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Babeş-Bolyai University, Cluj-Napoca

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**Psychological aspects of parental involvement in the school life of hearing impaired children**

Aspecte psihologice ale implicării parentale în viața școlară a copiilor cu deficiențe de auz

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# CHAPTER I: Literature review

## I.1 Special Education in Israel

### I.1.1 Special Education – definitions and concepts

Different definitions can be found for special education in the literature. In the Special Education Israeli Law (1988) special education is defined as "…*methodical teaching, studying and therapy which are adapted according hereto to a special needs child, including physiotherapy treatments, speech therapy, occupational therapy and therapies in additional professional fields, which shall be determined and including additional services, all according to the special needs child's needs*."

The super goal of special education is to enable any student with disabilities to fully fulfill his potential so that as an adult he may live a socially and economically independent life (Avissar, 2010, p.22).

The Special Education Law (1988) was one of the first laws that were designed to improve the state of children with disabilities in Israel. Among the orders of this law, one can find orders stating the rights of children with special needs to be treated equally in education and by society. Additional laws were set following this law, which assimilated the need for equality for people with special needs. In 2002, an amendment was added to the Special Education Law in Israel, which was designed to legislate by law the integration of a special needs child in regular education. This law resulted in the publication of guidelines regarding everything concerning the preparation of personal curriculums for children with special needs.

### I.1.3 Hearing impairment – concepts and definitions

Hearing impairment is divided, as aforementioned, into deafness and hardness of hearing. Dromi, Ringwald-Frimerman (1996) state that deafness is derived from damage to the ability to hear sounds. The characteristics of hearing impairment as well as the severity of the impairment differs from one person to the another and it is affected by the person's abilities of power and reception of hearing. Wiesel & Zandberg (2002) add that hearing impairment could be a result of damage to the hearing nerve or the brain centers, which are in charge of receiving auditory information and processing it.

Besides these two categories, special attention is given to the **cochlear implant**. Hearing impairment may influence language acquisition, quality of communication, realization of learning potential, development of social skills and abilities, emotional development and self-confidence, identity development and many other abilities related to quality of life, individual autonomy and social functioning (Bronski & Zaichick, 2001).

Today there is an extensive support system for the hearing impaired children (HIC). This system was created within the school as well as outside of it. At the schools, we can see pedagogical assistants, solider-teachers, speech therapists, occupational therapists, counselors, interpreters etc. There are SHEMA centers (Centers for the education and rehabilitation of HIC), which provide support for the children and their families in the afternoon. The centers provide counseling services, para-medical therapies, social and psychological services.

### I.1.4. The cochlear implant (CI)

Several studies (e.g. Mair & Sandler, 2004) discuss the cochlear implant within the context of family’s coping process with the disability of the hearing impaired child. On one hand, one can say that in the situation of a family with hearing impaired child, the habituation with the disability of the child might occur. The technical innovation (i.e. cochlear implant) brought by the modern medicine might impact the already created perception of disability and might be associated with stress regarding the new challenges it comes with the surgery and the functioning of the child post-surgery.

## I.2 The family systems theory

The Family Systems Theory relates to relationships within the family and between the family and how they affect the individual in the family (Bowen, 1978). The regularity of the family system is based on family connections, how it functions and how it communicates (*ibid*). The family system is derived from Bronfenbrenner's ecological system, which reflects a person's growth (Bowen, 1978). The term Family Centered (practice and/or care) has been in use since the 1950's so as to demonstrate the services provided for parents who have children. In fact, Family Centered is recognized as family support programs and is an essential and important component of family support (Allen, Petr & Gore, 1996). Cabus & Aries (2016) argue in their paper that school and home activities are mostly performed by the mothers, but the participation of both parents is beneficial for the communication with the child and leads to an improvement of the language abilities of the latter. Researchers divide parental involvement in the school of their children into two categories – one for involvement at home with homework given at school and the second one is the involvement with school system (communication with staff, decision regarding the placement in the special schools etc.). These categories regard not only assistances with homework, but also listening to the child, encouraging and helping (Taylor, 2016).

### I.2.1 Parental involvement in school – Concepts, definitions and models

The general term Parental Involvement (PI) encompasses many varied activities performed by parents with their children. Currently, there is no precise and unique definition of the term and it depends on whom we ask regarding this term: parents, children, teachers or principals (Fischer, 2010). Lavanda (2009) argues that the professional literature lacks any clear definition of the term Parental Involvement as it regards a number of activities, which might change in frequency and which are expressed in various levels (social, educational, every day life etc.).

Friedman (2010) argues that there are three types of positions regarding parental involvement in school:

1. **The closed door position**: Anything that happens within school premises is considered harmful to the school and the teacher is able to handle anything regarding the child.
2. **The open door position** (on the opposite side to the closed door). This position keeps close contact between parents and school staff.
3. **The balance theory** (the safe educational position): This theory maintains reciprocity between parents and the educational staff but with this position the school maintains a safe distance from parents, so that educational tasks are not harmed.

### I.2.2 **Involvement of parents of children with special needs in formal education**

The educational system is part of the parents' perception and coping with their child's inability. Sometimes, parents decide to sign up their children to the regular educational system, which increases their sense of everything being normal with their child. As a result, the educational system, unwittingly takes on the role of the "news breaker", when the kindergarten or school teacher sees the child's difficulties and reveals them to his/her parents (Noy, 2014). When the parents agree to transfer their child to the special education system, it is viewed in their eyes as an irrevocable step and hence their sense of losing control over the child's fate. In addition, parents’ feelings regarding their children not attending the regular educational system might be a cause of shame (stigma) to them and they fear their environment's reaction. The parents often tend to see themselves and ignore the child's true needs (Noy, 2014).

**I.2.3. Fathers involvement in the school life of their children**

Studies show that mothers are more involved in the child's educational system than the fathers (Hodtov, 2001; Bernham, 2010). A study conducted by Wegner (2015) on the ultra-orthodox Jewish in Israel, shows that since the work market in the field of education is saturated, wives of "yeshiva" students choose other jobs, which do not coincide with the children's schedules, so the yeshiva student fathers are required to take over the main role of the home. Fathers are required to be fully involved in caring for the children and the home. This perception is new to the ultra-orthodox world in Israel and it goes against the views of the ultra-orthodox world according to which the mother is in charge of raising the children. Bernham (2010) further adds that there are no specific studies that prove what part of the involvement has an impact on the self-efficacy dimension.

## I.3 Teachers' and principals' perspectives of parental involvement in school

There are scholars who argue that parents are interested in taking an active part in their child's school life (Wolf, 2001; Wathum-Ocama & Rose, 2002). According to Fischer (2010), teachers often fear the presence of parents, which might affect their ability to function properly in class, as they fear management will not back them up; they fear dismissal and view parental involvement as something leading to the children's negative behavior. In fact, the feeling is that the parents view them as service providers (Fischer, 2010).

**I.4 Evolutionary psychology – perspective on parental involvement**

Evolutionary Psychology is defined as the field of psychology, which is based on biological evolution knowledge (Cosmides & Tooby, 1997; Zelinger, 2009;). Buss (2004), describe evolutionary psychology's possible contribution to all fields with which psychology itself deals, by providing several tools linking psychology with other life sciences.

