ARE PLAYGROUNDS IN NORRLAND (NORTHERN SWEDEN) ACCESSIBLE TO CHILDREN WITH RESTRICTED MOBILITY?

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Abstract: The purpose of this study was to investigate the accessibility of playgrounds to children with restricted mobility in Norrland. The investigation was carried out as a descriptive postal survey study. The questions in the survey were retrospective, i.e. addressed the issue of what had or had not been done to adapt the playgrounds for children with restricted mobility. The questionnaire was sent out to all the 54 municipalities in the province of Norrland. In the municipalities that responded to the questionnaire there were in all 2,266 playgrounds. When compiling the answers it appeared that only two of the total number of playgrounds were considered by the municipalities to be completely adapted for children with restricted mobility and that 46 playgrounds were partially adapted for them. The investigation can be seen as an illustration of the social model of disability. The inadequate adaptation of playgrounds to the needs of children with restricted mobility constitutes a very tangible societal barrier. It is a barrier, which can only be removed if the knowledge borne by those with restricted mobility and their organisations is utilised by municipal decision-makers.

Accessibility is a theme that has been intensely discussed in disability research in recent years (Barnes et al., 1999; Imre, 1997; Oliver, 1996; Finkelstein, 1993; Hahn, 1986). One reason for this is that in sociological research today there is increasing mention of the social model of disability, i.e. disability can be seen as something created by society (Oliver, 1996). According to this view, disability occurs as a consequence of the fact that society contains a series of disabling barriers which exclude those

with a disability from every day activities. Such barriers can be physical obstacles of different kinds, e.g. buildings, workplaces, transportation and so on, that are not accessible. This can also apply to institutional obstacles, i.e. the fact that social services in the wider sense are organised in such a way that persons with disabilities have difficulties with regard to access. The experiences of persons with disabilities are to a large extent experiences of such barriers, consciously or unconsciously

raised by persons without disabilities (Law et al, 1999; Imre, 1997; SOU 1980:16). The solution is assumed to be that the barriers and obstacles mentioned should be removed, which presupposes that persons with disabilities are given increased influence over different aspects of social planning. The social model (Oliver, 1996) has been put forward as an alternative to the previous medical model. In the medical model, disability is seen as a result of the individual's illness or impairment. Care, treatment, rehabilitation and technical aids designed by experts are becoming important factors in adapting the individual to society. Through such measures, the socalled "personal tragedy" assumed to be caused by the disability can be mitigated.

Many disability researchers have noted the problems daily encountered by persons with disabilities in the form of different constructed environments that not accessible to them. Such accessibility problems exist also in Sweden, according to the response report (SOU 1999:21) of the Ministry of Health and Social Affairs. In an investigation addressed to the municipalities in the country and commissioned by the Disability Ombudsman, it was found also that there are considerable shortcomings in accessibility for persons with disabilities at sports facilities and public baths, Approximately two-thirds of the municipalities stated that only half their facilities were adapted for persons with disabilities (Handikappombudsman 1999:28).

In WHO's new international classification system, ICIDH-2 (WHO, 1999) there is considerable emphasis on the aspect of accessibility, where a passage states that inaccessible environments, both physical and social, can have a disabling effect, and that persons with disabilities should have a right to participate in community life. In fact, the basic principal in Swedish disability policy and legislation is that persons with a disability should have the possibility to participate in the community and to live as all others do (SoL, 1980:620). In addition, the Swedish definition of disability (SOU, 1980:16, p.40) underlines the significance of the environment for persons with disabilities and states that "disability arises in the confrontation between an individual with an impairment, or a disease, and an imperfection in the environment or in an organized activity, that makes accessibility difficult or impossible for him/her".

In this article, we address the issue of the occurrence of barriers that create disability also for children, principally as regards playgrounds. To children, playgrounds are significant outdoor public environments that are built specially for their (the children's) different needs. At playgrounds children can carry out different activities, many of them motor activities, but there is also opportunity for social activities, i.e. playing with friends. Through interaction with other children in shared activities, the children learn many

social rules and values. The physical environment is of great importance to children. If accessibility is insufficient, many play activities cannot be carried out, and children's interaction with these environments will be reduced or eliminated. At the same time, physical public environments communicate symbolic messages as to whether persons are welcome in these environments. A disabling playground, for example, states that this environment is intended for non-disabled children and that other children are not welcome (Proshansky & Fabian, 1987; Hayward et al., 1974). Through the inaccessibility of certain environments, certain groups of individuals are excluded, which in turn can be discriminatory (Imre & Kumar, 1998; Kitchin, 1998; Imre & Wells, 1993). In addition, in Sweden there is a law stating that public places including playgrounds should accessible to persons with restricted mobility or restricted sense of locality (Plan- och bygglagen, 1987:10).

