

## ACADEMIC AND SOCIAL EXPERIENCES OF SCHOOL-AGED CYPRIOT CHILDREN WITH UNILATERAL HEARING LOSS

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**Abstract:** This study explored personal descriptions of the academic and social experiences of pupils with unilateral hearing loss (UHL) who attend general secondary schools in Cyprus. In-depth semi-structured interviews were conducted with 18 Cypriot children with UHL. The participants described positive academic and social experiences, since they could communicate effectively with their teachers and peers, received support services and their teachers were deaf aware. The children's auditory difficulties and their impact on their psychological condition were also noted.

**Key words:** Academic inclusion, Unilateral hearing loss, Cyprus, Social experiences

## INTRODUCTION

It is well documented in the literature that bilateral hearing loss has a negative impact on children's functioning in various domains such as communication skills, academic achievement, and social behavior (Lynas, 1986; Powers, 2003; Powers, Gregory, & Thoutenhoofd, 1998; Power & Hyde, 2002; Stinson & Antia, 1999). Research has also shown that even children with a minimal or unilateral hearing loss face greater academic and social difficulties than children with normal hearing (Most, 2004).

Unilateral hearing loss (UHL) is defined as a permanent loss of any degree (mild to profound) in one ear (Oyler & McKay, 2008). It has been estimated that 1 out of every 1000 newborns has UHL (Prieve, Dalzell, Berg, Bradley, Cacace, Campbell, et al., 2000). The prevalence rate for school-aged children with UHL is 3% (Bess, Dodd-Murphy, & Parker, 1998). Historically, UHL has been considered only a minor challenge for educators, audiologists, otolaryngologists and other professionals working with children with UHL. It was also assumed that children with UHL face only few, if any, problems at school, and parents were reassured that no significant problem existed if appropriate classroom strategies were implemented (e.g., preferential classroom seating) (Bess & Tharpe, 1984). Children with UHL were also not identified until they were at school-age (Brookhouser, Worthington, & Kelly, 1991).

However, findings from studies carried out in the 1980s and 1990s suggest that children with UHL may be at risk for various communicational difficulties, and social, and educational problems, as well as limited auditory and psycholinguistic skills, and they often need special services to address these needs (Bess & Tharpe, 1984; Binhero, 1982; Bovo et al., 1988; Brookhouser et al., 1991; Stein, 1983).

Nowadays, due to screening programs, most of the children with UHL of a moderate degree or greater are identified in the first weeks of life. Lieu (2004) reviewed studies on UHL and identified the following risk factors for educational problems: early age of UHL onset (in infancy), perinatal and/or postnatal complications, severe to profound sensorineural hearing loss, and right UHL.

Tharpe (2007) emphasizes that one might expect that educational outcomes would improve over time, since newborn hearing screenings lead to earlier identification of UHL, and professionals in the hearing health care and education settings are more aware of the risk of academic difficulties experienced by these children. More recent studies suggest that children with UHL still lag behind their hearing peers academically (Most, 2006; Most & Tsach, 2010), regardless of the fact that more of these children are nowadays subjected to intervention (McKay, 2002; Reeve, Davis, & Hind, 2001).

A major reason for the difficulties mentioned above is the fact that children with

UHL do not have the advantage of binaural hearing. UHL affects a person's ability to detect where a sound is coming from. Additionally, children with UHL face difficulties in understanding speech directed to the impaired side, or recognizing speech in noisy and/or reverberant environments (Bess, Tharpe, & Gibler, 1986). Children with UHL face difficulties connected with signal segregation, and lack of qualitative benefits of sounds (e.g., naturalness and clarity of voice perception). Then, according to Most (2004), children with UHL who participated in her study "were more neglected in terms of support services. In most cases, they received no intervention or therapy, and their educational staff remained unaware of the negative effects, such a hearing loss, may have on their class performance" (p. 161).

Regarding the academic difficulties of children with UHL, a number of studies have revealed that children with UHL face various educational challenges (Bess & Tharpe, 1984; Bovo et al., 1988; Boyd, 1974; Brookhouser et al., 1991; Culbertson & Gilbert, 1986; Dancer, Burl, & Waters, 1995; English & Church, 1999; Most, 2004, 2006, Most & Tsach, 2010; Oyler, Oyler, & Matkin, 1988). All of these studies were carried out in the USA, with the exception of those carried out by Most (2004, 2006) and Most and Tsach (2010) in Israel, and Bovo and colleagues in Italy. Only the studies carried out by Most (2004, 2006) and Most and Tsach (2010) compared children with UHL with their hearing counterparts.

Specifically, in the rather old study of Boyd (1974) it was reported that 38% of the children with UHL had reading problems, 31% exhibited spelling problems, and 23% had problems with mathematics. In the study carried out by Bess and Tharpe (1984), a decade later, the educational case history data were obtained via parental interviews and school records of 60 children with UHL. Twenty-five of those children were matched with twenty-five children with normal hearing. It was found that 32% of the children with UHL had failed in at least one grade at school whereas none of the matched hearing children repeated a grade (as similarly suggested by Culbertson and Gilbert, 1986). The teachers of the children in the study by Bess and Tharpe (1984) were also asked to rate their students' academic performance; it was reported that only 22.2% of the teachers rated the academic performance of the children with UHL above average academically, in contrast to 47.3% of the students with normal hearing who rated above average.

Similarly, in the study carried out by Culbertson and Gilbert (1986) children with UHL had a poorer academic track record, poorer language skills on group achievement tests, and greater behavioral difficulties in the classroom compared with the hearing children. Those researchers compared the academic achievement, cognitive ability, psycholinguistic and social skills of a group of 25 children with UHL vis a vis 25 hearing children. It was also found that 50% of the children with UHL were

in need of resource help. Likewise, in the study carried out by Bovo and colleagues (1988) that followed up 115 children with UHL, 12% required assistance from a specialist in learning disabilities, and 22% failed at least one grade. Furthermore, in the study carried out by Oyler et al. (1988), a high rate of grade retention (23.7%) for children with UHL (10 times higher than the overall retention rate of their corresponding Arizona school district, 2%) was reported. Also, 40.7% of the children with UHL received special education services, i.e., was five times more often than the district average (8.6%).

The findings of these studies are in line with the study by Brookhouser and his colleagues (1991), which reported that the incidence of school problems (academic and behavioral) among their study population (324 children and adolescents with UHL) was 31%. Similarly, when Dancer et al. (1995) compared the academic difficulties between children with UHL and hearing children they found that the mean scores of children with UHL were lower than the mean scores of the hearing children on 13 out of 15 questions, showing an increased risk of educational difficulties. English and Church (1999) included in their study 406 children with UHL. It was found that 24% were functioning below average relative to their peers, as reported in earlier studies. The percentage of children with UHL in that study receiving individualized special education service was quite high, reaching 54%.

