



LAPIN YLIOPISTO
UNIVERSITY OF LAPLAND



University of Lapland

This is a self-archived version of an original article. This version usually differs somewhat from the publisher's final version, if the self-archived version is the accepted author manuscript.

I am not alone

Lasanen, Kirsti Maarit; Määttä, Kaarina; Uusiautti, Satu

Published in:
Early child development and care

DOI:
[10.1080/03004430.2017.1371704](https://doi.org/10.1080/03004430.2017.1371704)

Published: 29.08.2017

Document Version
Version created as part of publication process; publisher's layout; not normally made publicly available

Citation for pulished version (APA):
Lasanen, K. M., Määttä, K., & Uusiautti, S. (2017). I am not alone: An ethnographic research on the peer support among northern-Finnish children with hearing loss. *Early child development and care*.
<https://doi.org/10.1080/03004430.2017.1371704>

Document License
Unspecified

**“I am not alone” – An ethnographic research on the peer support
among northern-Finnish children with hearing loss**

Maarit Lasanen, Kaarina Määttä and Satu Uusiautti*

University of Lapland, Rovaniemi, Finland

*Satu Uusiautti, University of Lapland, PO Box 122, 96100 Rovaniemi, Finland. E-mail: Satu.Uusiautti@ulapland.fi

“I am not alone” – An ethnographic research on the peer support among northern-Finnish children with hearing loss

This study focused on the peer support group activities organized in two northern-Finnish places for children with hearing loss and their experiences of it. Two research questions were set for this study: (1) What kind of support did peer support group activities provide for children with hearing loss as described by themselves?; and (2) What kinds of practical solutions did the support from the peer support group activities provide for children with hearing loss as described by themselves? This was an ethnographic child research, in which the research participants were 16 (12 girls, 4 boys, aged 7-17 years) northern-Finnish children with hearing loss. The main research data consisted of the researcher’s field notes and diaries, and focus group interviews among the research participants.

Additional research data consisted of various questionnaires and background information. Peer support group activities provided children with hearing loss social, functional, cognitive, and emotional peer support and each of these included practical solutions to cope with hearing loss in everyday life. The benefits of peer support could be summarized as follows: (1) peer support group activities provided information and coping skills for the children’ daily lives; (2) participation in group activities and group discussions strengthened the children’s social competence; and (2) peer support group activities empowered the participants. The importance of friends and social relationships for children with hearing loss is discussed based on the findings.

Keywords: hearing loss; children; Finland; peer support; peer; peer support group activities; ethnography

Introduction

North-Finland is sparsely populated and distances are long. Schools have relatively low number of students and school commutes can be very long (see Uusiautti, Hoppo, & Määttä, 2014). Children with hearing loss are a marginal group in North-Finland and more often than not, there is only one student with hearing loss in school. Therefore, these children do not have enough opportunities to meet or maintain social relationships with other people with hearing loss. They may easily find themselves different and

lonely—also because challenges in communication can hinder social interaction. Due to long distances and transportation problems, they do not have many opportunities to participate in peer meetings either.

Peer support is important to all kinds of people. Often, people get support in communal events when meeting others who have similar experiences than themselves. Giving and receiving peer support can also be organized as peer support group activities. The forms and meaning of peer support have been studied abundantly in various organizations and among people with crises and critical life situations (see e.g., Dennis, 2003; Heisler, 2009). Peer support has a powerful effect on mental and physical health (Davison, Pennebaker, & Dickerson, 2000; Solomon, 2004).

Could peer support enhance the quality of life and interaction among children with hearing loss? For example, there are only a few studies of social–affective development at school age that assesses the deaf child's competence for forming relationships with the environment of their hearing peers (Antia, Kreimeyer, Metz, & Spolsky, 2011; Bat-Chava & Deignan, 2001; Preisler, Tvingstedt, & Alström, 2002). Creating friendships with hearing peers at school is sometimes problematic (Antia & Kreimeyer, 2015; Kluwin, Stinson, & Colarossi, 2002). To enhance it, leisure activities can be organized in which the participants must exercise certain communicative skills. This kind of intervention was done at the University of Arizona as part of Project Interact to facilitate communication between deaf and hearing children (Silvestre, Ramspott, & Pareto, 2006).

Social relationships between children with hearing loss have been studied to some extent (see e.g., Calderon & Greenberg, 2011; Martin, Bat-Chava, Laiwani, & Waltzman, 2010), while the importance of peer support for their lives and development in general is less researched (Cabral, Muhr, & Savageau, 2013; DeLuzio & Girolametto,

2011). However, communication and friendships with other children with hearing loss may provide different kind of socio-emotional support when compared to support received from normally hearing children. This is the main point of this article.

In this research, we analyzed peer group activities organized for children with hearing loss living in North-Finland. Dr. Lasanen designed and organized these activities in 2015-2016. They included group meetings, shared activities, and discussions. During the peer group activities and after them, children were asked to tell about their perceptions and experiences of peer support. Due to their hearing and speaking difficulties, children with hearing loss themselves have not often interviewed for studies like this. But in this research, the child-centered approach was deliberately chosen: the purpose was to hear the children's voices (e.g., Silvestre et al., 2006). Dr. Lasanen is able to communicate with children with hearing loss (see also Barnett, 2002), and therefore, it was possible to receive new information about peer support experiences among children with hearing loss. In addition, peer group activities as organized in this research were unique in Finland, especially in North-Finland. Moreover, international research on the theme appears to be relatively scarce.

Theoretical background

Challenges of communication among children with hearing loss

The term "hearing loss" refers to difficulties in communication with other people. It is difficult to define "deafness" or "hearing loss" because nowadays many children with serious hearing loss have cochlear implants (CI). With a CI, many people hear at least a little and are able to speak like children with smaller hearing problems (Antia & Kreimeyer, 2015.)

Children with hearing loss need various hearing aids that can be stigmatizing. Brunnberg (2010) noted that a hearing aid and CI are symbols of handicap because using them makes hearing loss visible. However, hearing aids do not turn children with hearing loss normally hearing children. They are technical equipment that may have technical problems or can break. In addition, there are situations when it is impossible to use hearing aids (e.g., in shower or in when swimming).

Linguistic development, language usage, interaction, and writing in children with hearing loss have been studied extensively and various methods to enhance their development have been created (Wolbers, Dostal, & Bowers, 2011). Parents' and teachers' roles in interaction has been emphasized (Goodman, 2006; Schneiderman, 1995). However, research on linguistic development in children with hearing loss is challenging (Metz, Miller, & Thomas-Presswood, 2010) and comparisons with hearing children have been greatly criticized (Sligar, Morene, Cawthon, & Moxley, 2013).

