Intergenerational transmission of occupational status: The role of voluntary association membership as an emerging compensatory strategy of reproduction

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Abstract

In this article, we raised the question as to what extent members from higher status groups effectuated social resources, more specifically voluntary association membership, as a possible new compensatory strategy to guarantee a successful intergenerational transmission of their occupational status. For that purpose, we investigated whether voluntary association membership (of parents and their child) mediate the positive effect of parental occupational status on that of their child and whether it has become more important over time as an explanation of social reproduction. In the empirical analysis, we incorporated voluntary association membership into the classic status attainment model and estimated path models using retrospective life course data from the Family Survey Dutch Population 2000. The empirical results showed that voluntary association membership does not play a mediating role in the intergenerational transmission of occupational status for the 1916–1947 birth cohort. However, it does so for the 1948–1960 birth cohort, thereby becoming an effective compensatory strategy in the intergenerational transmission of occupation status.

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1. Introduction

Dutch social stratification research established a decline in the direct impact of father’s occupation on the occupational status of his child (de Graaf & Luijks, 1995). The indirect effect of father’s occupation, via the educational attainment of his offspring, has decreased as well. In total, the intergenerational transmission of occupational status has been reduced with some 40% since 1930. Simultaneously, the effect of level of education on an individual’s occupational status has increased. In the Netherlands – like in many other modern societies – we thus observed a transition from ascription to achievement (Blau & Duncan, 1967), as in the status attainment process ascribed characteristics, like social origin, became less important, while merit and achievement, like education, gained in predictive power.

Several types of parental resources have been identified to explain (developments in) the intergenerational transmission of occupational status. A first branch of research emphasized the role of financial resources...
(Boudon, 1974; de Graaf, 1986). A second branch of literature showed that parents of higher status groups used their cultural capital to provide their children with the highest socio-economic position as possible, and started to use these resources to compensate for the loss of reproductive power of their financial resources (Bourdieu, 1973; de Graaf, 1986; Graaf, de Graaf, & Kraaykamp, 2000; Ultee & Luijkkx, 1990). As a result of the massive educational expansion and the accompanied credential inflation in the Netherlands (Tolsma & Wolbers, 2010; Wolbers, de Graaf, & Ultee, 2001), it is nowadays, however, not self-evident that children from higher status groups attain a high status job, despite having obtained a high level of education by effectuating their cultural resources. Consequently, the efficiency of cultural resources as a compensatory strategy has most likely declined as well. Here, we pose the question to what extent having access to social resources emerged as a compensatory strategy of social reproduction.

In recent labor market research, the role of social resources has attracted much attention. It refers to the contacts that individuals have with relevant others, who possess resources like information and knowledge, which can be used to gain access to high status jobs (Granovetter, 1973; Lin, 1999). Although different operationalizations exist of social resources, particularly voluntary association involvement would matter (Ruiter & de Graaf, 2009). Voluntary association membership – from civic organizations to sport clubs (Beggs & Hurlbert, 1997; Ruiter & de Graaf, 2009) – and volunteering for diverse types of organizations (Astin, Sax, & Avalos, 1999; Ruiter & de Graaf, 2009; Wilson & Musick, 2003) positively affect an individual’s occupational status and income position. This suggests that within these associations, members and volunteers get in touch with others, who dispose of relevant resources that can be used to get ahead in one’s working life.

It can be questioned to what extent the use of social resources – and in this study we focus at voluntary association membership to indicate them – might also act as an emerging compensatory strategy of social reproduction. The incidence of voluntary association membership is relatively high among higher status groups and well-educated individuals (Bekkers, 2007; Gesthuizen, 2006; Gesthuizen, van der Meer, & Schepers, 2008; Wilson, 2000; Wilson & Musick, 2003), and voluntary association membership is transmitted from parents to their children (Bekkers, 2007; Gesthuizen, 2006). The combination of both empirical findings make that in theory, voluntary association membership can be used to transmit social status from parents to their children. And since in the process of social reproduction the explanatory power of financial and cultural resources has declined over time (de Graaf & Luijkkx, 1995), it might well be that nowadays higher status groups are more likely to use resources that are available in their social network. In this contribution, we thus connect to the relatively neglected work of Bourdieu (1973; see also Ultee & Luijkkx, 1990) on compensatory strategies, and enrich this branch of literature by postulating and empirically testing that, as financial and cultural capital lost part of their effectiveness for guaranteeing social reproduction, resources available through voluntary association membership have become increasingly important for higher status groups to perpetuate their social status.

Despite its abovementioned theoretical relevance, the explanatory power of social resources in the status attainment process, and in particular that of voluntary association membership, is understudied as yet. Furthermore, its possibly changed explanatory role has been neglected entirely. In this article we, therefore, extend the classic status attainment model (Blau & Duncan, 1967) with voluntary association membership of parents and their child, with the aim to answer the following research questions: (1) To what extent does voluntary association membership of parents and their child explain the positive effect of parental occupational status on their child’s occupational status? and (2) To what extent has the explanatory power of voluntary association membership of parents and their child increased over time with regard to the intergenerational transmission of occupational status?

To answer these questions empirically, we use the Family Survey Dutch Population (FSDP) 2000 (Graaf, de Graaf, Kraaykamp, & Ultee, 2000). This retrospective life-course survey enables a chronological reconstruction of the relevant characteristics in the status attainment model, so that possible causation problems can be limited in studying the relationship between voluntary association membership and occupational status attainment (Ruiter & de Graaf, 2009). To determine possible changes in the explanatory role of voluntary association membership in the intergenerational transmission of occupational status, we compare one younger and one older birth cohort.

