Deaf people and the labour market in Sweden

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ABSTRACT

Rydberg, E. (2010). Deaf people and the labour market in Sweden. Education – Employment – Economy. (Döva och arbetsmarknaden i Sverige. Utbildning – Arbete – Ekonomi). In English. Studies from the Swedish Institute for Disability Research No. 32. Pp.68.

This thesis focuses on deaf people's educational attainment, position on the labour market and sources of revenue. These issues are interrelated, for instance a higher level of educational attainment seems to be associated with a lower unemployment rate and higher levels of income. The national context is Sweden and the Swedish welfare state in 2005.

All studies in the thesis compare a deaf population, consisting of 2,144 persons born between 1941 and 1980 who have attended a school for the deaf in Sweden, with a general reference population, consisting of 100,000 randomly chosen persons from the total Swedish population born between 1941 and 1980. Data for all studies consisted of registered information about the persons in the year 2005.

The results show that there are differences between the deaf and the reference population regarding level of educational attainment, position on the labour market and sources of revenue and disposable income, with the deaf population having a poorer position than the reference population in all areas. There are also differences between the workplaces of the deaf and the people in the reference population, and it is twice as common for people in the deaf population than for people in the reference population to have a higher level of educational attainment than is required for their occupation.

These differences between the deaf and the reference population cannot be associated with differences in the independent factors, as for instance sex, age and immigration background, for which the results have been adjusted. This thesis shows that being part of the deaf population appears to be of importance. Factors in conjunction with deafness that can increase our understanding of the differences between the deaf and the reference populations in an educational context, labour market context and economic context are discussed in the thesis.

Keywords: deaf, deafness, labour market, employment, workplace, level of educational attainment, disposable income, sources of revenue, register-based information

LIST OF PUBLICATIONS

The thesis is based on the following studies, which will be referred to in the text by their Roman numerals:

I. Rydberg, E., L. Coniavitis Gellerstedt, & B. Danermark. (2009). Toward an equal level of educational attainment between deaf and hearing people in Sweden? *Journal of deaf studies and deaf education, 14*, 312-323.

II. Rydberg, E., L. Coniavitis Gellerstedt, & B. Danermark. (2010). The position of the deaf in the Swedish labor market. *American Annals of the Deaf,* In press.

III. Rydberg, E., L. Coniavitis Gellerstedt, & B. Danermark. Deaf people's employment and workplaces – similarities and differences in comparison with a reference population. Submitted.

IV. Rydberg, E., L. Coniavitis Gellerstedt, & B. Danermark. Deaf people's sources of revenue and disposable income in Sweden. Submitted.

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TABLE OF CONTENTS

INTRODUCTION

This thesis focuses on deaf people's education, employment and income. These issues are interrelated, for instance a higher level of educational attainment seems to be associated with a lower unemployment rate and higher levels of income (Jones, 2004; Statistics Sweden, 2007a; Welsh & Foster, 1991; Welsh & MacLeod-Gallinger, 1992). The national context is Sweden and the Swedish welfare state in 2005.

Employment, or economic activity, is generally regarded as a wheel of development. The current labour market policy in Sweden advocates that those who can work, shall work and active labour market measures targeted to those without employment are preferred over allowances only. This policy is called a work strategy, the goal of which is to achieve full employment on the regular labour market (Swedish Government Official Reports, 2009). The benefits to society of having more people with incomes from employment are for instance greater tax revenues and fewer who are dependent on social welfare. The benefits to the individual of having employment are for instance self-support, participation in society and regular contact with other people.

Deaf people traditionally have been separated from others in education – special schools – as well as employment – special occupations – but a policy of inclusion is generally promoted today. In the question of education, the Salamanca Declaration promotes an inclusive school system in general, while also recognizing the very specific situation of people primarily using their national sign language and their need to have access to education in their language, which is the policy in Sweden. In the question of employment, the United Nations speaks for equal rights and work opportunities for all persons. Specifically, in the Convention on the Rights of Persons with Disabilities (United Nations, 2006), these rights are clearly indicated for people with disabilities. The Member States of the European Union have signed this UN convention and the States, among them the Swedish State, are consequently responsible to make sure that these rights are transformed from words into reality. In the Swedish context, legislation on workplace adjustments (Swedish Work Environment Authority, 2009), wage subsidy[1] and activity/sickness compensation[2] is the main measures taken to cope with what is administratively called reduction in work capacity due to illness or reduction of

[1] Wage subsidy is an economic compensation to employers who employ persons with impairments and has the purpose of converting it into a regular employment without financial support (Swedish National Labour Market Board, 2007).

[2] If a person's work capacity is reduced by at least 25% for at least 1 year, that person can receive activity compensation (if 19–29 years of age) or sickness compensation (if 30–64 years of age). Depending on how much one's work capacity is reduced, that person can receive 100%, 75%, 50%, or 25% activity/sickness compensation (Statistics Sweden, 2008).

physical or mental capacity. In addition, discrimination is prohibited (Discrimination Act, 2008).

Auditive communicational barriers are – temporarily or more permanently – present in many contexts. For deaf people, auditive communicational barriers are of a permanent nature in a society where hearing people make up the vast majority and, hence, such barriers have to be addressed if inclusion is seriously meant.

People with and without deafness – i.e. people in general – in Sweden are thus supposed to be equally included. From this point of view it is crucial to examine deaf people as compared to a general Swedish population. The description of deaf people as compared to the general Swedish population in this thesis is placed in this broader context of the political discourse of equal rights and inclusion.

ON DEAFNESS

Definitions of deafness

This thesis focuses on deaf people. There are different ways to define deafness. From a *medical perspective*, the degree of hearing loss is at the basis of the definition. According to this perspective, a person is audiologically deaf or has a profound hearing loss if he/she has a pure tone average (PTA) equal to or over 95 dB HL (Mazzoli et al., 2003). Persons with a hearing loss below 95 dB HL are often known as hard-of-hearing. However, the limit at which a person is considered to be deaf or hard-of-hearing varies in different studies. In Sweden a distinction is usually made between individuals who are deaf and individuals who are hard-of-hearing, while in several countries they are all referred to as deaf (Werngren-Elgström, Dehlin & Iwarsson, 2003) or people with a hearing impairment.

From a *cultural perspective*, a person is considered culturally Deaf if he or she views him-/herself as belonging to a cultural minority, i.e. the deaf community (Berbier, 1998) and uses sign language as the main mode of communication (Werngren-Elgström, Dehlin & Iwarsson, 2003). The degree of hearing loss is not of importance. An upper case letter is sometimes used to separate culturally Deaf from other deaf people.

It is also common to distinguish deaf people according to age of onset (Schein, 1996). Persons with an early onset of the deafness may be referred to as *prelingual* deaf since their early deafness has posed a severe barrier to acquiring spoken language (Schein, 1996). Many of these persons use sign language as their main mode of communication (Werngren-Elgström, Dehlin & Iwarsson, 2003). Persons with a late onset of deafness may be referred to as *postlingual* deaf since they lost their hearing after having acquired a spoken language. Although some postlingual deaf persons learn sign language most of them continue to use spoken language, sometimes supported by signs (Werngren-Elgström, Dehlin & Iwarsson, 2003). There is also a difference in identity in these groups. The prelingual deaf have had their deafness from an early age and their deafness is usually deeply rooted in their identity (Fredäng, 2003). The postlingual deaf on the other hand have grown up as hearing individuals who communicate through speaking and hearing, and their identity may be a more complex issue.

All deaf people in the focus of this thesis were located through schools for the deaf in Sweden, and the definition of a deaf person in the thesis is a person with a hearing loss or deafness from an early age who has attended a school for the deaf in Sweden. This is a definition of deaf that is administrative. The deaf persons in this thesis may be audiologically deaf and/or culturally Deaf but, since there is no information about these factors, it cannot be stated that this is the case.

Additional impairments among deaf people

Quite a large proportion of deaf people are considered to have additional impairments. Stephens (2005) comes to the conclusion that there appears to be a higher prevalence of psychiatric disorders among deaf children than among hearing children. Adams & Rohring (2004) report that Attention Deficit Hyperactivity Disorder (ADHD) is found to a higher degree among people who are deaf or hard-of-hearing and that vision problems are found in 30% of the same group. However, since it has been found that language differences and communication needs have mistakenly been perceived as other symptoms, the authors point out that caution is necessary when diagnosing physical and neurological impairments in deaf and hard-of-hearing persons.

Deaf pupils in Sweden with severe additional impairments usually attend a special school for the deaf with additional impairments and these pupils are not included in this thesis. According to several Swedish studies, 14-40% of pupils from the regional schools for the deaf in Sweden have additional impairments or require additional support (Backlund, 2000; Hendar, 2005; Högsten, 1989; Jonsson, 1995; National Agency for Special Schools for the Deaf and Hard of Hearing, 2001). Hence the percentage of all deaf with additional impairments is higher than the figures reported above.

Statistics from the US show figures similar to those in Sweden; during the period 1977-1997, 29-39% of deaf or hard-of-hearing people in the US had additional impairments (Holden-Pitt & Diaz, 1998). According to a study by the Gallaudet Research Institute (2003) 39% of the students had an additional impairment.

Since the information reported in this section shows that additional impairments represent a quite common factor among deaf people, deaf people in this thesis might have additional impairments that may be significant for their labour market position[3]. However, there may also be hearing persons that have impairments that have a significant impact on their labour market position.

The prevalence of deafness

The World Federation of the Deaf estimates that there are approximately 70 million deaf people in the world (World Federation of the Deaf, 2010). According to the Swedish National Association of the Deaf, 0.1% of the Swedish population or about 8,000-10,000 people are deaf from birth or at an early age. These deaf people are assumed to use Swedish sign language as their main mode of communication (Swedish National Association of the Deaf, 2010).

[3] In this thesis the main labour market positions are employed, in search of work and activity/sickness compensation (see study II for a further description of these positions).