## **I.5 Religion** and special needs children

The religious family has undergone changes in its traditional makeup. In the past the mother was the main caretaker for the children, but these days, as mothers go out to work, fathers have taken childrearing upon themselves in combination with their studies at the *Kolel* (religious institution for advanced studies) (Wegner, 2015).

The birth of a special needs child can bring with it stress, pressure, crises, and sadness to the family (Lazer, 1995). However, it can be seen that families are united and made stronger after caring for a special needs child (*ibid*).

In addition, the belief in God and the use of prayers were an important support resource. The faith that God had given the child to a certain family by choice, knowing that that family will be able to withstand the burden of raising such a child (Lazer, 1995; Kendal, 2005; Zimmerman, 2011). In regards with involvement, in the religious sector too, despite the changes it is, the mother is a dominant figure in childrearing and this because girls / women are raised with the belief that childbirth and rearing is the main goal of married life (Kendal, 2005). In recent years, when a special needs child is born, the ultra-orthodox sector of Jewish society in Israel tends to accept the situation, in accordance to the advice of the rabbis (Zimmerman, 2011). Moreover, society is obligated to care for the welfare of the child and his/her family out of consideration of his problem (Kendal, 2005). There is a sense of responsibility to the child’s family, and therefore the community has opened places of education and support for these children and their families, so that they would not use secular institutions (Zimmerman, 2011).

In summary, it is apparent that in recent years there has been a theoretical and actual change in Israel among the religious movement, which has made the help of both the special needs children themselves and their families much more accessible and accepted, so that the parents no longer hesitate to ask for support and help from their nuclear family and community.

# HAPTER II: Research design and methodology

This chapter presents the goals of the study, the research questions, hypotheses and methodology and the researcher considerations for choosing this research design and methodology.

## II.1 Research goals

The goal of this study is to complete the gap in knowledge concerning families of children with hearing impairment in Israel, and to examine how parents are involved in the education of their children at school and how they are currently coping with and have coped with the impairment when they had first learnt about the condition. This study focuses on coping and the involvement of parents in the school of their hearing impaired children. In addition, this study aims to examine how Israeli teachers relate to parental involvement and how they view parental involvement and particularly paternal involvement in relation to their professional duties and to the school system.

## II.2 Research questions:

The research questions are:

1. Which are the relations between the parent's background variables (gender, number of hearing impaired children in the family, and religious affinity) and several psychological variables, such as: parental authority towards children, coping with a family crisis, and involvement in school?
2. How do Israeli parents (fathers and mothers) of hearing-impaired children (HIC) perceive the challenges and coping with of the diagnosis and raising of a HIC?
3. How Israeli parents (fathers and mothers) of HIC are involved in the school life of their children?
4. What are the Israeli teachers and experts of HIC’s perceptions of parental involvement in the school?

To answer these questions, the research combined the quantitative and qualitative methods: questionnaires and in –depth interviews.

## II.3 Research population

### II.3.1. Quantitative research population

At first a pilot study was ran with three Israeli mothers and three fathers of HIC, so that the distributed questionnaires could be examined for the level of comprehension The researcher approached 50 Israeli parents of HIC, i.e. 25 fathers and 25 mothers and requested them to participate in the study. A number of 42 parents -25 mothers and 17 fathers (84%, response rate) expressed their written consent to participate and answer the research questionnaires.

The researcher had conducted the completion of the questionnaires with both fathers and mothers, so that the gender aspect of their coping methods could be examined and see if there is a gender-based difference in how the hearing impairment is accepted and handled.

## II.4 Qualitative study population

### II.4.1 The parents population

For the in-depth interviews, ten Israeli mothers and ten fathers were willing to participate in the study. It is important to note that the interviews did not include fathers and mothers of the same family. In addition, six teachers of hearing-impaired children from different schools in the northern district of Israel were interviewed. Three specialists, who had worked with the hearing-impaired in the past and who are currently teachers in various Israeli colleges and universities, were interviewed for the study.

### II.4.2 Teacher population

Six teachers, who teach several disciplines to hearing-impaired children, were selected from a number of schools in the north of Israel. Each one of the teachers had a different seniority within the educational system.

**Table 1.** Background information of the participating Israeli teachers in the qualitative study.

| **Initial of first name** | **Years of teaching experience** | **Academic degree** | **Position** |
| --- | --- | --- | --- |
| **N** | 30 | MA | Homeroom teacher and hearing impairment coordinator |
| **Y** | 25 | BA | Homeroom teacher |
| **N** | 15 | BA | Homeroom teacher |
| **D** | 10 | MA | Homeroom teacher |
| **M** | 7 | BA | Homeroom teacher and hearing impairment coordinator |
| **S** | 4 | BA | Homeroom teacher |

### II.4.3 Experts population

Table 2 presents the demographic details about the three Israeli experts in Special Education, who had worked with the HIC in the past and who are currently teachers in various Israeli colleges and universities.

**Table 2.** Special educationexperts’ demographic information (participants in the qualitative study).

| **Initial of first name** | **Gender** | **Age (years)** | **Years of teaching experience in higher education** | **Degree** |
| --- | --- | --- | --- | --- |
| **S** | Female | 43 | 6 | PhD |
| **Y** | Female | 56 | 25 | PhD |
| **I** | Female | 47 | 3 | PhD |

## II.5 Mixed method approach

### II.5.1 Integrating methodologies

In order to learn about the parents' coping and the parental involvement in school, as well as to get a comprehensive picture of the subject, two research methods were integrated: the qualitative method and the quantitative method. The quantitative method consisted in collecting data by using questionnaires filled out by 42 Israeli parents. The qualitative method used in-depth interviews with a representative group of parents: 10 mothers and 10 fathers.

The mixed method is defined as the collection and/or analysis of data simultaneously or continuously using qualitative and quantitative methods in one study (Creswell *et al.*, 2003; Hanson et al, 2005). The mixed method is used by other scholars (Frels & Onwuegbuzie, 2013; Bradt *et al*, 2013) and it is considered to reinforce the study's internal and external validity.

### II.5.2 Qualitative research

The qualitative research is open and depends on materials of the study itself and the researcher's style (Alpert, 2001; Gavton, 2001). The qualitative text includes extensive verbal and descriptive text. This research used in-depth interviews.

**Interviews** – Tsabar Ben Yehoshua (1991) argues that in the interview the researcher encourages the subject to speak while connecting with him and creating a sense of trust. A qualitative research is also used when the study's population is too small and cannot be synthetically sampled (Tsabar Ben Yehoshua, 1990; Shkedi, 2003). In this paper, ten mothers, ten fathers and six teachers were interviewed.

### II.5.3 Quantitative research

Tsabar Ben Yehoshua (1991) describes the differences between the qualitative and the quantitative method in a table. The quantitative research examines theories and correlations between variables. The research system is structured and detailed and the variables therein can be measured. In the case of quantitative method, usually the sample is big and defines control groups. In the quantitative research, in contrast with the qualitative research, the categories are predefined and the data collected fit the categories (Shakedi, 2003).