2. Theoretical background and hypotheses

2.1. The classic status attainment model

Social stratification sociologists consider occupational status to be an important characteristic of social
standing. The question of how individuals attain their occupational status has therefore received much attention (Ganzeboom, Treiman, & Ultee, 1991). The two most often studied determinants of occupational status are social origin and education, which both are incorporated in the classic status attainment model (Blau & Duncan, 1967). This path model explicates how parents’ occupational status (as a measure of social origin) is transmitted to their children’s. This intergenerational transmission can be direct, for instance, when a child takes over the family business. Yet intergenerational transmission of occupational status can also be indirect. Children from high social origins achieve, on average, a higher level of education than those from low social origins. Therefore, the former attain, via their education, a higher occupational status. In Fig. 1, which presents the classic status attainment model extended with voluntary association membership, plus signs have been displayed for the effects of the classic status attainment model, but no numbers. The numbers refer to theoretical expectations that we will formulate below.

Socio-economic opportunities and achievements differ between individuals from varying social origins, due to the unequal disposal of parental resources. So far, most attention has been paid to the mediating role of financial and cultural resources (de Graaf, 1986). Despite existing theoretical notions, social resources have, in contrast, hardly attracted any attention. In this article, we therefore investigate to what extent social resources, indicated by voluntary association membership of parents and their child, explain (developments in) the intergenerational transmission of occupational status.

2.2. The classic status attainment model extended: determinants of voluntary association membership

We assume that interest in societal issues induces the likelihood of voluntary association membership of parents. This particularly holds for parents from higher status groups, as on average they are higher educated and have a more cosmopolitan world view: They possess more information and knowledge concerning, and have more interest in, other times, people and cultures (Bourdieu & Passeron, 1977). Voluntary associations provide activities that directly pertain to these societal interests. Furthermore, through their high standing jobs, parents are exposed to numerous and various groups that can actively recruit them to become a member of voluntary associations. We therefore expect a positive relationship between parental occupational status and their voluntary association membership (see Fig. 1, arrow 1). Previous empirical research supports this view (see for instance Bekkers, 2007; Gesthuizen, 2006; Wilson, 2000).

Parental occupational status is also likely to affect voluntary association membership of their child. According to social learning theory (Bandura, 1977), individuals learn by observing and imitating other people’s behavior. Children familiarize the norms and values of their parents, which remain relatively stable during the life course (Glenn, 1980). Therefore, the more parents are interested in societal issues, the more they socialize their children in this interest as well. As the interest in societal issues is larger among parents from higher status groups, parental occupational status directly affects voluntary association membership of their child (Fig. 1, arrow 2). Furthermore, children might also be recruited by voluntary associations, through the social network of their parents that, as described above, can be related to their occupational position.

Parental occupational status also indirectly influences voluntary association membership of their child, via their own voluntary association membership. It can be deduced that if parents were a member of a voluntary
association when their child grew up, it is likely that their children will become a member later too (Fig. 1, arrow 3), through the mechanism of imitation (Bandura, 1977). The type of voluntary association membership, however, does not have to be the same. Basically, it is the value assigned to voluntary association membership that matters: Parents teach their children that participation in social life is important. US panel studies show that through the civic orientation of their parents, children become more civically oriented themselves, eventually leading to a higher likelihood of voluntary association participation in later life (Beck & Jennings, 1982; Janoski & Wilson, 1995).

In addition, level of education may have an impact on voluntary association membership. As said, the likelihood of voluntary association membership is larger; the more one is interested in societal issues. This interest is mainly developed in school (Durkheim, 1925; Gesthuizen et al., 2008; Gesthuizen & Scheepers, 2012; Torney-Purta, Lehmann, Oswald, & Schulz, 2001). We expect that individuals with a high level of education have a more cosmopolitan worldview and therefore are more often member of a voluntary association (Fig. 1, arrow 4).

2.3. The classic status attainment model extended: effects of voluntary association membership

Within voluntary associations, individuals come into contact with other people. The members of an individual’s social network have resources at their disposal that can be used to promote individual life chances (Bourdieu, 1979; Granovetter, 1973; Lin, 1999). In particular, network members with whom an individual has weak ties – contacts within voluntary associations can be characterized as such – can support, for instance, in the labor market. They are less closely connected and as a group they are more socially heterogeneous than relatives and friends, with whom an individual often has strong ties. An individual can expand his or her social network more by means of weak ties, who thereby more likely receives relevant (job) information, which helps to get ahead in the occupational career (Granovetter, 1973; Lin, 1999; Lin, Vaughn, & Ensel, 1981; Ruiter & de Graaf, 2009). So, voluntary association membership positively affects occupational status attainment (Fig. 1, arrow 5).

In addition, when someone is searching for a (new) job, parents’ voluntary association membership can be profitable. Parents’ voluntary association membership, for instance when the child is aged 15, likely is a valid indication of the social resources that the child has to its disposal, also at a later age. We predict that these resources can be used to promote occupational success (Fig. 1, arrow 6).

Finally, it is likely that individuals indirectly profit from their parents’ voluntary association membership, as it can be expected that on average children from socially active parents achieve a higher level of education. Members of the voluntary association of the parents probably have reliable information about high quality schools and educational programs, may have contacts with teachers, and can help with finding a good address to take extra lessons. Using these resources increases the likelihood of obtaining a high educational level (see Fig. 1, arrow 7), subsequently leading to a successful occupational position.