Communication difficulties hinder children's learning of social rules and behaviors (Calderon & Greenberg, 2011). If they do not understand (or are not explained) what happened and why in a certain situation, their incidental learning in social situations becomes hindered as well. Children do not learn how to negotiate with or justify their opinions to others (Antia & Kreimeyer, 2015). Due to lacking social skills, children with hearing loss may feel of being excluding, misunderstood, or just stupid (Edwards & Crocker, 2008). They can even feel being outsiders in their own homes if they cannot hear or understand what their family members are talking about (Kushalnagar et al., 2011). According to Theunissen et al. (2014), children with hearing loss experience that their peers and own parents do not accept them as well as they accept hearing children. Hays (2010) and Spencer and Marschark (2010) have noted

that the negative attitudes in the environment and communication challenges in children with hearing loss can together have an influence on their socio-emotional development.

Children learn social skills when they spend time with their peers.

Simultaneously, their social competence develops. Social competence means the ability to interpret various social situations and act in a constructive and acceptable manner.

According to Most, Ingber, and Heled-Ariam (2012), language skills, feeling of loneliness, and social competence in children with hearing loss are connected and significant already when they are small. Difficulties in starting and maintaining interaction with peers make shared activities challenging and cause feelings of loneliness. Therefore, becoming understood, speech intelligibility, is important already from early childhood (Most et al., 2012). Children with hearing loss may have low self-esteem because of experienced misunderstandings. They do not hear what other children say and therefore, they cannot for example laugh to jokes or in right places. It is difficult to listen to many children at the same time (Tasker, Nowakowski, & Schmidt, 2010). Children with hearing loss cannot reply to questions they have not heard, while others may find this unsocial and weird. Background noises make it more difficult to hear singular voices and words. Especially, speech in foreign languages is difficult to understand in a noisy environment. Uncertainty about what is happening and what should be done may make a child restless or even crying. Since hearing loss is invisible, other people may find it difficult to understand all challenges the loss brings to someone (Svirsky, Robbins, Kirk, Pisoni, & Miyamoto, 2000). If a child with hearing loss communicates with speech, other children and adults tend to assume that the child hears like normally hearing children do. When children are playing together, hearing loss is ignored because action proceeds fast and children move quickly from place to

another. Clear speech, eye contacts, and sign language become easily forgotten when playing (Antia, Reed, & Kreimeyer, 2005).

Every child needs the ability to interact with, make friends with, and be accepted by peers (Wauters & Knoors, 2007). Children need relationships and friendships to develop social, emotional, and cognitive skills (Antia & Kreimeyer, 2015). Friendships are significant although it is challenging to get friends and maintain friendships (Brunnberg, 2010; Kluwin et al., 2002). At the worst case, the child is socially excluded and does not have friends to spend time with. The feeling of not belonging to the same group with others may lead to loneliness, decrease in self-esteem, depression, pessimistic attitudes toward the future, and difficulties at school (Haynes, Moran, & Pindzola, 2006). To be able to create relationships and friendships with peers, children with hearing loss need opportunities to spend time with others. Small children need physical proximity and willingness to take contact. Shared interests or hobbies may motivate this activity (Antia & Kreimeyer, 2015). Children with hearing loss need chances of interacting with normally hearing children and with children with hearing loss (Edwards & Crocker, 2008; Wolters, Knoors, Cillesen, & Verhoeven, 2011)—this is important for the development of their self-image. Nunes, Pretzlik, and Olsson (2001) found out that children with hearing loss had fewer friends in their classrooms than hearing children. Children with hearing loss are in danger of exclusion. This risk has to be prevented (Wauters & Knoors, 2007), while good relationships with peers contribute to children's academic achievements and higher self-esteem (Gifford-Smith & Brownell, 2003).

Peer support group activities enhance social interaction

Peer support is a form of interaction in which people share their experiences with others who have experienced the same. Peers also share knowledge and advice that they can

use in their own situation (Dennis, 2003). Peer support is based on the idea of people helping themselves and others at the same time. Initially, it meant giving and receiving help from relatives, friends, and neighbors. Peers support is built on the shared experiences, situations, or interests of people participating in the activities (Heisler, 2009). Assimilating new knowledge and appraisals through mutual exchange of experiences occurs more effectively when presented by peer with whom people share common experiences (Heisler, 2009).

There are numerous studies on various peer groups for people with various kinds of life situations (see e.g., Davison et al., 2000; Marshall, Parker, Giarrochi, & Heaven, 2014). Peer support is based on the participants' lived or experiential knowledge, practical knowledge, and shared experience. Other people's experiences of their own lives provide tips for others with similar situations. Purcal et al. (2015) emphasize that good peer support includes activities that makes it possible to learn from others something that can be applied in one's own life. Simultaneously, their perceptions of their life-management skills and opportunities to influence in their lives improve.

In a peer support group, participants observe others but also themselves, their own strengths and needs for support. They can form a more comprehensive picture of their overall situation and get courage to discuss honestly their lives and issues. Open, reciprocal interaction, belief in better future, and responsibility for taking care of themselves and provide support for others are the keys of peer support group activities (Mead, Hilton, & Curtis, 2001).

Studies among children have showed that peer support can be very important (Camara, Bacigalupe, & Padilla, 2017). While according to some studies, emotional support from friends and family has also been revealed superior to the other types of support, adolescents may feel freer to talk about their problems with peers than parents

(Griffiths, Crisp, Barney, & Reid, 2011). Social support has been directly associated with lower rates of depression, better academic adjustment, and lower rates of substance use (Decker, 2007; Demaray et al., 2005; Dingfelder, Jaffee, & Mandel, 2010; Graziano, Bonino, & Cattelino, 2009).

Research on peer support among children have focused merely on school arrangement and especially on the development of inclusive education (Carter, 2017). The opportunities to create friendships have been given mainly reserved attention (Leigers, Kleinert, & Carter, 2017). Thus, mutual peer support group activities organized for research purposes too have not been studied from the children's perspective before.

Method

The purpose of this study was to analyze peer support group activities organized for children with hearing loss for one study year. The following research questions were set for this study:

- (1) What kind of support did peer support group activities provide for children with hearing loss as described by themselves?
- (2) What kinds of practical solutions did the support from the peer support group activities provide for children with hearing loss as described by themselves?

The goal is to see new viewpoints to the everyday lives of children with hearing loss and what kind of support and help peer group activities could offer them. In all, the purpose was to find out how important peer support is for children with hearing loss and how to develop and organize activities in the future.

