as family background, stand in the way of a society where everybody has the same chance to reach their true potential?

¹ w.quite@students.uu.nl

² nc.deschipper@students.uu.nl

³ b.hofstra@students.uu.nl

This study addresses the status attainment process and the associated mobility between generations for men in the Dutch society in 2000. We use the status attainment model of Blau and Duncan (1967), that states that a higher status of the father leads to a higher status of his son (with a direct effect on status, as well as an indirect effect through education). This model will be complemented with the social resources theory (Lai et al., 1998). Where occupational prestige of the father not only has an indirect effect on status of the son through education, but also through social capital of the son and education also has an indirect effect on status through social capital (Lai et al., 1998). The social resources theory implies that the more social capital you have in your network, for example the more people you have in your network that potentially can help you to reach a higher status job, the more likely you are to reach a high status position. In short, more social support from people in your network leads to a better job search outcome.

We are interested to see if this integrated model can explain the status attainment process better than the classic model by Blau and Duncan (1967) and the social capital theory separately. Hence, we examine if social capital plays a vital role in the status transfer from father to son or if education is still more important when taking social capital into account. This leads to the main question of this study;

How does social capital contribute to the status attainment process in the Netherlands?

We will try to unravel the different mechanisms explaining the effects of social capital in the status attainment process of the son. Lai et al. (1998) incorporated different theoretical assumptions of social capital in the status attainment process. They studied the effect of how well you know the alters (Granovetter, 1974; Lin et al., 1982), the effect of the prestige of all the alters in the network and the effect of prestige of the alter who helped a person to find a job (Flap & De Graaf, 1988), but not for the Netherlands. In the Netherlands, Flap & De Graaf (1988) only incorporated social capital in the status attainment model as prestige of the alter one uses to find a job. We examine the different dimensions of social capital in the status attainment process for the Netherlands, which has not been done before. We do so by using structural equation modeling to test and compare our models.

The research question will be explored with the use of the Social Survey of the Networks of the Dutch (SSND) from 1999/2000 (Flap, Snijders, Völker, van der

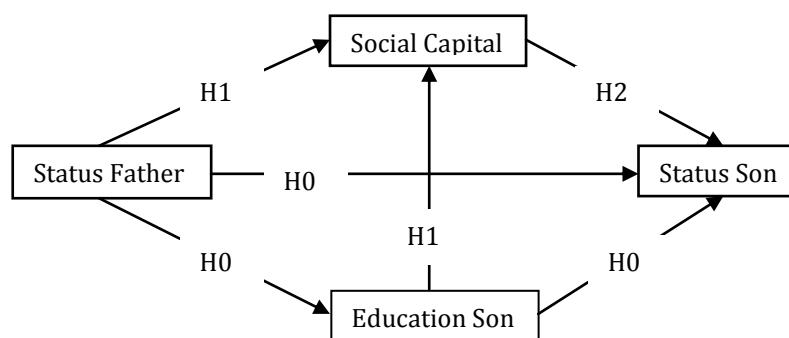
Gaag, 2000). The SSND is the most recent and extensive data set available concerning social capital in the Netherlands.

First, we will give a short recapture of the classic model by Blau and Duncan (1967). Then, we will according to Lin (2001) divide social capital into three elements; *accessibility*, *usability* and *embeddedness* and discuss these different dimensions of social capital and the hypotheses we can derive from them. Next, we will describe the data and the different constructs of variables we use in this study and see whether validity and generalisability is of concern. This is followed by an elaboration on the method of analysis and the results of the different models. To conclude this research we will discuss the implications of its results.

2. Theoretical Framework

The integration of the model by Blau and Duncan (1967) and the social resources theory by Lin et al. (1981) leads to the model shown in figure 1. In the following sections we discuss the hypotheses shown in figure 1. and explain the underlying mechanisms.

Figure 1. *Theoretical framework paper*



Source: Blau & Duncan (1967), Flap & De Graaf (1988), Lin et al. (1981) & Lai et al. (1998)

2.1. Status Attainment Model

First, we address the paths that were part of the model by Blau and Duncan (1967) and the logical inference for the integrated model presented in this article. The

status of the father has a direct positive effect and an indirect positive effect through education on the status of his son (Blau and Duncan, 1967).

The direct effect of the status transfer from father to son, can either be through the inheritance of a title, a family business or the father can directly provide a job for his son. For example if one his father is a farmer, he is more likely to become a farmer as well. He can work on the farm of his father or inherit the family business. This leads to our first hypothesis: *H0.1; Status of the father has a positive direct effect on status of the son.*

Status of the father also has an indirect effect on status of the son through education (Blau & Duncan, 1967). The father can pass his status on to his son using the etiquette and language of the cultural elite. These skills will pass on to the son in the family environment. The son can use the learned etiquette to his advantage in his education (Dronkers & De Graaf, 1995). Moreover, when a father has a higher social economic position in society, he has more financial means to support the education of his son. If the son has a higher education, one is more likely to attain a better job and therefore a higher position in society (Dronkers & De Graaf, 1995). For example, one cannot be a surgeon when he did not attend med school, even when his father is a surgeon. From this we derive the second hypothesis: *H0.2; Status of the father has an indirect positive effect on status of the son through education.*

2.2. Social Capital

Not only one's father or education can be helpful in obtaining a higher position in society, but also his friends, acquaintances or family members can be helpful. This potential social support a person can mobilize is considered to be social capital. Social capital exists next to the traditional forms of capital, such as financial capital (Marx, 1933/ 1849), human capital (Schultz, 1961; Becker, 1964) and cultural capital (Bourdieu, 1980). Social capital and the aforementioned forms of capital all assume that capital is a surplus value of the individual and an investment with expected returns (Lin, 1999). Where the cultural, financial and human capital only exists within the individual, social capital can only exist between two or more people. Social capital can be defined as the investment in social relationships with alleged reciprocity (Lin, 2001). Meaning, when one invests in a relationship (e.g. by providing friendship or give emotional support) one expects to receive returns from this investment in the future (e.g. this friend can help providing a job).

According to Lin et al. (2001), social capital consists of three elements; *accessibility*, *usability* and *embeddedness*. Accessibility is the extent to which the ego could access certain capital within his network (Van der Gaag, 2005). For example, are there contacts in a person's network that potentially can help him obtain a higher status job? Usability is the extent to which others actually provide the necessary means to reach that higher position (Flap & De Graaf, 1988). In other words, did a person actually receive help from one of his contacts to get a higher status job? Embeddedness deals with the structural position a person has in his network. We will concentrate on tie strength between a person and his alters. In other words, are strong ties (i.e. people you know well such as family members and friends) more important or are weak ties (e.g. acquaintances) more important in reaching a higher status position (Granovetter, 1974)? In the next paragraph we will discuss the effect of status of the father on social capital of the son. This will be followed by a further elaboration on the role of the aforementioned elements of social capital in the status attainment process.