2.4. Old and new compensatory strategies

The various resources that members of higher status groups have at their disposal, can be deployed to provide their children with a similar, or higher social position. Due to societal and institutional changes, resources that previously were more effective in this process of social reproduction, can lose their power. Bourdieu (1972, 1979) developed the hypothesis that under such circumstances, members of higher status groups effectuate other resources. Following Bourdieu (1972, 1979), Ultee and Luijkx (1990) predicted that, if it is the case that higher status groups use compensatory strategies of reproduction, more father-to-son occupational mobility (indicating societal openness) should go hand in hand with a lower level of educational heterogamy among couples. In their comparison of 23 industrial nations, they could not corroborate this hypothesis. Here, we describe the institutional changes and provide the theoretical reasoning as to why higher status groups first might have started to use their cultural capital to guarantee social reproduction, and after that the social resources that they have at their disposal.

According to modernization theory (Treiman, 1970), economic development and technological change have led to skills upgrading in the labor market. As a consequence, educational requirements gained importance in the selection for and allocation of (potential) workers to labor market positions. Employers use educational qualifications as a measure of labor productivity (Becker, 1964). The emphasis is nowadays on acquired knowledge and skills; a high social origin is not enough to gain a successful labor market position. For that reason, the direct effect of parental occupational status on their
children’s occupational status has declined over time (Blau & Duncan, 1967; de Graaf & Luijks, 1995).

To compensate this reduced direct effect of social origin, higher status groups increasingly aimed at the indirect transmission of status positions, via education. After World War II, however, the Dutch state introduced several educational reforms to reduce inequality of educational opportunity. The age of compulsory school was increased, family allowances and study grants were introduced and free education was established until the age of 16 (Dronkers & de Graaf, 1995). Hence, participation in education also became accessible for children from lower social strata, and the role of parents’ financial resources diminished as a means to promote their children’s occupational career via education.

According to Bourdieu (1972, 1979), however, higher status groups have that much (symbolic) power, that they hold in reserve alternative resources that only will be deployed when the until then applied strategy has become less effective. His idea was that – with the diminishing role of parents’ financial resources – higher status groups started to effectuate their cultural capital. Through the link between the culture at home and the culture at school, children from higher status groups would still finish school with the best qualifications (Bourdieu, 1973; Collins, 1979). Although the importance of parental cultural capital in educational careers is indisputable (Aschaffenburg & Maas, 1997; DiMaggio, 1982; de Graaf, 1986), there is an ongoing discussion about the exact mechanism behind it. Graaf, de Graaf and Kraaykamp (2000) claim that, for the Netherlands at least, the most important aspect of parental cultural capital is not parental familiarity and involvement in high-brow cultural activities – that, according to Bourdieu (1973), is the central element of social and cultural exclusion in education – but the transmission of cognitive qualities (like reading behavior and linguistic skills) from parents to their children.

However, the question is to what extent cultural resources have also (partly) lost their explanatory power in the intergenerational transmission of status positions. Due to the large demand for highly skilled workers in the labor market and the increased accessibility of (tertiary) education, massive educational expansion has taken place in the Netherlands. The skills upgrading in the labor market could not compensate this educational expansion, reducing the occupational returns to educational credentials (‘credential inflation’) (Wolbers et al., 2001; Tolsma & Wolbers, 2010). Consequently, credentials nowadays less often guarantee children from higher status groups to attain the best occupational positions. Additionally, the declined social status of the teacher profession in the Netherlands – as a consequence of the less academic profile of teachers and the worsened income position of the profession (Vogels & Bronneman-Helmers, 2006) – may have caused that the culture at school currently more closely fits the culture at home of middle class families than that of the upper class ones. This likely undermines the efficiency of cultural resources as a compensatory strategy in the status attainment process. Previous research has shown that in the Netherlands not only the direct transmission of occupational status decreased between parents and their offspring, but also the indirect inheritance via education (de Graaf & Luijks, 1995).

Despite of that, there is still a rather strong influence of the occupational status of the parents on that of their children (de Graaf & Luijks, 1995; Tolsma & Wolbers, 2010). Based on the abovementioned argument of higher status groups developing compensatory strategies (Bourdieu, 1972, 1979), we here claim that they possibly have changed their tune – once again – and nowadays more often use their social network as a compensatory resource in the process of transmitting occupational status from one generation to the other. It is expected, and previously also found empirically, that parents with a high status occupation are more often member of a voluntary association, that this kind of social capital is intergenerationally transferable, and that, therefore, the obtained social resources have a direct, positive effect on their children’s occupational status (Bekkers, 2007; Gesthuizen, 2006; Ruiter & de Graaf, 2009; Wilson, 2000). We also expect that children from higher status groups are more often member of voluntary associations themselves, and that this membership helps in making a career (e.g. Ruiter & de Graaf, 2009). Hence, we predict that voluntary association membership of both parents and their child partly explain the positive impact of the occupational status of the parents on that of their child (hypothesis 1).

Since the direct and indirect transmission of status positions between generations has declined, we additionally expect that higher status groups started to increasingly deploy their social contacts within voluntary associations as a compensatory strategy for social reproduction. It is assumed that social resources not only indirectly, via education, but also directly affect occupational status attainment (e.g. Granovetter, 1973; Lin, 1999). This implies that their efficiency as a compensatory strategy has not been eroded by the reduction of the explanatory power of education in the status attainment process. We therefore hypothesize that the role of voluntary association membership has increased over time in explaining the effect of parental occupational
status on the occupational status of their child (hypothesis 2).