This was an ethnographic child research (Pellegrini, Hoch, & Symons, 2013). The peer support group activities were organized by Dr. Lasanen in two different places in North-Finland in 2015-2016. The research participants were 16 (12 girls, 4 boys) northern-Finnish children with hearing loss, aged 7-17 years. Their average age was 11 years, 2 months. In addition to hearing loss, three children had at least one additional related handicap or illness. All children attended basic education except for one who studied in secondary education. Children's hearing loss varied between mild and severe so that nine children had mild or moderate hearing loss and six had difficult or severe hearing loss. Background information for one child was not available for research. Every research participant communicated with speech and used lip reading to support their understanding of speech.

In addition to children with hearing loss, people who were support persons attended the peer support group meetings. These persons were mothers, hearing rehabilitation counselors, interpreters, or siblings, although mothers attended only the first meeting. One child had an interpreter who used haptics with the child.

Peer support groups met altogether 14 times: in both places, six Saturday meetings and one weekend camp were organized. Saturday meetings followed similar structure every time. After a morning circle and general greetings the program included playing, discussions, varied activities, lunch, free time, and an ending circle to discuss how the day had gone.

The main research data consisted of the researcher's field notes and diaries, and focus group interviews among the research participants (Eriks-Brophy et al., 2012; Groundwater-Smith, Dockett, & Bottrell, 2015). Focus group interviews were conducted among 3-6 children at a time. After the peer support group activities ended in spring 2016, every participant was also interviewed individually. Additional research

data consisted of answers in the feedback questionnaires from the children with hearing loss, and children's written answers to friendship and peer interview questionnaires, writings to "My friends" book, and drawings. In addition, background information forms filled out by the children's parents and photos taken during the peer support group activities were included in the additional data. Altogether, the data consisted of 996 pages of text with 1.5 line spacing and 12 pt font.

The research data were analyzed with data-driven qualitative content analysis. The main purpose was to reach children's voices and avoid extracting their experiences and answers from the context (Atkinson & Delamont, 2005; Krippendorff, 2013). Therefore, the analyzing units were entities that consisted of children's notions or mentions about this entity (Eskola, 2010).

Ethical aspects were given especial attention in this research (e.g., James & James, 2012). Questions of how to ask questions from children, children's position in this research, and their anonymity had to be carefully deliberated (see Groundwater-Smith et al., 2015). Parents gave written permissions and children were asked oral permission. The findings were shown and discussed with the research participants to make sure the interpretations were correct. Furthermore, some adults who participated in the peer support group activities commented on the findings.

Findings: Forms of support and practical everyday solutions

The support children with hearing loss received from the organized peer support group activities could be divided into main forms of support: social, cognitive, functional, and emotional support. Likewise, they received a variety of practical solutions that were connected with the form of support they got. Next, we introduced the forms of support alongside related practical solutions.

Social peer support and practical solutions

Social peer support appeared as shared activities and friends with hearing loss. Children with hearing loss got new friends with whom they did activities in groups and during their free time. Activities brought children closer and helped them form friendships. The peer support group activities formed a special sub culture: while many lacked friends in their own school and home environment, in the peer support group they could feel belonging to a group.

Child8: Well [a pause] that exact thing that you can like see again your friends after a month. (YH, 47–48)

Researcher: Ok, why should someone participate?

Child13: Because you can meet friends with hearing loss and you can be with your ilk and you do not always have to explain and explain [uses sign language to explain how the story continues]. (FGHY, 277)

Children found spending time and discussing with other children having experienced the same important for their coping. Mutual understanding can become a way of starting friendship. Thus, participation in peer support group activities was an important means of forming new relationships and expand one's social network (Foster et al., 2014; Gannoni & Shute, 2009), especially with other children with hearing loss, which is obviously easier than forming friendships with normally hearing (see also Antia, Kreimeyer, Metz, & Spolsky, 2011; Most et al., 2012).

Researcher: Yeah [pause] ok. What about Child4, how about you?

Child4: I guess because we have been baking together and done everything together. (FGHX, 133)

Children in this research attended school and spend their free time in their home places among children with normal hearing. The children with hearing loss revealed experiences of becoming excluded of mutual activities, which corresponds to other researchers' findings, too (e.g., DeLuzio & Girolametto, 2011). Children with hearing loss in Brunberg's (2010) study reported that they do not have enough friends.

The peer support group in this study provided children with opportunities to practice activities together and take contact with others. They got positive experiences of being together which alleviated experiences of being left outside in their daily environments (see also Kluwin et al., 2002; Nunes et al., 2001). The findings showed how participation in peer support group activities enhanced their abilities to form social relationships and find friends.

During the day Child16, Child13, and Child12 have been concerted "Brother John" and, in addition, Child16 and Child13 had composed their own rap song that described this night camp. They sang it to me and that certainly was awesome. (Field Diary Y, 119)

Social support happened through doing activities together and simultaneously discussing hearing loss and other issues in their lives (see also Gladstone, McKeever, Seeman, & Boydell, 2014; Sattoe, Jedeloo, & van Staan, 2013). Therefore, social support included certain practical solutions, too, that the children with hearing loss shared with each other.

The main practical solutions were *the actual support and becoming encouraged facing challenging situations*. These challenging situations were mishearing situations and bullying.

Researcher: Have you had any situations in which you have misheard and started doing as you heard it? And after a while you notice that no, no.

Child13: [starts talking at the same time] Well for example this Tuesday at the coat rack. So, umm, our teacher had to that. - - Or it was at the coat rack. Then the teacher had told to take backpacks to the chairs so that no one could take them. And then, I was, I had not known or heard it. So, I had left my backpack there. And now, I was like, it is there, that what if someone has stolen my phone. Because I cannot find my phone anywhere. And it was not in my backpack on Tuesday anymore. (YH, 176)

The children with hearing loss had numerous mishearing experiences that led them into embarrassing or problematic situations, and in the worst case, could even lead to bullying. According to previous studies, after such experiences, children may start avoiding group situations and isolate from others (see e.g., Wolters et al., 2011). In addition, communication problems make finding friends and getting their acceptance more difficult (see Theunissen et al., 2014). Some children with hearing loss become excluded and left outside. In the peer support group, children shared their experiences and provided social support for each other:

Researcher: Tell us Child6, what happened to you?

Child6: Well, I have been alone or with friends and then some dudes have come and called me names like disabled. Or told me that we will not take you with us anywhere and that you have hearing loss. Not my classmates. Or actually some of them like, yeah, that is a jerk with hearing aids and so on. Why to even use them? So I just simply say that I use them because I do not hear well. And then they just say that you are a jerk because you cannot hear well. Fatty. Loser. [pausing] But not anymore. But [pausing] Actually yes. (FGHY, 54)

The children with hearing loss who participated in the study at hand, had experienced bullying not only at school but also already in day care and during leisure. Therefore, social support may become extremely important for these children's coping.