2.2.1. Influence status father on Social Capital of his son

A direct way one's origin has an effect on social capital, is the environment where one grows up in. Lai et al. (1998) found a positive effect of ascribed social resources (parental characteristics) on the amount of social capital in the son his network. The underlying mechanism concerning this, is if you have a father with a high status you are more likely to grow up in a good neighbourhood, where the friends you make are also more likely to reach a higher prestige later in life (REF betrekkelijke betrokkenheid). This leads to the following hypothesis *H1.1; Status of the father has a positive direct effect on social capital of the son.*

The father also has an indirect effect on social capital through education. As described in section 2.1., the status of the father has a positive effect on one's education (Blau & Duncan, 1967, Flap & De Graaf, 1981, 1988. Lin et al. 1981). Huang et al. (2009) showed in a meta-analysis that education has a positive effect on social capital. The explanation for this effect is that school is the place where you start to develop your social network. If a father sends his son to a better school, the friends that a person makes are also higher educated and are more likely to reach better positions later on in life. This way, your social network will contain more social capital, because your contacts are more likely to have a higher status later in life. So, we expect there to be an indirect effect of the status of the

father on social capital through education. This leads to the followings hypothesis *H1.2; Status father has a positive effect on social capital of the son through education.*

2.2.2 Accessed Social Capital

Accessed social capital is the total amount of social capital one has in his network, that could be used to achieve a higher status. This can either be the total amount of people in the network (network size) or the total amount of prestige present in the network (Van der Gaag, 2005). The total amount of social capital in the network, consists of the total number of alters in the network combined with the resources the alters together have to offer (in case of the status attainment process the total amount of prestige) (Van der Gaag, 2005). Prestige is important, because a higher status contact is more likely to provide higher status positions (Lin et al., 1981; Flap & De Graaf 1988). Note that that this way social capital is a *'quantification of an accumulated potential of social resources'* (Degenne et al., 2004). Which means that one accounts for the total availability of resources between the ego and his alters. The advantage of accessed social capital is that it is relatively context free. For example, a job recruiter is more likely to hire a person with more social capital, thanks to one's assured worthiness and trustworthiness gained from having high prestige contacts (Lin, 2001). Also, people who have more contacts with a high prestige have a higher chance to have the right contact in their network that can help them to reach a higher status position. Following from this theory, our next hypothesis can be formulated *H2.1; when the total amount of prestige in one his network is higher, one is more likely to have a higher status.*

2.2.3. Embedded Social Capital

Embedded social capital deals with the structural position a person has in a network. Like Lin et al. (1981), we will focus on tie strength of the contacts. Lin et al. use the theory from Granovetter (1974) to describe the diffusion of information through weak tie networks. A weak tie, as opposed to a strong tie (e.g. family or friends), is a contact which you do not know very well (e.g. an acquaintance), but you do know well enough for a conversation in which you can exchange of information. Weak ties can either provide an informational advantage, or help directly in the process of job attainment by putting in a good word for you. Strong

tie networks as opposed to weak tie networks are often more homogenous, this means that people in strong tie networks share the same information. Lin et al. (1981) argue that weak ties are more important to attain a higher status, because they are not part of your strong tie network and provide you with extensive reach and more likelihood to actually find people who can help you attain a higher status. This under the assumption that everyone actually wants to achieve a higher prestige in society.

Lin et al. (1981) and Lin and Dumin (1986), further argue that the informational advantage of weak ties is more likely to be found among people who grew up in a low status environment. Since strong tie networks are often more homogeneous, it is likely that people with a high status have strong ties that can provide equal status jobs as well as weak ties can. For example, when one is already an executive at a large firm, his strong ties can provide other executive jobs at other firms, opposed to an office clerk who does not have high status friends, that is why he needs his weak ties to attain a higher status job. Hence, we expect that the effect of tie strength will be non-significant for people with high prestige. From this we can derive two hypotheses *H2.2; Weak ties are more important in obtaining a high status job for one who grow up in a low status environment. H2.3; For one who grew up in a high status environment, ties strength does not matter or is equally important in obtaining a high status job.*

2.2.4. Used Social Capital

Used social capital, when compared to accessed social capital, prevents the bias of social capital which has not been put to use by the ego (Van der Gaag, 2005). If the mechanism underlying the effect of accessed social capital on the status of the son goes through the direct mobilization of an alter, one can expect that the effect of social capital on status of the son is stronger for people who mentioned an alter that helped them to get their job, than for persons who did not (Flap & De Graaf, 1988; Lin et al., 1981). This leads to the following hypothesis *H2.4; The effect of social capital on the respondents status is stronger for people who actively used their network than for people who did not.*

We will examine this mechanism closer by taking a closer look at the specific person that helped ego in attaining his status. Lin et al. (1981), Flap and De Graaf (1988), Lin and Bian (1991) and Bian (1997), found that when the person mentioned in the job attainment process (the person that directly helped them to

get a job) has a higher status the respondent is also more likely to receive a higher status job. This theory leads to last hypothesis of this study *H2.5; When the status of the person who helped to get a job is higher, one is more like to obtain a higher status job.*

3. Data

To construct and test this integrated model and the hypotheses, we will use the "Social Survey of the Networks of the Dutch" (SSND) (Flap, Snijders, Völker & Van der Gaag, 2000). This dataset includes questions that measure the general distribution of social capital of the respondents in the Netherlands between 1999 and 2000. The dataset is specifically designed to measure the different forms of social capital one possesses. This dataset consists of different measurement items of social capital. This is desirable, because we can perform analyses using different operationalizations of social capital.

The data for the SSND were gathered between 1999 and 2000 and is the first wave of data (second wave is to follow). Two samples of the SSND were accomplished. A labor force sample and a population sample. For this study, the labor force sample is used, since status is linked to having a job. The sample consists of $n = 1007$ randomly selected respondents between the ages of 18 and 65 that represent the Dutch labor population. These individuals were randomly selected from forty municipalities in the Netherlands, where the neighbourhoods and the addresses were randomly selected from zip-codes. Therefore, 4016 addresses were selected from whom 1498 were not reached at all. (f.e. because of; no telephone or wrong address). The complete no-response in the SSND therefore was 37.3%. The number of individuals who were reached is $n = 2518$. The complete response for people who were reached is $n = 1007$ (40%).