Environmental psychologists describe three different types of playgrounds - traditional, contemporary and adventure playgrounds (Hayward et al, 1974; Bell et al., 1990; Shaw, 1987). Traditional playgrounds are often found in parks and schools. They consist mainly of slides, swings, seesaws and climbing frames made of metal. Contemporary playgrounds are more aesthetically formed, with wooden play equipment built on different levels, with bridges and ladders linking equipment. At

adventure playgrounds children have access to building materials and tools and the children themselves can build different play structures. Sometimes also, an adult is on hand to assist. In different studies of playgrounds (Shaw, 1987; Brown & Burger, 1984; Hayward et al., 1974), it appeared that it was principally young children who played in traditional playgrounds. In contemporary playgrounds and adventure playgrounds the children were older, spent more time there and visited the playgrounds more often. At adventure playgrounds the children's games both socially and cognitively were more creative and complex than at the other playgrounds, and the children conversed more with each other on different topics, also on topics not related to the game or the playground.

To children with restricted mobility many playgrounds have insufficient access. This can be due to purely physical barriers, such as for example a ground cover of sand at a playground or too narrow a gateway into a playground. But there can also be social obstacles, such as the fact that children with restricted mobility seldom are alone in these environments, often being accompanied by an adult, who thereby 'disturbs' the normal play between children and also removes the opportunity of unconstrained interaction with other children (Tamm & Skär, accepted 2000; Howard, 1996; Brown & Gordon, 1987).

In several recent studies it has been found that children with restricted mobility have fewer play experiences, that they participate less in social activities with peers and that they are often onlookers during the play of other children (Tamm & Skär, accepted 2000; Howard, 1996; Brown & Gordon, 1987; Margalit, 1981). If children with restricted mobility become limited in their play and play contacts with other children, this can hinder their all-round development and it is possible that such play deprivation can lead to secondary disabilities. These secondary disabilities may consist of increased dependence on adults, poorly developed social competence and poor self-esteem. Such secondary disabilities affect the child restricted mobility not only during the game, but also in his/her whole development (Missiuna & Pollock, 1991; Philip & Ducksworth, 1982; Mogford, 1977).

Children have the same rights as adults as regards access to different public environments. The General Assembly of the United Nations adopted the Convention on the Rights of a Child in 1989. Sweden was among the first states to sign the convention. This means that Sweden is committed to ensuring that its national legislation is harmonised with the articles of the Children's Convention, i.e. that "an intellectually or a physically disabled child should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the

child's active participation in the community" (SOU 1997:116, p. 267). It further states in the convention that the child is to be protected against all forms of discrimination.

In previous exploratory (Prellwitz & Tamm, 1999), which was carried out in a medium sized municipality in northern Sweden, it was found that there was not a single playground that was completely adapted for children with restricted mobility. It was further found in this study that in this municipality the responsibility for the playgrounds was divided and that coordination was poor between the different administration units. questions therefore are as follows: Does this apply also to other municipalities? accessibility for children restricted mobility something nonexistent, despite the articles of the Children's Convention? In order to ascertain this, the purpose of this study was to investigate how accessible playgrounds are to children restricted mobility in Norrland, the northern region covering about half the area of Sweden.

Method

The investigation was carried out as a descriptive postal survey study. In the investigation, a questionnaire was used, consisting of 8 closed- and 5 openended questions. The questions in the questionnaire were formulated on the

basis of our previous study. The main questions in the questionnaire were short and easy to understand: what types of playground exist in your question municipality? (The was illustrated with a picture of the three relevant types of playground). How many playgrounds in your municipality are adapted for children with restricted mobility? etc. The survey format was chosen because it is quick, cheap and because it enabled us to cover a total population, i.e. to shed light on the total situation regarding playgrounds Norrland. The questions were retrospective; i.e. they addressed what had or had not been done to adapt playgrounds for children with restricted mobility in the different municipalities.