3. Data, variables, and analytical strategy

3.1. Data

In this article we use retrospective life-course data from the Family Survey Dutch Population (FSDP) 2000 (de Graaf, de Graaf, & Kraaykamp, 2000). These individual life-course data enable to determine at each age the occupational status of respondents, as well as the number of voluntary association memberships that were ongoing, started and/or ended in each year of their lives. The sample population is the Dutch (speaking) population aged between 18 and 70 years. Primary respondents and their partner have been interviewed using the same structured questionnaire.

The net random sample consists of 2096 individuals. Of these persons, 1796 have been contacted and, subsequently, 852 primary respondents have been interviewed. This relatively low response rate can be ascribed to the fact that both the primary respondent and his or her partner had to be interviewed. This implies that in the case of a couple both individuals needed to agree to participate. The net response rate is 40.6%. In total, 1561 individuals (primary respondents and partners) have been interviewed. In our study, these respondents are the (adult) children. Information about their parents has been obtained from the respondents. The observed dataset is representative for sex, but not for marital status, age, region, degree of urbanization and education. For descriptive purposes, therefore, a weight factor has been created, but we have not used it in the (multivariate) analysis of this article.

By using retrospective life-course data we try to limit reversed causality in the status attainment process. We assume that individuals finished their daytime education at the age of 25 at the latest. We therefore register the number of newly started voluntary membership associations after individuals finished their educational career, that is, between age 25 and 34 (so, ongoing memberships are not considered). We use the starting year and month of the membership to assure that it took place within this age range of 25–34. Subsequently, we determine the occupational status of the respondent’s job afterwards, at the age of 40. So, for the empirical analysis, we select the respondents, that is, both the primary respondent and the partner, who were minimally 40 years of age at the moment of survey, and working. The estimation procedures used in AMOS [see below] is based on information available for 497 respondents.

3.2. Operationalizations

The occupational status of the child is determined at the age of 40. This means, for instance that for those born in 1916, which are the oldest respondents, occupational

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2 First, recall bias can be a treat to retrospective life-course data. However, we tried to solve this potential problem by using support schemes in the questionnaire to reconstruct the various careers, including social participation. Moreover, it is known that recall bias for retrospectively collected social stratification variables is limited (de Graaf, Poortman, & Ultee, 1996; de Vries & de Graaf, 2008). For starting memberships of voluntary associations less is known about recall bias. Yet, given that becoming a member of an voluntary association is a conscious choice that involves considerations on costs, benefits, and timing, we assume that, at least for voluntary association membership of the child, the starting dates provided by the respondents are quite close to the true dates of becoming a member. Second, the problem of salience plays a role, particularly when measuring parental voluntary association membership. For the oldest cohort, some types of memberships might be more salient than other types than for the younger cohort. We are unable to address this issue. Therefore, the conclusions based on this social phenomenon are tentative.

3 Because primary respondents and their partners have been grown up in separate families, we consider them as independent units of analysis. With regard to their voluntary association membership and occupational status, mutual influence between partners is likely, but it is unfortunately unclear to what extent this occurs. The applied statistical software does not allow us to check this possible bias.

4 One obvious advantage of retrospective life-course data is that it allows for modeling causal sequences using event-history analysis. For reasons of assuring causal orders, this type of analysis is to be preferred above path models, in which we can only address a temporal causal sequence in the measurements. This increases the risk of the social phenomena being partly endogenous. We are well aware of this danger. There is, however, one important reason why we prefer to use the path analysis as described in the article: It allows for decomposing total effects into direct and indirect effects, which is the core of Blau and Duncan’s status attainment model. We need this decomposition for testing the hypotheses on the changing role of voluntary association membership as an emerging compensatory strategy of social reproduction. The data source that we use, offers high quality, longitudinal information to as well as possible, in a chronological way, investigate this extended model of intergenerational transmission of social status, as well as the changes therein. Moreover, sensitivity analyses (see Note 9) that, among others, could unmask these causality problems to some extent, do not lead to substantially different results that pertain to our hypotheses (results available on request).

5 Also removing respondents whose data were lacking for one or more of the variables used, would result in an analytical sample of 378 respondents. Yet, estimation procedures in AMOS enable to include respondents for whom information is partially invalid (N=119). As AMOS does not allow for calculating descriptive statistics for the sample in which missing values are still present, we decided to present descriptive statistics for the 378 respondents without any missing value (see Table 1).
status pertains to the year of 1956. Yet, these respondents had to be alive in 2000, the year of measurement. We use the International SocioEconomic Index (ISEI) of occupational status (Ganzboom, de Graaf, & Treiman, 1992). Status points are assigned to occupational titles (on the basis of three digit information from the ISCO-88 classification) according to a scale that (theoretically) ranges from 16 for occupations with the lowest status to 90 for occupations with the highest status.

The number of newly started voluntary association memberships between age 25 and 34 of the child is used as an indicator for their social resources. A wide range of voluntary associations are considered: Labor unions, professional organizations, political parties, religious organizations, civil-society organizations, choirs, theater groups, youth clubs, neighborhood associations, women organizations, soldiers’ organizations, service clubs, sport clubs and so on. The range of newly started memberships varies from 0 to 5.\(^6\)

The level of education of the child is defined as the nominal duration (in years of schooling) for each type of education: 6 years for primary education; 10 years for lower secondary (vocational or general) education; 11 years for intermediate secondary general education; 12 years for higher secondary general education; 14 years for upper secondary vocational education; 16 years for higher vocational education; 17 years for university education; and 21 years for postgraduate education. We assume that respondents finished their education by the age of 25. For the small share of respondents who did not (3%), their nominal duration is based on the highest attained level of education before age 25.

