# Deaf and Hard of Hearing Individuals and Education: Greece - A Special Case of Social Exclusion

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Abstract This paper is part of a wider research which makes an effort to record the conditions of Deaf and Hard of Hearing (DHH) individuals in Greece, with emphasis on learning the Greek Sign Language (GSL) and using new technologies (i.e. ICT). The basic aim of this study is to explore the educational needs of DHH individuals and, whether these needs are met or not and why these individuals are socially excluded from resources that they should have been offered or provided by institutional educational agencies. More specifically, it has been studied to what degree DHH individuals have acquired the necessary knowledge to communicate effectively with the GSL, communicate and acquire information with the help of a PC as well as to use ICT.

Keywords: ICT, social exclusion, IDs, school, individuals with disabilities

#### 1. Social Exclusion and Individuals with Disabilities (IDs)

# 1.1 Theoretical Background

The process of globalisation has generated transformations in the socio-cultural and economic environment and, more particularly, in the policies of nations-states (Bauman, 2002; Beck, 2000; Carnoy & Castells, 2001). In the Modern Greek reality, some researches have established that there have been new social conditions; that is, new conditions at work and in education, new forms of family, multiple social roles etc. (Kazamias, 2005; Mouzelis, 2005; Tsiolis, 2005; Tsobanoglou, 2008; Giavrimis, Papanis & Roumeliotou, 2007; Chatzichristou, 1999). In the post-modern milieu an individual's hindrance from his/her participating in society as an active member leads to his/her marginalisation and, finally, to social exclusion (Dewilde, 2003; Estivill, 2003).

Social exclusion that most times features IDs' everyday routine is an accumulation of various processes that keep away individuals, groups, communities and areas and push them to unfavourable situation compared to the centres of power and the resources of society. According to Burchardt et al., (1999, p. 230), an individual is socially excluded when this individual - although living in a geographically distinct society - does not participate in citizens' usual activities of the given society. The notion of social exclusion is related to deprivation of social goods, such as safety, participation, education, health etc. (Rosenfeld & Tardieu, 2000). Moreover, the Observatory of European Committees for National Policies links social exclusion from basic living standards with the lack of participation in important social and professional occasions of society, such as: consumption, savings, production, political activation and the social action (Papanis, Giavrimis & Biki, 2009). A commonality of all excluded individuals is their real relation to those principal mechanisms that produce and distribute resources (Karantinos et al., 1990). Exclusion can be understood as the interaction of those individuals or groups during which the socially stronger - consciously or due either to their indifference or misleading and/or erroneous policies - channel social resources systematically to a specific part of the society, thus marginalizing the rest (Papanis & Rontos, 2005).

Atkinson et al. (2002) and Burchardt et al. (2002) generally refer to three "schools of thought" of understanding social exclusion. According to first school of thought, individuals or groups are socially excluded when, compared with other groups, are excluded from events or activities that take place in the society. The second school of thought refers to institutions and systems of the society that are considered responsible for the overall situation. This school of thought describe, by in large, the refusal of the mainstream culture, ideology or group to recognise the right of IDs to the access to services, information, work, insurance or knowledge and, thus, the formers' weakness to ensure the latter's social acceptance and self-esteem (Duffy, 1995; Klasen, 1999; Sen, 1999). Finally, the third school of thought refers to social dynamics and restrictions that characterise the current situation of those who are being excluded socially, something that is a result of experiences and decisions of individuals in the past rather those of current processes. Here, it should be pointed out that all meanings of social exclusion also deal with the issue of voluntary exclusion (Burchardt et al., 2002), according to which there is the individual's conscious non-participation in social processes or in specific activities due to his/her negative past experiences or choices.

Although government policies consider social exclusion to be a phenomenon of fundamental importance, most times they persist in an approach that puts emphasis on causes, without nevertheless defining clearly its notion itself. According to the international and Greek bibliography – that is, Oliver & Barnes, 1998; Rabiee et al., 2005 and the *Greek National Action Plan on Social Integration* (ESDEN in Greek) - individuals with disabilities (IDs) fill all the criteria to be considered social excluded. Referring to the bibliography on stigma and the "spoiled identities", Goffman (1963) offers an approach that is of particular importance for understanding the social status of the impaired individuals, which is formed through incomplete or negatively charged interactions. Of course, Goffman does not include in his approach the more general socio-cultural and political framework of reference, which plays a principal role not only in the development of the phenomena of social exclusion and stigmatization but also in the construct of a definition of disability/impairment that puts emphasis more on the supportive environment of the disabled/impaired than on medico-biological approaches, as in the past (Shakespeare, 2008). According to Durkheim, each society constructs an ideal picture of the person, as to how s/he should be from a mental, physical and moral perspective (Durkheim, 1956, p. 70).