A Swedish study reports that even though the prevalence of deaf persons throughout the world has usually been estimated to be 0.1%, few recent studies exist that present this rate of prevalence (Werngren-Elgström, Dehlin & Iwarsson, 2003). In the authors´ own study the estimation of deaf people, defined as deaf persons who use sign language as their main mode of communication, in one region of Sweden was 0.07%. Given the definition of deaf used in this thesis, the prevalence of deaf people in Sweden is 0.05%.

Werngren-Elgström, Dehlin & Iwarsson (2003) state that the rate of prevalence of deaf people varies with the definition used and that it is not possible to make one single, valid estimate for the prevalence of deafness. Hence the authors of the study question the often used 0.1% rate of prevalence.

CONTEXT

Education in Sweden

There have been differences in the conditions of education for deaf and hearing people during different periods of time.

In Sweden, it was decided in 1686 that all children should receive basic education, but it was not until 1842 that education became compulsory. Education was first organized by the church and directed towards religious matters, but the state later took the overall responsibility for education and its focus became more general (Richardson, 2004).

For deaf people, a corresponding compulsory education was established in 1889, almost 50 years later (Pärsson, 1997). Local municipalities or county councils had responsibility for the schools for the deaf and the education was vocationally directed in order to develop self-sufficiency and thus gain independence (Förhammar, 1991). The state assumed responsibility for the education of the deaf in 1938 (Pärsson, 1997).

The oral educational method was used in the schools for the deaf, i.e. teachers used spoken language and pupils were to lipread and respond in spoken language. However, sign language was used to varying degrees during different periods, in different school subjects and at different schools. It is also known that, for instance during breaks, pupils themselves used sign language (Hermanson, 1999).

A comprehensive school was tested for hearing pupils in the 1950s and it was decided in 1962 that a compulsory nine-year comprehensive school would be introduced throughout the country (Pärsson, 1997; Richardson, 2004). The special schools for the deaf were included in this new educational system in 1965. This unified educational system meant that deaf and hearing pupils would be given an equal education, at least in terms of content. There was one difference, however: the education of the deaf lasted one year longer than the education of the hearing (ten versus nine years) (Pärsson, 1997).

The Swedish sign language was recognized in Sweden in 1981 and, because of that, a bilingual educational policy (Swedish sign language and Swedish) was introduced in the education of the deaf (Andersson & Hammar, 1996). Hence it was not until the 1980s that deaf and hearing pupils had similar opportunities to assimilate education.

When the compulsory comprehensive school had been introduced, an upper secondary education was established for hearing and deaf pupils. Prior to this there had been various further educational programs for hearing pupils. Further education for the deaf initially consisted of short courses at special schools for the deaf and later programs at separate schools – all with a focus on vocational training (Pärsson, 1997; Richardsson, 2004).

Today, upper secondary education offers the same range of programs to deaf and hearing pupils. In the town that hosts the Swedish National Upper Secondary School for the Deaf, deaf pupils attend their own classes in schools for hearing pupils (Pärsson, 1997).

An increasing number of occupations require higher education and an increasing number of deaf people achieve such education. Deaf students can choose freely among the courses offered at universities in Sweden. However, to study at a university, deaf students need access to Swedish sign language interpreters since deaf students are integrated with hearing students and the educational language is usually not Swedish sign language. Because of a lack of interpreters it is not always possible for a deaf person to take part in a university course, even if he/she has been accepted to it.

To sum up, there have been two reforms that have made the education of deaf and hearing formally equal. The first was the introduction of the compulsory comprehensive school and education became equal in terms of content. The second came in 1981 when deaf and hearing persons were given the same opportunities to assimilate their training, since deaf pupils then began to receive their education in Swedish sign language.

The Swedish labour market context

The Swedish labour market context in 2005 and some of its consequences for deaf people are discussed in this section.

Starting at the beginning of the 1990s temporary employment became more and more common in Sweden. It is known that women more often than men have temporary employment. There has also been an increase in persons employed at staffing companies since 2002 (Swedish Agency for Disability Policy Coordination, 2009). These increases can imply fewer working opportunities for deaf people, since it can be difficult to supply accommodations for deaf people who need it when work assignments are short.

In 2005 four of ten companies had external employees. Companies with more than 250 employees more often have external employees than companies with fewer employees. External employees are in this case persons employed at the company and regularly execute their work outside the company's premises with access to the company's IT system. Advantages of being an external employee can be that the person does not need to travel a long distance to the workplace and has flexible working hours. Being an external employee can demand a great deal of self-discipline, however, which may increase stress because the border between work and leisure time becomes less clear (Swedish Agency for Disability Policy Coordination, 2009).

There was a large increase in working at other times than during the day among employed persons during the 1990s and work demands increased starting in the year 1991

while a person's own influence decreased (Swedish Agency for Disability Policy Coordination, 2009).

At the end of the 1970s, almost half of the available jobs in Sweden did not require special education or experience. These kinds of jobs had decreased to less than 10% by the middle of the 1990s and now almost do not exist at all. Persons with a low level of educational attainment have fewer and fewer jobs to compete over (Swedish Agency for Disability Policy Coordination, 2009). Previous studies have shown that deaf people have a lower level of educational attainment than hearing people (Anon, 2006; Barnartt & Christiansen, 1996; MacLeod-Gallinger, 1992). This implies that deaf people are more vulnerable at a time when jobs without educational requirements are disappearing.

The number of people that use a computer in their work assignments has increased and many jobs require the ability to use several computer programs. At the beginning of the 1990s men more often than women used a computer in work settings, but the increase in computer use has been higher among women than among men, and there was an equal percentage of men and women who use a computer in work settings in 2005. The use of computers, internet and e-mail has implied an improvement for deaf people on the labour market (Swedish Agency for Disability Policy Coordination, 2009). Because of this, there are more jobs available for deaf people.

It should also be mentioned that, when the Swedish sign language was recognized in 1981, new educational and occupational fields opened for deaf people (as well as for hearing people). People who master Swedish sign language were now sought after in areas such as special education for the deaf and caring for children, adolescents and elderly deaf people (Pärsson, 1997).

In summary, there seems to be both favourable and unfavourable developments on the labour market from the perspective of job opportunities for deaf people. As mentioned earlier, the primary measures taken by the state to cope with what is called reduced work capacity are workplace adjustments, wage subsidy and activity/sickness compensation. However, Peralta (2006) points out that there is a clear tendency towards a medicalization of some parts of the Swedish labour market policy. For example, there is "a relocation of responsibility for the problem of unemployment from the labour market to the individual" (p. 65). Because of this relocation, unemployment has become more a problem of social policy and medicine than of labour market policy. The author also states that a dichotomy has been constructed between "on the one hand, a group of unemployed described in positive terms as potentially able to gain new employment, and on the other hand, a group whose exclusion and marginalisation were seen as permanent" (Peralta, 2006, p. 164). These issues will be addressed below in the summary and discussion.

PREVIOUS STUDIES

Deaf people's level of educational attainment

As the previous section demonstrated, the conditions for education have been different during different times for deaf and hearing people. This may have led to different positions on the labour market. Because education may influence employment, one of the studies of this thesis focuses on the present level of educational attainment of deaf people. A review of previous studies that focus on deaf people´s level of educational attainment and the knowledge that exists in this area is given in this section.

Knowledge of the level of educational attainment of deaf people today is limited. Sweden lacks statistics in this area and the few studies that do exist have several limitations, such as a low response rate (see for instance Swedish Research Institute for Disability Policy, 2005) and not distinguish deaf from persons with other degrees of hearing loss (see for instance Backlund, 2000; Högsten, 1989; Jonsson, 1995). According to studies done in other countries, deaf people have a lower level of educational attainment than hearing people (Anon, 2006; Barnartt & Christiansen, 1996; MacLeod-Gallinger, 1992) and deaf women have a higher level of educational attainment than deaf men (Lehtomäki, 2004; MacLeod-Gallinger, 1992). This difference between women and men exists among both deaf and hearing people (Anon, 2006).

Some studies report that the proportion of deaf people continuing to a high level of educational attainment has increased over time (Anon, 2006; Barnartt & Christiansen, 1996; Schroedel & Geyer, 2000). However, at the same time, according to a Danish study, the percentage of deaf people that at most complete compulsory comprehensive school is also increasing (Anon, 2006). A study by Barnartt and Christiansen (1996) showed that the proportion of people with a high level of educational attainment increased both among deaf and hearing people during the period 1972–1991. This increase was greater among hearing than deaf people, which means that the levels of educational attainment were still higher among hearing than among deaf people. A decrease in the difference between deaf and hearing people was seen at the second highest level of educational attainment, however.

Deaf people and the labour market

The main focus of this thesis is deaf people and the labour market. This section discusses previous studies in the area.

As shown in the review of deaf people´s level of educational attainment, knowledge is limited. This is also the case of knowledge about deaf people and the labour market (for a review, see Danermark, 2004). For instance, statistics in Sweden regarding deaf

people's position on the labour market do not describe the total group of deaf people in Sweden but only deaf people registered at the Swedish Public Employment Service. These statistics report that being registered at the Swedish Public Employment Service and part of an employment program such as wage subsidy or sheltered employment is more common among deaf persons than among the general population (L. Stoltz, personal communication, October 11, 2005; Swedish Public Employment Service, 2005). Public sheltered employment is an economic compensation to employers in the public sector that employ, in this case, a deaf person with additional impairments (Swedish National Labour Market Board, 2007).

Studies of deaf people´s position on the Swedish labour market have limitations such as a large non-response rate (Swedish Research Institute for Disability Policy, 2005) and inclusion of people with different degrees of hearing loss in the same group (Backlund, 2000; Högsten, 1989; Jonsson, 1995)[4]. It can be said that, to form a complete picture of deaf people´s position on the labour market in Sweden, it is not sufficient to use statistics from the Swedish Public Employment Service and other studies conducted in Sweden.