In a more recent study carried out by Most (2004) the school performance of 47 children aged 7:2 to 9:3 years with various degrees and types of hearing loss who attended general schools was investigated. Teachers evaluated the children using the Hebrew version of the Screening Instrument For Targeting Educational Risks (SIFTER). It was found “surprisingly” (as the author reported) that children with UHL, as well as children with minimal hearing loss, showed lower performance than children with more severe hearing loss in five domains (academic, attention, communication, class participation, and school behavior). Those findings are in line with those reported when the same researcher used the Arabic version of the SIFTER to compare achievement levels in mathematics and Arabic between children with UHL and children with severe hearing loss (Most, 2006).

In both of the studies (2004, 2006), Most found that children with UHL lagged behind their hearing peers, as also reported by a later study carried out by the same researcher (Most & Tsach, 2010). In the latter study significant differences between the performances of 33 elementary school children with UHL and 14 children with normal hearing in all SIFTER domains were reported.

In so far as the language performance of children with UHL is concerned, a number of studies (Borg, Risberg, McAllister, Undemar, Edquist, et al., 2002; Culbertson & Gilbert, 1986; Sedey, Carpenter, & Stredler-Brown, 2002) indicate that

children with UHL displayed significantly greater difficulty on word recognition, and written spelling tasks than the hearing children. However, some other studies did not find speech and language delays in this population (Bess & Tharpe, 1984; Kiese-Himmel, 2002; Klee & Davis-Dansky, 1986).

In the case of auditory skills, children with UHL face a lot of challenges. Specifically, the children with UHL in the study by Bess and Tharpe (1984) performed poorer than hearing children on a localization and syllable recognition test. Similar results were reported in the study carried out by Bess et al. (1986). The results of this study showed that children with UHL participating in their study performed more poorly than their hearing peers in both localization and speech recognition of nonsense syllables, even when the speech signal was directed toward their normal-hearing ear and the background noise was directed toward the impaired ear. Speech understanding was poorer in children with UHL than in children with normal hearing not only in a background of noise, but even in a quiet environment.

Regarding mental health, it has been suggested that children with UHL miss parts of peers' utterances, and this has an impact on their socialization and self-esteem. Stein (1983) carried out a study in USA to investigate the psychosocial development of children with UHL. The children in that study were rated by their parents as having a high frequency of behavioral problems (with acting out behaviors being more prevalent). Similar findings were reported in the studies by Culbertson and Gilbert (1986), and Bess and Tharpe (1984) (behavioral descriptions in those studies included attention to academic tasks, peer relations and social confidence, dependence-independence, emotional lability and organization). The teachers' ratings in Stein's study (1983) matched those of the parents. However, the ratings of self-esteem were similar of those of the hearing children. Likewise, in the study by Culbertson and Gilbert (1986) results indicated no significant differences between the two groups (children with UHL and hearing children) on their self-concept measures.

More recently, Borton, Mauze, and Lieu (2010) carried out a study in USA to investigate the health-related quality of life (HRQOL) of children with UHL between the ages of 6 and 17 years. Twenty-five families with children with UHL participated. Qualitative and quantitative methods were employed for the purposes of the study. The findings of the focus group meetings (with parents and children with UHL) at Stage 1 of the study revealed that children experienced problems due to their hearing loss, but learned to adapt. The Pediatric Quality of Life Inventory (PedsQL), which is an instrument that measures both child self-reported and proxy (parent)-reported, was used at Stage 2 of the study to measure the HRQOL in children with UHL, as well as in children with normal hearing and bilateral hearing loss. No statistically significant differences were observed between the groups on the three main HRQOL

scales (Total, Psychosocial, and Physical). Children with UHL had a significantly larger variance on the social functioning score than the rest of the children.

The present study aimed to explore for the first time in Cyprus the personal descriptions of the academic and social experiences of students with UHL who attend general secondary schools. The study posed the following research questions:

1. What are students' with UHL social and academic experiences in general secondary education in Cyprus?
2. What challenges do students with UHL face when accessing academic and social participation within Cyprus general secondary schools?
3. What does having a UHL feel like, according to school-aged Cypriot students?

The value of international perspectives for understanding students with UHL, the scarcity of qualitative studies on the experiences of children with UHL, as well as the lack of any such research in Cyprus underpinned the current study.

### *The context in Cyprus*

The official inclusion of children with special needs in mainstream education began in Cyprus when the Cyprus Parliament voted in 1999, the [113(1)99] Special Education Law, that stresses among other things the responsibility of the State to provide the least restricted environment possible for children with special needs, and their inclusion in general schools. This law also stipulates that the general school is the most appropriate educational environment for children with special needs, except in very special cases. In July 2001 the Regulations of the Law were also ratified by the Cyprus Parliament (Hadjikakou, Petridou, & Stylianou, 2008).

Fifteen years after the implementation of the Special Education Law, the majority of deaf and hard of hearing (d/hh) children in Cyprus are being educated in general schools, either individually, with or without support, or in units. All children attending general schools and units are trained orally.

There are seven major types of support offered to all d/hh children attending general schools in Cyprus: (a) *one-to-one and group sessions*: most d/hh children are present in the age-appropriate classroom for some of the day but also receive special educational services (one-to-one or in small group sessions) in a withdrawal room, by the general teachers in secondary education, and by teachers of the deaf, on the main, in primary education. In primary education, d/hh children are the beneficiaries of speech therapy sessions; (b) *in-service training for designated teachers*; (c) *modification of normal classroom delivery*; (d) *presence of inspectors of special education* (in primary education) and special education counsellors (in secondary education); (e) *psychological support and counselling*; (f) *'acoustical treatment'* (e.g.,

with curtains, and carpets) of classrooms, and (g) *provision and management of personal amplification (e.g. hearing aids, etc.)* (Hadjikakou, Petridou, & Stylianou, 2005). The support services are organized and provided centrally by the Ministry of Education, and all d/hh attending general schools receive all of these services irrespective of the school they attend.