The occupational status of the parents is measured in a similar way as the occupational status of their child. The respondent was asked to provide information on his or her parents’ occupation at the time when the respondent was 15 years old. In the analysis, we use the occupation of the parent with the highest status score. If occupational information of one of the parents is missing, we used the information of the other parent.

The number of voluntary association memberships of the parents is measured at the child’s age of 15. The respondent was asked to provide information on both the father and mother regarding whether they did voluntary work for a school, church, labor union or sport club, whether they participated in social activities for a church and whether they were member of a labor union. Following Bekkers (2007), these three types of voluntary association membership are summated for both parents together, resulting in a variable that ranges from 0 to 4 memberships (theoretically, a maximum of 6 memberships is possible, but empirically this does not occur). If information of one of the parents was missing, the number of voluntary association memberships was based on the information available for the remaining parent. For 41 respondents, information was missing for both parents.

We distinguish two (birth) cohorts to determine historical developments. Given the selection of respondents who are 40 years of age or older, the youngest individuals in the observed dataset were born in 1960. Due to data limitations, we were forced to create two cohorts of more or less equal size. The oldest persons were born in 1916. The older cohort refers to those individuals who were born between 1916 and 1947. The more recent cohort consists of those born between 1948 and 1960.

As stated above, an analytical sample of 497 respondents remained. We lost so many respondents, since the final dataset is based on individuals of 40 years and older, who were employed at that age. For this reason, we analyze men and women together.\(^7\) A statistical description of the variables used in the analysis is presented in Table 1.

### 3.3. Analysis

The extended status attainment model as presented in Fig. 1 is estimated by conducting path analysis (with AMOS 18.0.0). The full path model contains five variables and three regression equations. The results are obtained by means of the ‘Full Information Maximum Likelihood’ (FIML) estimation procedure. In this

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\(^6\) The average of 0.6 newly started memberships obviously indicates that most respondents either started no new memberships between age 25 and 34, or a single one. Yet we did not want to lose the information that more memberships imply a larger social network, by dichotomizing the number of newly started memberships. And even though theoretically relevant, we also did not want to distinguish between several types of memberships (joining a professional organization might be more beneficial than joining a choir), and organizations that might be more or less socially heterogeneous (the homophily principle [McPherson, Smith-Lovin, & Cook, 2001] implies that people join association in which many people are alike, but some associations might be more homogeneous than others). The main reason is that our main goal was to extend the status attainment model of Blau and Duncan (1967). Here, we thus aim at testing the changing role of voluntary association membership in the intergenerational transmission of status, in the broadest way as possible. We consider it a task for future research to further distinguish between voluntary association characteristics.

\(^7\) Statistically controlling for the main effect of gender has been done, but does not bias the effects of the other variables in the model (not shown). The presented models are without controlling for differences between men and women.
Table 1
Descriptive statistics.\textsuperscript{a}

<table>
<thead>
<tr>
<th>Variable</th>
<th>All respondents</th>
<th>C\textsubscript{1} (1916–1947)</th>
<th>C\textsubscript{2} (1948–1960)</th>
<th>ΔC\textsubscript{2} – C\textsubscript{1}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min.</td>
<td>Max.</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Birth year (cohort)</td>
<td>1916</td>
<td>1960</td>
<td>1943</td>
<td>9</td>
</tr>
<tr>
<td>Occupational status parents</td>
<td>16</td>
<td>88</td>
<td>46</td>
<td>16</td>
</tr>
<tr>
<td>Voluntary association membership parents</td>
<td>0</td>
<td>4</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Education child</td>
<td>6</td>
<td>21</td>
<td>11.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Voluntary association membership child</td>
<td>0</td>
<td>5</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Occupational status child</td>
<td>22</td>
<td>88</td>
<td>51</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Family Survey Dutch Population 2000, authors’ calculations.
\textsuperscript{a} The descriptive statistics of these variables have been calculated in SPSS (PASW Statistics 18).

- \textsuperscript{b} By means of \textit{t}-tests, it is demonstrated whether the differences in means between the two cohorts are statistically significant.
- *** \textit{p} < 0.001, (one-tailed tests).
- ** \textit{p} < 0.01, (one-tailed tests).
- * \textit{p} < 0.05 (one-tailed tests).
- ~ \textit{p} < 0.10 (one-tailed tests).

The procedure, all parameters are estimated simultaneously. Missing data are considered by looking at patterns of missing values for the analyzed variables (Enders, 2001). There were 378 respondents without any missing value. For 119 respondents who had one (or more) missing value(s), the probabilities of values and co-variances could be estimated based on patterns of missing data and the values of other variables. In so doing, the correlation matrix that serves as input for AMOS, could thus be based on 497 respondents. In this way, the most likely parameters are estimated and the procedure offers reliable results if data are missing at random. Unfortunately, it is not possible to find out whether this actually is the case (de Vries, Kalmijn, & Liefbroer, 2007). The estimation procedure only provides standard errors and probability values of the direct effects in the path model. To test the statistical significance of the indirect and total effects, standard errors and probability values of these effects have been estimated on the basis of 500 re-samples of the observed dataset by means of bootstrapping and using Monte Carlo simulations (Efron & Gong, 1983).

4. Results

4.1. The classic status attainment model

Table A1 presents the results of the path analysis of the extended status attainment model and displays the full set of parameter estimates of all respondents and the two cohorts separately. The standardized effects for all respondents and both cohorts are also presented in Figs. 2–4. The empirical tests of the hypotheses are based on the results in these figures.\textsuperscript{a}

First of all, the results for all respondents (see Fig. 2) show that parental occupational status has a positive, direct effect on the occupational status of their child at the age of 40 (Beta=0.173).