Cognitive peer support and practical solutions

Cognitive peer support consisted of shared information about hearing loss in general, information about hearing aids and CIs, and information about FM equipment. Peer support groups are good places for information sharing (see also Gannoni & Shute, 2009), and children could tell about, for example, their experiences of using various aids.

Child11: Well, at least I have learned a lot of new things. Like in those discussions. At some point we have talked about something by accident and then I have learned a lot of new things about something.

Researcher: Yeah. Can you think about something specific what you have learned from these friends here?

Child11: Well, no exactly. I have learned plenty of [a pause] information related to hearing aids or something that I could do instead of doing like I have done earlier [laughs].

Researcher: Okay. What about Child4, have you gotten help in anything?

Child4: I have the same situation with Child11... [laughs] Umm, well I have heard others' experiences and learned new things from all these stories. (FGHX, 142–143)

In this research, the participants received experiential knowledge and information through peer support. They heard from each other about challenging situations and coping with them. Realizing that others had trouble with hearing in similar situations seemed relieving. Although children got plenty of information from professionals, they could complement each other's knowledge in the peer support group discussions. Furthermore, the children with hearing loss could introduce their own means of coping with challenges. Sharing this kind of information is one of the main objectives of peer support group activities (see also Gannoni & Shute, 2009; Sattoe et al., 2013).

The most important practical solutions shared in the group were, in the participants' opinion, *various means to make schoolwork easier*: how to cope with school days, especially during handicraft lessons or foreign language lessons, and how

to keep on track with homework. The children described what kinds of situations they had experienced especially challenging and how they dealt with them. They emphasized how difficult it was to hear during lunch breaks or in PE lessons as well as in various classroom situations such as group discussion. Children with hearing loss may remain bystanders in classroom interaction even if they used technical hearing aids.

When everyone is yelling and the teacher has to yell “shut up”. It is a little bit difficult to hear in almost all lessons. (Child1, friendship questionnaire)

Noises during lessons and breaks at school could even lead to a decision of not trying to hear what others were talking about. According to this research, hearing and keeping in tract with teaching were especially challenging in foreign language lessons when it was difficult to listen to the listening practice and other children’s answers even with hearing aids.

Researcher: Think about your own school. Is there a person, a teacher or student or some other employee, who you find difficult to listen to and understand?

Child15: Well yes, there are such teachers.

Researcher: What makes it difficult that you cannot hear?

Child15: Voice, the teacher has such a low voice that you can barely understand.

[looks at the researcher]

Researcher: Year. Well how do you find out what the teacher is saying?

Child15: [shrugs shoulders] well, sometimes I go a little closer, and so on. And this is a new teacher.

Researcher: Ok. Have you ever told the teacher that you cannot hear?

Child15: Well, the teacher does know that I have hearing loss. [looks at the researcher]. Every student knows. [Looks again at the researcher] (FGHY, 166–167)

The children in this research reported that they needed others’ help to cope at school. Sometimes, they also had difficulties in understanding their friends at school. In the peer support group discussions, they told that they coped with these situations by using

lip reading and sign language. In addition, they observed others and tried to conclude or guess what was going on. A hearing classmate's help had proved important, as well.

Researcher: Well, tell me about a situation at school when others have been talking but you have not been able to figure out what they were talking about?

Child16: For example when after a weekend we always ask about our weekend doings in front of the class. And I cannot hear because some students speak like this, with a very small voice [lowers the volume of voice] So then I cannot hear.

Researcher: Okay. What happens then?

Child16: Umm, then I probably ask during the recess. I guess. (YH, 112)

In the peer support group activities, the children shared means that they and their teachers used to mark homework correctly. According to the children, a functional method was to write down the homework in the whiteboard, home notes book, or the home-school online communication system. Asking homework from a hearing classmate directly or by phone had become a useful means, too.

Child7: Well, we do so that to the other side of the whiteboard. We put all announcements there. And homework on the other side. (FGHX, 95)

Functional peer support and practical solutions

Functional peer support consisted of helping with hearing aids and more positive attitudes toward them. The children with hearing loss received functional support from others by observing their use of hearing aids and through concrete training. Their adopted models to use and take care of their hearing aids better by themselves.

Researcher: Yeah, okay. Well, let us think about what you have learned [in this group]. Think about it for a moment. What have you learned here? Child 1.

Child1: [I have learned] how to change a filter [to a hearing aid]. (FGHY, 270)

Functional support helped children to use hearing aids and think about possible problem situations related to hearing conditions.

Researcher: Do you have FM equipment at school?

Child6: No. And I will not even use it. (YH, 135)

Researcher: Yeah, you do not need it. You told that you do not need FM equipment.

Child6: No.

Researcher: Have you tried it ever?

Child6: No, and I do not want to try. I do not like this equipment because it is embarrassing. I do not like this equipment because it is really embarrassing. Then I would just go to the teacher to say that would you like to take this microphone and talk in it so I would hear better. [says this in an apologizing, weak tone] I do not like it. And then everyone would start laughing like “hey what’s that”. Hee hee.

Researcher: Yeah. What do you think is embarrassing in it?

Child6: Well because I do not want that the teacher would speak to anything for me or becomes bothered to do anything for nothing. At least not for me. (YH, 138)

Children with hearing loss may not want to stand out from others by using hearing aids.

Especially young people want to be similar with others (see also Ellington & Lim, 2013). When they use hearing aids, hearing loss becomes visible and therefore, not everyone wants to use for example FM equipment. They did not want to become stigmatized by dragging the equipment or bothering the teacher with it. However, experiences shared in the peer support group gave them courage to start using hearing aids and in that way, communication with the hearing children would become easier.

Practical solutions related to functional support covered various *advice to cope during free time*. The children described to each other how they woke up, used various media, and handled sports and other hobbies. They seemed to be active during their leisure and had plenty of hobbies. In the peer support group, the participants advised each other how to participate in various activities successfully despite their hearing loss. For example, they described how they woke up in the morning. In Finland, schoolchildren usually wake up by themselves and go to school alone because parents are already at work in the morning:

Researcher: Well, how about you Child7. How do you wake up to go to school?

Child7: Umm, well I do have an alarm that vibrates when you put it inside your mattress.

Researcher: An alarm that vibrates when you put it inside your mattress?

Child7: Yes, and then, when I do not have time, when I do not wake up at seven am because I do not feel the vibration.