## II.6 Research design

Table 3 presents the study stages, the purpose of each stage, the research tools and the study population of each stage.

**Table 3.** Research design and instruments.

| **Research stages** | **Aim** | **Tools** | **Research population** |
| --- | --- | --- | --- |
| Pilot study | Examine if the questions in the questionnaire were understood by the parents participating in the study. | Questionnaires | 3 mothers  3 fathers |
| Quantitative research | Explore parents' coping and their involvement with HIC. | Questionnaires | 25 mothers  17 fathers |
| Qualitative research-parents | Examine parents' challenges and coping, and their involvement in the education of their children at school. | Semi-structured in-depth interviews | 10 mothers  10 fathers |
| Qualitative research-teachers | Examine the perceptions of teachers of hearing-impaired children regarding parental involvement in their classes. | Semi structured in-depth interviews | 6 teachers of hearing-impaired children |
| Qualitative research-experts | Explore the experts' explanations in light of questionnaires' results. | Semi structured in-depth interviews | 3 hearing-impairment experts in Israeli academic institutions |

## II.7 Research tools

In the study, both the qualitative research (interviews) and the quantitative research (questionnaires) tools were used. There are advantages in the combination of both research methods; the qualitative analysis of the interviews provides us with an impression as to the wide range of emotions, attributes and impressions, which are brought up by the interviewees and define the categories. In the quantitative research, standardized questionnaires were used in order to get clearer and more precise results, in order to be able to generalize them.

### II.7.1 The standardized questionnaires

The research tools of the present study include three different questionnaires, which each assessed specific variables regarding the parents of HIC.

1. **Parents involvement** (Friedman & Fisher, 2003)
2. **Parental Authority Questionnaire** (Buri, 1981)
3. **Coping Resources - The Family Crisis Oriented Personal Evaluation Scales (**McCubin-Olson & Larsen, 1981)

All questionnaires were tested for reliability as internal consistency using Cronbach's alpha. Test findings are presented in table 1 of the Quantitative Findings chapter.

**Parents involvement Questionnaire (Friedman & Fischer, 2003) - questionnaire structure**

The average scale includes the 73 items, which are divided into four sub-scales for measurement of the parents' involvement phenomena. The answers were on Likert scale from 1 to 5, where 1 mean don't agree at all and 5 means definitely agree. The degree to which parents identify with the school which their child attends to – the first being the parents identify with the importance of education as means for social mobility and the children's success; and the second one the parents identify with the importance and value of school, items 1 – 17 (Friedman & Fischer, 2003). This questionnaire was translated into English from Hebrew by a professional translator.

**2. Parental Authority Questionnaire (Buri, 1981) - questionnaire structure**

This questionnaire includes 30 items, which need to be answered on a 5-points Likert scale from 1 to 5., where 1 is "I completely disagree", and 5 is "I very much agree". The questionnaire was developed by Baumrind (1971) in order to measure and examine both mothers and fathers in regards with their authority over their child (boys or girls). Each one of the items is derived of the phenomenological notes of parental authority towards their child. This questionnaire has great potential as a valuable tool in the examination of parental permissiveness and authority. The questionnaire was translated into Hebrew by a certified translator and the translated version was checked by an expert in the field of Special Education.

The total scale includes 30 items, which are divided into 3 parts: scale A, scale B and scale C: Scale A includes 10 authoritarian items, scale B includes 10 authoritative items and scale C includes 10 permissive items.

**3. Coping Resources -The Family Crisis Oriented Personal Evaluation**

**Scales (McCubin-Olson & Larsen, 1981) - questionnaire structure**

The Family Crises Coping Methods questionnaire/ F-COPES was developed by McCubin-Olson & Larsen to examine the best way to solve problems in regards with behavior and attitude, which said families adopt in reacting to problems or difficulties.

The overall reliability of the F-COPES using Cronbach’s Alpha has been estimated as ranging from .77-.86. Individual subscales had alpha’s ranging from .63- .83. Overall test-retest reliability is .81 with individual scales ranging from .61-.95. (McCubin-Olson & Larsen, 1981). The questionnaire entails 70 items, which are divided into a number of feedback types. Some are answered using a 5-points Likert scale of 1 to 5, and the rest are answered using: yes, no, and I do not know. The three questionnaires were individually distributed to both mothers and fathers. In some of the interviews, the fathers were unwilling to complete the questionnaires, and when asked why, they replied that they had found them too difficult. Therefore, 25 Israeli mothers filled out the questionnaires versus only seventeen fathers who agreed to complete them. As previously noted, a pilot phase was carried out with three mothers and three fathers, during which parents noted that the questionnaires were long and took too much time to complete. Despite this difficulty, it was decided to continue using these questionnaires, believing they gave a much wider picture of parents' involvement in their hearing impaired child's class, out of all the questionnaires put together.

### II.7.2 In- depth semi-structures interviews

Three types of in-depth interviews were conducted in the study: with Israeli parents, teachers and special education experts. The questions in these interviews were composed by the researcher according to the research goals and questions, in relation to the literature in the field.

### II.7.3 Structure of the in-depth interviews with the parents

The interview includes five initial guiding questions, which were predetermined and are a basis for the interview. All questions were based on the study's goals and the literature review regarding parents' coping and involvement. Interview lets the researcher receive multiple and varied information regarding how they perceive their involvement in the classroom, their opinions, feelings, and emotions. All interviews were carried out at the place of the interviewee's choice, which made them feel comfortable to have such a personal meeting. The interviews were recorded by tape recorder and later on transcribed.

## II.8 Data analysis methods

*Inferential statistics*

The findings of the standardized questionnaires (quantitative analysis) were analyzed using the following statistical tests, after checking for the normality of the data distribution:

(1) Independent t – test. The purpose of this test is to investigate the differences between the two groups. In the present study, the researcher used this test to check the differences between genders in regards to several psychological variables of the parents, such as: parental authority, level of receiving assistance and support from friends / family, the reciprocal relationships / connections and involvement with school and each one of the genders.

(2) Spearman's correlation coefficient was used as a measure to test the correlation between sets of two variables investigated in the study. In this study the correlation between level of self-perceived religiosity and parental authority was investigated, as well as between religiosity and level of parental contact with school, coping with crises in the family, support from family and friends, and interaction with school.

The in-depth interviews (qualitative data) were analyzed by themes and categories.

## II.9 Ethical considerations

The interviewee must give his approval to be interviewed, so it is important to have him sign a written declaration of his informed consent. In most cases this practice is grounded on the laws of the country (Dushnik & Tzabar-Ben Yehoshua, 2001).

Anonymity was promised (on a written consent) to all research participants as well as discretion, from the stage of questionnaire completion or interviews to the stage of the publication of the research findings. The researcher engaged not to provide any personal information about the parents or the teachers or the experts who had taken part in the research. Pseudonyms or initials were used, so as to avoid identification of the participants.

# CHAPTER III: Research findings

The first part of this chapter presents the demographic and the quantitative data received from the questionnaires investigating several aspects of education-related parental involvement of Israeli parents of HIC. The findings are presented at descriptive and inferential levels.