According to studies in other countries, deaf people, compared to hearing people, are unemployed to a greater extent (Anon, 2006; MacLeod-Gallinger, 1992; Schroedel & Geyer, 2000; Welsh & MacLeod-Gallinger, 1992; Winn, 2007) and employed to a lesser extent (Anon, 2006). Men are more often employed than women among both deaf and hearing people (Anon, 2006), although the results regarding unemployment among men and women are not consistent (Anon, 2006; Lehtomäki, 2004; MacLeod-Gallinger, 1992). Studies also report that younger deaf people are more often unemployed than older deaf people (Lehtomäki, 2004; Welsh & MacLeod-Gallinger, 1992).

Several studies state that higher education has a positive effect on employment for deaf people (Anon, 2006; Welsh & Foster, 1991; Welsh & MacLeod-Gallinger, 1992; Winn, 2007), which is also the case among hearing people (Statistics Sweden, 2007a). More types of jobs are available for a person with a high level of educational attainment, which probably makes it easier for a person to find a job, as one of the studies points out (Welsh & Foster, 1991).

The level of educational attainment also influences the type of occupation (Capella, 2003; MacLeod-Gallinger, 1992; Welsh & Foster, 1991; Welsh & MacLeod-Gallinger, 1992). Studies report that the higher the level of educational attainment, the more likely people are to be employed in a skilled occupation (such as managerial and professional positions) and less likely to be employed in a lower skilled occupation (such as opera-

[4] It should be noted that these studies are the same as those referred to above in the context of examining deaf people's level of educational attainment in Sweden.

tors and labourers) (MacLeod-Gallinger, 1992; Welsh & Foster, 1991; Welsh & MacLeod-Gallinger, 1992).

In general, deaf people are employed to a higher extent in occupations that require a low level of educational attainment (a low skilled occupation) (Capella, 2003; MacLeod-Gallinger, 1992; Welsh & MacLeod-Gallinger, 1992), whereas hearing people to a higher extent are employed in occupations that require the highest levels of education (Capella, 2003; Welsh & MacLeod-Gallinger, 1992). This can be a result of deaf people having a lower level of educational attainment than hearing people.

Earlier studies state that, the higher level of educational attainment people have, the more possible it is that they are employed in a skilled occupation. However, 13-15% of deaf people were found in a study by Schroedel and Geyer (2000) to have a higher level of educational attainment than was required for their occupation. The authors report these figures with caution since the deaf sample in the study is small and selective.

With respect to the workplaces of the deaf, one study reports that deaf people are employed in the public sector to a higher extent than hearing people (Anon, 2006). Several other studies (some of them regarding Sweden) focus on social relations and communication at workplaces where both deaf and hearing people work (see for instance Backenroth, 1997a, 1998; Emerton, Foster & Gravitz, 1996; Foster, 1992; Foster & MacLeod, 2003; Young, Ackerman & Kyle, 2000) and on accommodations at workplaces (see for instance Geyer & Schroedel, 1999; Mowry & Anderson, 1993; Scherich, 1996; Scherich & Mowry, 1997).

According to the respondents in Foster & MacLeod´s study (2003) several conditions can facilitate or impede communication between hearing and deaf persons at a workplace. The availability and quality of technological accommodations and support services, attitudes of hearing supervisors and colleagues, and their knowledge about deafness and sensitivity to a deaf person´s limited access to informal conversations may all be central conditions to the outcome of communication and thereby also the persons´ ability to perform their jobs well or to advance in their employment. The authors point out that the respondents often interweave individual and organizational conditions, which the authors did not find surprising because they are closely interdependent (Foster & MacLeod, 2003).

If communication between the hearing and deaf at workplaces does not work properly, communication problems become barriers according to Foster (1992). Emerton, Foster & Gravitz (1996) agree with this and state that "barriers to participation in the work place by deaf employees usually have to do with access to communication and related access to information" (p.45).

It should be noted that the studies last mentioned focus on deaf people who are employed and their situation at the workplace. Further barriers may exist for deaf people seeking employment.

Deaf people and income

The position that people have on the labour market has an influence on their sources of revenue and their disposable income (the amount that people have at their disposal including allowances and after taxes). One of the studies in this thesis focuses on these areas with respect to deaf people in order to gain knowledge of the economic consequences of different positions on the labour market. This section reviews studies in the area of sources of revenue and disposable income in the case of deaf people.

There is limited knowledge about how deaf people earn their living (except income from employment); no studies were found in this area. This also holds true for deaf people´s disposable income. The studies that focus on deaf people´s income usually do not specify the type of income (see for instance Moore, 2002) but careful reading reveals that the income examined is usually income from employment. Only one of these studies regards Sweden (Baltander, 2009).

Studies about deaf people´s income report that deaf people have a lower gross income or income from employment than hearing people (Anon, 2006; MacLeod-Gallinger, 1992; Welsh & MacLeod-Gallinger, 1992; Winn, 2007). There are different opinions about whether age changes this result (Anon, 2006; Welsh & MacLeod-Gallinger, 1992; Winn, 2007).

The lower income from employment of deaf people as compared to hearing people is suggested to be associated with deaf people more often being employed in lower paying occupations than hearing people (Capella, 2003; MacLeod-Gallinger, 1992; Welsh & MacLeod-Gallinger, 1992). If deaf people´s level of educational attainment increases so that they can enter occupations with higher salaries, their income level probably will increase, according to Welsh & MacLeod-Gallinger (1992).

Several studies state that a higher level of educational attainment means higher income from employment among deaf people (Moore, 2002; Schroedel & Geyer, 2000; Walter, Clarcq & Thompson, 2002; Welsh & Foster, 1991) and other studies claim that this is the case among both deaf and hearing people (Baltander, 2009; Jones, 2004; Weathers et al., 2007; Welsh & MacLeod-Gallinger, 1992).

Some studies report that deaf men have a higher income from employment than deaf women (Moore, 2002; Schroedel & Geyer, 2000; Walter, Clarcq & Thompson, 2002) and other studies report that this is the case among both deaf and hearing people (Jones, 2004; Welsh & MacLeod-Gallinger, 1992; Winn, 2007). This result is associated with the fact that men more often than women have higher paying jobs (Schroedel & Geyer, 2000; Walter, Clarcq & Thompson, 2002). To reduce the difference in income from employment between men and women, Schroedel & Geyer (2000) suggest that the number of women in scientific and technical better paid jobs should increase.

Summary of previous studies

In summary, knowledge of deaf people´s level of educational attainment, deaf people and the labour market, how deaf people earn their living and deaf people´s disposable income is limited, especially as concerns Sweden.

Studies done in other countries report that deaf people have a lower level of educational attainment than hearing people and that deaf women have a higher level of educational attainment than deaf men.

With respect to the labour market, studies have shown that deaf people are employed to a lesser extent and unemployed to a greater extent than hearing people. Younger deaf people are also more often unemployed than older deaf people. Among both the deaf and hearing, men are more often employed than women and higher education is assumed to a have a positive effect on employment.

Deaf people are to a higher extent employed in occupations that require a low level of educational attainment (a low skilled occupation) whereas hearing people to a higher extent are employed in occupations that require the highest levels of education. The higher the level of educational attainment, the more likely it is that people are employed in a skilled occupation and less likely to be employed in a lower skilled occupation. There is however a study that reports that there are deaf people who have a higher level of educational attainment than is required for their occupation.

Studies concerning deaf people´s workplaces focus mainly on social relations and communication at workplaces where both deaf and hearing people work and on accommodations at the workplaces.

With regard to income, many studies do not specify the type of income on which they focus. Studies that focus on income from employment report that deaf people have a lower income from employment than hearing people. This could be associated with deaf people more often being employed in lower paying occupations than hearing people. Men have a higher income from employment than women, and a higher level of educational attainment generally means higher income from employment among both deaf and hearing people.

Limitations of previous studies

Several of the studies of the deaf and level of educational attainment, labour market and income have limitations that affect our knowledge of these issues and several studies have been excluded from this thesis for that reason. The previous section mentioned some of the limitations of studies referred to. This section will further describe these and other limitations.

One of the limitations is that deaf people are not always clearly defined. Studies sometimes focus on people with different degrees of hearing loss in the same group (see for example Backlund, 2000; Barnartt, 2006; Högsten, 1989; Woodcock & Pole, 2008) and refer to the group as people with hearing impairments (Swedish Government Official Reports, 2001). This becomes an issue if the study group is made up of audiologically (in a medical perspective) deaf people. There are large differences between people who have an ability to apprehend sounds and those who do not. People with a hearing loss who have an ability to apprehend sounds (often called hard-of-hearing) are helped for example by Assistive Listening Devices whereas people who do not have any ability to apprehend sounds (the audiologically deaf) are not. It is difficult to draw conclusions about audiologically deaf people if studies include both people who are deaf and hard-of-hearing, as is also pointed out by a report from the Swedish Government Official Reports (2006).

In the studies that focus only on deaf people, it is not always clearly expressed whether it is people with an early or a late onset of deafness (see for instance Statistics Sweden, 2009). As mentioned in *Definitions of deafness* above, there are several differences between these groups. The definition of deaf changes from study to study, which limits knowledge about the deaf and level of educational attainment, labour market and income.

Another limitation in studies concerning deaf and employment is that there is often a high rate of non-responses (see for example Larisgoitia, 1997; Swedish Research Institute for Disability Policy, 2005). This affects the results of the studies to the extent that it is not possible to make generalizations about the total group of deaf people and the results can be related only to the persons that are included in the study. Larisgoitia (1997) associates the low response rate with various factors. For instance, some deaf persons may lack sufficient knowledge of the written language of the questionnaire and may therefore have problems understanding it. Other factors according to the author could be uncertainty about the confidentiality and that the deaf persons in the study may not think it is important to participate in this kind of study.