At the same time, as far as education is concerned, Poulantzas (1974) mentions that this is a state control mechanism to legalise a specific ideology and imposes it on its citizens (Carnoy & Kastells, 2001: 403-404). Paraphrasing the preceding statement, we can thus claim that in a globalised environment the institution of education and, by extension, training and its linkage with labour market distribution assumes a mainstream role and determines not only the social role of the individuals with disabilities (IDs) but also the awareness of the society, in general, on issues of communication and diversity, recognition and acceptance of the IDs and the contact with alternative forms of behaviour. Consequently, the IDs' accessibility to education and the development of their basic skills and competences support policies of social cohesion and participation of

these individuals in economic and other activities as active members of the society. We should point out that, while their social role is being formed, the IDs' needs and preferences are seldom sought for or heard of (Abbott et al., 2000; Burke & Montgomery, 2003).

#### 1.2 Greek Context

At the end of 1980s in Greece, neo-liberal policies started being mainstreamed, with the consequence of complete renegotiation of the welfare character of educational policies (Zabeta, 1993, p. 224). The Greek Constitution foresees beneficial provisions on banning phenomena of social exclusion stating the following: "People with disabilities are entitled to benefit from measures ensuring their self-sufficiency, professional integration and participation in the social, economic and political life of the Country" (*Constitution of Greece*: Article 21, paragraph 6). Moreover, according to the *Greek National Action Plan for Social Integration*, an effort has been made to protect and facilitate the IDs' access to the least possible restrictive or isolated educational environment. Nevertheless, these initiatives are not enough to guarantee an equal treatment of IDs, something which, according to Cousins (1998, p.128), may lie in the fact that IDs' social rights have yet to become known to the wider society.

# 2. Education of Deaf and Hard of Hearing (DHH) Individuals

#### 2.1 An Overview of the International and Greek Context

For many years, the education of DHH worldwide was, to a great degree, influenced by the pathology of Deafness and was focused on restoration of the acoustic loss (i.e. medical deficit model), (Rodda & Eleweke, 2006). The primary goal was to teach DHH students how to speak, no matter how difficult it might have been (i.e. oral method) (Kourbetis, 2006).

Unfortunately, the same approach to DHH individuals was applied in Greek Education for many years, despite the fact that – as the Greek Ministry of Education and Religious Affairs claimed - it is essential for the acquisition of a language that its users are present, interact and contribute to this interaction (YPEPTH, 2004a). It should be taken into consideration that the DHH child in the Greek educational system (especially in primary and secondary school) found themselves between a hard and a rock place.

On the one hand, when attending a school of hearing individuals, the DHH child was not usually exposed to the GSL but rather to a complex form of spoken language with a number of meanings, since the school is that for hearing individuals. If s/he was to learn GSL, s/he learned it informally from other older DHH students and adults, when or if there were such students and/or adults in the school community. As a result, the DHH child ended up learning neither the GSL nor the Greek language to a satisfactory degree, while the level of his/her academic competence remained very low (Kourbetis & Hoffmeister, 2002).

On the other hand, even when attending a Greek DHH school, the DHH child was deprived of learning the GSL since it was partly prohibited! First, because teachers and other professionals did not know how to communicate in GSL to a satisfactory degree (Kourbetis, Adamopoulou & Ferentinos, 2005; Labropoulou, 1999a and b), and, second, because a holistic teaching methodology followed – that is, teaching the GSL and Greek (Labropoulou, 1999a and b) - did not have the anticipated outcomes, that is, DHH pupils/student to acquire both the GSL and develop reading and writing skills in the spoken Greek language (Kourbetis, Adamopoulou & Ferentinos, 2001). This had as a result the DHH child's low performance at school and his/her incomplete training in the GSL.