The second part of the chapter presents the qualitative data received from the interviews of 20 Israeli parents of HIC, 6 teachers of HIC and 3 hearing-impairment experts.

The findings presented here reflect the major objective of the doctoral study, which was to examine the parental involvement of Israeli parents of hearing-impaired children in the formal education (school) of their children, as well as their coping resources related to the parental involvement and with the disability condition of their children. The findings are presented according to the research questions.

This research used three standardized questionnaires, which were given to Israeli fathers and mothers of hearing impaired children. The questionnaires examined the following three aspects: (1) Parental Involvement [questionnaires concerning parents’ involvement by Friedman & Fischer (1990), (2) Parenting Styles – Parental Authority Questionnaire by Buri (1981), (3) Coping Resources – the family crisis oriented personal evaluation scales by McCubin–Olson & Larsen (1981)]. All the questionnaires were either available in Hebrew language or they were translated from English language to Hebrew (following standard translation method) for the purpose of this research. Agreement of usage the instruments for research data collection were obtained from the authors of the questionnaires.

The data collected by using the questionnaires were statistically analyzed in order to test the hypotheses of the study and to investigate the statistical significance of the results. Demographic variables were also analyzed, as well as the psychometric properties of the questionnaires.

This study examined in an exploratory manner the differences between Israeli fathers and mothers of children with disabilities (i.e. hearing impairment), specifically how parents cope with their child's hearing impairment and how they are involved with their child’s education in school. In addition to the questions mentioned above, parents – teacher interactions were examined, too, in regards with parental involvement in school.

## III. 1. Descriptive statistics on the sample related to demographic variables (gender, age, and level of religiousness, number of children with and without disabilities)

***Sampling method*:**

The sampling was done by convenience, meaning that the participating parents were those parents whose children attended the primary school where the researcher had worked as teacher of HIC. This school is a regional one, so the parents were from various places in the North of Israel.

***Gender and age distribution of the sample*:**

The sample included 42 Israeli parents (25 women - 58% and 17 men – 42%), with age distribution between 32-44 for women (mean = 39.16, SD 4.384) and for men 37-52 (mean = 40.944, SD 4.263).

***Self-reported level of religiousness of the sample***

The sample included a question regarding the level of religious belief the subjects hold (i.e. self-reported level of religiousness). The responses were collected by using a Likert 5-points scale, where 1 means not at all (secular) and 5 means highly religious. 25% of all subjects answered that they were completely secular, 12% claimed to be highly religious, 5% of all subjects did not answer this question. The remaining subjects, between 2 and 4, who are 58% of the sample, answered that they are somewhere on the scale between secular and highly religious.

***Distribution of Hearing-Impaired Children (HIC) in the family***

The number of HIC in the families of the participants to this study was as it follows: 33% of the Israeli parents in the sample had one HIC in the family versus 67% of the parents, who had more than one HIC in the family (i.e. 2-3 HIC's in the family).

***Distribution of total number of children in the families***

The following figure presents the distribution of the different kinds of families based on the number of children in the family (typically developed children and children with hearing impairment): 2% are parents who have a one child family, 32% are parents who have a two children family, 33% are parents who have a five children family, 5% are parents who have an eight children family, and 2% of all parents did not answer that question. The majority of the parents included in our sample had two children in the family (one typically developed and one with hearing impairment or both with hearing impairments).

## III. 2. Psychometric properties of the questionnaires used in the research

For all the standardized questionnaires used in the research, several psychometric analyses were done, as it follows.

### **III.2.1** Psychometric properties of the Parental Authority Questionnaire

The Parental Authority Questionnaire (Buri, 1981) consists in three scales. Scale A presents the authoritarian items, scale B presents the authoritative items and scale C presents permissive items. Each scale has 10 items (see Annex 3 for the complete structure of the questionnaire). In the literature, this questionnaire has a reported Alpha Cronbach value of .60, .70 and .66 for permissiveness, authoritarianism and authoritativeness (Buri, 1991). Table 4 presents the results on the psychometric values calculated in our sample (alpha Cronbach coefficients), which are similar to those reported in the literature (i.e. good to excellent reliability values): Scale A = 0.63, Scale, scale B = 0.82, Scale C = 0.88.

**Table 4.** Psychometric properties of the Parental Authority Questionnaire

|  |  | | **Min.** | **Max.** | **Avg.** | **SD** |
| --- | --- | --- | --- | --- | --- | --- |
| Number of reversed items | Cronbach's α |  |  |  |  | |
| Parental authority Scale A | 38 | 0.63 | 5 | 37 | 25.87 | 7.28 | |
| Parental authority Scale B | 37 | 0.82 | 5 | 44 | 30.73 | 7.83 | |
| Parental authority Scale C | 38 | 0.88 | 5 | 44 | 32.16 | 9.83 | |

**III.2.2** Psychometric properties of the questionnaire coping resources (Family Crisis Oriented Personal Evaluation Scale. F-COPES, McCubin-Olson & Larsen, 1981).

The following three subscales present Coping Resources (Family Crisis Oriented Personal Evaluation Scale) by McCubin-Olson & Larsen (1981). The questionnaire assesses the optimal way in which the family can solve problems. The reliability of the F-COPES when using Cronbach’s Alpha in the literature (McCubin-Olson & Larsen (1981) has been predicted to be between .77-.86. Individual subscales had Cronbach's Alpha ranging between .63- .83. Overall test-retest reliability is .81 with individual scales ranging between .61-.95 (McCubin-Olson & Larsen (1981). In our sample, the values of Cronbach’s alpha indicated excellent reliability for Crises in the family=0.86, Perceived need for family support=0.84, Perceived social support-friends=0.59 (Table 5).

**Table 5**. Psychometric properties of the questionnaire coping resources (Family Crisis Oriented Personal Evaluation Scale)**.**

|  |  | |  | **Min.** | **Max.** | **Avg.** | **SD** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No. of reversed Items |  | Cronbach's α |
| Crises in the family | 40 | 26, 28 | 0.86 | 2.03 | 4.47 | 3.15 | 0.6 |
| Perceived need for family support | 39 | 3, 4, 16, 19, 20 | 0.84 | 1.15 | 2.3 | 1.63 | 0.36 |
| Perceived social support-friends | 39 | 2, 6, 7, 18, 20 | 0.59 | 1.2 | 2.3 | 1.61 | 0.29 |

III.2.3. Psychometric properties of the questionnaire (Friedman and Fischer***,*** 1990)

The last three items from the Table 6, Interactions, Relationships and Involvement, are from the questionnaire developed by Friedman & Fischer (1990). These items describe the parents' involvement in their children lives at school. In the literature, this questionnaire has a reported Alpha Cronbach value of internal consistency of the items' scores was 0.89 for the empathy scale and 0.88 for the notes scale (Friedman & Fischer, 1990). In our sample, the Alpha Cronbach values were 0.64 for Interactions, 0.92 for Relationships, and 0.77 for Involvement.