Table 1. shows the representativeness of the SSND labor force sample for men, by comparing national statistics of the Dutch labor force in 2000 with the SSND labor force sample. Table 1. shows that the SSND labor force sample deviates somewhat from the national labor force statistics of the Netherlands regarding some characteristics. More specific, married males are overrepresented (SSND = 70.9%; the Netherlands = 44.8%) and higher educated individuals are overrepresented (SSND University = 17.6%; the Netherlands = 5.5%) in the SSND labor force sample in comparison to the Dutch labor force population. The creators of the dataset (Flap, Snijders, Völker & Van der Gaag, 2000) do not exactly know

how these biases occurred, since men often refuse more often and singles have more time to participate in surveys. However, they do state that in the fieldwork married men were more interested in the scientific approach and that singles did not like to answer questions about relationships. The education bias is as expected, since respondents who are higher educated tend to participate in scientific research more often. Furthermore, the marital population labor force statistics are from the total population of the Netherlands, which means that these biases could occur due to the lack of labor force population parameters.

Table 1. *Comparison Between SSND labor force and national labor force statistics of the Netherlands for men in 2000 in %*

		National labor force (45% of total)	SSND-labor force sample (471)
Education	Primary education	4.4	1.9
	Lower general secondary education	12.4	8.9
	Higher general secondary education/ pre- university education	32.2	6.4
	Lower vocational education	-	14.9
	Intermediate vocational education	18.7	24.6
	Higher vocational education	8.2	25.7
	University	5.5	17.6
	Status*	Single	44.4
	Married	44.8	70.9
	Divorced	5.5	4.7
	Widowed	5.4	0.8

* = Marital status statistics are from total Dutch population statistics.

Source: *Social Survey of the Networks of the Dutch (Flap, Snijders, Völker, van der Gaag, 2000)*. National figures from the central bureau for statistics and are for the year of 1999/2000 (CBS).

4. Variables

Dependent Variable

Status of the ego.- Occupations in the SSND are coded through the 1992 standard classification for occupations of the Dutch Bureau for Statistics (CBS, 1993). These occupational codes are linked to both the International Socioeconomic Index (ISEI; Ganzeboom et al., 1992) and Ultee and Sixma's (1984) occupational prestige measures. Both measures have a different interpretation when it comes to status; prestige measures refer more to 'social rewards people can expect in human interactions', while socioeconomic indices are more linked to human resources and economic rewards (Ganzeboom & Treiman, 2003; Van der Gaag et al., 2008). Both measures are focus on different aspects of status. The Ultee and Sixma measure especially focuses on occupational prestige instead of socioeconomic status (Van

der Gaag et al., 2008). This is more relevant for this study, since this study addresses the link between social resources and prestige instead of socioeconomic status. Therefore, we will use the Ultee and Sixma measure as our dependent variable, thus occupational status of the ego. However, both measures are strongly correlated with one another ($r = .81$; $p \leq .000$). The descriptives of this dependent variable, as for all the other variables, are shown in table 2. at the end of this section.

Table 2. Descriptives for variables used in the analyses

		Min.	Max.	Mean	S.D.
	Status Son	15	86	52.38	16.4
	Status sather	15	86	46.1	17.9
	Education	1	5	3.3	1.1
Position Generator	Total Accessed Prestige	51	1522	840.9	312.1
	Strong Ties Prestige	0	1298	477.3	230.2
	Weak Ties Prestige	0	1099	293.8	243.4
Name Generator	Total Accessed Prestige	24	1872	523	252.8
	Status Person Mentioned	0	86	47.9	27.4
		Low Status	High Status		
	Youth Environment	78.40%	21.60%		

Independent Variables

Status of the father.- We measure the status of the father also through the prestige measure as mentioned in the dependent variable description. The prestige score of the father in the SSND corresponds with the job code, or last job if the father was unemployed, the ego his father had when he was sixteen years old.

Education son.- Education of the respondent in our analysis is measured by the Dutch Standard Classification of Education (Standaard Onderwijs Indeling; SOI) (CBS, 2006). The SOI is based on the UNESCO International Standard Classification of Education (ISCED) (1997), but is more fit for the Dutch educational system. For example, the distinction in higher education between the Dutch High Vocational Education (Hoger Beroeps Onderwijs) and University Education is not clear within the ISCED, but is clear for the SOI (CBS, 2006). Therefore, the SOI is appropriate for educational attainment in the Netherlands. The original SOI is a seven-point scale, ranging from education to toddlers to a doctoral degree. With the data available in the SSND, we are able to recode a five-point scale based on the SOI, since education to toddlers and a doctoral degree is not included in the SSND questionnaire.

Social Capital: Position Generator.- The SSND uses several approaches to measure social capital, among them the position and name generator. The position generator, as a measure for social capital which is included in the SSND, is used first by Lin and Dumin (1986) in their Albany study (Van der Gaag, 2005). The position generator is constructed as a measure in which the respondent is asked if he knows someone with a specific occupation. Since the position generator measures access to positions, without mentioning alter names, it is content free and role neutral (Lin, 1998), which makes most suitable for operationalizing social capital. In the SSND data set this is established by asking the respondent if he knows alters in his network through 30 occupations. The 30 occupations represent are linked to the related prestige scores. For example; Do you have a barber in your network? Or; Do you have a scientist in your network? This measurement is useful for our analysis, because it is theoretically consistent with the general concepts of social capital such as, range of prestige in ego's network, highest level of prestige in ego's network and the number of different positions in ego's network (size) (Lin & Dumin, 1986; Lin, Fu, and Hsung, 2001).

The first measure of the position generator we use, is the '*total accessed prestige*' a respondent has. According to Van der Gaag (2005) this is the most general operationalization of social capital. Also, within the position generator measure, this is the construct which is most normally distributed (Van der Gaag, 2005). All the positions of the position generator in the SSND data set are linked to a specific prestige score. The total accessed prestige measure is constructed by adding up the specific prestige scores of the alters the ego knows. Thus, the newly constructed variable becomes an interaction of, if one knows a person with a specific occupation multiplied by the prestige linked to that occupation.

In order to test the weak ties theory (Granovetter, 1974), we constructed two dummy variables within the position generator, a total prestige in weak ties variable and a total prestige in strong ties variable. For the weak ties variable, an acquaintance scores 1 (a weak tie), friends and family score a 0, and 'do not know that person' is a missing parameter. For the strong ties variable, friends and family score a 1 (a strong tie), an acquaintance scores a 0, and 'do not know that person' is a missing parameter. It is interesting to see that people know an average of 6.7 strong ties and an average of 5.6 weak ties. In both variables, the prestige of the strong or weak tie are added up in order to create the newly constructed variable.