It was just in 2000 that the Greek Sign Language (GSL) was recognized as the official language of the DHH individuals (Law 2817/2000), and a GSL Curriculum was developed. Thus an important step was taken for the systematic teaching of the GSL to pupils and students at all levels of the Greek Education (Kourbetis, Hoffmeister & Simpsa, 2004. YPEPTH, 2004a and b). Moreover, the restricted GSL teaching material

developed by the Pedagogic Institute (PI) - with narrations or fairy tales of DHH individuals - is an important educational tool to help and strengthen the cultural identity of the DHH individuals as well as to enhance their level of understanding and use of the GSL (Kourbetis, 2001a and b).

Nevertheless, neither the long-awaited recognition of the GSL as official language of the DHH individuals in Greece nor the bilingual education (i.e. spoken language and Sign Language (SL) ) that has been implemented both in Greece and worldwide (Labropoulou, 1999a and b; Rodda & Eleweke, 2006) – together with programmes of integration of DHH pupils/students that have been organised and implemented in schools of hearing pupils/students, so that stereotypes and phenomena of social exclusion should be decrease – have had a smooth sailing

On the one hand, deaf professionals - who came from the Greek educational system described above - may not be able to communicate through the GSL, since they were not trained properly in it. On the other hand, there are only few hearing professionals who work in DHH Education who know how to use the GSL excellent (Kourbetis, Adamopoulou & Ferentinos, 2005). In contrast, the majority of teachers do not understand what their pupils/students say when they communicate with each other in the GSL (Kourbetis & Gargalis, 2002), since seldom did hearing individuals have as a linguistic model to learn DHHs' natural language (i.e. GSL), and it is eventually something that has consequences both on the cognitive and psychoaffective level both of the pupils/students and their teachers (Kourbetis, Adamopoulou, Ferentinos, 2001).

Another negative aspect is that DHH individuals continue not to have complete access to their national spoken language (GSL in our case – as discussed in the preceding paragraph) or to a recognized national Sign Language (SL) (Lane, Hoffmeister & Bahan, 1996). Both school education and various programmes for DHH children in a lot of member-states of the European Union (EU) – Greece included - continue to rely, to a great degree, on oral linguistic education (Powers, 2002; Kourbetis, Adamopoulou & Ferentinos, 2005). More particularly in Greece, a research has shown that the language of communication between Greek schoolteachers and DHH pupils/students does continue being monolingual and is fundamentally based on spoken Greek (Kourbetis, 2006).

Within the context of the Greek Primary and Secondary Education, a positive aspect is that DHH pupils/students are given the opportunity to study in two different kinds of schools, depending on their parents' philosophy: either in DHH schools or in divisions of DHH integration that run in schools of hearing individuals, despite the fact that only few teachers may know and can communicate in GSL with DHH children.

Now as far as Higher Education is concerned, the international and Greek bibliography has shown that during their study at the university DHH individuals face problems with acquiring, comprehending and communicating information (Lang, 2002; Kalatzi & Tsinarellis 1994, Giavrimis, 2010), since everything is taught primarily in the spoken language. As it is conspicuous, the problematic teaching and communication practices delay the development of DHH individuals' Sign Language (SL) and their more general education at all levels (Primary, Secondary and Higher Education), hindering their professional development. DHH adults cannot be educated effectively, when their SL level is low or stagnant (Freebody & Power, 2001).

In Greece, the passage of DHH individuals to Higher Education signals their first important contact with the society of hearing individuals. Important Greek laws (3404/2005, 2909/2001, 2525/1997) allow the IDs' access to higher education. However, these regulations in no case ensure that their educational background suits with the studies they have chosen to follow (Kourbetis & Savvalidou, 2006; Tzouriadou & Kourbetis, 2005), since DHH individuals face the excessively high study requirements, the bias or the ignorance of the academic community and the inadequate infrastructures (non-existence of interpreters or support by a special teacher and/or a mentor etc.) (Kourbetis & Savvalidou, 2006; Eboridou, 2007).