\textsuperscript{a} Statistical differences in the unstandardized effects (\textit{B} coefficients) between the two cohorts are calculated on the basis of \textit{t}-tests. The \textit{t}-values have been calculated as follows: \textit{t} = \frac{\bar{x}_2 - \bar{x}_1}{\sqrt{\frac{s_2^2}{n_2} + \frac{s_1^2}{n_1}}} = \frac{\bar{B}_{\text{cohort 2}} - \bar{B}_{\text{cohort 1}}}{\sqrt{\frac{s_{B_{\text{cohort 2}}}^2}{n_{\text{cohort 2}}} + \frac{s_{B_{\text{cohort 1}}}^2}{n_{\text{cohort 1}}}}}.
4.2. Source:

Moreover, cohorts 1948 on also the younger cohort, that is, for respondents born between 1948 and 1960 (see Fig. 4).

Second, the results reveal that parental voluntary association membership has a positive impact on the number of voluntary association memberships that their child started between age 25 and 34. When both birth cohorts are compared, we again observe that this finding only holds for the younger cohort.

Fourth, given the positive relationship between the occupational status of the parents and their voluntary association membership at age 15 of the child for the younger cohort – for this cohort parental occupational status has an indirect positive effect on their child’s newly started voluntary association memberships between age 25 and 34, via their own voluntary association membership.

Fifth, since parental occupational status positively affects their child’s level of education, it indirectly influences their child’s newly started voluntary association memberships. However, the results in Table A1 show that the total effect of the occupational status of the parents on their child’s newly started voluntary association memberships is only significant for the younger cohort.
4.3. The classic status attainment model extended: the effects of voluntary association membership

The findings first of all show that for the younger cohort the number of newly started voluntary association memberships between age 25 and 34 positively affects the occupational status at age 40. In addition, parental voluntary association membership at age 15 of their child, has a direct positive impact on their child’s occupational status, but, once again, only for the younger cohort. Furthermore, the results reveal that (for both cohorts together and separately) parental voluntary association membership has a positive effect on their child’s level of education. Given that the occupational status of the child is determined by his or her level of education, parental voluntary association membership also has an indirect positive effect on the occupational status of their child.

4.4. Social resources as a new compensatory strategy

As presented above, for individuals from the older cohort, there is no association between the parental occupational status and their voluntary association membership at age 15 of their child. Despite the fact that for this cohort parental voluntary association membership has an indirect effect on their child’s occupational status, via the child’s educational level, parental voluntary association membership does not explain the transmission of occupational status between the two generations. In addition, for the older cohort, newly started voluntary association memberships of the child between age 25 and 34, do not positively affect his or her occupational status. Although for this cohort there is an indirect positive effect of parental occupational status on their child’s newly started voluntary association memberships, mediated by the child’s education, newly started voluntary association memberships of the child also do not interpret the intergenerational transmission of occupational status.

For the younger cohort, a different picture arises. First, there is a positive correlation between the parental occupational status and their voluntary association membership. For this cohort, parental voluntary association membership also positively affects the occupational status of their child. This total effect consists of a direct effect and three indirect effects, mediated by the child’s level of education, the child’s newly started voluntary association memberships and the combination of both characteristics. In this way, parental voluntary association membership partly explains the intergenerational transmission of occupational status. Second, for the younger cohort, parental occupational status has an indirect positive effect on their child’s newly started voluntary association memberships, via their own voluntary association membership at age 15 of their child, the child’s level of education and the combination of both variables. Moreover, as said before, newly started voluntary association memberships of the child between age 25 and 34 have a positive impact on his or her occupational status. So, newly started voluntary association memberships of the child, partly explain the transmission of occupational status between parents and their child. In sum, then, hypothesis 1 can be corroborated for the younger cohort.

Next, to determine whether social resources nowadays more often are used by higher status groups as a compensatory strategy in the status attainment process, we try to find out – by comparing both cohorts – whether voluntary association membership increasingly explains the intergenerational transmission of occupational status. However, we first describe changes in the direct and indirect transmission of occupational status between parents and their child. The results indicate that the direct effect of the occupational status of the parents on that of their child does not differ between the older and younger cohort. The Beta-coefficients are 0.152 and 0.186, respectively. The indirect effect of parental occupational status on their child’s, is 0.152 (0.352 × (0.433 + (0.179 × −0.013))) for the older cohort and 0.083 for the younger. So, the importance of indirect intergenerational status transmission of occupations, via education, has decreased over time. Additional calculations reveal that this decline is particularly caused by the weakened effect of parental occupational status on their child’s level of education. The total intergenerational transmission of occupational status has decreased as well, from 0.303 for the older cohort to 0.275 for the younger one.