Social Capital: Name Generator.- As a different measure for social capital, we will use the name generator (McCallister & Fischer 1978), which is also included in the SSND data set. Both as a robustness check for our analyses and to perform an analysis with a slightly different operationalization of social capital. Name generating involves asking the respondents for contact names in their network. Hereby, we can derive detailed information about the network characteristics from the respondents. However, there are a number of problems related to the name generator measure. The distribution of this measure is affected by the role and number of names. Because of this, the name generator measure tends to show stronger ties or ties in close geographic limits only (Lin, 1999; Campbell & Lee, 1991). Therefore, the position generator is a better measurement and we use this measure primarily as a robustness check. However, the name generator does allow us to take a look at the person who helped the ego to get a job.

Social Capital: Person Mentioned.- The third measure for social capital is a variable in the name generator which is linked to directly activated social capital, namely; 'Which person helped you find your current or last a job?'. From the males in the SSND data set ($n = 582$) $n = 142$ respondents had an alter who helped them get a job. So, 24.6% of the male respondents in the SSND directly used their social capital to get a job.

In order to test whether it matters if one directly uses his social capital in getting their job, we constructed a dummy variable which states if one used an alter in getting a job or not. In order to test whether the status of the person who directly helped the respondent getting their job matters, we constructed a variable which is the prestige score of the person who helped the respondent getting their job. People who did not have an alter who helped them to get a job, are filtered as missing in these particular analyses.

Youth Environment.- In order to see if strong or weak ties matter in getting a job when looking at the status of the environment where one grew up, we constructed a new variable 'youth environment'. This newly constructed variable is a dummy variable stating that one grew up in a low status environment if the prestige score of the father (when the respondent was 16) is below 61 and that one grew up in a high status environment if the prestige score of the father (when the respondent was 16) is above 60. We thus created a dummy variable which states if one comes from a high status environment or a low status environment.

5. Method of Analysis

We use Structural Equation Modelling (SEM) for the analyses of this study. SEM is a statistical technique used for estimating and testing causal relationships, combining both empirical data and theoretical causal assumptions among variables of interest (Pearl, 1998). The use of SEM is desirable to test a path model using a number of variables which are dependent of one another (Spirtes et al., 1998). SEM allows to test models as a whole and compare the models with each other. This way, it is possible to find the most parsimonious model to explain the status attainment process for men in the Netherlands. SEM requires a sample size of at least 100 to 150 (Ding et al., 1995), a requirement which is met in our analyses.

Another assumption is the assumption of multivariate normality, that states that all the variables of our models should be normal distributed in relation to one another (Boomsma, 2000). This assumption is not violated for our analyses. Table 3. shows the univariate skewness and kurtosis of each variable in our most standard model, as well as the multivariate kurtosis. When looking at table 3., one can see that both the univariate skewness and kurtosis are in between 2.0 and -2.0 for all the variables in our most standard model and therefore, do not violate the normality assumption of our model (Gao et al., 2008; Muthén & Kaplan, 1985). The multivariate kurtosis is in between 1.0 and 5.0 and does not heavily violate the normality assumption of our most standard model (Gao et al., 2008; Muthén & Kaplan, 1985).

Table 3. *Assumption of univariate and multivariate normally distributed variables*

Variables	Min.	Max.	Skewness	C.R.	Kurtosis	C.R.
Prestige Father	15	86	.101	.991	-.823	-4.055
Prestige Son	15	86	-.334	-3.289	-.478	-2.355
Total Accessed Prestige	51	1522	-.079	-.779	-.582	-2.866
Education Son	1	5	.041	.404	-.93	-4.577
Age	18	65	-.16	-1.577	-.81	-3.99
Multivariate					-3.427	-4.941

6. Results

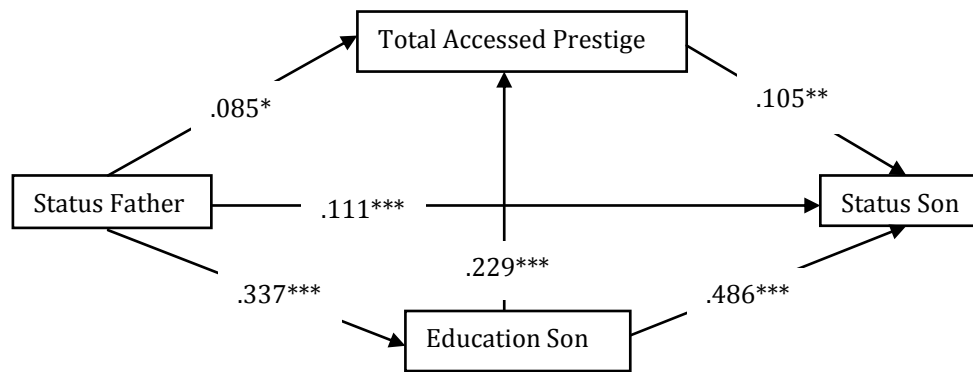
In this section, concerning the results of this study, we will follow the line of this paper by first addressing the results of accessed social capital, followed by embedded social capital and used social capital.

6.1. Accessed Social Capital

Accessed social capital is the total amount of prestige one has in his network (Van der Gaag, 2005). As described in section 2.2.2., this includes most general mechanisms which can be ascribed to social capital. Therefore, we will use this to test our most general model.

First, we address the hypotheses derived from the classic status attainment model (Blau & Duncan, 1967). *H0.1; Status of the father has a positive direct effect on status of the son* and *H0.2; Status of the father has an indirect positive effect on status of the son through education*.

Figure 2. Model including total accessed prestige as social capital



*** = $p \leq .000$; ** = $p \leq .005$; * = $p \leq .05$; ($n = 582$)

Controlled for age, where the effect of age is significant on total accesses prestige ($p \leq .05$)

Model-fit: $\chi^2 = 1.26$; $df = 2$; CFI = .999; RMSEA = .021

When looking at figure 2., one can see the estimates regarding the accessed social capital model. Taking the relationships of the classic status attainment model into account, one can see that all these relationships are significant. The direct effect of the prestige of the father on the prestige of the son, is a positive effect ($B = .111$; $p \leq .000$). Hypothesis *H0.1* can be accepted, according to this result; status of the father has a direct positive effect on the status of the son. The prestige of the father has an positive indirect effect through education on the prestige of the son ($B = .164$; $p \leq .05$). Therefore, hypothesis *H0.2* can be accepted; status of the father has

an indirect effect on status of the son through education⁴⁵. Since both these hypotheses are accepted, it is likely to state that the classic status attainment model still fits for Dutch men in 2000.