The only school for the deaf nowadays in Cyprus operates mainly as a provider of different services and programs for d/hh children/adults and their families: specifically, audiological services, services for support and employment of adult Deaf<sup>1</sup>, and an early intervention/parent guidance program, which is a peripatetic service for children of 0-3 years of age and their families. Only a minority of d/hh children in Cyprus attend the school for the deaf; however, a variety of educational programs are available for them, such as: (a) a nursery program for babies aged 0-3 years; (b) a preschool program for children aged 3-6 (the majority of the children in the above two programs have cochlear implants); (c) education for students aged 6-21 years. The school provides primary and secondary education curricula similar to those of general education, individual educational programs for d/hh students with complex needs and vocational training programs. As regards the mode of communication followed at the school for the deaf, despite the fact that an oral approach was used traditionally in the classrooms, d/hh children have always signed with each other at the school yard and some teachers have been using, in an unofficial way, total communication in their classrooms (Hadjikakou et al., 2008).

In April 2006, the Cypriot Sign Language (CSL) was recognized by the Cyprus Parliament (Law 66(I)2006) as a language equivalent to Greek. Nowadays, the Cyprus Federation for the Deaf supports the role of CSL in the bilingual education of d/hh children (Lampropoulou & Hadjidakou, 2010).

## METHOD

### *Participants*

The sample structure was determined a priori (Oppenheim, 1997; Stewart & Shamdasani, 1990). Thus, all Cypriot students with UHL satisfying a certain set of criteria, namely, diagnosed with UHL, having no other known disabilities, aged

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<sup>1</sup> In this paper, the lower case “d” is used to refer to those deaf people who do not sign, are oral, and do not belong to the Deaf community, whereas the upper “D” is used to refer to Deaf adults, who belong to the Deaf community, are signing Deaf and are considered culturally Deaf. The term “deaf” also refers in general to the condition of not hearing.

between 12-18 years and attending a general secondary school, were selected by the researchers. The criteria had been developed by the researchers “independently of the concrete material analyzed, and before its collection and analysis was defined for this study” (Flick, 1998, p. 63). In order to trace and select the sample, we contacted the School for the Deaf in Nicosia, which keeps records for all pupils with hearing impairments in general and special school settings. Nineteen children with UHL attending Cyprus general secondary schools that met the criteria of the study were identified. The parents of all of them were contacted by the researchers, and 18 of them expressed an interest in letting their children participate voluntarily in this study. In total, 18 pupils with UHL participated in the study. Each child followed their individual educational plan (IEP) and all of them were trained orally. Fourteen of these children were not using hearing aids, and none of them had any other known disabilities. Most of their school time was spent in the regular classroom, some with only short withdrawals for specialist attention by the general teachers. The periods for withdrawal sessions ranged from 1 to 10 periods per week for each child ( $M = 5.1$ ,  $SD = 3.7$ ) out of 37 taught periods per week in the general classroom; three children did not receive any one-to-one sessions. Eight of the children had right UHL, and 10 had left; three had other family members with hearing loss, whereas 15 had not. Table 1 illustrates the rest of the demographic characteristics of each child.

**Table 1. The demographic characteristics of each child with UHL**

Participant	Gender	Age (yrs*)	Severity of hearing loss (dB HL**)	Age at detection of hearing loss (yrs)
Child 1	Male	18	110	8
Child 2	Female	14	55	6
Child 3	Male	13	105	9
Child 4	Female	13	80	7
Child 5	Male	15	30	12
Child 6	Female	14	75	6
Child 7	Male	14	105	11
Child 8	Male	16	100	6
Child 9	Male	17	110	birth
Child 10	Male	13	100	7
Child 11	Female	17	100	10
Child 12	Male	13	100	12
Child 13	Male	12	50	birth
Child 14	Male	14	80	8
Child 15	Female	16	75	11
Child 16	Female	17	100	birth
Child 17	Female	16	85	9
Child 18	Female	13	80	birth

\*yrs = years

\*\*dB HL= decibels Hearing Level



### ***The Instrument***

Qualitative methods were deemed appropriate in order to allow the voices of children with UHL to be heard. Thus, in-depth semi-structured interviews were used to gather data for this study (Drever, 2003; Wengraf, 2001). The general issues to be investigated were formulated in the interview guide. The questions in the interview guide (which was developed by the authors) were based on current literature on children with UHL (e.g., Borton et al., 2010; Kuppler, Lewis, & Evans, 2013; Tharpe, 2007). Three sets of questions relating to the research questions of the study were used, and the interview guide matched the three sets of questions (the whole interview guide is presented in Appendix A). The first set of questions focused on academic inclusion (e.g., understanding of the lesson, one-to-one sessions, modification of normal classroom delivery). The second set of questions focused on social inclusion (e.g., friendships, communication, participation in school events, etc). Finally, the third set of questions investigated general issues related to living with UHL (e.g., challenging environmental situations, people's attitudes, etc.).

### ***Data analysis***

Qualitative data analysis was carried out. Three steps were followed in analyzing the interviews: a) text transcription, b) coding procedures, and c) search procedures. Stewart and Shamdasani (1990) have stated that "this coding procedure requires several passes through the transcript as categories of the topics evolved and the analyst gained greater insight into the content" of the interviews (p. 105). The topics of the interviews served as a general guide for developing the code categories. A set of three primary code categories was created. These were: academic inclusion, social inclusion, and living with UHL. Additional codes, referring to aspects of each major category were also used; some were pre-coded and some came up during the data analysis (Foster & Kinuthia, 2003; Nikolarazi & Hadjidakou, 2006). For academic inclusion, the following sub-codes were used: teachers, lessons, one-to-one sessions, preferential seating, homework, and feelings about school. For social inclusion, the sub-codes used were: classmates, friendships, and contacts with the d/hh of hearing. For living with UHL, the sub-codes used were: advice for newly diagnosed with UHL, difficult listening conditions, hypothetical seminar on UHL, feelings about UHL. Once the code categories were assigned and noted in the margins of the interview transcripts the search procedure took place. The data were copied, cut and pasted, and sorted into separate code folders. A printout of the data sorted in the code folders was produced and was used as supporting material within an interpretative analysis.

In order to ensure the reliability of the coding, more than one individual reviewed the data (Lincoln & Guba, 1985). Specifically, the identification of meaningful units, the creation of meaningful concepts, their allocation to the code categories, and the development of the final code categories were undertaken by two researchers; one associated and one not associated with the study. They coded the transcripts independently and then they met to discuss and resolve disagreements (Hadjidakou Hadjidakou, Christodoulou, Hadjidemetri, Konidari, & Nicolaou, 2009). Inter-rater reliability was calculated by dividing the total number of agreements by the total number of agreements and disagreements (Uebersax, 1987; Nikolarazi & Hadjidakou, 2006). The inter-rater reliability was on average of 87%.