Researcher: Ok, so nowadays you do not feel the vibration anymore and you do not wake up. Well, what then?

Child7: Well then, umm. [thinks] Last Tuesday [mumbles indistinctively] The schools started at eight am and I had that alarm clock to wake me up. Maybe at six am.

Researcher: At six, okay.

Child7: And then I did not feel it. I did not wake up until 8.30. [Looks at the researcher and smiles] And then. I was late from school then. (FGHX, 70)

The children had also various sportive hobbies. In the peer support group meetings, they described how they managed in these hobbies. For example, a helmet should be so loose that you could wear hearing aids underneath it. Scout trips in the woods could be done if planned well together beforehand. Those children who did swimming went in front of their swimming coach to read from the coach's lips. In sauna, sign language, lip reading, and a notebook covered with plastic and a marker made communication with others easier.

Listening to music was also a very important activity to the children with hearing loss (see also Eriks-Brophy et al., 2012). In the peer support group meetings, children told how they usually listened to music—the tips were found useful. Especially children with CI should be encouraged to musical activities and hobbies but they may lack knowledge about how to do these in practice. In the meetings, practical solutions were described in detail:

Researcher: Are you able to wear hearing aids [under the big headphones]?

Child14: Yes, you are.

Researcher: Do you usually wear them?

Child14: Or if it starts to make beeping sound but if I put in a certain position, it maybe does not.

Researcher: Ah, okay. So, what do you mean, a certain position?

Child14: So that if it is in a little bad position, and it starts to beep and. But the music is there so you cannot hear it so loud.

Researcher: Okay. So, do you have to move the headphones or the hearing aids? How do you make the beeping stop?

Child14: I do not know. [laughs]

Researcher: But do you let the beeping sound come?

Child14: [looks at the researcher and nods and smiles] Uh-oh. Sometimes.

Researcher: How does it feel when it its beeping?

Child14: I know that music is louder. [laughs]

Researcher: You just add volume to music so that you will not hear the beeping?

Child14: Yeah. [laughs] (FGHY, 189–190)

When it came to the use of various media, it was obvious that for every child in the peer support group the media represented an important free time activity. Everyone had their own mobile phones and access to the internet. Especially messaging (e.g., text messages, Messenger, WhatsApp, etc.) was considered a crucial means of communicating with others:

Researcher: What did you, Child15, nod? What do you say?

Child15: That it is better to use messages than to call.

Researcher: Yeah, in what sense it is better?

Child15: Because then you sort of understand much better. (FGHY, 197)

The children reported that it was difficult to hear what people said in the phone; this was also because lip reading is not possible. Children shared many functional advice with each other, which became an important part of the offerings of peer support.

Emotional peer support and practical solutions

Emotional peer support covered confirmation that you are not the only one; new perspectives to one's own hearing situation; trust and courage; and joy and comfort.

Child3: Umm, because there are others with hearing loss and it is nice there and so on.

Researcher: Why is it good to meet other people with hearing loss?

Child3: Because then you know that you are not alone. (YH, 21)

The children with hearing loss considered themselves the only ones with this kind of a handicap and thought that they were different from others. In some cases, they did not have others in their home schools who had hearing loss or used hearing aids.

Difficulties in hearing and challenging situations could cause feelings of inferiority.

This research clearly showed that meeting other children with hearing loss and listening to their experiences comforted the participants. Discussions in the peer support group included concrete examples from others' lives with which everyone could compare their own experiences and feelings. Becoming aware of the fact that you are not alone and there are others with the same problem was comforting (see also Cabral, Muhr, & Savageau, 2013; Sattoe et al., 2013).

Researcher: Well, what do you think when others told something about their lives in our discussions. So, what did you think about these stories?

Child14: Their situation could be a little worse. Like for example Child2 has an implant. Mine is not so bad in that sense. Child2's situation must influence a little bit more to [life, hearing]. (YH, 88)

The children in this study were happy because they could spend time together. They expressed empathy when listening to each other's stories. They could identify themselves in these experiences and challenging situations, and therefore, provide emotional support with words and acts.

Researcher: Well, what did you get from this group?

Child4: New friends of course and a little bit of this sort of self-confidence.

Researcher: Yeah. How can you tell that your self-confidence has increased?

Child4: Umm, I do not know. I think that it is not something of which I should be embarrassed. That you have hearing loss. Like this. (YH, 63)

Participation in the peer support group activities increased courage and activity in the children with hearing loss. Mutual trust created the sense of being able to participate and gave courage to defend oneself in everyday situations.

Researcher: Okay. What have you Child8 gotten? What are the three things that you have gotten after having these meetings here?

Child8: ...and then, more courage at school and so on. And [pause, thinking] I do not know.

Researcher: Yeah. Good things. How do you perceive that you have had more courage to act at school?

Child8: Well so that when I was starting the fourth or fifth grade and I was just shy and quiet. So now I am just jabbering everywhere. [smiles]. (FGHX, 133)

The study showed that the participants started to trust in themselves more and their self-esteem got higher. They accepted hearing loss as a part of their identity after meeting others in the peer support group activities (see also Calderon & Greenberg, 2011).

Emotional support had a very concrete practical benefit: it increased *hopeful attitudes toward future*. The children expressed new kinds of hopes about participation in peer support again, ideas about future peer support group activities, and thoughts of recommending peer support to others, too. Their hopefulness expanded also toward their work and family lives in the future. They had new visions about their own future and opportunities.

Researcher: Well, what do you think about your future and its relation to your hearing loss?

Child5: [thinks] I do not know if I dare to say this. [laughs]

Researcher: You can say it.

Child5: So, what do they, with whom I will start dating. What will they say about this? What do they say because I have a hearing aid and an implant?

Researcher: So if you start dating with someone, what that person will say about it then.

Child5: So the attitude toward it.

Researcher: Yes, well what do you think what the attitude can be like?

Child5: I guess at first so that the date thinks about it a while and then starts to get used to it. I hope. [laughs]. (YH, 129)

The children seemed to have optimistic attitudes toward the future. Discussions in the peer support group and with adults visiting the group could boost their trust in their coping at school and later at work too. They became encouraged to tell about their hearing loss to others. Participation in peer support increased their social coping and could even prevent exclusion.

Researcher: Well, what if we pretend played that here we have a new child who also has hearing loss. And the child was thinking what that peer support group is and whether to participate in it and how would it benefit the child. What would you tell to this child?