Not only the classic status attainment model is important in the status transfer from father to son, the model might improve by adding status transfer through social capital. To see if this is true, we first examine the effect of father on accessed social capital. Lai et al. (1998) found a positive effect of ascribed social resources (parental characteristics) on social capital in the son his network and Huang et al. (2009) showed that education has a positive effect on social capital. The father also has a positive indirect effect on the amount of social capital through education. These relationships are addressed in the following hypotheses *H1.1; Status of the father has a positive direct effect on social capital of the son. H1.2; Status father has a positive effect on social capital of the son through education.*

Figure 2. shows that prestige of the father has a direct positive effect on the total amount of prestige in the network of his son ($B = .085$; $p \leq .05$). Hypothesis *H1.1* can therefore be accepted; status of the father has a positive effect on the total amount of prestige in the network of his son. Also prestige of the father has a indirect positive effect through education on social capital ($B = .077$). Due to data restraints we cannot estimate the p -value of this coefficient, but since both the effect of father's status on education and education on network status are significant ($p \leq .000$), it is very likely to state that this effect is also significant. Thus, hypothesis *H1.2* can according to this results be accepted; status of the father has a positive effect through education on social capital of his son.

A higher status contact is more likely to provide higher status position than a lower status alter (Lin, 1981), therefore the more higher status alters you have the higher the chance that one of you alters can provide higher status job. This is addressed in the following hypothesis *H2.1; when the total amount of prestige in the network is higher, one is more likely to have a higher status.* The total amount of prestige in the network (accessed social capital) has a positive direct effect on prestige of the son ($B = .105$; $p \leq .005$). Therefore, hypothesis *H2.1* can be

⁴ Also for the model with person mentioned as moderator all of Blau and Duncan's assumed relationships are significant ($p \leq .05$).

⁵ When looking at the effect of education on status of the ego, it is significant for all the further models ($p \leq .000$).

accepted; when one has more social capital, one is more likely to have a higher status⁶⁷.

The estimates suggests that the model for status attainment for men in the Netherlands is more accurate when including the direct effects of status father and education on social capital of the son. When we look at the differences in model-fit, the Chi-Square (χ^2), the Comparative-Fit-Index (CFI) and the root mean squared error of approximation (RMSEA), this is true. The model of Blau & Duncan (1967), controlled for total amount of prestige in network, has an erroneous fit with the data ($\chi^2 \leq .05$; CFI = .883; RMSEA = .134). However, when adding the relations prestige of the father to social capital and education of the ego to social capital, the model fit becomes significantly better ($\chi^2 \geq .05$; CFI = .999; RMSEA = .021). Our assumption for a parsimonious and integrated model is justified.

So the model-fit improves when taking the effects through social capital into account. What does this mean for the effect of status of the father on the status of his son? In table 4. we can see that the total effect of status of the father on status of his son improves (from B = .275 to B= .292) when we take the indirect effect through social capital into account. So, for men in Dutch society, the status of the father is an important predictor for the status a person will reach in society. However, the total effect of education also improves when social capital is added to the equation (from B = .486 to B = .510). So education is a more important predictor for the status a person will reach in life. Social capital is a small predictor for status of men in Dutch society (B = .105), when compared to the effect of education and prestige of the father. When interpreting these results, we can state that in the status attainment process for Dutch men, education is the most important predictor for status of the ego. In other words, ascribed attributes are still important in the Dutch society. However, achieved attributes, like education and social capital combined, are more important for predicting the status of men in Dutch society.

⁶ All models are controlled for age in years as a logical factor which can influences ego's status. When one gets older, it is likely to assume that one gets an higher status. However, in all the models this control variable does not have a significant effect on status ($p \geq .05$)

⁷ When performing the analysis with the name generator measure for accessed social capital, all of the results are in the same direction and also significant ($p \leq .005$).

Table 4. *Indirect and total effects of general model*

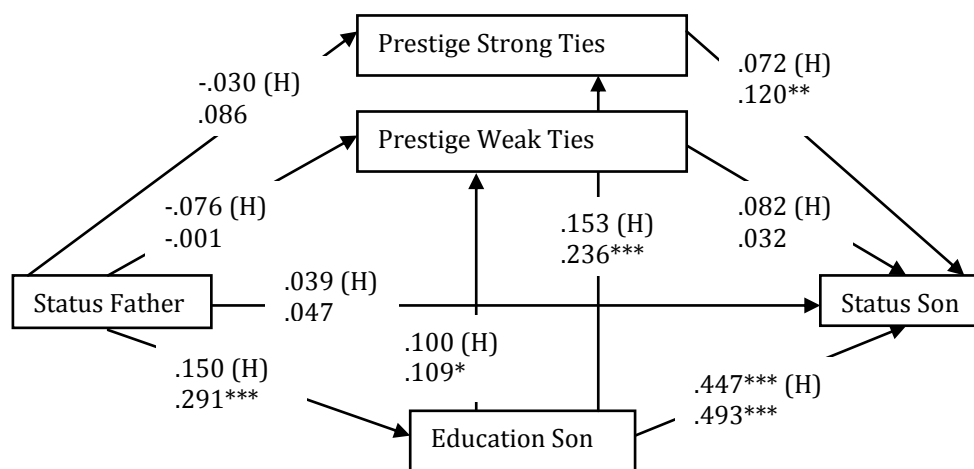
<i>n</i> = 582	Blau & Duncan	Social Capital
	Indirect Effects	Indirect Effects
Prestige Father → Prestige Son (social capital)		.009
Prestige Father → Prestige Son (education)	.164	.164
Prestige Father → Network Social Capital (education)		.077
Prestige Father → Prestige Son (education & social capital)		.008
Education Son → Prestige Son (through social capital)		.024
	Total Effects	Total Effects
Prestige Father → Prestige Son	.275	.292
Education Son → Prestige Son	.486	.510

6.2. Embedded Social Capital

So the total amount of prestige in one his network (accessed social capital) plays a significant role in the status transfer from father to son. In the next section the focus is on the distribution of prestige in one his network (embeddedness). Does the status transfer happens mostly through weak ties, strong ties or both?