### ***Procedure***

The schools of the participants were chosen as suitable places for conducting the interviews. A note-taker was also available at every interview to ensure that a back-up of data would be available in case technical problems regarding the tape recorder arose during the interviews. Each one-hour-and-a-half interview was audiotaped. Ethical issues regarding anonymity, confidentiality and access to the research findings were discussed with the participants and their parents, and both of them gave an informed consent prior to data collection.

## **RESULTS**

### ***Academic inclusion***

#### ***Teachers***

The majority of the participants expressed their satisfaction with their teachers, since they are aware of their hearing loss, and they adapt their lessons to meet their needs. They also offer help, when asked for.

*“The teachers try to help me in any possible way. I never hesitate to ask them something.” (P1)<sup>2</sup>*

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<sup>2</sup> It is noted that the participants numbering in the results section does not match the numbering of the participants in Table 1 (e.g., P1 is not the first participant as indicated in Table 1). This was done to protect the participants' anonymity. Cyprus is a small island, and they participants might be identified, if their quotes were matched with their demographic data.

*“They modify the lesson to meet my needs. They speak slowly and they write notes on the board.” (P7)*

*“They speak in a normal pace, but they remember and pass by my desk, and they ask me if I understood well.” (P11)*

Participants also stressed that, in general, they can communicate easily with their teachers.

*“I can communicate easily with my teachers.” (P1)*

However, a couple of participants revealed some problems created when trying to communicate with them.

*“In general I can communicate with them, but I get very upset, when they shout or speak in a low voice.” (P2)*

*“I communicate with my teachers better during the one-to-one sessions. In the classroom I feel more embarrassed.” (P12)*

Half of them stressed that their teachers pay more attention to them than to the rest of their peers.

*“I believe my teachers pay more attention to me than to the rest of the students. I do not mind; I would just feel more relaxed and comfortable if they could understand my point of view.” (P1)*

*“I feel my teachers pay more attention to me than to the rest of the pupils, but I like it, I do not mind.” (P3)*

Half of them emphasized that the teachers do not pay any special attention to them, and they treat them the same way as the rest of the pupils.

*“They treat me in a normal manner, the same way they treat my peers. They help me and I feel comfortable.” (P4)*

They also stressed that the teachers expect from them the same things as from their hearing peers.

*“My teachers believe that I have the same abilities as the rest of the students.” (P6)*

*“They expect me to be quiet in the classroom. They want me to keep my*

*mouth shut, and not to talk with the girl sitting next to me. They have academic expectations.” (P11)*

*“They expect from me to respond to the requirements, and to participate in the classroom, because I receive the one-to-one sessions.” (P15)*

The participants also described ways in which they can get information from the teacher in the classroom (e.g., watching the teacher, through repetition, etc.).

*“I need to watch the teacher when he speaks, and sometimes I need to lip-read as well.” (P2)*

*“I watch him/her carefully, and if I do not understand something I ask the girl sitting next to me (who knows about my hearing loss) to repeat.” (P11)*

*“When I do not understand something, I ask them and they repeat.” (P15)*

The majority of the teachers also use some visual aids, e.g., blackboards, power point presentations, maps, films, experiments, etc., which were characterized as helpful.

*“The teachers use pictures, experiments, and power point.” (P2)*

*“My teachers use the computers and experiments.” (P7)*

*“In geography they use power point, in mathematics reflective board, and in science short films. All these make the lesson more visual and interesting.” (P12)*

A couple of participants also mentioned that some teachers also use teaching in groups, or teaching through drama.

*“The teachers ask us to work in small groups, which are very helpful.” (P6)*

*“My Greek teacher teaches Greek through drama, which is very helpful.” (P12)*

Because of the above, the majority of them stressed that they can follow the lesson in the classroom, and they face some difficulties only in rare cases.

*“I can understand the lesson in the classroom when it is quiet. Sometimes, I cannot understand the difficult words.”* (P16)

*“Only a few times I cannot understand the lesson in the classroom. Most of the times I understand the lesson in the classroom.”* (P17)

Half of the participants in the question what they would say about themselves to the teachers of a new school, which they might attend the following day, stressed that they would not say anything.

*“I would not say anything.”* (P5)

*“I would say nothing. I would not refer to my hearing loss.”* (P11)

Half of them mentioned that they would disclose issues relating to their hearing loss.

*“I would tell them that sometimes I have difficulties to understand the lesson in the classroom.”* (P2)

*“I would say that I have a hearing problem and I would ask the teachers to speak more loudly.”* (P7)

*“I would tell the teachers that I have a hearing problem, and I would ask my peers to respect me.”* (P12)

*“I would tell them that I face some difficulties, and it takes longer for me to understand; that I need more attention.”* (P16)

### Lessons

The participants did not express preference for specific lessons (e.g., for more practical lessons) given the linguistic difficulties they might face. On the contrary, the majority of the participants showed interest in various lessons depending on each child's personal interests and skills.

*“I like the art lesson, because it expresses me.”* (P3)

*“I like science, chemistry and music, because we do experiments, and because I like the music.”* (P4)

*“I like history because I learn about my ancestors and mathematics because I put my mind to work.” (P7)*

*“I like music because it is relaxing.” (P18)*

The participants did not associate their hearing loss with their status of “good or bad students”. A participant acknowledged the role of her mother in being a good pupil.

*“I am a good pupil because of my mother, who pays attention to me.” (P4)*

A couple of participants emphasized that they are not good students, because they do not try hard.

*“I am not a good student, because I do not study a lot.” (P10)*

*“I am an average student because I do not spend a lot of time in my reading.” (P16)*

#### *One-to-one sessions*

Almost all the participants could follow the lesson in the classroom but they preferred the one-to-one sessions, since they can understand better the lesson, and they can share their problems with the teachers at the one-to-one level.

*“I like both the lesson in the classroom and the one-to-one sessions. Sometimes, I do not understand the lesson in the classroom. During the one-to-one sessions, though, I understand better.” (P14)*

*“I prefer the one-to-one sessions than the lesson in the classroom, because during the sessions we are alone, the teacher explains the lesson in a more practical way, there is not much theory, and the teacher simplifies the lesson. There is no noise at the one-to-one sessions. During the one-to-one sessions, I talk about everything. In the classroom I do not speak, because I am scared that if I may say something and they will laugh at me. They think that I have a problem.” (P16)*

The vast majority of the participants attended one-to-one sessions offered by the classroom teachers. They were overall pleased with it, since during those sessions they could be prepared for lesson content that would come up, get familiar with vocabulary/key concepts which would be covered in the lesson, identify areas of

confusion, ask for explanations, or even discuss personal issues.