**Table 6.** Reliability coefficients of the "Parents Involvement Questionnaire” developed by Friedman & Fischer (1990).

|  |  | | | | |  |  | **Max.** | **Av** | **SD** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of reversed items** | |  | | **Cronbach's α** | |  |
| Interactions | 39 |  | | 0.64 | | | 3.1 | 5.54 | 4.03 | 0.5 |
| Relationships | 39 |  | | 0.92 | | | 1.7 | 4.65 | 2.75 | 0.66 |
| Involvement | 39 |  | | 0.77 | | | 1 | 4 | 2.44 | 0.83 |

To summarize the psychometric analysis of all the three questionnaires utilized in our research, the reliability coefficients (Cronbach's alpha) of most of the instruments used for assessing the research variables exceeded the value 0.7. These coefficients indicate a good convergence of the items into a representation of the concept assessed by each instrument.

## III.3 Findings relating to research question 1

The first research question was the following:

**Which are the relations between the parent's background variables (gender, number of HIC in the family, and religious affinity) and the parental authority, coping with a family crisis, and involvement in the educational institution.**

The variables parental authority, coping with a family crisis and parental involvement in the educational institution were assessed using the standardized questionnaires described in section 2.5 of the Methodology Chapter

### III.3.1 Gender-based comparative analysis (parents of HIC)

A comparative analysis between the Israeli mothers and fathers included in our sample was performed in relation to the investigated variables: parental authority, coping resources and parental involvement.

#### Gender-based comparative analysis (Israeli mothers and fathers of HIC) in relation to the Parental Authority variable

In order to analyze the two categories of parents (mothers and fathers) in a comparative manner, an independent t-test was performed (Table 7), after checking for the normal distribution of the data. The sum of the answers was calculated for each test and then the sums of each group were calculated (for this matter, mothers and fathers are different groups).

**Table 7.**Differences between Israeli mothers and fathers of HIC regarding the variable "Parental Authority" (independent t-test).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Fathers** | | | | **Mothers** | | | | **Statistical**  **significance** |
|  | **N** | **Range** | **Avg.** | **SD** | **N** | **Range** | **Avg.** | **SD** |  |
| Parental authority | 14 | 10-33 | 25.79 | 6.83 | 23 | 5-37 | 25.65 | 7.73 | **t (35) =.05,** |
| Scale A- Authoritarian |  |  |  |  | **p=.96** |
| Parental authority | 13 | 16-42 | 31.54 | 6.92 | 23 | 5-44 | 30.61 | 8.43 | **t (34) =.34,** |
| Scale B- Authoritative |  |  |  |  | **p=.74** |
| Parental authority | 14 | 5-42 | 31.36 | 10.01 | 23 | 5-44 | 32.48 | 10.11 | **t (27.81) =.33,** |
| Scale C – Permissive |  |  |  |  | **p=.75** |

The results (Table 7) indicate no significant difference (p> 0.05) between Israeli mothers and fathers in the dimensions of parental authority .Hence, fathers and mothers appear to have similar values on the 3 scales of parental authority. In light of the difference between the two opposite authority styles (A and C), it is apparent that most Israeli parents included in the sample tend to be more liberal and attentive to their hearing-impaired children. There are several conclusions to be drawn from these findings, as to be presented in the Discussion Chapter of this thesis.

#### Gender-based comparative analysis in relation to the Coping with Crisis in the Family

Coping with crisis was assessed with a standardized questionnaire ((Mccubbin-Olson & Larsen, 1981). The answers to 70 items were given on a 5-points Likert scale and the rest of the items of the questionnaire were answered using: yes, no, and I do not know. For the comparative analysis of the two categories of parents (mothers and fathers), an independent t-test was performed. In order to carry out the parametric tests, the normal distribution of the variables was examined and it was found to be a normal distribution.

Table 8 presents the differences and similarities between the Israeli parents (mothers and fathers) in relation to the "Coping with Crises in the Family" variable.

**Table *8*.** Differences between Israeli fathers and mothers of HIC in relation to the variable "Crises in our family" (independent t-test).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Men** | | | | **Women** | | | | **Statistical significance** |
|  | **N** | **Range** | **Avg.** | **SD** | **N** | **Range** | **Avg.** | **SD** |  |
| Crises in our family | 16 | 3.93-2.10 | 3.1 | 0.47 | 23 | 4.47-2.03 | 3.35 | 0.61 | **t (37) =1.37,** |
|  |  |  |  |  |  |  |  |  | **p=.14** |

No statistically significant difference [t (37) = 1.37, p> 0.05] was found between fathers (M = 3.10, SD = 0.47) and mothers (M = 3.35, SD = 0.61) of hearing impaired children in relation to the variable "Coping with Crises in our family"

The two categories of Israeli parents of HIC had similar values regarding the coping resources with a crisis in the family, i.e. our data show that the Israeli mothers and fathers who cope with problems and crises in their family basically might react the same way to the crisis and therefore there is no difference between them in their response. In other words, the Israeli parents in our sample might share difficulties related to the disability condition (and other family-related crisis situations) in a similar way and look for encouragement in the same way.

#### Gender-based comparative analysis in relation to the need for family support

The need for family support was assessed by a questionnaire used, in which the answers to the items were given by yes, no, and I do not know. Table 9 presents the differences between Israeli mothers and fathers in their need for support from the family in regard to their HIC. Independent t-test was used to perform the comparative analysis, due to the normal distribution of the data. The data on the variable Perceived need for family support had a normal distribution.

**Table 9.** Comparison between Israeli parents (mothers and fathers) of HIC relating to the need for family support variable (independent t-test).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Fathers** | | | |  | **Mothers** | | |  |
|  | **N** | **Range** | **Avg.** | **SD** | **N** | **Avg.** | **Range** | **SD** | **Statistical significance** |
| Perceived need for family support | 16 | 2.30-1.15 | 30.94 | 8.42 | 23 | 28.91 | 2.25-1.20 | 8.12 | **t (37) =.75,** |
|  |  |  |  |  |  |  |  |  | **p=.79** |

A review of Table 9 indicates no significant difference [t (37) =. 75, p> 0.05] between fathers (M = 30.94, SD = 8.42) and mothers (M = 28.91, SD = 8.12) in the variable "Perceived social support – family". The items in this questionnaire refer to emotions and experiences these parents have in their relationships with their families. According to the data collected, there is no difference between the Israeli mothers and fathers who participated in this research regarding their subjective perception of receiving help / support / collaboration from the family. Hence, both mothers and fathers had a high level of agreement with the fact that they do not need support from their family in regards to their HIC.

#### Gender based-comparative analysis in relation to their expressed need for friends' support

The variable “need for friends’ support” was assessed with a questionnaire with 20 items, in which the answers were offered based on: yes, no and don't know. The comparative analysis between the Israeli mothers and fathers was performed by using a t-test for independent samples, due to the normal distribution of the data.