Weak ties are supposed to be more important in reaching a high status, because they give you an information advantage (Granovetter, 1974). The effect of weak ties is more likely to be found among people who grew up in a low status environment (Lin & Dumin, 1986). This is addressed in the following hypotheses *H2.2; Weak ties are more important in obtaining a high status job for one who grow up in a low status environment. H2.3; For one who grew up in a high status environment, ties strength does not matter or is equally important in obtaining a high status job.* These hypotheses will be discussed in the next model, seen in figure 3.

Figure 3. Model including prestige of strong and weak ties and youth environment as moderator



*** = $p \leq .000$; ** = $p \leq .005$; * = $p \leq .05$; H = high prestige youth environment; ($n = 582$)
 Model fit: $\chi^2 = 4.16$; $df = 12$; CFI = .99; RMSEA = .076

The model-fit measurements indicate that this model does not fit appropriately with the sample data. The model-fit shows that this model as a whole is insignificant. This implies that tie strength does not matter in the status transfer from father to son. However, this could be due to all the insignificant effects which are not related to tie strength. Therefore, a closer look at the estimates can give us an insight if tie strength might have an effect on prestige of the son, by looking at specific relations. In figure 3., growing up in an high status or low status environment is added as a moderator. Men who grew up in a high status environment represent the abovementioned coefficients in figure 3. and the persons who grew up in a low status environment represent the lower shown coefficients. When looking at figure 3., we see that for persons who grew up in a low status environment, there is only an effect of prestige among strong ties on status ($B = .120$; $p \leq .005$). Therefore, hypothesis $H2.2$ is refuted; it is not confirmed that weak ties are more important than strong ties in obtaining an high status job for one who grew up in a low status environment.

The results suggest that it rather seems to be the other way around, strong ties are more important to reach a higher status for men who grew up in a low status environment. If we look at figure 3., we see that mobility from a low status environment goes mostly through education. Status father has a positive effect on education ($B = .291$; $p \leq .000$) and education has a positive effect on status ($B =$

.493; $p \leq .000$). Also education has a significant effect on the amount of prestige among the strong ties ($B = .236$; $p \leq .000$). We can interpret this effect in the following way; the higher your education, the higher the status of the friends you meet. Those friends, most likely strong ties, can later on in life help you to obtain a higher status job ($B = .120$; $p \leq .005$).

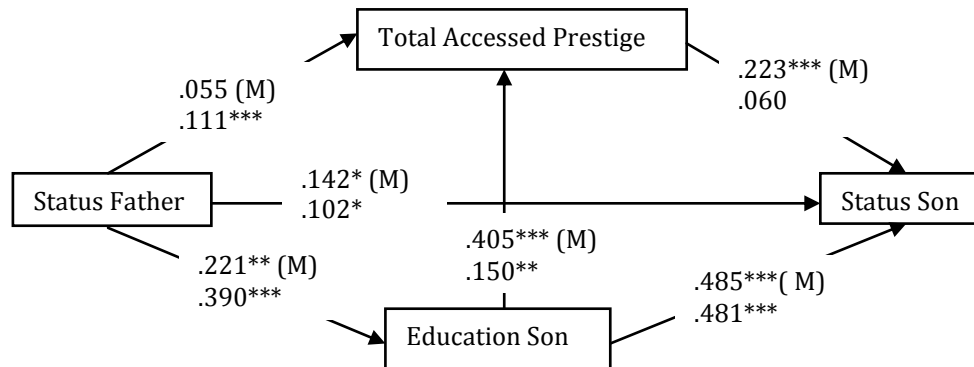
Hypothesis *H2.3* can carefully be accepted; for one who grew up in an high status environment, tie strength does not matter for the status job one attains. In figure 3., we can see that both the amount of prestige in the weak ties and the amount of prestige in the strong ties do not have significant an effect on prestige of the son ($p \geq .05$). It should be noted that the respondents who grew up in a higher status environment (21,6%) do not have a lot of variance left in the analysis regarding obtaining a higher status. This could contribute to the insignificant results. However, we can state from these results that adding tie strength as social capital to the status attainment process does not significantly improve the integrated status attainment model. Status of the father does not have a significant effect on prestige among the son his strong ties or weak ties. This applies either for persons who grew up in a high status environment as well as for person who grew up in a low status environment. We found no evidence that tie strength matters in the status attainment process.

6.3. Used Social Capital

We can state that the effect of ties is very weak for the status attainment process in the Netherlands. Maybe there is an effect of social capital on the status of the son by the direct mobilization of an alter. In other words, a person who directly helps you get a job (used social capital) is more important than the total prestige your network (accessed social capital) or how well you know them (embedded social capital). Flap and de Graaf (1988) found that approximately one third of their sample used a contact to attain a job, this also corresponds with our findings. In this section we will see if used social capital, in contrary to embedded social capital can explain the status attainment process more adequately. If used social capital plays a more important role, we can expect that the effect of social capital on the status of the son is stronger for men who mentioned an alter that helped them to get there job than for persons who did not. This is addressed in the following hypothesis *H2.4*; *The effect of social capital on the respondents status is stronger for*

people who actively used their network than for people who did not. This hypothesis will be tested with the model shown in figure 4.

Figure 4. Results person mentioned versus no-person mentioned

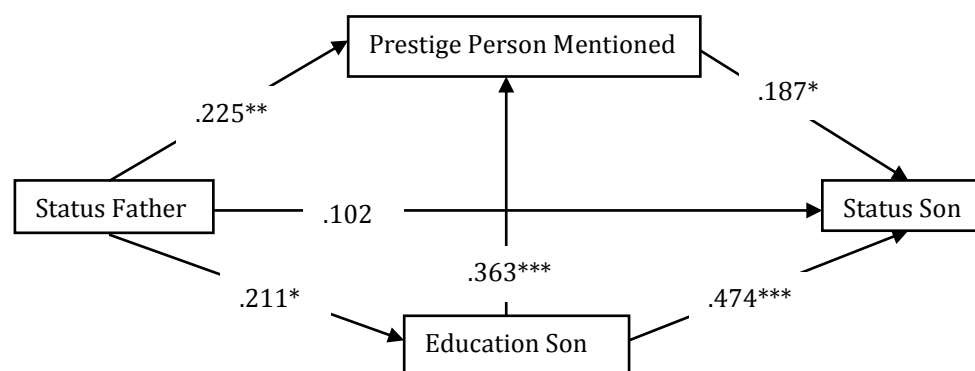


*** = $p \leq .000$; ** = $p \leq .005$; * = $p \leq .05$; M = coefficient for person mentioned; ($n = 582$)
 Model Fit: $\chi^2 = .170$; $df = 6$ CFI = .992; RMSEA = .035