*“The one-to-one sessions not only help me to understand the lesson, but help me to face the different problems I have, not only regarding lessons but in life in general. With my teachers’ solidarity, I have self-confidence, and I can cope, regardless my hearing loss.”* (P1)

*“During the one-to-one session, I am alone and I can participate more, and if I have questions, the teacher answers them immediately.”* (P2)

All participants, with the exception of two, did not receive any support when they were attending primary schools.

*“When I was in primary school, I was not receiving any support.”* (P2)

They liked both pre- and post-tutorial sessions, for different reasons.

*“I like both. During the pre-tutorial sessions, the teacher prepares me for the lesson coming up, and during the post-tutorial session, she/he has the opportunity to answer to my questions.”* (P2)

*“I prefer post-tutorial sessions, as the teacher can explain to me what I did not understand in the classroom.”* (P6)

*“I prefer the pre-tutorial sessions, because they offer the opportunity to the student to understand better what is said in the classroom.”* (P9)

### *Preferential seating*

Most of the participants sat at the front rows, next to hearing students (despite the fact that some participants sat next to children with hearing loss) with the ‘better-hearing’ ear facing the teacher. Their seat was enabling them to minimize background noise.

*“I sit at the front, because I can listen no matter how much noise my classmates make.”* (P16)

*“I sit with my ‘better’ ear facing the teacher. I sit at the front with my friend who helps me.”* (P12)

*“I sit at the front, and when I do not understand something I ask during the tutorials.”* (P16)

### Homework

Seven of the participants stated that they do not find the homework difficult, and could do it without help.

*“The homework is in general easy, but in some lessons it is rather difficult. I do not need help to do my homework.” (P1)*

Six students mentioned that sometimes the homework is quite difficult, and in some cases they needed private lessons in the afternoon to cope with it, especially those who would sit for final exams.

*“Sometimes, homework is not too much, but sometimes is quite a lot, rather demanding.” (P3)*

*“I have private lessons in the afternoon in modern Greek, mathematics, history, and English language, because of the university entrance exams.” (P9)*

*“I attend private lessons twice a week.” (P12)*

In five cases, relatives would help them where necessary.

*“I study alone. I do not have any private lessons in the afternoon. Only occasionally, I ask for help from my cousins.” (P11)*

*“I study alone. Sometimes, my sister helps me.” (P17)*

A couple of participants acknowledged the role of one-to-one sessions for homework.

*“Homework is not difficult. I ask my teachers for any problems about it during the one-to-one session. I understand mathematics during the one-to-one sessions. We do it step-by-step.” (P11)*

### Feelings about school

Students were asked to talk about their feelings about school. Most of them expressed feelings of happiness regarding school.

*“I am happy at school. I have friends. The word school brings to my mind the words lessons, friends, entertainment.” (P4)*



*“The word school brings to my mind joy and interest for life. I learn new things. I love my school” (P12)*

*“I like school. It brings to mind lessons, reading, and nice moments.” (P2)*

*“Learning and respect are the first words that come to mind, when I think about school! I like school a lot.” (P16)*

The majority of them stressed that they would not like any changes to be made within school.

*“No changes need to be made.” (P5)*

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Four of the participants suggested some changes within school.

*“I would like the teachers to understand better our needs.” (P6)*

*“I would like school to start at 8:00 am and not at 7:30 am. I would also like the teacher not to shout at us. I would also like the teachers not to be so strict, and to give children a second chance.” (P12)*

*“I would like less teaching periods.” (P19).*

*“In order to feel comfortable, they should allow us to wear sport clothes in the winter.” (P7)*

### **Social inclusion**

#### *Classmates*

The majority of the participants stressed that they can communicate with their classmates, despite the fact that sometimes their hearing loss has an impact on their communication.

*“I can communicate easily with my peers.” (P18)*

*“I communicate comfortably with my peers; if I do not understand something I ask them to change seats.” (P17)*

*“We communicate comfortably. Sometimes, I do not understand*

*if we are a lot of children together, because they speak in a low voice. I may find someone who does not participate in the conversation and I talk with him.” (P11)*

Most of the participants stated that their hearing loss did not have any impact on their relationships with their peers.

*“The hearing loss has no impact on my relationships with my peers. However, when they speak in a low voice, I cannot hear.” (P18)*

*“My relationship with my peers is very good. They all love me, and they treat me like the rest of the students.” (P6)*

*“I am not very friendly with my peers, but this has nothing to do with my hearing loss, rather with different characters. I don’t feel nice that I cannot make friends. I feel that if I argue with my friends that I hang around with, I will be alone.” (P2)*

The majority of the participants stated that their classmates knew about their hearing loss.

*“They know about my hearing loss, but they do not know anything about the hearing aid.” (P13)*

*“Only some classmates know about my hearing loss, my closest friends.” (P12)*

A couple of participants mentioned that their hearing loss does not have an impact on their relationships with their peers, since they are not aware of it, as they choose not to disclose it to their peers.

*“The classmates treat me normally, because they do not know about my hearing loss.” (P11)*

*“My relationship with my peers is good, because (with the exception of my close friends) they do not know anything about my hearing loss, and they treat me the same way as the rest of their peers.” (P7)*

However, one participant stated that despite the fact that the hearing loss was known to the classmates, they forgot it in the classroom.

*“I believe that my classmates know about my hearing loss, but*

*sometimes they “forget” about it, and they make noise in the classroom, and I cannot understand the lesson.” (P1)*

Most of the participants mentioned that during the breaks they talked with their classmates.

*“I sit together with my friends and we talk.” (P15)*

*“We’re all together; we talk and eat.” (P14)*

*“We talk, we have fun with each other and I talk with everybody.” (P6)*

However, only one participant mentioned that he/she does not communicate with his classmates.

*“I do not talk with any of my classmates. They only talk to me to make fun of me.” (P16)*

### *Friendships*

The majority of the participants stressed that they made friendships at school.

*“I have a nice time with my classmates. We go together to the clubs.” (P15)*

*“They treat me like friends, who care for each other. I help them.” (P13)*

*“I hang around with my friends. At school I have friends, but not at home. I communicate with my friends through the facebook.” (P11)*

A minority of the participants mentioned that they did not develop enough or any friendships at school.