Procedure

The questionnaire was sent by post to all municipalities in the five counties (Norrbotten, Västerbotten, Västernorrland, Jämtland and Gävleborg), that together constitute the region of Norrland. The questionnaires were addressed to the person in the municipality who was responsible for playgrounds. A total of 54 questionnaires were sent out. The municipalities that after six weeks had not responded to the questionnaire were sent a reminder in the form of a letter. Four weeks after the reminder, 18 municipalities had still not responded to the questionnaire. These 18 municipalities were contacted by telephone. Five of these municipalities chose to reply to the questionnaire directly by telephone. Two municipalities replied that they could not reply to the questionnaire since they had handed over responsibility for playgrounds to road or residents' associations and in two municipalities the appointment had recently been filled and the person responsible did not consider him/herself to have sufficient information to be able to reply to the questionnaire. Seven municipalities did not reply to the questionnaire despite the reminder and the telephone call, and neither did they give any reason for not replying. In all, 41(76%) municipalities replied to the questionnaire.

Results

The information was given by the person in the municipality who is responsible for the playgrounds or the person who considers him/herself to be the most knowledgeable in that field. The number of participating municipalities and playgrounds in each county is presented in Table 1.

Different types of playgrounds

In the first question in the questionnaire, the respondents were asked to state what types of playgrounds were represented in the municipality - traditional, contemporary or adventure playgrounds. The result is presented in Table 2.

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Table 1: Number of participating municipalities and number of playgrounds in each municipality:

County	Number of participating municipalities (of total number of municipalities)	Number of playgrounds investigated in each county (n=2266)
Norrbotten	14 (14)	621
Västerbotten	11 (15)	339
Jämtland	3 (8)	65
Gävleborg	7 (10)	540
Västernorrland	6 (7)	711
Total of five counties	41 municipalities (of a total of 54 municipalities)	2,266 playgrounds

Tabell 2: Number and percentage of different types of playground in Norrland

Type of playground	Number	Percentage
Traditional	1,077	47.5%
Contemporary	820	36.2%
Traditional/contemporary	360	16.2%
Adventure playground	3	0.1%

As shown in the table, approximately half the playgrounds in Norrland are traditional, while the other half of the playgrounds are contemporary or a combination of contemporary and traditional. This combination often arises according to the respondents when a traditional playground is renovated and new, contemporary play equipment is mixed with the traditional. The table also shows that there are very few adventure playgrounds.

Playgrounds adapted for children with restricted mobility

In response to the question whether there were any playgrounds in the municipality that were wholly or partially adapted for children with restricted mobility, the replies showed that there were only two playgrounds (0.8%) in the whole of Norrland – one in Gällivare and one in Söderhamn – that according to the municipalities were adapted for children with

restricted mobility. The respondents reported also that in all there were 46 (2%) playgrounds that were partially adapted for children with restricted mobility. Of these playgrounds partially adapted for children with restricted mobility, 35 (76%) were located in larger cities, 17 (35%) were in Gävle and 10 (22%) in Umeå. The remaining 2,218 were not adapted in any way.

Even though playgrounds are not consciously adapted, they nevertheless may be accessible to children with restricted mobility. In the questionnaire the question was posed whether a child using a wheelchair could pass through the entrance to the playground even though the playground was not adapted for children with restricted mobility, then reach the play equipment and finally, use the play equipment. The replies showed that 10 respondents (24%) considered that a child using a wheelchair was able to pass through the entrance of all the municipality's playgrounds, approximately half of the respondents (49%) considered that this was possible in most or some of the municipality's playgrounds, while four respondents (10 %) did not consider this to be possible at any of the municipality's playgrounds.

The possibility to move to the play equipment is also limited. Only one respondent (2%) thought that a child using a wheelchair would be able unaided to move to the play equipment at all the playgrounds in the

municipality and more than half of the respondents (54%) considered that they had one or a few playgrounds in the municipality where a child using a wheelchair would be able unaided to make it all the way to the play equipment. 7 respondents (17%) stated that they had no playground in the municipality where a child using a wheelchair would be able to move all the way to the play equipment.

None of the 41 respondents considered that there was any possibility for a child using a wheelchair to use the play equipment in all of the municipality's playgrounds, while 19 respondents (46%) considered there to be one or more playground(s) in their municipality equipment where the play Six respondents accessible. (15%)reported that there was no playground in the whole municipality where a child using a wheelchair could use the play equipment.

One of the reasons why children using a wheelchair cannot pass through the entrance to the playgrounds in many municipalities, according to the respondents, is quite simply the ground cover. Sand or gravel right up to the entrance makes it difficult for a person using a wheelchair to enter. Another obstacle at the entrance can be a gate that is difficult to open or too narrow.