The model-fit measurements indicate that the model with total accessed prestige and person mentioned as a moderator has a correct fit with the sample data. Figure 4. shows the results for this model. The effect of total accessed prestige on the prestige of the son, is only significant for men that did mention an alter who helped them getting their current or last job ($B = .223$; $p \leq .000$). Therefore, hypothesis *H2.4* can be accepted; the effect of social capital on respondent status is stronger for those who actively used their network than for people who did not. It is peculiar to see that prestige of the father has a significant effect on social capital for egos that did not mention a person who helped them getting their job ($B = .111$; $p \leq .05$), but not for egos that did mention a person who helped them getting their current or last job ($p \geq .05$). However, the effect of education on total amount of social capital is much stronger for egos that did mention an alter who helped them getting their current or last job ($B = .405$; $p \leq .000$) and the effect of status father on education is significant for this group as well ($B = .221$; $p \leq .05$). Thus, for people who mentioned an alter that helped them to get a job the father has an indirect effect on social capital through education ($B = .090$ $p \leq .005$). So for this group there is a status transfer from father to son through education and social capital ($B = .020$ $p \leq .005$), which is a rather small effect.

We will examine this mechanism closer by examining the specific person that helped ego in attaining his status. Lin et al. (1981) and Flap and De Graaf (1988), found that when the person mentioned in the job attainment process has a higher status the respondent is also more likely to receive a higher status job. This is addressed in the following hypothesis *H2.5; When the status of the person who helped to get a job is higher, one is more like to obtain a higher status job.* This hypothesis will be tested in the last model, shown in figure 5.

Figure 5. Results including prestige of person mentioned



*** = $p \leq .000$; ** = $p \leq .005$; * = $p \leq .05$; ($n = 142$)
 Model Fit: $\chi^2 = 1.90$; $df = 2$; CFI = .985; RMSEA = .074

The model-fit measurements indicate that the model with the prestige of the person who helped the ego to get a job has a correct fit with the sample data. The results of this model are shown in figure 5. The model shows that the status of the person who helped ego getting his job matters ($B = .187$; $p \leq .05$). This leads to the acceptance of hypothesis *H2.5*; when the status of the person who helped to get a job is higher, one is more likely to obtain an high status job. Moreover, the direct effect of status of the father on status of the son, does not seem to matter anymore for this group ($p \geq .05$). Supposedly, this effect diminishes when one directly activates his higher status friend when looking for an high status job. The status of the father does however has a positive effect on the prestige of the alter that helped obtaining a job ($B = .225$; $p \leq .05$). Furthermore, the direct effect of education on prestige of the person mentioned is still high ($B = .363$; $p \leq .000$). When one has a higher education, the person who helps one getting their current or last job is more likely to be of an higher status. To conclude, the effect of education on status is still high for this group ($B = .474$; $p \leq .000$), an alter can help

you to get a high status job, but one must have the skills to be able to execute that job.

7. Conclusion

The results of this study into the role of social capital in the status attainment process for Dutch men in 2000 can be summarized as follows. First, the classic status attainment model by Blau and Duncan (1967) still fits. By adding social capital, the status attainment process can be explained better. Both status father as well as a person's education have a significant direct and indirect effect on one's status. However, the total effects of status of the father are subordinate to the total effects of education on the status of his son. In other words, ascribed attributes, such as status of one's father, are important in the Dutch society, but achieved attributes, education and social capital, are more important for predicting the status of men in Dutch society. After we pointed out that social capital plays a vital part in the status attainment process, we examined the mechanisms underlying the effect of social capital on status.

For accessed social capital, we find that the total amount of prestige in the network has a significant effect on the status of the son. Our model indicates that a high prestige of the father has a positive effect on the amount of prestige in the network of his son. But we also find that education is a more adequate predictor in comparison to social capital. This could be, because you can meet your friends at school. The disadvantage of the measurement that represents general social capital, such as the total amount of prestige in the network, is that it contains "noise" of unused social capital. It does not prevent the bias of social capital which has not been put to use by the ego (Van der Gaag, 2005). Therefore, the assumption of causality cannot be guaranteed. In other words, did a person had a lot of social capital, and with use of that capital reached a higher position, or did a person acquired his social capital because he had a high status job with high status colleagues. To solve this problem, we used *used social capital* in our analysis.

We examined social capital that actually has been put to use, to tackle this problem of causality. If a person helped you to get a job, you have had to know him before you obtained the job. And the higher the status of the contact that is used, the higher the status of the job he helps you to obtain. We also examined how important this mechanism was in the effect of total amount of prestige (accessed social capital). The men in our analysis that actually used a contact person in their

network to get their current job, had a significant higher effect of social capital on their status, than respondents who did not mentioned a person that helped them to obtain a job. For the last group the effect of accessed social capital on status was not significant. Thanks to these results we can cautiously state that social capital works by the direct mobilization of a contact person. So to address the research question of this study;

How does social capital contribute to the status attainment process in the Netherlands?

From the abovementioned we can answer this research question. Social capital strengthens the effect of the status of the father and education on status of the son and thus fits in the classic status attainment model by Blau and Duncan. Social capital works mostly by a direct mobilization of a high status alter in the network.

When analyzing the embedded social capital (weak and strong ties) of the ego, we found no evidence that weak ties provide higher status jobs than strong ties for people who grew up in a lower status environment. Moreover, strong ties are important for people who grew up in a low status environment to reach a high status in society. When one grew up in a high status environment, weak or strong ties do not seem to matter in reaching a higher status. This is consistent with our hypothesis. However, it has to be noted that due to a lack of variance in the analysis for respondents who grew up in a high status environment, our results could be biased due to a low number of respondents in that group as well. The mobility of people from a low status background could be explained by the direct effect of education on status and the indirect effect through social capital on status, this happens mostly through strong ties, because the friends you make in school are likely to be strong ties. So, in contrary to Granovetter's theory (1974), we find no evidence for weak ties being more important in attaining a high status job.

Although our research has been done with great care, there is some room for improvement. We have to note that our operationalization of embeddedness could be improved upon in future research. Not only tie strength is part of the embeddedness of one in his network, but also the position one has in his network. Such as argued by Burt (1992). In order to address this examine this theory, one needs to know the position of the ego in his complete network, which was not available in the SSND data set.

This study addressed the status attainment model by Blau and Duncan. However, in contrast with Blau and Duncan's model, we were not able to implement the education of the father into the model, since this variable was not available in the SSND data set. Also, first job of the son could have a positive effect on status of the son and mediates the effect of status of the father and education (Flap & De Graaf, 1988). This variable also was not available in the SSND data set. Adding both first job of the son and education of the father to the model, would have improved our model statistically, since the degrees of freedom of our models would then have been higher.