*“I only have a few friends at school.” (P18)*

*“I do not have any contacts with my classmates. I feel terrible, so alone. During the breaks, I discuss about it with my friend X. My classmates make me feel that I have a problem. What do I do that makes them so angry with me?” (P16)*

*“I don’t do anything during the breaks; I am all alone.” (P3)*

Those who do not meet their classmates after school, they spend the weekends with their families, sometimes for practical reasons (e.g., because of distance, or family rules).

*“I meet my peers at school, not in the afternoon. I spend the weekends at home or I go for a stroll with my family.” (P18)*

*“I have never been to parties. I stay at home. I help my mother and my father. I go to the village with my family. I do not go out. My father doesn’t let me.” (P16)*

*“I meet my classmates not very often, because the distance of our houses. I only meet my neighbors who attend my school.” (P7)*

Those who developed friendships with their classmates, meet them after school either in the afternoons or during the weekends. They do various activities together, e.g., playing games, fishing, going out.

*“Sometimes I meet my friends. We play hand ball.” (P17)*

*“On Saturdays we go to the club and on Sundays to the café.” (P15)*

*“During the weekends, I meet my friends, sometimes I have basketball game. In the afternoons I communicate with them through skype” (P12)*

*“I go to the parties, for fishing, trips with my friends.” (P5)*

Three participants expressed their preference for small groups than for big groups, for better communication.

*“I prefer a small group for hanging around; maximum five persons. If they are more than five, it’s getting very noisy.” (P13)*

*“I prefer to go out in small groups, so as to participate in the discussion.” (P12)*

*“We are a big group of friends. However, sometimes we go out only three persons, so as to communicate more easily.” (P9)*

For other participants this was not the case.

*“I prefer to go out in a big group. We have better time.” (P15)*

*“We hang around in a big group.” (P8)*

A number of participants stressed how important friendships are for them, since they do not feel lonely.

*“The fact that I have friends makes me feel better about myself. I don’t like to be on my own.”* (P15)

*“When my friends do not want me, I do not feel well.”* (P14)

*“They help me/ they do not tease me. If they teased me, I would feel very bad.”* (P13)

Only a minority of them participated in school events.

*“I belong to the basketball team of my school.”* (P12)

The participants were also asked to answer to whom they would turn for help when needed. Most of them identified friends, family members, or members of the school staff (e.g., counselors, etc.).

*“I would ask for help from my science teacher.”* (P6)

*“I would turn to my mother, and to the counselor.”* (P7)

*“I would turn to my best friend, to my brother, and to the school counselor.”* (P5)

Three of the participants mentioned that they would not turn anywhere for help.

*“I would not turn anywhere for help.”* (P19)

#### *Contacts with the other d/hh students*

The majority of the participants did not have any classmates with hearing loss, and also had never met any adults with hearing loss.

*“I don’t know any adults or children with hearing loss.”* (P16)

Only a few of them knew people (adults or children) with hearing loss.

*“I met some d/hh people, but I do not have contacts with them. At the junior school I had a classmate with hearing loss, and we used to sit together at the front desk.”* (P11)

*“I met a Swedish man, who had hearing loss in his ears. He was wearing Baha. It was very encouraging.”* (P9)

*“I know an adult with hearing loss. I have very good feelings for them; joy and happiness.” (P4)*

Most of them felt closer to their hearing peers than to the d/hh.

*“I like it that I have hearing friends.” (P16)*

*“I feel closer to my hearing peers, because I do not feel different from them.” (P4)*

A number of participants felt closer to their d/hh friends.

*“I feel closer to J [child with hearing loss]. I like that we help each other.” (P13)*

Three of them had relatives with hearing loss

*“I only know my brother, and my relationship with him is quite good.” (P18)*

*“I only know my mother.” (P7)*

### **Living with UHL**

Participants were also asked to answer what kind of advice they would offer to a newly diagnosed neighbor with UHL. Six of the participants held very strong views.

*“You have to accept it. If you reacted differently I would not talk to you.” (P4)*

*“Don’t be embarrassed. Don’t be embarrassed.” (P7)*

One third of the participants gave supportive answers.

*“We need to be friends from now on, because we have the same problem.” (P12)*

*“I would tell him that sometimes you will not understand when other people speak.” (P13)*

*“It’s not something nice to have UHL, but in time you need to get used to it, to accept it, and not to feel embarrassed about it.” (P2)*

*“I would advise him to be strong and brave.” (P3)*

*“I would advise him how to get over his difficulties.” (P16)*

*“I would tell him not to get disappointed and to visit an Ear, Nose and Throat doctor.” (P19)*

Two participants were rather optimistic.

*“People get over problems in life.” (P6)*

*“UHL is nothing; just stay away from noise.” (P7)*

Most of the participants described difficult for listening situations because of their UHL, such as at the cinema, the playground, the mall, parties during different events, and in general noisy conditions.

*“At the events, parties and malls, the listening conditions are hard. It’s also rather difficult to listen when you are at the cinema or at the playground.” (P4)*

*“When there is noise, I get buzzing in my ears and I close them. It is also very difficult when I cycle, or when I walk in the street. When I cycle I turn from the other side (at the left) to listen better.” (P12)*

*“I face difficulties listening everywhere, or even at home when the television is on, and they talk to me and I cannot listen.” (P16)*

*“It’s difficult for me to listen when there is loud music.” (P17)*

One third of the participants described difficult listening situations at school.

*“It is difficult to listen during the breaks at school when there is a lot of noise.” (P6)*

*“It is difficult to listen in the classroom, when all children talk at the same time, or during the school events.” (P2)*

Five participants stressed that it is difficult to listen when a lot of people speak at the same time, or when they try to detect where the sound comes from.

*“When someone tries to talk to me, and the rest of the people speak at the back, I cannot listen.” (P13)*

*“It is difficult to detect the sound. When they call me I turn around to find out who calls me, and it is difficult.” (P7)*

One participant commented on the fact that some people (including peers) can be very rude when they cannot listen during those difficult listening situations.

*“Sometimes someone may tell me something and if I don’t answer he tells me ‘Why don’t you answer? You are deaf?’ This hurts me a lot, and I may never talk to this person again.” (P11)*

Participants were also asked to describe their feelings when they are in these difficult for listening situations, when they are alone, or with family and friends. Seven of them mentioned that when they are alone or with classmates they feel bad, whereas when they are with friends or parents they feel fine, since they feel that the parents will support them.

*“When I am with my parents, I don’t mind at all. However, I feel very bad when I am with my classmates, because I cannot understand what they say.” (P1)*

*“When I am with my parents, my mother protects me, as well as my friends. When I am with my classmates, I change seat. When I am alone, I leave.” (P12)*

The participants were asked to answer how they would react in a difficult for listening situation of a pool party with a DJ playing music, some children talking over the tables with the food, and other children playing in the pool. Most of them answered that they would withdraw somewhere that would be very quiet.