**Table 10.** Comparison in "Perceived social support-friends between Israeli fathers and mothers (independent t-test).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Men** | | | | **Women** | | | | **Statistical significance** |
|  | **N** | **Range** | **Avg.** | **SD** | **N** | **Range** | **Avg.** | **SD** |  |
| Perceived social support-friends | 16 | 2.30-1.25 | 1.62 | 0.32 | 23 | 2.20-1.20 | 1.6 | 0.28 | **t (37) =.27,** |
|  |  |  |  |  |  |  |  |  | **p=.79** |

Table 10 indicates no significant difference [t (37) =. 27, p> 0.05] between fathers (M = 1.62, SD = 0.32) and mothers of hearing impaired children (M = 1.60, SD = 0.28) in relation to the variable "Perceived social support-friends ".The results show that on average, the Israeli parents included in the sample are not certain about the variable of support from friends, since the means is -1.62, which in the present scale is between "no" and "don't know".

#### Gender-based comparison in relation to Parental Involvement

The Parental Involvement variable has three dimensions, as it follows:

* Interaction – It refers to the interaction between parents and school.
* Connection - This refers to the quality of the relationship between the school and the parents, assessed using the Fisher-Friedman (2003) questionnaire.
* Involvement - This refers to the active participation of the parents in their child's educational system (Fisher-Friedman, 2003).

##### **Interactions between parents of HIC and school**

Parents-school interactions variable indicated the values of 4.01 average for the fathers and 4.05 for the mothers (the levels of agreement with each item were collected on a 5-points Likert scale).

Table 11 indicates the differences and similarities in the interactions between fathers and mothers with their HIC's academic institution. The comparative analysis was performed by using an independent t-test. In order to carry out parametric tests the normal distribution of the variables was examined and it was found that the distribution is normal***.***

**Table 11.** Comparative analysis between Israeli fathers and mothers in "Interactions parents with school" (independent t-test).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Men** | | | | **Women** | | | | **Statistical significance** |
|  | **N** | **Range** | **Avg.** | **SD** | **N** | **Range** | **Avg.** | **SD** |  |
| Interactions | 17 | 4.78-3.12 | 4.01 | 0.48 | 22 | 5.54-3.10 | 4.05 | 0.53 | **t (36.04) =.25,** |
|  |  |  |  |  |  |  |  |  | **p=.81** |

The results indicate that there is no statistical significant difference [t (36.04) =. 25, p> 0.05] between fathers (M = 4.01, SD = 0.48) and mothers (M = 4.05, SD = 0.53) in the variable "Interactions with school".

##### **Connection between parents and school**

Connection variable refers to the quality of relationship between the school and parents and it was assessed using the Fischer-Friedman (2003) questionnaire.

**Table 12.** Comparative analysis between Israeli fathers and mothers in "Parents connection with school" (independent t-test).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Fathers** | | | | **Mothers** | | | | **Statistical significance** |
| **N** | **Range** | **Avg.** | **SD** | **N** | **Range** | **Avg.** | **SD** |  |
| Parents and their connection with school | 17 | 3.48-1.70 | 2.36 | 0.47 | 22 | 4.65-2.04 | 3.05 | 0.64 | **t (37) =3.73\*\*\*** |
|  |  |  |  |  |  |  |  |  | **p=.001** |

\*\*\* p<.001

Table 12 indicates a significant difference [t (37) = 3.73, p <.001] between fathers (M = 2.36, SD = 0.47) and mothers (M = 3.05, SD = 0.64) in the variable "connection with school". The answers were on the same direction (both mothers and fathers had answers above the value 2 on the Likert scale of the agreement). Mothers had higher scores than fathers, which might indicate that mothers have much more and better communication with the school.

##### **Parental Involvement in School**

Parental involvement in school was assessed with a subscale of the questionnaire *"Parents and school: positions and level of involvement*" by Friedman & Fisher (1990), in which the answers to the items were given on four options: 1-never, 2- rarely, 3- often and 4 - very often. Comparative analysis between the parents (mothers and fathers) was performed with independent t-test. *(Normal distribution of the answers was assessed prior the analysis).*

**Table 13**.Comparative analysis in the level of Involvement in school between Israeli fathers and mothers (independent t-test).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Fathers** | | | | **Mothers** | | | **Significant difference** |
|  | **N** | **Range** | **Avg.** | **SD** | **N** | **Avg.** | **SD** |  |
| Involvement | 17 | 3.50-1.00 | 2 | 0.79 | 22 | 2.77 | 0.7 | **t (32.32) =3.18\*\*** |

\*\* p<.01

Significant difference was found between the fathers and the mothers in their involvement in school. Table 13 shows that the average values for involvement of mothers (M = 2.77, SD = 0.70) is higher than the average values for fathers (M = 2.00, SD = 0.79) significantly [t (32.32) = 3.18, P<.01]. Israeli mothers appear to be more involved in the school in which their child attends compared with the fathers.

### III.3.2. The relations between the number of Hearing-Impaired Children (HIC) and Parental Authority, Coping Resources and Parental Involvement in School

#### Analysis of Parental Authority relative to the number of HIC's in the family

Table 14 presents the differences in the variable parental authority between parents (mothers and fathers together) who have one hearing-impaired child versus those who have more than one hearing-impaired child.

**Table 14***.* Parental Authority differences between "parents of a single HIC and parents of multiple HICs" (independent t-test).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Multiple HICs** | | | **One HIC** | | | **Statistical significance** |
|  | **N** | **Avg.** | **SD** | **N** | **Avg.** | **SD** |  |
| Parental authority | 11 | 26 | 10.22 | 25 | 25.6 | 6.04 | **t (34) =.15,** |
| Scale A – authoritarian | **p=.88** |
| Parental authority | 10 | 27.4 | 10.99 | 25 | 32.48 | 6.01 | **t (11.22) =1.38,** |
| Scale B – authoritative | **p=.19** |
| Parental authority | 11 | 28.73 | 14.33 | 25 | 33.28 | 7.4 | **t (12.14) =1.00,** |
| Scale C – permissive | **p=.34** |

A review of Table 14 indicates no significant differences (p> 0.05) between the parents of a single HIC and between parents with more than one HIC.  Specifically, both categories of parents had similar scores on the Parental Authority Scale A – Authoritarian. Also, relatively similar scores on the Parental Authority Scale B- Authoritative were registered for parents of multiple HIC [M = 27.40, SD = 10.99) and parents of one HIC = 32.48 M, SD = 6.01, t (11.22) = 1.38] On Parental Authority Scale C - permissive on scale C, the score means for the parents who have multiple HICs was 28.73 and 33.28 for parents with one HIC, but it was not statistically significant.

#### Number of HIC and coping with crisis

"The Family Crisis Oriented Personal Evaluation" variable was assessed with a scale on which the answers were offered on a 1 to 5 Likert points, where 1 means strongly disagree and 5 means strongly agree (Mccubbin-Olson & Larsen (1981)

**Table 15*.*** Differences in the variable "Coping with a Crisis in Our Family" of parents of one HIC and parents of numerous HIC (independent t-test(.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Multiple HICs** | | | **One HIC** | | | **Statistical significance** |
|  | **N** | **Avg.** | **SD** | **N** | **Avg.** | **SD** |  |
| Coping with crisis in our family | 11 | 3.48 | 0.48 | 27 | 2.98 | 0.6 | **t (36) =2.48\*,** |
|  |  |  |  |  |  |  | **p=.02** |

\* p <.05

A review of Table 15 indicates that the average value for "Coping with a Crisis in our family" among parents of multiple HICs (M = 3.48, SD = 0.48) is significantly higher than the average value of parents of a single HIC (M = 2.98, SD = 0.60) significantly [t (36) = 2.48, p <.05. The table shows that when there are multiple HIC, parents cope better with their impairment than when there is one HIC. The reason for this may be as a result of their earlier knowledge of the hearing impairment.