Studies of the deaf and employment often focus on special groups of deaf persons and not on representative samples of the total group of deaf people. For instance, there are studies that focus only on deaf people who are employed (Backenroth-Ohsaka, 2002; Backenroth, 1997a, b) and the Swedish Research Institute for Disability Policy (1996) focuses on members of the Swedish National Association of the Deaf. Since these samples are not representative of the total group of deaf people, the results can only refer to the sample itself.

It can be difficult to select representative samples of the total group of deaf people since a population of deaf is not easily distinguishable. Thus quantitative studies of a large group of deaf people are rare (Lamar Crain & Kluwin, 2006).

Danermark (2004) points out in a review of the psychosocial effects of hearing impairment that the number of subjects in several quantitative studies is not sufficient to draw valid conclusions. The author further reports that there is a lack of studies that are longitudinal and of studies that focus on gender. There are also several studies that lack a general reference group with which to compare the results (see for example Moore, 2002; Schroedel & Geyer, 2000; Welsh & Foster, 1991).

SOME IMPORTANT CONCEPTS

Different perspectives can be used to understand impairment and disability, for instance the medical model, the social model and the relative perspective. According to the medical (or individual model), a disability is a problem in the individual that can be managed by individual adjustments (National Board of Health and Welfare, 2003). The goal is restoration to normal functioning and it is the impairment as such that is of central concern (Thomas, 2002).

The social model arose as a reaction to the medical model. According to the social model, disability is a form of social oppression (Thomas, 2002) and it is society that is attributed with the responsibility for the cause and the solution of the disability. The social model does not connect a disability to an individual (Grönvik, 2005) and, to manage disability, it is stated that society must be adjusted (National Board of Health and Welfare, 2003).

The relative perspective finds it important to differ between individual and contextual factors, as the social model also does. However, according to the relative perspective, a disability is neither an individual factor nor a contextual factor. Disability is the description of the relation between a person with impairment and a deficient context. A person can have a disability in some situations, contexts and points of time and in others not (Grönvik, 2005). In a way, the relative perspective includes both the medical and social models since both individual and contextual factors are of importance.

The persons in the deaf population in this thesis are assumed to have an impairment since they have a hearing loss/deafness. In relation to a context this impairment may give a disability, but not in all contexts and situations. For example, at a special school for the deaf, the education is offered in sign language and all persons in this context usually know sign language. Deafness does not then imply a disability. However, in an interaction situation between people at a workplace where the majority use spoken Swedish as their main mode of communication and do not know sign language, deaf people who use sign language have a disability. Conversely, in an interaction situation where the majority of persons use Swedish sign language, persons who do not know it have a disability. On the basis of these statements, it can be said that this thesis starts from a relative perspective.

According to the National Board of Health and Welfare in Sweden, impairment should be defined as a physical or mental impairment of the body whereas disability should be defined as "the restriction the impairment implies for the person in relation to the environment" (my translation) (National Board of Health and Welfare, 2010).

These terms are used in various ways, however. If an authority uses one of the terms in a specific context, this will also be done in this thesis. For example the Swedish Public Employment Service has *employment programs for people with disabilities*. Other-

wise the distinction between the terms made of the National Board of Health and Welfare holds for this thesis.

The concept of *attribution of responsibility* was used in the description of the social model. This concept will be used in the discussion of this thesis as well. The theory of attribution is originally a theory used in social psychology to explain the cause of people's actions by observations (Nilsson, 1996). The cause of an action can either be connected to an individual or to the situation where the action takes place (Nilsson, 1996). In this thesis the concept of attribution of responsibility will be used in a discussion of the cause (individual and/or contextual factors) of differences between deaf and hearing people in an educational context, labour market context and economic context.

Another concept that will be discussed in relation to the results of the studies is *master status*, which is a concept from role theory. A status is a position a person occupies in society and it exists regardless of who is in it (Barnartt, 2001). Examples of statuses are parent, student and doctor. Statuses can either be ascribed (given) by society or achieved (chosen) by the person himself/herself. The difference between a status and a master status is that a master status is seen to be so important that it affects all other statuses a person has; a master status supersedes and dominates all other statuses. Examples of master statuses are sex, ethnicity and age. In this thesis it will be discussed whether deafness can be considered to be a master status.

AIMS

The purpose of this thesis is to describe and analyse deaf people's position on the Swedish labour market.

The aims of each study are as follows:

Study I: To describe and analyse levels of educational attainment among people that have attended special schools for deaf people in Sweden.

Study II: To describe and analyse the position in the labour market of people who have attended a special educational program for the deaf in Sweden.

Study III: To describe and analyse the characteristics of deaf people with employment and their workplaces in Sweden.

Study IV: To describe and analyse deaf people's sources of revenue and disposable income in Sweden.

METHOD

Materials of all studies

The studies in this thesis are register based and the data in all of the studies, relating to 2005, were collected from a database at Statistics Sweden, the "Integrated database for labour market research". This database consists of data from several registers with information regarding the persons in the Swedish population, for instance a register at the Swedish Public Employment Service and several registers at Statistics Sweden, such as "Total population register", "Register based labour market statistics" and "Income and taxation register". Data concerning education, employment and income have been used in the studies in this thesis. For a detailed description of the data, see Studies I-IV.

The Regional Ethics Board in Uppsala, Sweden, granted ethics approval of this thesis (Dnr 2007/077).

Participants in all studies

The deaf population in all four studies of this thesis consists of 2,144 persons born between 1941 and 1980 who attended a special school for the deaf in Sweden and/or the Swedish National Upper Secondary School for the Deaf.

The persons in the deaf population were located by Emelie Rydberg and Bengt Norén. In 2001, Norén made a list of all persons born between 1961 and 1980 who had attended the Swedish National Upper Secondary School for the Deaf. This list was used in a preliminary study of deaf people's situation in a town in Sweden (Norén, 2001). In 2005, Rydberg made a complementary list to Norén´s with persons born between 1941 and 1965 who had attended a special school for the deaf in Sweden. Schools for the deaf with additional impairments were not included. When Norén´s and Rydberg´s lists were put together some duplicates were found and excluded.

A total of 2,371 persons (after the exclusion of duplicates) and their identification numbers (consisting of year, month, day of birth and a four-digit code) were found. To minimize the risk of errors, school catalogues issued every second year were studied. Some persons had incomplete identification numbers and almost all were located through their name and date of birth in the national population register. A few persons were also located with the help of people who have a strong relation to the Swedish deaf community. Owing to emigration from Sweden, death or incomplete identification numbers, 227 persons were not included in the deaf population.

Since all persons born between 1941 and 1980 who attended a special school for the deaf in Sweden and/or the Swedish National Upper Secondary School for the Deaf are included in the deaf population, it constitutes a total population. However, it is not all

deaf people in Sweden because, besides the criteria already mentioned, the persons in the deaf population must have been entered in the national population register in Sweden on the 31st of December 2005.

The reason that persons born between 1941 and 1980 (25-64 years of age in 2005) are included in the deaf population is that they should be of working age, since a focus of this thesis is the labour market. Moreover, the persons should have been on the labour market for a few years in order to have had time and possibilities to get a connection to the labour market. The entrance in working life is 20 or 21 years of age for deaf people in Sweden because of a longer compulsory school education and sometimes also a longer upper secondary education than hearing people.

In all four studies of this thesis, the deaf population is compared to a general reference population consisting of 100,000 persons in the same ages (born between 1941 and 1980). Statistics Sweden randomly chose the reference population from the total population born between 1941 and 1980 and living in Sweden in 2005. At that time the total population in Sweden born between 1941 and 1980 was approximately 4.8 million (Statistics Sweden, 2007b).

Additional details about the deaf population

All persons in the deaf population attended a special school for the deaf and/or the Swedish National Upper Secondary School for the Deaf. Thus it is known that they all have a congenital or early onset of deafness/hearing loss. However, since the degree of hearing loss they have is not known, we cannot state that the persons in the deaf population are audiologically deaf. Neither is there knowledge about whether the persons in the deaf population consider themselves to be culturally Deaf nor what their skills are in the Swedish sign language. It is known, however, that persons born 1964-1980 attended school when the educational policy recommended Swedish sign language (the Swedish sign language was officially recognized in Sweden in 1981). Persons born 1941-1963 attended school when the oral method was recommended as educational policy. Many of these persons that attended school during the oral educational policy used Swedish sign language anyway, as sources have revealed. Other information about the deaf population concerns cochlear implant (CI). Since it is known that CI implantation in deaf children began at the end of the 1980s in Sweden (C. Möller, personal communication, October 26, 2007), we can state that no person in the deaf population of this study received a CI at an early age.

From the additional details about the deaf population in this section it can be said in short that persons in the deaf population attended a deaf school in Sweden, have had a hearing loss/deafness from an early age and did not get a CI at an early age.

Statistical analysis

The Statistical Package for the Social Sciences (SPSS) was used in all the studies in this thesis to analyse data regarding the deaf population and the general reference population. Table 1 shows the analyses that were made in each study.

Table 1. Analysis methods in the studies

Analysis method	Study I	Study II	Study III	Study IV
Frequencies	X	X	X	X
Quartiles, quartile deviation, min and max				X
Cross tables	X		X	
Relative risk reduction (RRR)	X		X	
Odds		X	X	X
Logistic Regression	X	X	X	X

Frequencies, in all studies, and quartiles, quartile deviation and min and max in Study IV were used to describe how the populations are distributed in different variables. To examine the relation between two variables, cross tables were used in Studies I and III.

Relative risk reduction (RRR) was used in Studies I and III to compare some of the results in the deaf and the reference population to see whether the differences between the populations imply an over- or an underrepresentation of the deaf population. When the baseline risks are not similar, the RRR, i.e. ((P1-P2)/P2), is used (Swinscow & Campbell, 2002). This type of analysis is often connected with a negative outcome since the term *risk* is included. To avoid a negative aspect connected to the outcome, Malmquist (2002) suggests a switch from the term *risk* to *event rate*.

Logistic regression was used in all studies to examine the relations between variables and to investigate the effect of independent variables on a dependent variable. This was done to find a possible explanation for a difference between the two populations.