*“I would try to pull out somewhere quiet.” (P4)*

*“I would go somewhere else, I would leave. I wouldn’t like to stay and ask other people what they were talking about. The other persons would get fed up, and they would not answer to my questions.” (P13)*

*“I would try to make friends, to draw back and talk with them.” (P3)*

*“When there is noise, I cannot always listen. I would just leave.” (P16)*

The participants were also asked to describe the information they would like to get during a hypothetical seminar on UHL. Most of them stated that they would like to



get more audiological information (e.g., how the ear works, about hearing aids).

*“I would like to learn more about ways to listen, and to feel better.” (P3)*

*“How can you gain your hearing again, without the hearing aids.” (P12)*

*“I would like to learn more things about the ears and the sounds.” (P2)*

*“I would like to learn more from a medical perspective.” (P17)*

Three of them expressed the wish to learn more about the sign language, or about people with hearing loss.

*“I would like to learn about everything and the sign language.” (P19)*

*“I would like to learn more about people with hearing loss. I would like to meet them.” (P15)*

Finally, they were asked to describe how it is to have UHL. The majority of the participants expressed very negative feelings.

*“It is very difficult to have hearing loss. When they talk to my ear that has the hearing loss, I cannot understand anything” (P15)*

*“It is extremely bad to have UHL. It causes problems. My neck pains me because I have to turn all the time to the side of the better hearing ear to listen and lip-read.” (P16)*

*“It’s difficult. In order to listen, one person should talk each time, and not all of them together. I also face difficulties with detecting where the sound comes from.” (P19)*

*“It can be embarrassing when I talk to others and I cannot understand. I feel ashamed to ask them to repeat many times the same thing.” (P17)*

Three of them were more optimistic.

*“It is not that bad to have UHL.” (P12)*

*“You sleep well at nights, but it is not very convenient when you are with your classmates.” (P7)*

*“Sometimes it is difficult, and sometimes it may be very nice. For instance, when there is noise you lie down covering the ‘hearing’ ear and you leave ‘free’ the ear with the hearing loss.” (P11)*

## DISCUSSION

The first two research questions of this study were related with Cypriot pupils' with UHL social and academic experiences and challenges within Cyprus general secondary schools. In general, in our study the responses suggested that their academic and social experiences were positive; there were only limited academic, communicational, and social challenges in contrast with previous studies (Bess & Tarpe, 1984; Bovo et al., 1988; Boyd, 1974; Brookhouser et al., 1991; Culbertson & Gilbert, 1986; Dancer et al., 1995; English & Church, 1999; Most, 2004, 2006; Most & Tsach, 2010; Oylar et al., 1988).

Specifically, regarding their academic experiences, most of the participants expressed feelings of happiness at school and positive academic experiences. In general, they stated that they could follow lessons in the classroom easily, because of their preferential seating in class and the coping strategies they developed (e.g., asking for repetitions, watching the mouth, etc.). They also stressed that their teachers adapted the lesson to their needs (e.g., speaking in a slow pace, facing them while speaking, using visual aids and auxiliary teaching methods (e.g., working in groups). Then, these students mentioned that they attend one-to-one sessions which are either pre-tutorial or post-tutorial.

Previous researchers attributed the academic difficulties of children with UHL, not only to their auditory challenges, but also to the fact that these children are ignored in the educational system, they do not get any support, and their teachers are not aware of the negative effects of UHL on their communicative skills and academic performance (Most, 2004). However, the participants in this study emphasized that they get enough support through one-to-one sessions. According to them, besides other benefits, one-to-one sessions facilitate them to be prepared for lesson content that will come up, and to cope with their homework. The participants also stated that their teachers modify normal classroom delivery, use appropriate teaching methods, and apply preferential classroom placement for their students. Previous studies support that general teachers in Cyprus are deaf aware (through in-service training for general teachers) (Hadjikakou et al., 2008). The positive impact of support services, and teachers' deaf awareness and modification of normal classroom delivery on the academic and communicative skills of children with bilateral hearing loss, has been documented by previous studies that were conducted in Cyprus (Hadjikakou et

al., 2005, 2008; Hadjidakou & Nikolarazi, 2007), and elsewhere (Iantaffi, Jarvis, & Sinka, 2003; Leigh, 1999; Power & Hyde 2002; Powers, 2003; Stinson & Antia 1999; Stinson & Liu, 1999; Stinson, Whitmire, & Kluwin 1996).

In so far as the social experiences and challenges of children with UHL is concerned, the majority of children with UHL developed friendships with their classmates both in and outside school. In general, only a minority of the children stated that they did not develop friendships at school, and that they felt rather lonely. These findings are in accordance with previous studies carried out in Cyprus (Hadjidakou et al., 2008; Hadjidakou & Nikolarazi, 2007). Almost all of them did not have any contacts or mixed with other d/hh children or adults.

The majority of children with UHL in this study developed good communicative skills that enabled them to communicate easily with their peers and teachers, as they stated. They also reported that the majority of them developed friendships with their hearing peers. These findings are consistent with previous studies reporting positive attitudes toward, and acceptance of, students with hearing loss by their hearing peers (Hung & Paul, 2006; Kluwin & Stinson, 1993; Luckner, 1999; Power & Hyde, 2002;) given that meaningful contact has been provided within these two groups (Hung & Paul, 2006). Without communication, socialization cannot exist (Antia, Stinson, & Gaustad, 2002; Cawthon, 2001). It has been suggested in a number of studies that d/hh children's lack of communication skills is a major obstacle to their social inclusion and genuine acceptance by their hearing peers (Hung & Paul, 2006; Stinson et al., 1996; Stinson & Liu, 1999).

The third research question of this study regarded children's feelings when living with UHL. More specifically, the participants stressed that within the classrooms (despite the fact they are acoustically treated), they face difficulties in listening when there is noise, when there is group discussion, when the teachers or children speak in a low voice, when they do not have eye contact with the teachers or classmates, when the speech is directed to the impaired side, or during the breaks. They also identified difficult for listening situations outside school, such as at a mall, parties, a cinema, the playground, during different events, and in general in noisy environments (Bess et al., 1986; Bess & Tharpe, 1984).