# 2.2 Organisations and Curricula for the DHH Individuals' Education and Care

According to the Federation of DHH individuals Greece (OM.K.E in Greek), nowadays there are DHH associations in big cities in Greece. More specifically, there are organised DHH associations both in big urban

centres (Athens, Thessaloniki, Patras etc.) and in provincial cities (Volos, Xanthi, Drama etc.). In addition, there are 13 centres of GSL teaching and learning (Kourbetis et al., 2001). Furthermore, programmes of adult DHH education that were implemented or are being implement by public or private educational institutions - being financed by the EU – have been: "From disability to empowerment of the DHH world: forms of discrimination that suffer the DHH individuals in Europe", from 15 December 2000 to 15 December 2001; "Deaf Empowerment in Greece or Deaf Advocates for Deaf children in Greece: Unity through Empowerment", for two years (1998-2000); "Multimedia and Digital Process of Picture for Producers of Television Shows" in 1999; "Production of MULTIMEDIA material for learning and teaching of the Sign Language" in 1998; and "Education of DHH in the Use of Multimedia for the Teaching of the Sign Language and the Construction of Dictionaries" in 1996.

# 3. Education and Training of DHH Individuals in ICT

#### 3.1 An Overview

In the past few years the Internet has became an important driver of information diffusion. It has become a means of communication and training that offers information through texts and pictures. DHH population can communicate not only with each other but also with hearing individuals with electronic correspondence (e-mail), take part in on-line discussion groups and exchange information with other users (Agboola & Lee, 2000). In the United States of America (USA), there has been observed an increasing use of ICT in DHH schools. More specifically, in 70% to 90% of these schools DHH pupils/students have access to and can use ICT (or PCs) (Clymer & McKee, 1997). Unfortunately, the same does not occur in the developing countries. As Agboola and Lee (2000) claim, this is due to the lack of appropriate education and training of the low level of digital literacy in their countries.

### 3.2. Greek Context

For the last ten years, the Greek educational system has been offering the opportunity to its pupils and students (DHH pupils/students included) to come in contact with ICT and the important potentials they offer. According to the curricula, the subjects taught are *inter alia* (among others) software programs, such as: text processing (Word), accountant program (Excel), program of presentations (PowerPoint) and surfing on the Internet (Pedagogic Institute (PI), 1997a and b). In DHH Public schools, however, the use of ICT is not taught, whereas the material and technical infrastructure is at least insufficient. Thus, on the one hand, in the DHH Public School of Thessaloniki there is not even a laboratory of new technologies (Goubatzi, 2007), and, on the other hand, in the Junior High school, ICT is taught by teachers without satisfactory level of communication in the GSL and only for an hour (Mellios, 2007).

The result of the systematic ICT teaching that has been done methodologically since 1997 is that only the DHH of younger age are taught how to use ICT, acquire information, communicate electronically and how to explore the potentials that these new technologies (NT) offer.

# 4. Methodology of the Present Study

The present study is a part of a wider research trying to record under what conditions DHH individuals in Greece learn the Greek Sign Language (GSL) and how to use ICT. The basic aim of this study is to explore these individuals' educational needs and, whether these needs met or not. In the case that these needs are not met, then it is studied how the unmet needs of DHH individuals have excluded them from those resources that they should have been offered or that have been provided by institutional educational agencies. More specifically, it is studied to what degree DHH individuals have acquired the necessary knowledge of how to

communicate effectively with the GSL, use ICT, communicate and acquire information with the aid of ICT (or a PC).

4.1 Method

# 4.1.1 Sample

The research sample consisted of 133 DHH adults. With regard to the participants' sex in the research, men who participated were 57.9% (77), whereas women were 42.1% (56). Regarding their age, in the first age-related group (18-29) belong 32.3% of the participants (43 individuals), while in the second (30-41) 31.6% (42). 20.3% of the participants (27) belong to the third age-related group (42-51). Participants of the age 54-65 were the least (21), with the percentage of 15.8%. As far as their educational level, it has been established that none of the participants in the research finished the Primary School of Hearing Individuals, while only 2.3% finished Junior High School of hearing individuals. 23.3% of them finished a DHH Primary School. 15% graduated from a DHH Junior High school (Gymnasium), whereas only 5.3% are graduates of a High School (Lyceum) of Hearing Individuals. 19.5% graduated from the DHH High School, while 6.8% of the DHH adults graduated from a technical school. Finally, 9% of the participants declared that they have an academic degree; 18.8% of the respondents answered that their education does not belong to any of the categories in the questionnaire.