In Study I the Akaike information criterion (AIC) was used in the logistical regression to determine which combination of independent variables best fit the data (Hair, Anderson, Tatham, & Black, 1998). The combination of independent variables displaying the lowest AIC indicates the best model.

The odds ratios (ORs) in Studies II, III and IV from the odds and logistic regression describe the odds for the deaf population to belong to a category compared to the odds for the reference population to belong to a specific category. If the ORs are higher than one, the odds for the deaf population are higher than the odds for the reference population to belong to that category. The ORs are shown both with and without adjustments for differences between the two populations regarding several independent factors, such as sex, age and immigration background.

A margin of error was calculated for the frequencies of the reference population at the 99.9% confidence level in Study I and at the 99% confidence level in the other studies. In the cross tables in Study I, a margin of error was also calculated (99.9% level of confidence), whereas a chi square test was made in the cross table in Study III (99% confidence level). Confidence intervals were calculated on the odds and ORs (at the 99% confidence level) concerning both populations in Studies II, III and IV. These tests were done since the reference population is a sample from the total population in Sweden. The deaf population is a total population and the results of the deaf population represent the total group.

Additional details about the method

This section gives some additional information about the method in terms of the populations, validation of the register of the deaf population and advantages and disadvantages of register-based information.

It should be noted that when the reference population was collected by Statistics Sweden, people from the deaf population were not excluded. Because of that 45 persons in the deaf population are included in the reference population (0.045%). (Compare with earlier estimated prevalence for this deaf population, 0.05%.) Since the reference population is a very large sample consisting of 100,000 people, the 45 deaf persons that are included are assumed to have no impact on the results of the reference population.

It was planned to validate the established register of the deaf population by comparing it to other registers of deaf people in Sweden, for instance registered users of Swedish sign language interpreters in two counties and congenitally deaf persons registered at the Swedish Public Employment Service. However, these registers are deficient to the extent that validation was not effectuated. It was also planned to use a register at the Swedish Social Insurance Agency of people who have disability allowance to validate the register of the deaf population. Since deaf people are entitled to a tax-free disability allowance in Sweden, many deaf people apply for it. However, all administrators at the Swedish Social Insurance Agency have not registered the type of impairment of the applicants or the time of onset of the impairment, which makes also this register deficient. Unfortunately no total register with which to compare the deaf population was found.

There are both advantages and disadvantages in using register-based information. Advantages are for instance that there are few known missing data (which is otherwise common when sending out questionnaires), there is a possibility to construct a reference population and to carry out future longitudinal studies, since the database is updated yearly. Myrskylä (1999) states that advantages of register-based systems are lower

costs, no additional burden to respondents, additional use of already existing register data and new statistical possibilities.

As stated in the studies in this thesis, disadvantages in using register-based data may be that there are risks of unknown errors in the datasets since the data were originally registered and gathered for reasons and in ways that are beyond of the control of the researcher. Myrskylä (1999) points out disadvantages such as limitations in terms of a lack of data in areas in which a researcher may be interested, that attitudinal questions cannot be obtained and, if too many registers are combined to give detailed information about the respondents, there might be people who are afraid of infringement of personal privacy. In this thesis it is not possible to connect any information to a specific person, since Statistics Sweden removed the persons´ identification numbers. The results are also only showed on group levels, which makes it more difficult to identify one single individual.

In summary, the conclusion is that the advantages weigh over the disadvantages. If the limitations of earlier studies regarding deaf people are also taken into consideration, several of the limitations have been avoided by using registered information, for example the studies in this thesis have a general reference group and very few known missing data.

Description of the deaf and the reference populations

Table 2 describes the deaf and the reference populations. As can be seen in the table, the distributions of sex and age are almost similar in the two populations.

Immigration background differs between the two populations, with a higher percentage of people with an immigration background (i.e. persons born abroad or having at least one parent born abroad) in the general reference population. To be included in the deaf population, the persons had to attend a deaf school in Sweden. As a consequence, deaf immigrants who came to Sweden when they were older and already had completed their education are not included in the deaf population. Persons with an immigration background in the reference population may have come to Sweden at any time up to the year 2005, when the data for this thesis were collected. The reference population thus has a higher percentage of people with an immigration background.

As concerns region, persons in the deaf population were more likely to live in more populated areas than persons in the reference population (see Table 2). A reason for this may be that there is a greater chance in a more populated area for a deaf person to be together with other deaf people with whom he/she can share the same language and culture.

Table 2. Description of the deaf and reference populations (%)

		Deaf population N = 2,144	Reference population [a] N = 100,000
Sex	Men	53	50
	Women	47	50
Age category	25–34 years	21	24
	35–44 years	29	26
	45–54 years	21	24
	55–64 years	29	25
Immigration background	Immigration background	16	24
	Born in Sweden with both parents born in Sweden	84	76
Region	Metropolitan area [b]	34	38
	Other densely populated areas [c]	48	35
	Medium populated areas [d]	9	16
	Sparsely populated areas [e]	9	11

Due to rounding, not all percentages add up to 100.

[a] The margin of error was 0.3–0.4% (confidence level 99%) for the results of the reference population.

[b] Metropolitan areas are the cities of Stockholm, Gothenburg and Malmö and their surrounding areas.

[c] Other densely populated areas are municipalities with more than 90,000 residents within 30 kilometres of the centre of the municipality.

[d] Medium populated areas are municipalities with more than 27,000 residents and less than 90,000 residents within 30 kilometres of the centre of the municipality and more than 300,000 residents within 100 kilometres of the same centre.

[e] Sparsely populated areas are municipalities with less than 90,000 residents within 30 kilometres of the centre of the municipality and less than 300,000 residents within 100 kilometres of the same centre.

SUMMARY OF THE RESULTS

Study I

Title: Toward an Equal Level of Educational Attainment between Deaf and Hearing People in Sweden?

The results of this study show that the deaf population has a lower level of educational attainment than the reference population. Women have a higher level of educational attainment than men and younger people have a higher level of educational attainment than older people in both populations.

When comparing the level of educational attainment in different age categories, the results showed that the level of educational attainment has increased in the deaf population but to an even greater extent in the reference population, which means that the differences between the two populations is maintained. At the level of post secondary education of 2 years, the deaf population approaches the reference population in terms of the percentage of the population with this level of educational attainment.

During the period of the sign language educational policy, the difference between the deaf and the reference populations increased at an upper secondary level and decreased on higher educational levels.

Sex, age and immigration background cannot statistically explain the differences in the level of educational attainment between the two populations.

Study II

Title: The Position of the Deaf in the Swedish Labour Market

In this study it was found that the position on the labour market of the deaf population is not as strong as that of the reference population. This can be seen for instance in the higher unemployment rate and lower employment rate of the deaf population in comparison to the reference population. Moreover, deaf people participate to a higher extent in employment programs than people in the reference population, which shows that employment programs are important to the economic activity of deaf people in Sweden.

People in the deaf population are more often included in more than one category (employed, in search of work and having activity/sickness compensation) than people in the reference population, which indicates that the deaf population is targeted for more types of benefits. Many types of benefits can make it difficult in finding long-term solutions to the deaf population´s problems finding employment.

Differences in sex, age, immigration background, level of educational attainment and region of residence do not affect the difference in the position on the labour market between the two populations. Instead, it seems as deafness is an important factor.

Study III

Title: Deaf People's Employment and Workplaces – Similarities and Differences in Comparison with a Reference Population

This study showed that there are several differences between the workplaces of the deaf population and the reference population. For instance, people in the deaf population are more often employed within the public sector and at workplaces with 100 or more employees than people in the reference population.

The results further showed that people with employment displayed a similar pattern in both populations with respect to sex, age and level of educational attainment. For example, employment rates are higher among men than women and the higher the level of educational attainment, the higher the employment rate. However, a high level of educational attainment does not automatically mean an occupation with corresponding educational requirements. Having occupations with lower educational requirements than the level of educational attainment was twice as common among people in the deaf population as among people in the reference population. Differences in sex, age, region and immigration background in the two populations did not influence this result.

The results that deaf people more often than hearing people have a higher level of educational attainment than is required for their occupation is seen as an indication of discrimination of deaf people in the Swedish labour market.

Study IV

Title: Deaf People's Sources of Revenue and Disposable Income in Sweden

This study reports that the deaf population has a lower disposable income than the reference population. As concerns sources of revenue, people in the deaf population more often have unemployment benefit and, particularly, activity/sickness compensation than people in the reference population, who more often have an income from employment. These results imply that the deaf population depends on economic support from the welfare state to a higher extent than the reference population and that the reference population earn their own living by income from employment to a higher extent than the deaf population.

A person must be assessed by the authorities as having a reduced work capacity to be eligible for activity/sickness compensation. Since a higher percentage of the deaf population than the reference population has activity/sickness compensation, the deaf popu-

lation is assessed as having a reduced work capacity to a higher extent than the reference population.

Differences in sex, age, family status, immigration background, level of educational attainment, region and occupation in the two populations do not influence the differences between the two populations in disposable income or in having any of the sources of revenue. It seems as though factors related to deafness are of importance.

METHODOLOGICAL CONSIDERATIONS

This thesis has avoided some of the limitations that previous studies in the area have. For example, in this thesis, there are very few known missing data, the deaf population is a total population and there is a large reference group. This contributes to our knowledge about deaf people's level of educational attainment, position on the labour market and income.

Moreover, the use of register data has contributed to new knowledge and experience in this specific field of data collection. Being quantitative and descriptive with considerable precision, the studies in this thesis furthermore provide a unique platform for further investigations of mechanisms of importance to the living conditions of deaf people. In such further investigations, both qualitative and longitudinal approaches would offer additional substantial and useful knowledge.

With respect to the variable of level of educational attainment, the description of the sub groups was not clearly expressed in Study I. It should be (a) maximum upper secondary education, (b) from post secondary education of one semester to two years and (c) post secondary education of three years or more.