#### Number of HIC and the Need for Family Support

The variable “*need for family support”* was assessed with the questionnaire "Coping Resources -The Family Crisis Oriented Personal EvaluationScales**"** (McCubin-Olson & Larsen, 1981).

**Table 16.** Differences in the variable of "Perceived need for family support" between parents of multiple HIC and parents of a single HIC (independent t-test).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A Number of HICs** | | | **One HIC** | | | **Statistical**  **significance** |
|  | **N** | **Avg.** | **SD** | **N** | **Avg.** | **SD** |  |
| Perceived need for family support | 11 | 1.68 | 0.34 | 27 | 1.61 | 0.37 | **t (36) =.55,** |
|  |  |  |  |  |  |  | **p=.59** |

A review of Table 16 indicates no significant difference [t (36) =. 55, p> 0.05], (p=0.59) between parents of a number of HIC's (M = 1.68, SD = 0.34) and parents of a single HIC (M = 1.61, SD = 0.37) in the variable "Perceived need for family support". The mean is lower than 2, meaning that the trend is that the parents agree that they do not need help from the family.

#### Number of HIC and the Need for the Support of Friends

The variable *need for the support of friends* was assessed with a questionnaire and the answers to the items were offered with yes, no and don't know answers. Table 17 presents the difference between parents of one hearing-impaired child and parents of several hearing-impaired children and how this difference is expressed the need for friends' support.

**Table 17.**Differences in the variable "need for friends - "between parents of a single HIC and the parents of a number of several HIC's" (independent t-test **(**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A Number of HICs** | | | **One HIC** | | | **Statistical significance** |
|  | **N** | **Avg.** | **SD** | **N** | **Avg.** | **SD** |  |
| Need for friends’ support | 11 | 1.68 | .24 | 27 | 1.58 | .32 | **t (36) =.92**  **P=.36** |

A review of table 17 indicates that there is no significant difference [t (36) =. 92, p> 0.05], (p= .36) between parents of a number of HIC's (M = 1.68, SD = 0.24) and parents of a single HIC (M = 1.58, SD = 0.32) in the variable "need for friends' support ".

#### Number of HIC and Interaction between School and Parents

Table 18 examines the difference in the interaction between school and parents of one HIC and parents of several HIC. The comparative analysis between mothers and fathers was done with independent t-test. A check for normality distribution of the data was done prior the t-test.

**Table 18.** Differences in Interactions between parents and school (parents with one HIC and parents of numerous HIC).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A Number of HICs** | | | **One HIC** | | | **Statistical**  **significance** |
|  | **N** | **Avg.** | **SD** | **N** | **Avg.** | **SD** |  |
| Interactions  with school | 11 | 4.27 | .62 | 27 | 3.94 | .43 | **t (36) =1.89**  **P=.07** |

A review of Table 18 indicates no significant difference [t (36) = 1.89, p> 0.05], (p=.07) between parents of a number of HIC's (M = 4.27, SD = 0.62) and parents of a single HIC (M = 3.94, SD = .43) in the variable "Interactions school-parents" (between the father / mother and the school teaching personnel).

In this table, the high values show that there is no difference in the interactions between parents and school faculty whether the family has one HIC or several HIC's.

#### Number of HIC and the Parents' Connections with the School

With respect to table 18, the variable was assessed with a standardized item, and the answers were represented on a 5-points Likert scale. Table 19 presents the comparative analysis in connections with the school between parents of one HIC and parents of numerous HIC

**Table 19.** Differences in connections with school (between parents of one HIC and parents of a number of numerous HICs (independent t-test).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Numerous HICs** | | | **One HIC** | | | **Statistical**  **significance** |
|  | **N** | **Avg.** | **SD** | **N** | **Avg.** | **SD** |  |
| Connections | 11 | 2.9 | .46 | 27 | 2.62 | .63 | **t (36) =1.36**  **p = 0.18** |

A review of Table 19 indicates no significant difference [t (36) = 1.36, p> 0.05] between parents of multiple hearing-impaired children (M = 2.90, SD = 0.46) and parents of a single HIC (M = 2.62, SD = 0.63) in the variable "Connections with school". Since the answers to the items were offered on a Likert scale is between 1 and 5, where 1 is completely disagree and 5 is totally agree, and the average is 2.9 for parents of several HICs, it can be concluded that both categories of parents moderately confirm that they are in constant contact with the school.

### III.3.2.1 Number of HIC and the parental involvement in school

Table 20 presents the level of involvement in school of parents of one hearing-impaired child versus parents of several HIC.

**Table 20***.* Differences in parental involvement in school between parents of one HIC and parents of numerous HICs (independent t-test).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Numerous HICs** | | | **One HIC** | | | **Statistical**  **significance** |
|  | **N** | **Avg.** | **SD** | **N** | **Avg.** | **SD** |  |
| Involvement | 11 | 2.36 | .84 | 27 | 2.41 | .8 | **t (36) =.15**  **p=.88** |

A review of Table 20 indicates no significant difference [t (36) =. 15, p> 0.05] between parents of several of HIC (M = 2.36, SD = 0.84) and parents of a single HIC, (M = 2.41, SD = 0.80) in the variable "Parental Involvement in school". The parental involvement scores were measured with a questionnaire "Parents involvement" by Friedman & Fisher, (1990), by using self-reporting on a Likert scale to collect the answers to the items (1 being a low level of involvement and 5 being a high level of involvement). The average score for parents with one HIC was 2.41±0.8 and the average score for parents with more than one HIC was 2.36±0.84.

### III.3.3. Identifying potential predictors of parental involvement in school for parents of HIC

A series of correlational and regression analyses were performed in order to identify potential predictors of parental involvement in the education of hearing impaired children in Israeli parents.

#### Correlation between Religious Affinity and Parental Authority in parents of HIC

A correlation analysis was performed between the level of religious affinity and parental authority - various parental authority styles, assessed with Parental Authority Questionnaire by Buri (1991). The scale for the variable "religious affinity" was an ordinal scale. This aspect necessitated using a non-parametric test to perform the correlational analysis, which was the Spearman rank correlation test.

**Table 21.**Association (Spearman's rank correlation coefficient) between Religious Affinity and Parental Authority towards children of Israeli parents of HIC.

|  |  |  |
| --- | --- | --- |
|  | **N** | **Religious affinity** |
| Parental authority | 35 | .42\*, p=.01 |
| Scale A |  |
| Parental authority | 36 | -.19, p=.28 |
| Scale B |  |  |
| Parental authority | 35 | .35\*, p=.35 |
| Scale C |  |  |

\* p<.05

A significant positive correlation was found between Parental Authority Scale A -which measures the authoritarian parenting style and C, which measures the permissive parenting style, and the variable Religious Affinity (self-reported level of religiousness) in Israeli parents of HIC. Meaning that if the family has a religious affinity than the parental authority practiced by it is either more assertive (Style A) or more permissive (Style C).