Child8: If I saw the child at the hospital and they would be talking with a doctor or with some parents about this group and whether to participate. And MAYBE if I was not this shy, I would participate in this conversation and say ^hey I have been in this group and you should come if you want to learn new about these hearing aids and you will get friends and there is plenty of else to do than just these hearing aids." I would describe the club style. (YH, 47)

Discussion

According to this research, peer support group activities provided children with hearing loss multidimensional support. The elements of support were divided into social, functional, cognitive, and emotional peer support and each of these included practical solutions to cope with hearing loss in everyday life. By providing opportunities to create new social relationships, friendships with peers, peer support increased children's

chances of coping and forming an optimistic attitude toward the future. The benefits of peer support could be divided into three: (1) peer support group activities provided information and coping skills for the children's daily lives; (2) participation in group activities and group discussions strengthened the children's social competence; and (2) peer support group activities empowered the participants.

Peer support group provided chances of being in interaction with others and having the sense of belonging to a group. The children learned how to deal with various challenges and situations in life. Meaningful activities increased their social skills, too (see also Tasker et al., 2010). Positive atmosphere and experiences of success gave them courage and strengthened self-esteem.

Adults are needed to make peer support group activities possible. However, children should be involved in planning and creating the activities. They have plenty of good ideas about which activities are meaningful to them. In the future, it would be reasoned to organize peer support group activities to children with hearing loss through action research so that the activities are constantly planned, created, and molded with children.

When it comes to reliability issues in this study, the most important viewpoint is perhaps the question of reaching the children's voices authentically (see also Uusiautti & Määttä, 2013). The study followed the socio-constructivist understanding of knowledge, which is quite typical of ethnographic research. At all phases of data collection and analysis, special attention was paid on how to encourage children to tell about their experiences without putting words to their mouths. Still, the interpretations made from the data are the ones of researchers and just one description of the elements of peer support group activities among children with hearing loss. However, the interpretations were showed to children and they validated them (Groundwater-Smith et

al., 2015). Various data collection methods were selected to ensure multidimensional perspectives to the theme and the sets of data complemented each other successfully.

Conclusion

This study encourages people living and working with children with hearing loss to think how to hear their needs and how to best support their positive development (Clymer, 1995; Luetke-Stahlman, Hayes, & Nielsen, 1996). How to help them recognize and use their resources (see Leskisenoja & Uusiautti, 2017; Uusiautti & Määttä, 2014a)?

Based on the findings of this study, the children with hearing loss were especially happy about the notion that they are not alone. They saw concretely that there are others struggling with the same issues and challenges. Getting peer support was crucial as was feeling of belonging to a group. Many of these children had experienced what it feels like when you are being excluded from play by your classmates (see also Jobe-Shields, Cohen, & Parra, 2011). In addition, these northern-Finnish children's schools were somewhat small and without same aged peers with hearing loss nearby. Distances are long to everywhere. The feeling of loneliness is just around the corner.

In childhood and adolescence, children construct their identities, and loneliness can have a significant negative influence (Cacioppo, Fowler, & Christakis, 2009). Therefore, the social dimension of children's peer support is invaluable (Mahon, Yarcheski, & Yarcheski, 1998). Finding friends and feeling better about oneself can be highlighted in this study. Social resources help children with hearing loss to also better cognitive and linguistic performances with others, including normally hearing children (Kluwin et al., 2002; Peterson, 2009; Silvestre et al., 2006), but most importantly,

friendships help cope with and conquer bullying (see also Hodges, Boivin, Vitaro, & Bukowski, 1999).

Children with hearing loss seemed to favor the modern technology, too, which is an important notion. When communication happens by writing, for example, through Messenger or WhatsApp, these children have equal chances of becoming understood and understand others than children without hearing loss. Using these media are also crucial if you live in a remote place, which was the case among children of this study. However, maintaining friendships becomes easier if children are able to and can use a variety of means of communication. Other benefits exist, too. For example, learning can be enhanced by online social networking (Tian, Yu, Vogel, & Kwok, 2011; Uusiautti & Määttä, 2014b).

This research contributed to the discussion of peer support among children with hearing loss an important addition: the children's own voices. By hearing their experiences and perceptions, it is possible to develop peer support in a direction that can serve and support these children in the best possible way. There is no question that more collaboration is needed between the organizers of peer support, but most of all, more willingness to hear and plan activities in children's terms so that they enhance the emergence of positive social relationships is needed. This research gives reasons why and examples how.

References:

- Antia, S. D., & Kreimeyer, K. H. (2015). *Social competence of deaf and hard-of-hearing children*. Oxford: Oxford University Press.
- Antia, S. D., Kreimeyer, K. H., Metz, K. K., & Spolsky, S. (2011). Peer interactions of deaf and hard-of-hearing children. In M. Marschark & P. E. Spencer (Eds.), *The Oxford handbook of deaf studies, language and education* (pp. 173-187). Oxford: Oxford University Press.

- Antia, S. D., Reed, S., & Kreimeyer, K. H. (2005). Written language of deaf and hard-of-hearing students in public schools. *Journal of Deaf Studies and Deaf Education, 10*(3), 244-255. doi: 10.1093/deafed/eni026
- Atkinson, P., & Delamont, S. (2005). Analytic perspectives. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 821-840). Thousand Oaks, CA: Sage.
- Barnett, S. (2002). Communication with deaf and hard-of-hearing people: A guide for medical education. *Academic Medicine, 77*(7), 694-700.
- Bat-Chava, Y., & Deignan, E. (2001). Peer relationships of children with cochlear implants. *Journal of Deaf Studies and Deaf Education, 6*(3), 186-199.
- Brunnberg, E. (2010). Hard-of-hearing children's sense of identity and belonging. *Scandinavian Journal of Disability Research, 12*(3), 179-197. doi: 10.1080/15017410903309102
- Cabral, L., Muhr, K., & Savageau, J. (2013). Perspectives of people who are deaf and hard of hearing on mental health, recovery, and peer support. *Community Mental Health Journal, 49*(6), 649-657. doi: 10.1007/s10597-012-9569-z
- Cacioppo, J. T., Fowler, J. H., & Christakis, N. A. (2009). Alone in the crowd: the structure and spread of loneliness in a large social network. *Journal of Personality and Social Psychology, 97*(6), 977-991. doi: 10.1037/a0016076
- Calderon, R., & Greenberg, M. (2011). Social and emotional development of deaf children: Family, school, and program effects. In M. Marschark & P. E. Spencer (Eds.), *The Oxford handbook of deaf studies, language and education* (pp. 188-199). Oxford: Oxford University Press.
- Camara, M., Bacigalupe, G., & Padilla, P. (2017). The role of social support in adolescents: are you helping me or stressing me out? *International Journal of Adolescence and Youth, 22*(2), 123-136.
- Carter, E. W. (2017). The promise and practice of peer support arrangements for students with intellectual and developmental disabilities. *International Review of Research in Developmental Disabilities*, online May 10, 2017. doi: 10.1016/bs.irrdd.2017.04.001
- Clymer, E. C. (1995). The psychology of deafness: Enhancing self-concept in the deaf and hearing-impaired. *Family Therapy, 22*(2), 113.