Studies I and II have other levels of educational attainment than Studies III and IV. It was decided to use the levels of educational attainment in Study I to be able to present the level that corresponds to a university degree in Sweden. The levels of educational attainment were changed in Study III in order to compare them with occupation.

As mentioned in the section *Education in Sweden*, the compulsory school education lasts one year longer for deaf people than for hearing people in Sweden. However, even though deaf people have attended school one additional year, it is considered to be at the same level of educational attainment as that of hearing people.

The percentage of people that are employed differs from the percentage that has an income from employment in the studies. This is explained by different time references.

People participating in employment policy programs may have wage subsidy, public sheltered employment, enterprise grant[5] and employment subsidy[6]. The majority of the people in the deaf population that participate in employment policy programs are considered to have wage subsidy. Reasons for this assumption are as follows: people from schools for the deaf with additional impairments were not included in the deaf population, which implies that the percentage that has public sheltered employment is low. Study III reports that the percentage of people in the deaf population that are self-

[5] An enterprise grant is a grant a person may receive when starting his or her own business (Swedish National Labour Market Board, 2007).

[6] Employment subsidy may be granted to an employer who hires a person who has been unemployed for a long period of time (Swedish National Labour Market Board, 2007).

employed is 1%, which makes the percentage of people in the deaf population that have enterprise grant low. As regards employment subsidy, the Swedish Public Employment Service reports that the number of deaf people with this employment program is low (H. Karlsson, personal communication, January 22, 2010). Because of these factors, the majority of people in employment policy programs in the deaf population are assumed to have wage subsidy.

Study I reports that neither sex, age nor immigration background differs in the two populations and that the covariation is similar in the two populations. However, there may be differences with regard to sex, age and immigration background in the two populations, but these differences cannot explain the difference in level of educational attainment between the deaf and the reference populations.

The confidence level in the statistical analyses in the studies differs. The highest possible confidence level was chosen in Study I (99.9%) in order to show the high statistical quality of the results. When Study II was carried out, it was not possible to choose a higher level of confidence than 99% in the logistic regression analysis in SPSS and, for this reason, confidence levels were 99% in the study.

It should also be noted that all ORs in Study II (Table 3) are significant and that all ORs in Study III (Table 5), except for the ORs for *occupation level higher than the level of educational attainment,* are significant.

SUMMARY AND DISCUSSION

The work reported in this thesis has described and analysed the position of the deaf on the Swedish labour market, including such factors as education and economy. The results of Studies I, II and IV show, in short, that there are important differences in level of educational attainment, position on the labour market and sources of revenue and disposable income between the deaf and the reference populations, with the deaf population having a poorer position than the reference population in all areas. Study III is a more detailed description of the position on the labour market of the deaf as compared to the general population. There are differences between the workplaces of the deaf and the people in the reference population, for example that deaf people are more often than people from the reference population employed in the public sector and at workplaces with 100 or more employees, and it is twice as common for people in the deaf population than for people in the reference population to have a higher level of educational attainment than is required for their occupation.

Master status

According to Barnartt (2001) a master status is given to a person by society and she/he usually does not have a choice in the assignment to a master status. There are both positive and negative consequences of having been given a master status by society. A master status based on impairment can give a person access to certain social supports and services (Barnartt, 2001), for instance disability allowance and employment programs for persons with disabilities. The negative aspect of having such a master status can be stigmatization, stereotyping, prejudice and discrimination (Barnartt, 2001). It can also be the basis for other people's reaction to a person. This is why some people prefer to use the concept *people with impairments* instead of *impaired people* (Gustavsson Holmström, 2005). In this way the focus is placed on the person, and the impairment becomes a subordinated factor and not the factor that seems to decide the person's entire identity.

In the case of deaf people, the most common concept used, by deaf persons themselves and many others, is *deaf people* and not *people with deafness*. This may be so because many deaf people have been deaf since birth or an early age and it has become integrated in the person's identity. Barnartt (2001) points out that this could be the case for people who have grown up with a certain status. Many deaf people themselves choose the master status of being deaf. In this case, the given status of society is in agreement with the chosen status of the persons themselves. However, even if both society and deaf persons agree with deafness being a master status, they do not have to agree over what it means to be deaf. What it means to be deaf differs according to the definition of deafness that is used. From a medical perspective, deaf people cannot hear.

From a cultural perspective, deaf people belong to the deaf community and use sign language as their main mode of communication. It could be that people in the environment have one definition of deafness and that deaf persons have another. The same is true for the cause of the effects of the master status.

The differences found in this thesis between the deaf population and the reference population in level of educational attainment, position on the labour market and income cannot be statistically explained by background factors, such as sex, age and immigration background. In all three aspects investigated here, it seems that it is the fact that being part of the deaf population that is a decisive factor.

This indicates that being deaf is a status that supersedes and dominates other statuses, i.e. it seems to be a master status. While for instance sex, ethnicity and age are also considered to be master statuses, the results of the studies presented in this thesis show that being part of the deaf population might be a master status that weighs over other master statuses. Barnartt (2001) writes that several studies report that having impairments is a master status and that the impairment supersedes other master statuses, for instance being female. The results of this thesis are in agreement with this.

Important factors in conjunction with deafness

Analyses have shown that there are a number of factors of importance that, in conjunction with deafness, can increase our understanding of the differences between the deaf and the reference populations. Table 3 shows some factors that can be of importance in an educational context, labour market context and economic context.

Table 3. Individual and/or contextual factors in conjunction with deafness

	Individual factors	Contextual factors
Personal factors other than deafness	X	
Additional impairments	X	
Education	X	X
Social context		X
Labour market context		X
Employers´ ignorance of deaf people's competence		X
Insufficient working conditions		X
Work capacity	X	X

Personal factors (other than deafness), such as sex, age and immigration background, may have an influence on level of educational attainment, labour market and

income (see for instance Anon, 2006; Rydgren, 2004; Welsh & MacLeod-Gallinger, 1992). However, according to the results of this thesis, differences in these factors cannot statistically explain the differences between the two populations in these contexts.

Tacit knowledge is another aspect of personal factors. Tacit knowledge is knowledge that is abstract and that we sometimes are unaware of, for instance intuition, rule-of-thumb and personal skills (Haldin-Herrgard, 2000). On the other hand, the opposite, explicit knowledge, exists in e.g. databases, books and discussions. According to Haldin-Herrgard (2000), tacit knowledge can be shared by apprenticeship, direct interaction, networking that includes face-to-face social interaction and practical experience.

Since many deaf persons grow up as the only deaf person in a family, they may miss a great deal of tacit knowledge that hearing people take for granted. The same occurs for instance at workplaces where a deaf person is the only one who knows sign language. Foster & MacLeod (2003) point out that deaf persons´ limited access to informal conversation at workplaces is a factor that is central to persons´ ability to perform their jobs and to advance in their employment. Having deficient tacit knowledge may influence the position on the labour market.

There is no knowledge about tacit knowledge in either the deaf or the reference population in this thesis, and no studies in the area of deaf and tacit knowledge have been found. However, it would be interesting to further investigate tacit knowledge as it applies to deaf people and the labour market.

Since a large proportion of deaf people (30-40%) are assessed to have *additional impairments*, this factor could have a strong influence on the results of this thesis. Even though persons from schools for the deaf with additional impairments have been excluded from the deaf population, there is a chance that there are deaf people with additional impairments in the deaf population. These persons may perhaps not receive appropriate support in school to be able to overcome their difficulties so that they are able to continue to higher education or it may be the case that higher education is not an option, which can be a reason why deaf people have a lower level of educational attainment than the reference population. The additional impairments may also have effects later in life, for instance in connection with the position on the labour market. There are certainly persons who have impairments in the reference population as well, for example 5%–10% in Sweden have dyslexia (Sterner & Lundberg, 2002), but the fact is that a proportion of deaf persons with additional impairments could be one factor (although difficult to estimate) behind the differences between two populations.

With regard to the factor of *education*, several aspects are important. For instance, communication between teachers and pupils must work properly; otherwise pupils may get problems in taking in the education offered (Swedish Government Official Reports, 1996; Swedish National Agency for Education, 1996). This can happen if the teacher and the pupil have different standards in sign language, for example.

The consequence of getting an inadequate education may be poor grades, and low grades of course present difficulties in continuing to higher education. According to studies, the rate of pupils that leave the Swedish special school for deaf persons with complete final grades is low (Hendar, 2008; Ministry of Health and Social Affairs, 2003), which negatively affects the possibility of upper secondary education. In addition, the level of knowledge in general among deaf pupils as compared to hearing pupils in upper secondary education is also reported to be low (Swedish National Agency for Education, 1996).

To continue to higher education, good knowledge in the Swedish language is needed. Since Swedish is deaf people's second language, they may not have sufficient knowledge of it. Hendar (2008) confirms that pupils in special schools for the deaf, compared to pupils from other schools, have lower grades in the Swedish language.

The level of educational attainment may in turn influence a person's position on the labour market. For instance, the field of education can be of importance. It could be that deaf persons have an education in occupational fields in which the demand for labour has recently decreased, which could cause deaf persons to have difficulty in gaining employment.

The results of this thesis show that it is twice as common for people in the deaf population than for people in the reference population to have a higher level of educational attainment than is required for their occupation. In the case that work assignments are not in parity with a person's competence, this could be referred to as "dequalificational tasks" (Larsson, 2000). Larsson (2000) showed that quite a large proportion of employed people with impairments experience work assignments of this kind. However, having a higher level of educational attainment than is required for an occupation could be a strategy used by deaf people to gain employment at all.

Another factor that might influence the level of educational attainment is the *social context*. When deaf persons begin at the Swedish National Upper Secondary School for the Deaf (which exists in only one town in Sweden), they may give greater priority to social life than studying since many of them have moved to a new town and made new friends (Norberg, Yström & Brunnberg, 2008).