Second, we focus at the effects that refer to changes in the intergenerational transmission of occupational status, via voluntary association membership. We already indicated that for the older cohort there is no direct effect of voluntary association membership (of both the parents and their child) on the child’s occupational status. Neither is there an effect of parental occupational status on their voluntary association membership. These findings together imply that for the older cohort the intergenerational transmission of occupational status is not mediated by voluntary association membership. Therefore, the direct effect of the occupational status of the parents on that of their child remains the same after statistically controlling for voluntary association membership (0.152). For the younger cohort, in contrast,
voluntary association membership (of both generations) does have a direct impact on the occupational status of the child. The effect of the child’s newly started voluntary association memberships is significantly larger for the younger cohort (see Note 8 and note “c” of Table A1, which refer to the t-test used to calculate this significance). Furthermore, for the younger cohort, parental voluntary association membership has an indirect effect on the occupational status of the child. This is the result of the mediating role of the child’s education, his or her newly started voluntary association memberships and the combination of both characteristics. Once again based on t-test calculations, this indirect effect is significantly larger for the younger cohort. After controlling for voluntary association membership (of both the parents and the child), the direct effect of parental occupational status on that of their child drops from 0.210 (not presented) to 0.186. This is a reduction in of some 11%. So, the explanatory power of voluntary association membership in the intergenerational transmission of occupational status has increased over time, which supports hypothesis 2.9

5. Conclusion and discussion

The empirical analysis presented in this article shows that voluntary association membership of parents and their children, as a measure of social resources, nowadays plays a role in explaining the intergenerational transmission of occupational status. Although for the older cohort (whose members were born between 1917 and 1947) no such mediating effect was found, for the younger cohort (born between 1948 and 1960) it was observed that the impact of the occupational status of the parents on their child’s occupational status is mediated by their own voluntary association membership at age 15 of the child, and of the newly started voluntary association memberships of their child between age 25 and 34. Parents use their social resources obtained from voluntary association membership to advance their child’s educational and occupational career. Since the child’s level of education positively affects his or her occupational status, parents impact their child’s occupational status also indirectly with their social resources, via the education of the child. In addition, for the younger cohort it was demonstrated that voluntary association membership is intergenerationally transmitted: Parental voluntary association membership has a positive effect on their child’s newly started voluntary association memberships. Subsequently, the newly started voluntary association memberships of the child – in the form of its associated social resources – are used to promote their occupational career.

With this conclusion, we improve upon earlier studies and underline the importance of social resources in status attainment research. It also supports and extends the hypothesis of Bourdieu (1972, 1979; see also Ultee & Luijkx, 1990) that higher status groups effectuate alternative resources as compensatory strategies for social reproduction, once prior strategies have become less efficient.

Nevertheless, the empirical analysis presented in this article has its shortcomings. First, the analytical sample size used is small, in particular due to the fact that only respondents of 40 years of age and older, and who worked at that age, were analyzed. For this reason, the statistical power was rather limited, and the hypotheses have been tested with a relatively large probability value, that is, a one-tailed significance level of 10%. This is, however, still acceptable for testing hypotheses with a clear theoretical direction, as is the case in this study. And besides that, a consequence of our decision to study the newly started voluntary association memberships of the child between age 25 and 34, is that its effect is probably underestimated, as the influence of ongoing memberships is eliminated by this choice to achieve an as clear as possible causal time path. Second, we were forced to estimate models for men and women simultaneously, even though processes of status attainment might well vary between both sexes. Third, and also related to the small sample size, we could only compare two birth cohorts. A larger dataset that enables to distinguish more cohorts (with a shorter time span), for men and women separately, would be very welcome for future research. Fourth, we used a rather limited measure of social resources (see Note 2 for a discussion of recall bias and salience when using retrospective life-course survey data and Note 6 for a brief discussion of characteristics of

9 We performed several (separate) sensitivity analyses to test for the robustness of our findings. First, we included occupational status at age 25. It could be hypothesized that parental voluntary association membership particularly influences child’s occupational status in the beginning of his or her career. Even though the influence of parental voluntary association membership is the strongest for the early career measure of occupational status, it still also affects occupational status at age 40. Second, we tested for alternating effects if parental educational attainment was included into the models. All presented effects remained substantially similar. Third, we deleted church and labor union membership from the measure of children’s voluntary association membership, as the prevalence of particularly these memberships declined considerably over time. Again the conclusions remain unaltered. We therefore can be relatively certain about the robustness of our findings, as well as about the chronological causal order that we established in the extended classic status attainment model.
Table A1
Estimation results of status attainment model extended with voluntary association membership.a