### 4.1.2 Questionnaire

In order for the research to be carried out, an *ad lib* (impromptu) questionnaire was used including 14 questions. The questions were divided in four themes: (a) investigation – that is, whether the DHH adults had acquired the necessary knowledge, skills and attitudes to communicate effectively with the GSL; (b) investigation – that is, whether the DHH adults had acquired the necessary knowledge, skills and attitudes to be able to use ICT (or a PC), communicate effectively as well as to acquire information with its help; (c) detection of their special educational needs with regard to the GSL and ICT, as they themselves define them; and (d) detection of factors that affect the establishment of these needs. The construction of the questionnaire was based on the respective bibliography and, more particularly, on the curricula on teaching the GSL and ICT (or PCs) in school education, which were developed by the Pedagogic Institute (PI). Furthermore, important help was the knowledge and scientific expertise and experience provided by the experts of the field. Before the data collection was finally implemented, a pilot research into 15 DHH individuals was carried out so that the clarity and comprehension of the questions of the questionnaire were tested (Kyriazis, 2002).

# 5. Findings

### 5.1. Participants' Distribution According to Age and Educational Level

Most of the participants who were 18-29 years old were graduates of Secondary Education; 16.3% were University graduates, and only 5.4% had finished Primary Education. 9.3% of this age-related category (4 in total) declared that they belonged to another educational category (3 stated that they had finished the DHH Junior High School). 2.3 % of this age-related category declared that they were alumni of DHH Public School (Table 1). Something similar also happened to the participants of the second age-related category (30-41). 19% completed the DHH Junior High School; 4.8% graduated from the High School of Hearing Individuals; 35.7% finished the DHH High School; 9.6% graduated from the Technical & Vocational Training School whereas 11.9% declared University graduates. However, the percentage of those who were graduates of

Primary Education is much higher than that of those of the first age-related group (19% versus 2.3%). No participant of this age-related category graduated from a High School of Hearing Individuals (Table 1).

As illustrated in Table 1, the educational level of the next two age-related categories is significantly lower. The percentage of the participants of the third category (42 - 53) who declared that they were alumni of the DHH Public School was 63%. The higher educational level from which they claimed that they graduated was the DHH Junior High School – that is, 11.1%. An important percentage (25.9% - 7 participants) declared "other". Of them, 4 participants declared illiterate, while 2 that they finished the Third Grade of the Public School. None of them was a graduate either of High School or Higher Education (Table 1).

The fourth educational level (54-65) seems to consist of the least educated individuals. 23.8% declared that they finished the DHH Public School; only 9.5% completed the DHH Junior High School, whereas – as mentioned above - an important percentage (66.6% - 14 participants) stated "other". As a result of processing the questionnaires, seven (7) of the participants stated "illiterate", two (2) claimed that they finished the Second Grade of the Public school, one (1) finished the Third Grade of the Public school, one (1) the Fourth Grade of the Public school and one (1) completed the DHH Primary School.

Table 1. Participants' distribution according to their age and educational level (Ed. Level)

Ed. Level	Primary School of Hearing Individuals	Primary School of DHH Individual s	Junior High School of Hearing Individuals	Junior High School of DHH Individuals	High School of Hearing Individuals	Junior High School of DHH Individuals	Technical school	University	Other	Total
Age	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
18–29	0	1 (2.3)	3 (7)	7(16.3)	5(11.6)	11(25.6)	5(11.6)	7(16.3)	4(9.3)	43(32.3)
30–41	0	8 (19)	0	8 (19)	2 (4.8)	15(35.7)	4(9.6)	5(11.9)	0	42(31.6)
42–53	0	17 (63)	0	3(11.1)	0	0	0	0	7(25.9)	27(20.3)
54-65	0	5 (23.8)	0	2 (9.5)	0	0	0	0	14(66.7)	21(15.8)
Total	0	31 (23.3)	3 (2.3)	20 (15)	7 (5.3)	26(19.5)	9(6.8)	12(9)	25(18.8)	133(100)

# 5.2 Level of the Participants' Knowledge and Skills

One of the research objectives was to investigate whether DHH adults had acquired the necessary knowledge and skills so to be able to communicate effectively with the GSL. Table 2 presents the level of the participants' knowledge of six different subjects, according to their own opinion, about which they were asked in the questionnaire. As it is conspicuous, the participants' majority knows no subject "excellent" or "very well". More specifically, 30.8% of the participants considered that they knew the GSL Grammar from "very well" to "excellent"; 24.8% knew the GSL Grammar "well enough", while a high percentage (44.3%) knew it from "little" (27.8%) to "not at all" (16.5%).