It could also be the case that low expectations of persons in the surroundings may have an impact on deaf persons´ level of educational attainment. This was the case of hard-of-hearing students (Danermark, Antonson, & Lundström, 2001).

The *context of the labour market* may also influence deaf people's position on the labour market. As described earlier in this thesis, the increase in temporary employments and employments at staffing companies (Swedish Agency for Disability Policy Coordination, 2009) may reduce the working opportunities for deaf people since working conditions might possibly not be adjusted for short work assignments. The fewer number of employments that require low educational competence (Swedish Agency for Disability

Policy Coordination, 2009) will also make it more difficult for deaf people to gain employment, since a higher rate of deaf people than hearing people have a low level of educational attainment (Anon, 2006; Barnartt & Christiansen, 1996; MacLeod-Gallinger, 1992). A counteracting factor is however that the increased use of computers, internet and other technical devices has made more jobs available for deaf people (Swedish Agency for Disability Policy Coordination, 2009).

It has been found that approximately 70% of all new employed persons are recruited through social networks (Swedish Government Official Reports, 2004). If a person lacks this type of network, it might mean greater difficulty in finding employment. The deaf community is usually a tight network, which may offer an advantage to a deaf person to gain employment related to the deafness, for example at an association for the deaf. However, gaining employment in other areas might be difficult for a deaf person if he/she does not have a social network outside the deaf community.

Other factors that might influence the position on the labour market can be that deaf persons may have trouble gaining employment because *employers are uncertain and ignorant about deaf people's competence* (including their social competence) that makes them employ other persons than deaf persons. This could happen despite the fact that deaf persons can prove their competence to some extent by their level of educational attainment and/or previous working experience. It could also be that the *working conditions are insufficient* at the workplace, which makes it impossible for a deaf person to take a particular job, in spite of the fact that individually adjusted working conditions is prescribed by law in Sweden (Swedish Work Environment Authority 2009).

Reduced *work capacity* could also be a factor that might influence the differences between the deaf and the reference population. A further discussion of this factor is given in a section below.

As can be seen in Table 3, personal factors and additional impairments are considered to be individual factors whereas social context, labour market context, employers' ignorance of deaf people's competence and insufficient working conditions are considered to be contextual factors. Education and work capacity are considered to be both individual and contextual factors. Work capacity, for instance, is a relative concept, which means that the capacity to perform is dependent on the context and on the individual. This holds also for education.

Either the individual or society could be attributed with the responsibility for the differences, or it could be both. As Michailakis & Reich (2005) point out, society can choose between different causal explanations in the case of people who differ from standard expectations. According to Nilsson (1996), people often believe that unusual behaviour is caused by the individual whereas usual behaviour is caused by society. Myers (2009) and Nilsson (1996) state that the extent to which behaviour reflects the individual's characteristics and attitudes are often overestimated and that the impact of

the situation is often underestimated. In this thesis it cannot be stated whether the responsibility for the differences between the deaf and the reference populations have to do with the individual or society. Further research in these factors is needed to investigate whether they can explain the difference between the deaf and the reference population in terms of level of educational attainment, position on the labour market and income.

Work capacity

Persons who seek work can contact the Swedish Public Employment Service for help in finding employment. If a person has physical, mental or social limitations that imply reduced work capacity, the Swedish Public Employment Service can give this person a disability code (deafness is one of the codes) (Seing, 2009). This code states the type of impairment the person has and that the person is assessed as having reduced work capacity (Swedish National Audit Office, 2007). A disability code entitles the person to several employment programs that are exclusively targeted for people with disabilities that have reduced work capacity, for instance wage subsidy. It is the Swedish Public Employment Service that determines, after an investigation, whether a person has reduced work capacity and whether the person should be given a disability code. The person must however give his/her consent to receive a disability code (Seing, 2009).

As can be seen in the studies in this thesis, a high percentage of people in the deaf population participate in employment programs, especially wage subsidy. Wage subsidy is in fact the employment program for people with disabilities with the greatest number of recipients in Sweden (Swedish National Audit Office, 2007). To be entitled to wage subsidy, a person must be assessed to have reduced work capacity. But do deaf people have reduced work capacity? The impairment itself may have different consequences in connection with the environment, and the most significant factor is probably that deaf people use sign language. Does another language than the language of the majority in Sweden (i.e. communication barrier) imply that a person has reduced work capacity? Since work capacity is a relative concept, which means that the capacity to perform a work task is dependent on the context as well as the individual, there may be situations and work assignments in which a language other than the majority language is related to reduced work capacity and other situations in which it is not. If the working conditions in the former cases were adjusted, i.e. abolishing communication barriers, there would not be a reduced work capacity. It is then the context and not the impairment itself that is the main concern. However, as the concept work capacity is implemented in the Swedish contemporary context, it has become an individual characteristic. A consequence of this "individualization" of a relational phenomenon is that society attributes

the responsibility for being "employable" more to the individual him/herself and less to the environment.

Many authors have suggested that it is easier for society to assess deaf people as having reduced work capacity because the focus is then transferred from environmental barriers, for instance communicative barriers (Emerton, Foster & Gravitz, 1996; Foster, 1992; Foster & MacLeod, 2003), to the individual. Although laws state that working conditions should be individually adjusted in Sweden (Swedish Work Environment Authority, 2009), employers and society do not always eliminate communication barriers. If such barriers were eliminated (by for instance technical devices and interpretation services) more deaf people would probably have employment on the regular labour market.

Although work capacity is a relative concept and should be investigated as such, it is proposed by a Swedish Government Official Report (2009) that it should be investigated as *medical requirements for work*. The report states that work capacity has long been seen as a medical concept. Lindqvist (2008) reports that medical criteria decide which people are entitled to special support, in terms of employment programs, from the state. Peralta (2006) also points out that there has been a clear tendency towards a medicalization of some parts of the Swedish labour market policy.

This could also be the case for deaf people. In a medical perspective, deafness is a restriction in body functions, since the person lacks the ability to apprehend sounds. This restriction might automatically be associated with reduced work capacity. The Swedish Public Employment Service has several methods to investigate whether a person is assessed to have a reduced work capacity but the Swedish National Audit Office states (2007) that there is insufficient documentation of several parts of the management of wage subsidy, for instance in the determination of people's disabilities and their work capacity (Swedish National Audit Office, 2007). It should be noted that there are most certainly deaf people that do have a reduced work capacity, as is also the case in the general population. All deaf people should not automatically be assessed as having a reduced work capacity because they are deaf, however. Further research is needed to conclude to what extent deaf people have reduced work capacity and what the consequences are of being assessed as having reduced work capacity simply because of deafness.

As mentioned earlier, there are number of factors of importance in conjunction with deafness that can increase our understanding of the differences between the deaf and the reference populations in an educational context, a labour market context and an economic context. This thesis has discussed some of these factors. However, there are most certainly further factors of importance. Further research is needed to gain a better understanding of these factors, practical as well as theoretical.

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SAMMANFATTNING PÅ SVENSKA/SWEDISH SUMMARY

Döva och arbetsmarknaden i Sverige. Utbildning – Arbete – Ekonomi

Introduktion

Denna avhandling fokuserar på döva personers utbildningsnivå, position på arbetsmarknaden och inkomstkällor. Dessa delar hänger ihop eftersom en högre utbildningsnivå förknippas med en lägre arbetslöshetsnivå och en högre inkomstnivå. Den nationella kontexten är Sverige och den svenska välfärdsstaten år 2005.

Den gällande arbetsmarknadspolicyn i Sverige bygger på att de som kan, skall arbeta och att arbetsmarknadsåtgärder för de som är utan arbete är att föredra framför enbart bidrag. Denna policy, *arbetslinjen*, har som mål att nå full sysselsättningsnivå på den reguljära arbetsmarknaden. Samhällets fördelar med att ha fler personer med arbetsinkomst är till exempel större skatteintäkter och färre som är beroende av social välfärd. Fördelarna för individen med att ha ett arbete är till exempel att vara självförsörjande, delaktig i samhället och regelbunden kontakt med andra människor.

Kunskapen om dövas utbildningsnivå, position på arbetsmarknaden och försörjning samt disponibla inkomst är begränsad. Den forskning som finns, huvudsakligen från andra länder än Sverige, anger bland annat att döva har en lägre utbildningsnivå än hörande och att döva kvinnor har en högre utbildningsnivå än döva män.

När det gäller arbetsmarknad uppges det att döva personer har ett arbete i mindre utsträckning och är arbetslösa i högre utsträckning än hörande personer. Bland både döva och hörande är män oftare i arbete än kvinnor och i allmänhet antas högre utbildning ha en positiv effekt för arbete. Ju högre utbildningsnivå desto mer vanligt är det att personer är anställda i ett yrke som också kräver en hög utbildningsnivå och mindre vanligt att de är anställda i ett yrke med låg utbildningsnivå. Det finns dock en studie som anger att döva har en högre utbildningsnivå än vad som krävs för deras yrke.

När det gäller inkomst, påträffades inga studier som fokuserar på dövas inkomstkällor eller deras disponibla inkomst. Av de som påträffades gällande dövas inkomst var det svårt att utläsa vilken typ av inkomst de fokuserade på. Efter noggrann läsning visade det sig vara inkomst från arbete. Dessa studier anger att döva personer har en lägre arbetsinkomst än hörande personer, vilket kan hänga samman med att döva personer oftare är anställda i låginkomstyrken. Män har en högre arbetsinkomst än kvinnor och i allmänhet ger en högre utbildningsnivå högre arbetsinkomst bland både döva och hörande personer.

Syfte

Avhandlingens syfte är att beskriva och analysera döva personers position på den svenska arbetsmarknaden.

Material och metod

Data till alla studierna har hämtats från Statistiska Centralbyråns register LISA (Longitudinell Integrationsdatabas för Sjukförsäkrings- och Arbetsmarknadsstudier). Materialet är registerbaserat, på individnivå och från år 2005. Den regionala etikprövningsnämnden i Uppsala har godkänt alla studierna.