The greatest obstacle to access to the play equipment has also to do with the ground cover. The play equipment is

often located at the centre of sandcovered areas with no footpath nearby. Borders in the form of half-buried logs or enclosures with narrow openings also constitute obstacles for a child using a wheelchair. The fact that the ground is uneven and the fact that there are steep gradients are also mentioned as obstacles, but to a lesser extent.

According to most respondents, the main obstacle to being able to use the play equipment is that there are no ramps leading to the play equipment. The fact that the play equipment is not designed for children with restricted mobility is also given as an obstacle. Some respondents comment that if the child using a wheelchair receives help from an adult then the child can use some play equipment.

"Has the issue of adapting playground for children with restricted mobility been under discussion among you?", was one of the questions in the questionnaire. 26 respondents (63%) replied no to this question and 15 respondents (37%) replied yes. Of the 26 respondents who replied to the question in the negative, 22 stated that the reason for this was that they had never even considered it or that nobody had brought up the subject, remaining four gave economic reasons for the issue never having been brought up. The 15 municipalities where the issue had been brought up, that is, those that had answered the question in the

questionnaire in the affirmative gave a lack of expertise and/or lack of funds as the main reason why little or nothing had been done with regard to this issue.

Of the playgrounds that the municipalities completely or partially had adapted for children with restricted mobility, it is principally the ground cover that has been dealt with. Paths had been built leading up to the play equipment, and in addition, some equipment ordered that was was specially designed as adapted for children with restricted mobility. In some municipalities, ramps have also been built, leading to some play equipment. All this is according to the respondents in the study.

Renovation and new construction of playgrounds

The respondents (in one of the questions) were asked to report how many of the municipality's playgrounds that had been newly built or renovated in the preceding five years, and who had participated in any way in these construction projects. It appeared that of the 2,266 playgrounds, 392 (17%) had been built or renovated in the preceding five years. Both regarding new construction and renovation, all 41 municipalities stated that they had contacted different groups of representatives for consultations. The result is presented in Table 3.

Table 3: Number and percentage of municipalities that had contacted representatives upon new construction or renovation of playgrounds.

Representatives	No. municipalities		
_	Upon new construction	Upon renovation	
School or day nursery staff	25 (61%)	29 (71%)	
Children	15 (37%)	15 (37%)	
Parents	8 (20%)	6 (15%)	
Organisations for the disabled	5 (12%)	3 (7%)	
Nearby residents	1 (2%)	6 (15%)	

The table shows that the municipalities to a larger extent consult school and day nursery staff and nearby residents when renovating existing playgrounds than when building new playgrounds. Just over one third of the municipalities considered children's views parents' views were considered to only small degree. Something which cannot be read from the table, but which appeared when compiling the results, was that the five municipalities that had been in contact with organisations for persons with disabilities when building playgrounds also had 31 (68 %) of Norrland's partially adapted playgrounds and both (100 %) of the playgrounds completely that are adapted.

One of the questions in the questionnaire was of a hypothetical nature. It was: "If the economy allowed your municipality to build a playground adapted for children with restricted

mobility, what more would you need to be able to carry out the project?" The most common reply to this question was that the respondents wished for more knowledge in the field. Some replied that they would contact organisations for persons with disabilities and others would investigate whether there was a need in the municipality for a playground adapted for children with restricted mobility.

Discussion

The aim of this study was to investigate the accessibility of playgrounds to children with restricted mobility in Norrland. The results show that only a few playgrounds are accessible to these children. Many municipalities have playgrounds where a child using a wheelchair cannot even pass through the entrance to the playgrounds, despite the fact that the Planning and Building

Act (1987:10) stipulates that also playgrounds are to be built in such a way that they are accessible to all. Through their lack of accessibility, playgrounds become disabling barriers to children with restricted mobility. Why has this situation come about? In our previous study (Prellwitz & Tamm, 1999), it was shown that the planning and building of playgrounds itself is an activity that often "falls between two stools" in municipal administration. It is often unclear which administration department has the main responsibility and the fact that this part of municipality's commitment is fragmentised can be seen as a major to those with restricted mobility. In addition, the results of the present study indicate that those with a disability are not always given the opportunity to influence or participate in municipal decisions.