This study tried to complement to the status attainment process in the Netherlands. We showed that the Netherlands anno 2000 has improved in being a meritocracy, but the inheritance of status from father to son must not be underestimated. Is the status attainment process as researched in this study the same for women as for men? This might be an interesting question for future research.

8. References

- Becker, G.S. (1964). *Human Capital*. Chicago, IL: University of Chicago Press.
- Bian, Y. (1997) Bringing strong ties back in: indirect ties, network bridges, and job searches in China. *American Sociological Review*. 62: 366 – 385.
- Blau, P. & Duncan, O. (1967). *The American Occupational Structure*. New York: Wiley.
- Boomsma, A. (2000). Reporting Analyses of Covariance Structures. *Structural Equation Modeling*. 7: 461 – 483.
- Bourdieu, P. (1980). Le Capital Social: Notes Provisions. *Actes de la Recherche en Sciences Sociales*. 3:2-3.
- Burt, R.S. (1992). *Structural Holes, The Social Structure of Competition*. Cambridge, MA: Harvard University Press.
- Campbell, K.E. & Lee, B.A. (1991) Name generators in surveys of personal networks. *Social Networks* 13: 203 – 221.
- Centraal Bureau voor de Statistiek. (1993) Standaard Classificatie voor Occupatie.
- Centraal Bureau voor de Statistiek. (2006). Standaard Onderwijs Indeling 2006.
<http://www.cbs.nl/nl-NL/menu/methoden/classificaties/overzicht/soi/2006/default.htm>

- Centraal Bureau voor de Statistiek. (2011). Consulted numerous times between april 2011 and june 2011 in order to obtain national statistics.
<http://statline.cbs.nl/statweb/>
- Collins, A.L., Goldman, N. & Rodríguez, G. (2008). Is Positive Well-Being Protective of Mobility Limitations Among Older Adults? *Journals of Gerontology*. 63: 321 – 328.
- Degenne, Al., Lebeaux, M.O. & Lemel, Y. (2004). Social Capital in Everyday Life. *Centre de Recherche en Economie et Statistique*. 98.
- Ding, L., Velicer, W. F., & Harlow, L.L. (1995). Effects of estimation methods, number indicators per factor, and improper solutions on structural equation modeling fit indices. *Structural Equation Modeling: A Multidisciplinary Journal*. 2: 119 - 144.
- Dronkers, J. & De Graaf, P.M. (1995). Ouders en het onderwijs van hun kinderen. *Verschuivende Ongelijkheid in Nederland*.
- Flap, H.D. Graaf de, N.D. (1988). With a little help from my friends. *Social Forces*. 67.
- Flap, H.D., Snijders, T., Völker, B., & Gaag, van der, M. (2000). Measurement Instruments for Social Capital of Individuals. *Interuniversal Center for Social Science Theory and Methodology*.
- Van der Gaag, M. (2005). Measurement of Individual Social Capital. *Netherlands Organization for Scientific Research (NWO)*.
- Van der Gaag, M.P.J., Snijders, T.A.B. & Flap, H.D. (2008). Position Generator measures and their relationship to other social capital measures. *Chapter 2 in: "Social Capital: An international Research Program"*.
- Ganzeboom, H.B.G., De Graaf, P.M. & Treiman, D.J. (1992). A Standard International Socio-Economic Index of Occupational Status. *Social Science Research*. 21: 1 – 56.
- Ganzeboom, H.B.G. & Treiman, D.J. (1996). Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations. *Social science research, Vol, 25*. pp. 201-239 .
- Gao, S., Mohktarian, P.L. & Johnston, R.A. (2008) Nonnormality of Data in Structural Equation Models. *Transportation Research Record: Journal of the Transportation Research Board*. 116 – 124.
- Granovetter, M.S. (1974). *Getting a Job: A study of contacts and Careers*. Cambridge, MA: Harvard University Press.
- Heemskerk, E. & Fennema, M. (2009). Network Dynamics of the Dutch Business Elite. *International Sociology*.

- Huang, J., Maassen van den Brink, H. & Groot, W. (2009). A meta-analysis of the effect of education on social capital. *Economics of Education Review*. 28: 454 – 464.
- Lai, G. & Lin, N. & Leung, S. (1998). Network Resources, Contact Resources and attainment. *Social Networks*. 20: 159-178.
- Lin, N. (1982). Social resources and instrumental action. *Social Structure and Network Analysis*. Beverly Hills, CA: Sage.
- Lin, N. (1999). Social Networks and Status Attainment. *Annual Review of Sociology*. 25: 467-487.
- Lin, N. & Bian, Y.. (1991). Getting Ahead in Urban China. *American Journal of Sociology*. 97: 657 – 688.
- Lin, N., Cook, K. & Burt, R.S. (2001) *Social capital: theory and research*. Hawthorne, NY: Aldine de Gruyter.
- Lin, N. & Dumin, M. (1986). Access to occupations through social ties. *Social networks*. 8: 365-385.
- Lin, N., Fu, Y. & Hsung, R. (2001) The Position Generator: Measurement Techniques for Investigations of Social Capital. *Hawthorne, NY: Aldine de Gruyter*. Chapter 3.
- Lin, N. Vaughn, J. Ensel, W. (1981). Social Resources and Occupational Status Attainment. *Social Forces*. 59: 1163-1181.
- Marx, K. 1933 (1849). *Wage- Labour and Capital*. New York: International Publishers Co.
- McCallister, L.; Fischer, C. (1978) A procedure for surveying personal networks. *Sociological Methods and Research* 7:131-148.
- Muthén, B. & Kaplan, D. (1985). A Comparison of Methodologies for the Factor Analysis of Non-Normal Likert Variables. *British Journal of Mathematical and Statistical Psychology*. 38: 171 – 189.
- Pearl, J. (1998). Graphs, Causality, and Structural Equation Models. *Sociological Methods Research*. 27: 226 – 284.
- Schultz, T.W. (1961). Investment in Human Capital. *The American Economic Review*. 1: 1-17.
- Spirtes, P., Richardson, T., Meek, C., Scheines, R. & Glymour, C. (1998) Using Path Diagrams as a Structural Equation Modeling Tool. *Sociological Methods Research*. 27: 182 – 225.

- Ultee, W.C. & Sixma, H. (1984). An Occupational Prestige Scale for the Netherlands in the Eighties. *Social Stratification and Mobility in the Netherlands*. 29 – 39.
- UNESCO. (1997). International Standard Classification of Education (ISCED) (1997).