It was also revealed that their inability to listen bilaterally and to detect the sound source has an impact on their psychological condition, as similarly described elsewhere (Bess & Tharpe, 1984; Binhero, 1982; Bovo et al., 1988; Brookhouser et al., 1991; Culbertson & Gilbert 1986; Stein, 1983). Specifically, according to the participants, their UHL causes them various feelings of discomfort, frustration, nervousness, embarrassment and anger, since they cannot listen under all circumstances, cannot detect the sound source, and they have to ask for repetitions or to withdraw because

they cannot follow the discussion. These feelings were apparent in their answers. Additionally, to the hypothetical question as to what they would say about themselves to the teachers of their new school that would start the following day, most of them stressed that they would disclose their auditory difficulties. Having recognized these difficulties, their answers to the hypothetical question as to what advice they would offer to newly diagnosed people with UHL, were very supportive.

The participants also made various suggestions for the improvement of the school system, but they also suggested seminars and workshops on UHL, in order to learn more about audiology, sign language, adapting strategies, and to meet other people with hearing loss.

To conclude, the participants in this study described positive academic and social experiences, since they could communicate effectively with their teachers and peers, they received support services and their teachers were deaf aware. They also described the difficulties they face when listening in noisy conditions both at school and outside school (e.g., at the cinema, parties, etc.), when there is group discussion, when other people speak in a low voice, when they do not have eye contacts, or when speech is directed to the impaired side. They also emphasized that these conditions cause them various feelings of discomfort, frustration, nervousness, embarrassment and anger.

There are several limitations to the conclusions that can be drawn from the experiences of 18 pupils, and we acknowledge that a variety of perspectives may be missing from the narratives. However, given the lack of similar studies that focus on pupils with UHL in Cyprus, the fact that all Cypriot secondary students with UHL meeting our criteria were enrolled in this study, and the limited international qualitative studies on the experiences of children with UHL, the issues raised here may be relevant to other pupils with UHL in Cyprus and elsewhere. Additionally, the fact that this study enrolled only children with UHL and not both hearing children and children with UHL, the participants' comments on how general areas such as homework, feelings about school, social inclusion and friendships may be affected by UHL, need to be examined with caution, since it is unclear how these questions would be answered by hearing teenagers. Further systematic research (employing both qualitative and quantitative methods) in bigger countries that will enroll the children UHL, their parents, teachers and classmates will improve our understanding of the issues concerning UHL.

Despite the fact that the above constraints limit the generalizability of these results, a number of implications for future work with children with UHL may nevertheless be drawn from our findings. Listening to the children themselves, to their own narratives, parents, teachers, researchers, and stakeholders can learn a lot about the children's experiences, and about how they view themselves. In Cyprus,

pupils with UHL are not neglected in terms of support services, and their teachers are deaf aware, according to the children. Given the positive impact that this may have on their academic performance, communication skills, and social inclusion and development of friendships, policy makers elsewhere should reconsider the way they treat children with UHL educationally, through the provision of support services to them, and by increasing teachers' and hearing pupils' deaf awareness, as also suggested by Most (2004). In this study it has been revealed that the presence of UHL causes children a number of negative feelings. Thus, stakeholders in Cyprus and elsewhere should organize group meetings in order for children with UHL to meet with each other and to learn more about their hearing loss (as also suggested by the children themselves). Mental health professionals (e.g., psychologists, psychiatrists, counsellors), should also be involved with children with UHL and with their families.

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## **Appendix A**

### *Academic inclusion*

1. Do you prefer some lessons more than other? If yes, which ones and why?
2. Do you face any difficulties to understand the lesson?
3. What are your school grades? Why do you think you got the specific grades?
4. In which lessons do you attend one-to-one sessions? And in which lessons you do not? When did you start attending the one-to-one sessions? Did you get any support when you were in primary school?
5. Can you follow the lesson in the classroom when you do not attend the one-to-one sessions prior to the class lesson?
6. Do you prefer to attend the lesson in your classroom with the hearing children or do you prefer to be taught at the one-to-one level? Why?
7. What are the benefits of the one-to-one sessions?
8. When do you prefer to have one-to-one sessions? Prior or after the lesson in the classroom? Why?
9. Do you communicate easily with your teachers?
10. How do the teachers treat you? Do they help you? Do you feel comfortable to ask the teachers for help when you do not understand something in the classroom? Do you prefer to ask for clarifications at the one-to-one sessions? Why?
11. How do you understand what the teacher says in the classroom?
12. Do the teachers make teaching modifications (e.g., they speak clearly, they do not cover the mouth, etc.)?
13. Do the teachers use visual aids? If yes, which ones?
14. Do the teachers use other auxiliary teaching methods, such as group work, teaching through drama to enhance your learning?
15. Do you believe that your teachers pay more attention to you rather than to your peers? If yes, how do you feel about this?
16. What do teachers expect from you compared to your peers?
17. Where do you sit in the classroom? Alone or with another child? Are you taught all lessons in the same classroom or do you change rooms? Do you think that your position in the classroom has an impact on your understanding of the lesson? How?
18. What do you think about the homework? Is it too much or difficult for you to do it on your own?
19. Can you do alone your homework? Or does someone help you?
20. How many hours does it take you to do your homework?

21. Which grade at your schooling was your favorite? Why? More/fewer friends? More friendly and understanding teachers?
22. How do you feel about your school?
23. What changes could be made within school?
24. Let's assume that you start tomorrow a new school: Do you disclose your hearing loss to your teachers?

#### *Social inclusion*

1. Are your classmates aware of your hearing loss?
2. Do you communicate comfortably with your classmates?
3. Do you have friends at school?
4. How would you describe your relationship with your classmates? How do they treat you?
5. What are you doing during the breaks? With whom do you hang around?
6. Lots of kids hang out with friends at the mall, go to the movies or to parties together on the weekend. What do you do on the weekends?
7. Are these group activities or individual activities? Large groups or small groups? Why?
8. Do you meet your classmates in the afternoons? Do you to the parties with them?
9. Do you participate in the school events?

#### *Living with UHL*

1. Let's assume that I am your neighbor that I have just been diagnosed with hearing loss like yours. What would you tell me?
2. UHL makes it hard to know where a sound is coming from. What other situations are difficult with a UHL? (e.g., at the parties, etc.)?
3. How difficult is for you to listen when you are at the cinema, or at the playground?
4. How do you feel when you are in these difficult listening situations alone, or with family, or with your friends?
5. How would you react in a difficult listening situation of a pool party with a DJ playing music, some children talking over the tables with the food, and other children playing in the pool?
6. What kind of information would you like to get during a hypothetical seminar on UHL?
7. How it is to have UHL?