Dövpopulationen i denna avhandling består av 2,144 personer, födda år 1941-1980 och som har gått i specialskola för döva och/eller Riksgymnasiet för döva (RGD) i Sverige. Denna dövpopulation är lokaliserad genom skolornas skolkataloger. Detta är en totalpopulation omfattande alla personer födda 1941-1980 och som har gått i specialskola för döva och/eller RGD. Det är dock inte alla döva i Sverige eftersom för att vara inkluderad i dövpopulationen måste personen även ha varit folkbokförd i Sverige den 31 december år 2005. Personer som har gått på specialskolor för döva med ytterligare funktionsnedsättningar är inte heller inkluderade i dövpopulationen.

Dövpopulationen jämförs med en referenspopulation bestående av 100,000 personer födda år 1941-1980. Statistiska Centralbyrån har slumpvis valt ut denna referenspopulation från den totala befolkningen i dessa åldrar i Sverige år 2005.

Statistikprogrammet SPSS (Statistical Package for the Social Sciences) har använts för att analysera materialet. Tabell 1 visar vilka analyser som har använts i vilken studie. För en utförligare beskrivning om studiernas analyser, hänvisas till respektive studie.

Tabell 1. Studiernas analysmetoder

Analysmetod	Studie I	Studie II	Studie III	Studie IV
Frekvenser	X	X	X	X
Kvartiler, kvartilavvikelse, minimum och maximum				X
Korstabell	X		X	
Relativ risk reduktion (RRR)	X		X	
Oddskvoter		X	X	X
Logistisk regression	X	X	X	X

Resultat

Av studie I framgår att dövpopulationen har en lägre utbildningsnivå än referenspopulationen. Kvinnor har en högre utbildningsnivå än män och yngre personer har en högre

utbildningsnivå än äldre personer i båda populationerna. Kön, ålder och utländsk bakgrund kan inte statistiskt förklara skillnaderna i utbildningsnivå mellan populationerna.

Resultaten från Studie II visar att positionen på arbetsmarknaden för personer ur dövpopulationen inte är lika stark som referenspopulationens. Detta visas bland annat genom att dövpopulationen i jämförelse med referenspopulationen har en högre arbetslöshetsnivå och en lägre sysselsättningsnivå. Döva personer deltar oftare än personer i referenspopulationen i arbetsmarknadsåtgärder, vilket betyder att arbetsmarknadsåtgärder är viktiga för den ekonomiska aktiviteten för döva personer i Sverige. Skillnader i kön, ålder, utländsk bakgrund, utbildningsnivå och bostadsregion påverkar inte skillnaden i position på arbetsmarknad mellan de två populationerna. Istället verkar det som att dövhet är en viktig faktor.

Studie III beskriver att det finns flera skillnader mellan dövpopulationens och referenspopulationens arbetsplatser, till exempel är personer i dövpopulationen oftare anställda inom den offentliga sektorn och på arbetsplatser med 100 eller fler anställda än personer i referenspopulationen. Personer med arbete visar ett liknande mönster i båda populationerna när det gäller kön, ålder och utbildningsnivå. I båda populationerna är exempelvis sysselsättningsnivån högre bland män än kvinnor och ju högre utbildningsnivå desto högre sysselsättningsnivå. En hög utbildningsnivå ger dock inte automatiskt ett yrke med motsvarande utbildningskrav. Det är dubbelt så vanligt för dövpopulationen att ha högre utbildningsnivå än vad som krävs för yrket. Skillnader i kön, ålder, bostadsregion, utländsk bakgrund i de två populationerna påverkar inte detta resultat. Att döva personer oftare än hörande personer har en högre utbildningsnivå än vad som krävs för deras yrke kan ses som en indikation på att döva personer diskrimineras på den svenska arbetsmarknaden.

Studie IV visar att dövpopulationen har en lägre disponibel inkomst än referenspopulationen. När det gäller inkomstkällor har personer i dövpopulationen oftare en inkomst från arbetslöshetskassa och sjuk/aktivitetsersättning än personer i referenspopulationen, som oftare har en inkomst från arbete. Detta resultat innebär att dövpopulationen är beroende av ekonomiskt stöd från välfärdsstaten i större utsträckning än referenspopulationen och personer i referenspopulationen försörjer sig genom inkomst från arbete i högre utsträckning än dövpopulationen. En person måste vara bedömd av myndigheterna att ha nedsatt arbetsförmåga för att vara berättigad till sjuk/aktivitetsersättning. Eftersom en högre andel av dövpopulationen än referenspopulationen har sjuk/aktivitetsersättning, är dövpopulationen bedömd att ha nedsatt arbetsförmåga i högre utsträckning än referenspopulationen. Skillnader i kön, ålder, familjestatus, utländsk bakgrund, utbildningsnivå, bostadsregion och yrke i de två populationerna påverkar inte skillnaderna mellan populationerna när det gäller disponibel inkomst eller att ha någon av de studerade inkomstkällorna.

Diskussion

Master status

En persons status är förknippat med den position en person har i samhället. Exempel på status är förälder, student och doktor. En särskild typ av status, en s.k. master status anses vara så viktig och framträdande att den påverkar alla andra status som en person har; master status dominerar alla andra status så att den blir den primära och dominerande identitetsmarkören. Exempel som nämns på möjliga master status är kön, etnicitet och ålder.

I denna avhandling har flera skillnader mellan dövpopulationen och referenspopulationen framkommit när det gäller utbildningsnivå, position på arbetsmarknaden och inkomst. Dessa skillnader kan inte statistiskt förklaras av bakgrundsfaktorer som exempelvis kön, ålder och utländsk bakgrund. Alla studierna i denna avhandling indikerar att det förhållandet att man ingår i dövpopulationen är en avgörande faktor. Att vara döv tycks vara en status som, i denna avhandlings perspektiv, dominerar andra status, en master status.

Viktiga faktorer i förening med dövhet

Denna avhandling pekar på flera faktorer som i förening med dövhet kan öka vår förståelse för skillnaderna mellan döv- och referenspopulationen i en utbildningskontext, arbetsmarknadskontext och i en ekonomisk kontext. En del av dessa faktorer är individuella faktorer, t.ex. personliga faktorer (förutom dövhet) och ytterligare funktionsnedsättningar, medan andra är kontextuella faktorer, t.ex. social kontext, arbetsmarknadskontext, arbetsgivares (o)kunskap om döva personers kompetens och bristande arbetsvillkor. Det finns också några faktorer som kan anses vara både individuella och kontextuella, t.ex. arbetsförmåga (som diskuteras ytterligare nedan) och utbildning.

Ansvaret för de förhållanden som redovisas i denna avhandling kan fördelas (s.k. attribuering) mellan såväl individen som samhället. Vidare forskning om de nämnda faktorerna krävs för att vi bättre skall förstå skillnaderna mellan dövpopulationen och referenspopulationen när det gäller utbildningsnivå, position på arbetsmarknaden och inkomst samt hur ansvaret för dessa förhållanden attribueras i samhället. Andra studier visar en tendens att i allt högre utsträckning attribuera ansvaret till den enskilda individen. Ett tecken på en sådan utveckling är den allt mer ökande fokuseringen på arbetsförmåga.

Arbetsförmåga

Om en person har en fysisk, psykisk eller social svårighet som innebär nedsatt arbetsförmåga kan Arbetsförmedlingen ge en arbetssökande en funktionshinderkod (dövhet är en av koderna). Denna kod berättigar en person till specifika arbetsmarknadsåtgärder för enbart personer med funktionshinder som innebär nedsatt arbetsförmåga, t.ex. lönebidrag.

Studierna i denna avhandling anger att en hög andel av döva har lönebidrag. För att vara berättigad till lönebidrag måste en person således vara bedömd att ha nedsatt arbetsförmåga. Men har döva personer nedsatt arbetsförmåga? Funktionsnedsättningen kan ge olika konsekvenser i relation till omgivningen och den kanske mest märkbara faktorn är att döva som regel använder teckenspråk som sin primära kommunikationsform. Eftersom arbetsförmåga hänger samman med både individuella och kontextuella förhållanden, kan det finnas situationer och arbetsuppgifter där ett annat språk än det som används av majoriteten innebär nedsatt arbetsförmåga och i andra situationer inte. Om arbetssituationen var bättre anpassad till individen skulle dövhet troligtvis inte innebära nedsatt arbetsförmåga i den utsträckning som tycks vara fallet i dag.

Begreppet arbetsförmåga har dock mer och mer blivit kopplat till individen och bedöms som regel utifrån ett medicinskt perspektiv. Detta kan även gälla för döva. Utifrån ett medicinskt perspektiv är dövhet en begränsning i en kroppsfunktion, eftersom personen saknar förmåga att uppfatta ljud. Denna begränsning kan då kopplas samman med nedsatt arbetsförmåga. Även om Arbetsförmedlingen har flera metoder att undersöka om en person har nedsatt arbetsförmåga uppges det från andra studier att dokumentationen kring lönebidrag, bland annat när det gäller bestämmandet av personers funktionshinder och arbetsförmåga, är bristfällig. Det finns naturligtvis döva som har nedsatt arbetsförmåga liksom i den övriga populationen. Men av detta följer inte att dövhet i sig innebär nedsatt arbetsförmåga. Fortsatt forskning behövs för att utröna i vilken utsträckning som döva har nedsatt arbetsförmåga och vilka konsekvenserna är av att vara bedömd att ha nedsatt arbetsförmåga enbart för att man är döv.

Som tidigare nämnts finns det flera faktorer i förening med dövhet som är av vikt när det gäller förståelsen av skillnaderna mellan döv- och referenspopulationen i en utbildningskontext, arbetsmarknadskontext och i en ekonomisk kontext. Denna avhandling tar enbart upp några av dessa faktorer. Det finns säkerligen flera andra faktorer som är av vikt. Vidare forskning krävs för att få en bättre förståelse för dessa faktorer.

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