Another problem that the respondents in this study mentioned, which was also identified in the previous (Prellwitz & Tamm, 1999), in response to the question why playgrounds were not adapted, was the poor economy of the municipalities. When the economy is seen as poor, visions of providing children with disabilities opportunities equal to those of children without disabilities can easily be set aside. The fact that most playgrounds are of the traditional type in Norrland and that only 17% have been renovated in the last five years might depend partially on the municipalities' economy. Playgrounds adapted for children with restricted mobility, according to the respondents, are simply not a priority area, which also suggests a lack of new thinking in this area. The respondents also say that they would like more knowledge about these questions. One interesting observation is as follows: in the municipalities that have contacted organisations for persons with disabilities when a new construction or construction has been considered. certain changes have indeed been made, resulting in some playgrounds being adapted for children with restricted mobility. Institutional barriers evidently can be overcome, but this requires that the decision-makers observe the views of those with limited mobility.

The insufficient accessibility playgrounds also indicates that children with restricted mobility are treated in a discriminatory way or that their needs are ignored. The present study shows that children with restricted mobility are excluded from a section of society that is important to them. This discrimination is illustrated by the fact that the most common answer to the question why there were no adapted playgrounds in the municipality was that decision-making administrators had not thought about the issue or that nobody had brought up the issue. As one responsibility official with municipal playgrounds put it, "I have never seen anyone in a wheelchair in a playground". The situation is so normal that nobody has reacted to the fact that children using a wheelchair are seldom or never seen in a playground. In the official report of the Swedish Government done by the Ministry of Health and Social Affairs (SOU 1999:21), similar situations are reported (not regarding playgrounds however), where persons with disabilities are largely excluded from e.g. public transport in many municipalities. Also according to the United Nations' Children's Convention children are to be protected against discrimination and exclusion from society and instead active participation in the community should be facilitated.

To create easily-accessible playgrounds where a child with restricted mobility can move about independently is also important in order for the child to be able to grow up and become as independent as possible. To constantly be surrounded by professional helpers, assistants, parents and siblings who "help out," means that children with restricted mobility gradually are socialised into the role of weak and constantly help-dependent individuals (Tamm & Skär, 2000; Söder, 1989). They risk being part of "a vicious circle" where they are considered to have "special needs", which require the help of experts and specially-adapted solutions, which in turn confirms that they have special needs and so on. With such approach, the disability an becomes a question of the individual's shortcomings and the societal barriers disappear from the field of vision. This approach is described by several disability researchers as a common phenomenon in society (Barnes et al., 1999; Burnes, 1996; Oliver, 1996). The insufficient accessibility can in time lead to a broad range of skills not being acquired, to a sense of competence not being achieved, to self-determination being weakened and to the understandings of society and culture being developed to a lesser degree, which many researchers refer to as secondary disabilities (Howard, 1996; Brown & Gordon, 1987; Margalit, 1981).

The insufficient adaptation of playgrounds to the requirements of children with restricted mobility can instead be interpreted within the conceptual framework of the social model of disability (Oliver, 1996). Non-adapted playgrounds constitute very tangible physical barriers to children with restricted mobility. However, the fact that accessible playgrounds are not built must also be seen in a wider context. There are institutional barriers in the fragmented manner in which the issue of playgrounds is dealt with in the municipalities. It is difficult to know who has the responsibility and where the decisions are made, which means that there is a shortage of channels for persons with disabilities to influence. In addition, there is little knowledge, and there are attitudinal obstacles among decision-makers, in that the issue is not regarded especially important. At the same time, our results show that changes can be made. In those cases where persons with disabilities through their organisations make their voices heard, certain consideration is given to their views.

Acknowledgement: The authors express their gratitude to those who participated in this study. Further thanks to "Save the Children" Sweden for financing the project.

References:

- Barnes C, Mercer G & Shakespeare T (1999). Exploring disability – a sociological introduction. Cambridge: Polity Press.
- Bell P, Fisher J, Baum A & Greene T (1990) Environmental psychology. (3:ed). New York: Harcourt Brace Jovanovich College publishers.
- Brown J & Burger C (1984). Playground designs and preschool children's behaviors. Environment and Behavior16 (5) 599-626.
- Brown M & Gordon WA (1987). Impact of impairment on activity patterns of children. *Archives Physical Medicin and rehabilitation* 68, 828-832.
- Burnes J (1996). Variations in childhood occupations: Play in the presence of chronic disability. In Zemke R & Clark F (Eds.). Occupational science. The evolving discipline. Philadelphia: Davis.
- Finkelstein V (1993). The commonality of disability, in Swain J, Finkelstein V, French S & Oliver M (Eds.). Disabling Barriers enabling environments. London: Sage.
- Hahn H (1986). Disability and the urban environment: a perspective on Los Angeles. Environment and Planning D: Society and Space, 4, pp. 273-288.
- Handikappombudsmannen (1999). Delrapport till regeringen 1999. Undersökning om delaktighet och jämlikhet för personer med funktionshinder en enkätundersökning bland Sveriges kommuner. [Report to the Government 1999]. Stockholm.
- Hayward G, Rothenberg M, Beasley R (1974). Children's play and urban playground environments. A comparison of traditional, contemporary, and adventure playground