Table 2. Level of the participants' knowledge of the GSL

SUBJECT	E.	V.W.	W.E.	L.	Not at All
	N (%)	N (%)	N (%)	N (%)	N (%)
GSL Grammar	17 (12.8)	24(18)	33(24.8)	37(27.8)	22(16.5)
GSL Vocabulary	11(8.3)	36(27.1)	49(36.8)	31(23.3)	6(4.5)
GSL & DHH Culture	17(12.8)	33(24.8)	31(23.3)	38(28.6)	14(10.5)
Literary texts in the GSL	1(0.8)	12(9)	22(16.5)	39(29.3)	59(44.4)

Note: E.: Excellent; V.W.: Very Well; W.E.: Well Enough; L.: Little; N.A.: Not at all

With regard to the GSL Vocabulary, 35.4% declared that they knew it from "very well" to "excellent", 36.8% "well enough", while 27.8%, stated that they knew it from "little" or "not at all". Only 37.6% of the respondents answered that they knew GSL & DHH Culture from "very well" to "excellent", 23.3% answered "well enough" and the highest percentage (39.1%) stated that they knew it from "little" to "not at all". Finally, concerning the subject "Literary texts in the GSL", a very small percentage (9.8%) claimed that they knew it "excellent" or "very well", a slightly higher percentage (16.5%) stated that they knew it "well enough". The participants' majority declared that they knew this subject from "little" (29.3%) to "not at all" (44.4%).

### 5.3. Level of the Participants' Knowledge of ICT (PCs)

Table 3 presents the participants' opinion on the level that they themselves consider they know how to use and communicate with ICT (PCs).

Table 3. Level of the participants' knowledge of ICT (PCs)

SUBJECT	E.	V.W.	W.E.	L.	Not at All
	N (%)				
Internet	13(9.8)	20(15)	27(20.3)	16(12)	57(42.9)
Word	11(8.3)	27(20.3)	13(9.8)	14(10.5)	68(51.1)
Excel	8(6)	10(7.5)	19(14.3)	16(12)	80(60.2)
Power Point	7(5.2)	15(11.3)	12(9)	15(11.3)	84(63.2)
E-mail	18(13.5)	20(15)	17(12.8)	13(9.8)	65(48.9)
Online discussion (with a camera through a PC; i.e. video phone calls)	13(9.7)	27(20.3)	17(12.8)	5(3.8)	71(53.4)

Note: E.: Excellent; V.W.: Very Well; W.E.: Well Enough; L.: Little; N.A.: Not at all

What is evident from Table 3 is that the large majority stated that they knew the various subjects from "little" to "not at all". More specifically, 54.9% of the participants answered that they knew of the Internet from "little" to "not at all", 20.3% "well enough", while only 24.8% answered they knew how to use the Internet "very well" or "excellent".

As far as the software program "Word", the percentage who answered "little" or "not at all" reached 61.6%. A relatively small percentage (9.8%) stated that knew "well enough", whereas 28.6% claimed that they knew the specific subject "excellent".

A large majority (72.2%) stated that they knew how to use the software program "Excel" from "little" or "not at all", a very small percentage 14,3% "well enough", while 13.5% of the participants claimed that they knew it from "very well" to "excellent".

Regarding the software program "PowerPoint', 74.5% of the participants declared that they knew how to use it from "little" to "not at all", a very small percentage (9%) knew it "well enough", whereas 16.6% of the participants stated that they knew it from "very well" or "excellent". As far as communicating electronically (e-mailing) is concerned, 58,7% of the participants stated that they knew how to use it from "little" to "not at all"; a small percentage (12.8%) knew it "well enough", while 28,5% claimed that they knew how to use it from "very well" to "excellent". Finally, concerning the software program of participation in online discussions, 57.2% of the participants knew how to use it from "little" to "not at all", 12.8% knew it "well enough", while 30.1% declared that they knew it from "very well" to "excellent".