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>B</td>
</tr>
<tr>
<td>Direct effects</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Occup. status parents → education child</td>
<td>0.068***</td>
<td>0.010</td>
<td>0.301</td>
<td>0.081***</td>
</tr>
<tr>
<td>Vol. assoc. mem. parents → education child</td>
<td>0.147***</td>
<td>0.125</td>
<td>0.184</td>
<td>0.540**</td>
</tr>
<tr>
<td>Occup. status parents → vol. assoc. mem. child</td>
<td>0.001***</td>
<td>0.002</td>
<td>0.027</td>
<td>0.000</td>
</tr>
<tr>
<td>Vol. assoc. mem. parents → vol. assoc. mem. child</td>
<td>0.308***</td>
<td>0.018</td>
<td>0.876</td>
<td>0.035</td>
</tr>
<tr>
<td>Education child → vol. assoc. mem. child</td>
<td>0.038***</td>
<td>0.010</td>
<td>0.184</td>
<td>0.034**</td>
</tr>
<tr>
<td>Occup. status parents → occup. status child</td>
<td>0.165***</td>
<td>0.039</td>
<td>0.173</td>
<td>0.144**</td>
</tr>
<tr>
<td>Vol. assoc. mem. parents → occup. status child</td>
<td>0.841***</td>
<td>0.049</td>
<td>0.067</td>
<td>0.426</td>
</tr>
<tr>
<td>Education child → occup. status child</td>
<td>1.671***</td>
<td>0.178</td>
<td>0.397</td>
<td>1.795***</td>
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<tr>
<td>Vol. assoc. mem. child → occup. status child</td>
<td>0.674***</td>
<td>0.801</td>
<td>0.033</td>
<td>−0.281</td>
</tr>
<tr>
<td>Occup. status parents ↔ vol. assoc. mem. parents</td>
<td>2.689***</td>
<td>0.902</td>
<td>0.135</td>
<td>1.512</td>
</tr>
<tr>
<td>Indirect effectsb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occup. status parents → vol. assoc. mem. child</td>
<td>0.003***</td>
<td>0.001</td>
<td>0.055</td>
<td>0.003**</td>
</tr>
<tr>
<td>Vol. assoc. mem. parents → vol. assoc. mem. child</td>
<td>0.021***</td>
<td>0.007</td>
<td>0.034</td>
<td>0.018**</td>
</tr>
<tr>
<td>Occup. status parents → occup. status child</td>
<td>0.116***</td>
<td>0.020</td>
<td>0.122</td>
<td>0.144**</td>
</tr>
<tr>
<td>Vol. assoc. mem. parents → occup. status child</td>
<td>0.959***</td>
<td>0.228</td>
<td>0.077</td>
<td>0.957*</td>
</tr>
<tr>
<td>Education child → occup. status child</td>
<td>0.026</td>
<td>0.032</td>
<td>0.006</td>
<td>−0.010</td>
</tr>
<tr>
<td>Total effectsb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occup. status parents → education child</td>
<td>0.068**</td>
<td>0.009</td>
<td>0.301</td>
<td>0.081**</td>
</tr>
<tr>
<td>Vol. assoc. mem. parents → education child</td>
<td>0.546**</td>
<td>0.124</td>
<td>0.184</td>
<td>0.540**</td>
</tr>
<tr>
<td>Occup. status parents → vol. assoc. mem. child</td>
<td>0.004***</td>
<td>0.002</td>
<td>0.082</td>
<td>0.003</td>
</tr>
<tr>
<td>Vol. assoc. mem. parents → vol. assoc. mem. child</td>
<td>0.068***</td>
<td>0.028</td>
<td>0.110</td>
<td>0.044</td>
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<tr>
<td>Education child → vol. assoc. mem. child</td>
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<td>0.010</td>
<td>0.184</td>
<td>0.034**</td>
</tr>
<tr>
<td>Occup. status parents → occup. status child</td>
<td>0.281***</td>
<td>0.037</td>
<td>0.295</td>
<td>0.288**</td>
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<tr>
<td>Vol. assoc. mem. parents → occup. status child</td>
<td>1.800***</td>
<td>0.502</td>
<td>0.144</td>
<td>1.384*</td>
</tr>
<tr>
<td>Education child → occup. status child</td>
<td>1.697***</td>
<td>0.182</td>
<td>0.403</td>
<td>1.785**</td>
</tr>
<tr>
<td>Vol. assoc. mem. child → occup. status child</td>
<td>0.674</td>
<td>0.807</td>
<td>0.033</td>
<td>−0.281</td>
</tr>
<tr>
<td>Intercepts</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Education child</td>
<td>8.005***</td>
<td>0.448</td>
<td>6.912***</td>
<td>0.595</td>
</tr>
<tr>
<td>Vol. assoc. mem. child</td>
<td>−0.006</td>
<td>0.126</td>
<td>0.055</td>
<td>0.147</td>
</tr>
</tbody>
</table>
voluntary associations such as social heterogeneity and beneficiary potential). Although voluntary association membership is a valid and reliable measure of weak ties, it would, additionally, be interesting to see whether other weak ties (such as ‘friends’ contacted at social media like Facebook, LinkedIn, et cetera) and strong ties (family, good friends) are important in the status attainment process. Moreover, it was not possible to demonstrate with our measure of social resources that individuals actually use these resources, how they accomplish this (for instance, through the intergenerational transmission of norms and values) and whether they intentionally apply their social capital. Future research should, therefore, aim at using other measures so that the explanatory role of social resources in the intergenerational transmission of occupational status can be further investigated, and becomes more accentuated in relation to our rather general perspective.

Yet all in all, our findings are the first to provide tentative evidence for the mediating role of voluntary association membership in the transmission of occupational status from parents to their children. Combined with the finding that the direct effect of parental occupational status on the that of their child has decreased over time, we conclude that social capital, defined here by voluntary association membership, is used more and more by higher status groups as a compensatory resource in the status attainment process.

<table>
<thead>
<tr>
<th>Occup. status child</th>
<th>All respondents</th>
<th>C_1 (1916–1947)</th>
<th>C_2 (1948–1960)</th>
<th>ΔC_2 − C_1</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>23.092***</td>
<td>2.245</td>
<td>24.331***</td>
<td>2.832</td>
<td>22.621***</td>
</tr>
</tbody>
</table>

Proportion explained variance (R^2)

- Education child: 0.140 SE 0.164 Beta 0.110
- Vol. assoc. mem. Child: 0.050 SE 0.038 Beta 0.052
- Occup. status child: 0.260 SE 0.264 Beta 0.268

Other parameters

- Degrees of freedom (Df): 497 SE 273 Beta 224

Source: Family Survey Dutch Population 2000, authors’ calculations.

- ^a Full information maximum likelihood (FIML) estimates.
- ^b Standard errors and probability values of indirect and total effects have been estimated on the basis of 500 re-samples of the observed dataset by means of bootstrapping and using Monte Carlo simulations.
- ^c In the last column, differences in B coefficients between the two cohorts are presented. By means of t-tests, it is demonstrated whether the differences are statistically significant.

**^*** p < 0.001 (one-tailed tests).
**^** p < 0.01 (one-tailed tests).
^* p < .05 (one-tailed tests).
~ p < 0.10 (one-tailed tests).

### Appendix.

See Table A1.

### References