- Davison, K. P., Pennebaker, J. W., & Dickerson, S. S. (2000). Who talks? The social psychology of illness support groups. *American Psychologist, 55*(2), 205-217.
- DeLuzio, J., & Girolametto, L. (2011). Peer interactions of preschool children with and without hearing loss. *Journal of Speech, Language & Hearing Research, 54*(4), 1197–1210. doi: 10.1044/1092-4388(2010/10-0099)
- Dennis, C. L. (2003). Peer support within a health care context: a concept analysis. *International Journal of Nursing Studies, 40*(3), 321-332.
- Decker, C. L. (2007). Social support and adolescent cancer survivors: A review of the literature. *Psycho-Oncology, 16*, 1–11.
- Demaray, M. K., Malecki, C. K., Davidson, L. M., Hodgson, K. K., & Rebus, P. J. (2005). The relationship between social support and student adjustment: A longitudinal analysis. *Psychology in the Schools, 42*, 691–706.
- Dingfelder, H. E., Jaffee, S. R., & Mandell, D. S. (2010). The impact of social support on depressive symptoms among adolescents in the child welfare system: A propensity score analysis. *Children and Youth Services Review, 32*, 1255–1261. doi: 10.1016/j.chilyouth.2010.04.016
- Edwards, L., & Crocker, S. (2008). *Psychological processes in deaf children with complex needs: An evidence-based practical guide*. London: Jessica Kingsley.
- Ellington, T., & Lim, S. (2013). Adolescent's aesthetic and functional view of hearing aids or cochlear implants and their relationship to self-esteem levels. *Fashion Practice, 5*(1), 58–80.
- Eriks-Brophy, A., Durieux-Smith, A., Olds, J., Fitzpatrick, E. M., Duquette, C., & Whittingham, J. (2012). Communication, academic, and social skills of young adults with hearing loss. *The Volta Review, 112*(1), 5.
- Foster, K., Lewis, P., & McCloughen, A. (2014). Experiences of peer support for children and adolescents whose parents and siblings have mental illness. *Journal of Child and Adolescent Psychiatric Nursing, 27*(2), 61–67. doi: 10.1111/jcap.12072
- Gannoni, A. F., & Shute, R. H. (2009). Parental and child perspectives on adaptation to childhood chronic illness: A qualitative study. *Clinical Child Psychology and Psychiatry, 15*(1), 39–53.
- Gifford-Smith, M. E., & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology, 41*(4), 235-284. doi: 10.1016/S0022-4405(03)00048-7

- Gladstone, B. M., McKeever, P., Seeman, M., & Boydell K. M. (2014). Analysis of a support group for children of parents with mental illness: Managing stressful situations. *Qualitative Health Research, 24*(9), 1171–1182. doi: 10.1177/1049732314528068
- Goodman, C. A. (2006). Teaching manual communication to preservice teachers of the deaf in an accredited comprehensive undergraduate teacher preparation program. *American Annals of the Deaf, 151*(1), 5-15.
- Graziano, F., Bonino, S., & Cattelino, E. (2009). Links between maternal and paternal support, depressive feelings and social and academic self-efficacy in adolescence. *European Journal of Developmental Psychology, 6*, 241–257.
- Griffiths, K. M., Crisp, D. A., Barney, L., & Reid, R. (2011). Seeking help for depression from family and friends: a qualitative analysis of perceived advantages and disadvantages. *BMC psychiatry, 11*(1), 196.
- Groundwater-Smith, S., Dockett, S., & Bottrell, D. (2014). *Participatory research with children and young people*. London: Sage.
- Haye, A. T. (2010). *Effects of intervention on psychosocial functioning of hearing and hard of hearing children in selected primary schools of Addis Ababa, Ethiopia*. Jyväskylä: University of Jyväskylä.
- Haynes, W. O., Moran, M. J., & Pindzola, R. H. (2006). *Communication disorders in the classroom: An introduction for professionals in school settings*. Sudbury, MA: Jones and Bartlett.
- Heisler, M. (2009). Different models to mobilize peer support to improve diabetes self-management and clinical outcomes: evidence, logistics, evaluation considerations and needs for future research. *Family Practice, 27*(suppl_1), i23-i32.
- Hodges, E. V., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*, 94–101.
- James, A., & James, A. (2012). *Key concepts in childhood studies*. Los Angeles, CA: Sage.
- Jobe-Shields, L., Cohen, R., & Parra, G. R. (2011). Patterns of change in children's loneliness: Trajectories from third through fifth grades. *Merrill-Palmer Quarterly, 57*(1), 25-47.

- Kluwin, T. N., Stinson, M. S., & Colarossi, G. M. (2002). Social processes and outcomes of in-school contact between deaf and hearing peers. *Journal of Deaf Studies and Deaf Education*, 7(3), 200-213.
- Krippendorff, K. (2013). *Content analysis: An Introduction to its methodology*. Thousand Oaks, CA: Sage.
- Kushalnagar, P., Topolski, T. D., Schick, B., Edwards, T. C., Skalicky, A. M., & Patrick, D. L. (2011). Mode of communication, perceived level of understanding, and perceived quality of life in youth who are deaf or hard of hearing. *Journal of Deaf Studies and Deaf Education*, 16(4), 512–523. doi: 10.1093/deafed/enr015
- Leigers, K., Kleinert, H. L., & Carter, E. W. (2017). “I never truly thought about them having friends”: equipping schools to foster peer relationships. *Rural Special Education Quarterly*, online May, 2017. doi: 10.1177/8756870517707711
- Leskisenoja, E., & Uusiautti, S. (2017). How to increase joy at school? Findings from a positive-psychological intervention at a Northern-Finnish school. *Education in the North, SE (Research and Children in the North)*, in press.
- Luetke-Stahlman, B., Hayes, P. L., & Nielsen, D. C. (1996). Essential practices as adults read to meet the needs of deaf or hard of hearing students. *American Annals of the Deaf*, 141(4), 309-320.
- Mahon, N. E., Yarcheski, A., Yarcheski, T. J. (1998). Social support and positive health practices in young adults. Loneliness as a mediating variable. *Clinical Nursing Research*, 7(3), 292-308.
- Marshall, S. L., Parker, P. D., Ciarrochi, J., & Heaven, P. C. (2014). Is self-esteem a cause or consequence of social support? A 4-year longitudinal study. *Child Development*, 85(3), 1275-1291. doi: 10.1111/cdev.12176
- Martin, D., Bat-Chava, Y., Lalwani, A., & Waltzman, S. B. (2010). Peer relationships of deaf children with cochlear implants: Predictors of peer entry and peer interaction success. *Journal of Deaf Studies and Deaf Education*, 16(1), 108-120. doi: 10.1093/deafed/enq037
- Mead, S., Hilton, D., & Curtis, L. (2001). Peer support: A theoretical perspective. *Psychiatric Rehabilitation Journal*, 25(2), 134–141.
- Metz, K., Miller, M., & Thomas-Presswood, T. N. (2010). Assessing children who are deaf and hard of hearing. In D. C. Miller (Ed.), *Best practices in school*