# 5.4 Level of the Participants' Skills

Skills in the use of and communication with the GSL and ICT (or PCs)

Table 4 presents the participants opinion on the level they themselves consider that they had acquired basic communication skills in the GSL and the PC:

Table 4. Level of the	participants' s	skills in the GSL	and ICT (	or PCs)

SKILLS	E.	V.W.	W.E.	L.	Not at All
	N (%)	N (%)	N (%)	N (%)	N (%)
I communicate in writing with the PC	14(10.6)	20(15)	18(13.5)	16(12)	65(48.9)
I communicate through a camera (i.e. video phone calls) with the GSL and the aid of ICT (or a PC)	20(15)	24(18)	18(13.5)	11(8.4)	60(45.1)

Note: E.: Excellent; V.W.: Very Well; W.E.: Well Enough; L.: Little; N.A.: Not at all

25.6% of the participants declared that they acquired the particular ICT skill how to communicate in writing with the PC from "excellent" to "well", 13.5% considered that they acquired this skill "well enough", while the participants' large majority (60.9%) claimed from "little" to "not at all". 33% of the participants considered that they can communicate with the GSL with the aid of ICT (or a PC) through cameras (i.e. video phone calls) from "excellent" to "very well", 13.5% "well enough", whereas the large majority of the respondents (53.5%) considers that they acquired this particular skill from "little" to "not at all".

# 6. Concluding Remarks - A Discussion

The detection of the existing level of adults' knowledge, skills and attitudes determines, first, the gaps and the lack that require educational intervention (Karalis, 2005) and, second, those operational sectors of social and political institutions in which social exclusion is generated.

The research outcomes have illustrated that most of the majority of the participants are graduates of Secondary Education (i.e. Schools of Hearing Individuals, DHH Schools and Technological & Vocational Training) and alumni of the DHH Public School, whereas very few have graduated from Universities. An important percentage (18.8%) declared illiterate or they finished some Grades of the (Primary) Public School or the DHH School. Almost all young participants (19 - 41 years) were alumni of Secondary Education, while, on the contrary, none of the individuals who were 41 years or older graduated from this educational level.

All graduates of Tertiary Education are individuals between 18 - 41 years old. The research outcomes confirm what has also been pointed out in other research. In their research, Kourbetis, Adamopoulou & Ferentinos (2006) reached the conclusion that 22.7% of Greek DHH individuals do not continue their education after they finish the Primary School. Moreover, the outcomes concerning the academic education of DHH individuals coincide with the research carried out by Kourbetis & Savvalidou (2006) showing that only few DHH individuals can respond to the requirements of this educational level due to the lack of infrastructures, a curriculum adapted to their educational needs and to the international standard teaching methodologies of DHH individuals.

Now, regarding the existing knowledge of the GSL of the DHH individuals, the research outcomes have shown that the large majority of participants has low or sufficient knowledge of the following subjects: (a) "GSL Grammar"; (b) "GSL Vocabulary"; (c) "the GSL and Culture of the DHH Community"; and (d) "Literary texts in the GSL". The ascertainment is related to GSL teaching at all educational levels, something that up to a few years ago was almost non-existent in Greece, and, of course, the GSL was being taught informally and not systematically (Kourbetis, Adamopoulou & Ferentinos, 2001; Labropoulou, 1999 a, b). This situation has generated a complex form of spoken language and meanings that does not help in the effective communication (Kourbetis & Hoffmeister, 2002). Furthermore, the situation becomes tense and complicated by the fact that teaching is done by teachers that do not have an advanced degree of proficiency in the GSL. Should teachers have an advanced degree of proficiency in the GSL, they could have exerted a decisive influence on the culture of the DHH community for the better - a culture the level of which is now very low (Kourbetis, 2006; YPEPTH, 2004a). The acquisition of the first language – that is, the Sign Language – offers DHH individuals the opportunity to learn other languages too; that is, in our case, reading and writing of Greek (Kourbetis, Hoffmeister & Simpsa, 2004).

The research outcomes have also shown that the majority of the participants uses ICT (or PCs), even though roughly one third (1/3) claims for the opposite. The outcomes of the present study differ slightly from those of the research carried by Zazove et al (2003), which sshowed that the percentage of DHH adults that uses ICT is 65%. As the specific researcher pointed out, a lot of DHH adults use ICT in order to avoid the difficulties of oral communication (Zazove et al, 2003). The reason why there has been a difference in the Greek reality lies in the lack of an appropriate education and the low level of digital literacy (Agboola & Lee, 2000).