- types. Environment and Behavior, 6 (2). 131-169.
- Howard L (1996). A comparison of leisure-time activities between able-bodied children and children with physical disabilities. *British journal of occupational therapy*, 59. 570-574.
- Imre R (1997).Rethinking the relationships between disability, rehabilitation, and society. Disability and Rehabilitation, 19 (7), 263-271.
- Imre R & Kumar M (1998). Focusing on disability and access in the built environment. *Disability & Society*, 13, (3). 357-374.
- Imre R & Wells P (1993). Disablism, planning and the built environment. Environment and Planning C: Government and Policy; 11. 213-231.
- Kitchin R (1998). "Out of place", "Knowing one's place": space, power and the exclusion of disabled people. *Disability & Society*, 13, (3), 343-356.
- Law M, Haight M, Milroy B, Willms D, Stewart D, Rosenbaum P (1999). Environmental factors affecting the occupations of children with physical disabilities. *Journal of Occupational Science*, 6, (3), 102-110.
- Margalit M (1981). Leisure activities of cerebral palsied children. *Israel journal of psychiatry and related sciences*, 1, (3), 209-214.
- Missiuna C & Pollock N (1991). Play deprivation in children with physical disabilities: The role of the occupational therapist in preventing secondary disability. The American Journal of Occupational Therapy, 45 (10), 882-888.
- Mogford K (1977). The play of handicapped children. In.Tizard B & Harley D (Eds.). Biology of play. London: Spastics International.
- Oliver M (1996). Understanding Disability: from theory to practice. Basinstoke, MacMillan.
- Philip M & Duckworth D (1982). Children with disability and their families. Windsor: NFER-Nelson.

- Plan- och bygglagen 1987:10. [Planning and Building Act] Svensk författnings samling 1992:1769.
- Prellwitz M & Tamm M (1999). Attitudes of key persons to accessibility problems in playgrounds for children with restricted mobility: A study in a medium-sized municipality in northern Sweden. Scandinavian Journal of Occupational Therapy 6 166-173.
- Proshansky HM & Fabian AK (1987). The development of place identity in the child. In. Weinstein CS & David TG (Eds.). Spaces for children. The built environment and child development. Plenum Press. New York.
- Rembel A (1992). Barnets rättigheter-Samhällets skyldigheter: Lagar och regler. Stockholm: Wahlström & Widstrand.
- Shaw LG (1987). Designing playgrounds for able and disabled children. In. Weinstein CS & David TG (Eds.). Spaces for children. The built environment and child development. Plenum Press. New York.
- SoL. Socialtjänstlagen,[Social service act] (1980:620). Författningshandboken 1998. Stockholm, Liber förlag.
- SOU (1980:16). Vissa frågor rörande handikapp.[Certain questions concerning disability]. Omsorgskommittén.
- SOU (1997:116). Barnets bästa i främsta rummet. FN: s konvention om barnets rättigheter förverkligas i Sverige. [The children's best in the front room. UN's Convention on the Rights of the Child implemented in Sweden] Stockholm: Fritzes.
- SOU (1999:21). Lindqvist nia nio vägar att utveckla bemötandet av personer med funktionshinder. [Lindqvist's nine - nine

- ways to develop the meeting with disabled people | Stockholm: Fakta info direkt.
- Söder M (1989). Oberoende och autonomi. [Independence and autonomy.] Socialmedicinsk tidskrift, 4. 155-160.
- Tamm M & Skär L (2000) How I play: roles and relations in the play situations of children with restricted mobility. Scandinavian Journal of Occupational Therapy 7, 174-182.
- WHO (1999). ICIDH-2. International Classification of Function and Disability. Beta-2 draft. Full Version. Geneva: World Health Organisation.

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