neuropsychology: Guidelines for effective practice, assessment, and evidence-based intervention (pp. 419–463). New York, NY: Wiley.

- Most, T., Ingber, S., & Heled-Ariam, E. (2012). Social competence, sense of loneliness, and speech intelligibility of young children with hearing loss in individual inclusion and group inclusion. *Journal of Deaf Studies and Deaf Education, 17*(2), 259–272. doi: 10.1093/deafed/enr049
- Nunes, T., Pretzlik, U., & Olsson, J. (2001). Deaf children's social relationships in mainstream schools. *Deafness & Education International, 3*(3), 123-136.
- Pellegrini, A. D., Symons, F., & Hoch, J. (2014). *Observing children in their natural worlds: A methodological primer*. New York, NY: Psychology Press.
- Peterson, C. C. (2009). Development of social-cognitive and communication skills in children born deaf. *Scandinavian Journal of Psychology, 50*(5), 475-483. doi: 10.1111/j.1467-9450.2009.00750.x
- Preisler, G., Tvingstedt, A. L., & Ahlström, M. (2002). A psychosocial follow-up study of deaf preschool children using cochlear implants. *Child: Care, Health and Development, 28*(5), 403-418. doi: 10.1046/j.1365-2214.2002.00291.x
- Purcal, C., Evans, K., Meltzer, A., Johnson, K., Fisher, K. R., Robinson, S., Bevan, N., & Kayess, R. (2015). *Peer support with children and young people with intellectual disability: Literature review*. Australia: Social Policy Research Centre.
- Sattoe, J. N. T., Jedeloo, S. & van Staa, A. (2013). Effective peer-to-peer support for young people with end-stage renal disease: A mixed methods evaluation of Camp COOL. *BMC Nephrology, 14*(279), 1–14. doi: 10.1186/1471-2369-14-279
- Schneiderman, E. (1995). The effectiveness of an interactive instructional context: Principles from the parent-child interaction literature. *American Annals of the Deaf, 140*(1), 8-15.
- Silvestre, N., Ramspott, A., & Pareto, I. D. (2006). Conversational skills in a semistructured interview and self-concept in deaf students. *Journal of Deaf Studies and Deaf Education, 12*(1), 38-54. doi: 10.1093/deafed/enl011
- Sligar, S. R., Morere, D., Cawthon, S., & Moxley, A. (2013). Equity in assessment for individuals who are deaf or hard-of-hearing. *Journal of the American Deafness and Rehabilitation Association, 47*(1), 110–127.

- Solomon, P. (2004). Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatric Rehabilitation Journal*, 27(4), 392-401.
- Spencer, P. E., & Marschark, M. (2010). *Evidence-based practice in educating deaf and hard-of-hearing students*. New York, NY: Oxford University Press
- Svirsky, M. A., Robbins, A. M., Kirk, K. I., Pisoni, D. B., & Miyamoto, R. T. (2000). Language development in profoundly deaf children with cochlear implants. *Psychological Science*, 11(2), 153-158. doi: 10.1111/1467-9280.00231
- Tasker, S. L., Nowakowski, M. E., & Schmidt, L. A. (2010). Joint attention and social competence in deaf children with cochlear implants. *Journal of Developmental and Physical Disabilities*, 22(5), 509-532. doi: 10.1007/s10882-010-9189-x
- Theunissen, S. C. P. M., Rieffe, C., Netten, A. P., Briaire, J. J., Soede, W., Kouwenberg, M., & Frijns, J. H. M. (2014). Self-Esteem in hearing-impaired children: The influence of communication, education, and audiological characteristics. *Plos One*, 9(4), e94521. doi: 10.1371/journal.pone.0094521
- Tian, S. W., Yu, A. Y., Vogel, D., & Kwok, R. C. -W. (2011). The impact of online social networking on learning: a social integration perspective. *International Journal of Networking and Virtual Organisations*, 8, 264–280. doi:10.1504/IJNVO.2011.039999
- Uusiautti, S., Happo, I., & Määttä, K. (2014). Challenges and strengths of early childhood education in sparsely populated small provinces. The Case of Lapland, Finland. *British Journal of Education, Society & Behavioural Science*, 4(5), 562-572.
- Uusiautti, S., & Määttä, K. (2013). Many dimensions of child research. In S. Uusiautti & K. Määttä (Eds.), *How to study children? Methodological solutions of childhood research* (pp. 11-27). Rovaniemi: Lapland University Press.
- Uusiautti, S., & Määttä, K. (2014a). How to promote the healthy development of human resources in children and youth? In K. Määttä & S. Uusiautti (Eds.), *Time for health education* (pp. 131-140). Frankfurt am Main: Peter Lang.
- Uusiautti, S., & Määttä, K. (2014b). I am no longer alone - How do university students perceive the possibilities of social media? *International Journal of Adolescence and Youth*, 19(3), 293-305. doi: 10.1080/02673843.2014.919600
- Wauters, L. N., & Knoors, H. (2007). Social integration of deaf children in inclusive settings. *Journal of Deaf Studies and Deaf Education*, 13(1), 21-36. doi: 10.1093/deafed/enm028

Wolbers, K. A., Dostal, H. M., & Bowers, L. M. (2011). "I was born full deaf." Written language outcomes after 1 year of strategic and interactive writing instruction. *Journal of Deaf Studies and Deaf Education, 17*(1), 19-38. doi: 10.1093/deafed/enr018

Wolters, N, Knoors, H. E. T., Cillesen, A. H. N., & Verhoeven, L. (2011). Predicting acceptance and popularity in early adolescence as a function of hearing status, gender, and educational setting. *Research in Developmental Disabilities, 32*(6), 2553–2565. doi: 10.1016/j.ridd.2011.07.003