Of the participants only one third (1/3) declared that they participated in a programme of learning how to use and communicate with ICT in the past. Moreover, the research has shown that the majority neither has the necessary knowledge to use various software programs, nor knows how to communicate with or search for information with the aid of ICT. Thus, the outcomes of the present study do agree with the research on how DHH individuals use ICT in developing countries (Agboola & Lee, 2000). However, the use of ICT does not necessarily mean that DHH individuals explore creatively the beneficial services that ICT provides. This fact is also confirmed by the outcomes that are related to the knowledge of ICT, the communication and the acquisition of information with the aid of ICT. The level of their existing knowledge of the use of ICT, the communication and the acquisition of information with the aid of ICT is very low. All these failings are related to the curricula of formal education, where the particular subject (ie. the GSL) has been non-existent for the past few years. These subjects are offered only in the Junior High School, High School and Technical & Vocational Training but in a one-hour course (!), during which the knowledge of the functional use of ICT (i.e. PCs and the Internet) is taught (YPEPTH, 1997a and b).

The fact that the systematic ICT teaching began few years ago has resulted in that only younger DHH individuals know how to use ICT – that is, how to use using software programs, search for information, communicate electronically and explore the potentials ICT offers. Thus, it is self-evident that older DHH individuals cannot respond to the requirements of contemporary society that is flooded with very fast electronic dissemination of information.

As Durheim characteristically mentions the social subject that education should create is not the one that was created by the nature, but as society wants him (Blackledge & Hunt, 2000) or, according to the Marxist approach to education, education is what reproduces, with the means it has, the dominant or mainstream culture of the class that owns the capital. Therefore, education is one of the most important factors that affects children's development and the social status during the distribution of work, later in the adult life (Lamnias, 2001). Both non-participation in the educational process or non-acquisition of basic knowledge and skills as well as the insufficient development of individual skills are connected with f social exclusion, whereas, on the contrary, participation in education is a basic way of dissuasion of this danger and poverty (Jeffery, 2004).

From the finds of our research it has become conspicuous that a high percentage of DHH individuals were excluded not only from being taught their basic language – that is, the GSL that has been established as their official language only in the past few years – but also from functional means of alternative communication, such as ICT. At the same time, members of the Greek educational community and the institutional education have yet to fid ways to communicate and interact effectively with these individuals. Both the social and welfare state have been treating these individuals with a very peculiar and faulty way, which does not coincide with the educational and social needs of these individuals.

DHH individuals have been experiencing a non-voluntary social exclusion, since they do not have access to basic resources of the educational system and the educative capital they acquire is so little that does not allow them to get a position in the job market. Their identity - which they form primarily during their school years in the DHH school and during their contact with other DHH individuals (Nikolaraizi & Hadjikakou, 2006) – falls short due to ineffective communication with their teachers, insignificant material and technical infrastructures, delayed state policies and, finally, due to an unaware society.

Therefore, DHH adults need, on the one hand, the institution of continuous education so that they acquire the necessary new knowledge, skills and qualifications required in the job market, and, eventually, they will be able to adapt himself/herself to the new conditions of work and respond successfully to the increased demands of the job market (Bergidis, 2003, 2005). On the other hand, the structures and the basic principles of the educational system with faster pace should be changed, so that younger (DHH) individuals' learning process will become more effective within the school framework. Here, we should point out that the new Law 3699/2008 defines the "compulsory of the integration" of individuals with disability and special educational needs in the educational system and institutionalises the GSL as their own language.

To this goal, curricula which depend on special communication needs of DHH individuals (Burke & Montgomery, 2003) should be planned, organised and, finally, implemented. At the same time, it should be taken into consideration pupils'/students' traits, which play a decisive role in the effectiveness of the curriculum (Karalis, 2005; Rogers, 1999; Kokkos, 1999). Such curricula should be relevant to the education of DHH individuals in communicating with the GSL and ICT (or PCs). Only in this way and with policies that will converge in both recognising and respecting the diversity of these individuals would be feasible the effective achievement of the goals of a democratic education, without exclusions and stigmatization - which are not other than the functional integration of DHH individuals in social and professional life.

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