A negative and not significant correlation was found between Religious Affinity and Parental Authority Scale B which measures the authoritative parenting style. A review of Table 20 shows positive significant relationships between religious affinity and Scale A parental authority (ρ = .42, p <.05) and parental authority Scale C (ρ = .35, p <.05). A negative correlation and a weak intensity and insignificant correlation was found between Religiousness and Parental Authority scale B (R = -0.19, p> .05(

#### Correlation between Religious Affinity (self-declared level of religiousness) and Coping with Crisis in the Family

It was examined whether there is a correlation between self-perceived religiousness and coping with a crisis in the family of the Israeli parents of HIC included in our sample. The variable *Coping with Crisis* was assessed by a questionnaire (Family Crisis Oriented Personal Scales, F-COPES, by Mccubbin, Olson & Larsen (1981).

The analysis of the association between Religious affinity and coping with a crisis in the family revealed that there is a significant positive correlation with a medium intensity and a clear connection (p = .32, p <.05, N=38). This result indicates that the higher the level of self-perceived religiousness is, the less difficult it is to cope with family crises for parents with HIC in our sample.

#### Correlation between Religious Affinity and perceived need for Family Support

It was examined whether there is a correlation between the self-perceived level of religiousness and the wish to receive support from the family, which was assessed by F-COPES (Family Crisis Oriented Personal Scale, by Mccubbin, Olson & Larsen 1981). Spearman's rank correlation coefficient indicates a zero power and no significant connection between Religious Affinity (self-perceived level of religiousness) and "Perceived social support – family” (Ρ = -.05, p> .05, N=38).

The correlation found is negative, but not significant. This may imply that the higher the level of religious belief the lower the need for emotional support from the family is indicated by the parents of HIC in our sample.

#### Correlation between religious affinity and need for friends' Support

There was a high positive correlation, with powerful and significant medium affinity between self-perceived level of religiousness and the variable "Need for Friends' Support" (ρ=.36, p<.05, N=38) in the HIC parents in our sample, which means that the more there is religious affinity of parents of HICs, they are more willing to receive the assistance of their friends.

#### Correlation between religious affinity and interaction with school

The findings indicate a negative correlation, with a weak intensity, and insignificant correlation between religious affinity and "Interactions with school" – (ρ= -.14, p>.05, N=38). No significant correlation was found between two variables.

The higher the religious affinity was, the lower was the level of interaction with school. This finding leads to the conclusion that since school is not where the parents reside, the parents find it hard to come to school and create a more in-depth involvement with their children’s school. It should be noted that in the religious Jewish sector, the number of children per family is high, so the parents are not always available to come to all the schools. It can further be deduced that since there are not hearing-impaired schools in the religious sector (in the northern region of the State of Israel), the children are referred to secular schools, and this fact may also prevent parents from coming to school.

#### Correlation between Religious Affinity and connections with School

The correlation was tested by Spearman's rank correlation coefficient. The following finding indicates a weak and insignificant correlation between Religious Affinity and Connections with school" (Ρ = .05, p> .05, N=38).

#### Correlation between Religious Affinity and Parental Involvement in School

If was examined whether there is a correlation between religion and parents' involvement in their hearing-impaired children’s school*,* by using the Spearman's rank correlation test. The data indicate a negative correlation, a weak intensity and no statistical significance between Religious Affinity (self-perceived level of religiousness) and Parental Involvement (ρ= -.15, p>.05).

The findings show that the higher the religious affinity, the lower the parental involvement.  A possible explanation of this finding is presented in the Findings chapter.

#### Regression analyses for the identification of potential predictors of Parental Involvement in School of parents of HIC

Stepwise regression analyses were performed using the inserted variable "Parental Involvement in School" as the dependent variable. Parental Involvement was assessed with "Parents and school: positions and level of involvement. Parents self-reporting questionnaire" by Fischer-Friedman, (2003). Independent variables (forecasters) that were included are the following: gender respondent (0- women, one - man), education of the parent (0-academic one - none academic), education of the partner (0-academic one – none academic), Practice (0-employee, one - another), subject partner business (0-employee, one - another), additional children's parentage hearing impaired (0-no, 1 - yes), the number of children in the family (8-1), Religious Affinity (5-1).

The question then arose if it was possible to predict parental involvement in hearing-impaired children's school based on the variables taken into account in our investigation. The following table shows the predictors for parental involvement using the Stepwise regression tests method.

**Table 22.** Predictors of Parental Involvement in Israeli parents of HIC.

|  |  |
| --- | --- |
|  | **Β** |
| Gender of respondent (0 - women, 1 - men) | -.45\*\* |
| Parent's education (0 - academic one - none academic) | 0.05 |
| Partner's education (0 - academic one - none academic) | 0.01 |
| Practice under test (0 - employee, 1 - other) | 0.03 |
| Spouses occupation (0 - employee, 1 - other) | -0.01 |
| Other HIC (0 - no, 1 - yes) | -0.02 |
| Number of children in the family (8-1) | -0.13 |
| Religious affinity | -0.1 |

**\*\* p<.01**

A review of Table 22 reveals that the only significant predictor for "Parental Involvement" was the gender of the parents: fathers’ level of involvement was found to be significantly lower compared to mothers’ (beta = -0.45, p <0.01).

As evident from the table, there are parameters which came out as negative regarding the prediction of "Parental Involvement", i.e. parental education and the number of children in the family who are hearing impaired.

III.4**. Findings relating to research question 2 – Qualitative analysis**

The second research question was:

**How do Israeli parents (fathers and mothers) of hearing impaired children perceive the challenges and coping with the diagnosis and rising of their child?**

The findings presented in this section are derived of two types of in-depth interviews:

1. In-depth interviews conducted with ten Israeli mothers and ten fathers in order to examine how parents cope with the diagnosis and raising of a hearing-impaired child. In addition, the interviews tried to examine the parental involvement in the child's educational framework.
2. In-depth interviews with Israeli teachers and Special Education experts: six hearing impairment teachers and three hearing impairment specialists were interviewed in order to examine how teachers view parents' involvement in the educational framework.

The experts' interviews were designed to present the results found in the parents' in-depth interviews and ask them to refer to these findings as experts in that field.

### III.4.1. Findings regarding the in-depth interviews with the parents

The content analysis of the parents' interviews was based on six main topics.

1. **Challenges and coping**

Findings referring to challenges and coping with the situation of hearing impairment of the child/children

*A.1. Challenges*

In the interviews, the parents were asked about how they had responded to and coped with the discovery of their child's hearing impairment condition.

Most of the parents stated that they had felt that the child had difficulties and could not pinpoint what they were. They had done a sort of self-diagnostic test to their child so as to examine their concerns. All of which was done before the child was diagnosed the child had undergone. There were mothers who described the various ways in which they tested their children so as to thoroughly examine the source of the child's difficulty:

Interview analysis points to that both mothers and fathers express responding to the diagnosis as one would to a shock.

Crying appears to be part of the process for some of the parents, upon discovering that their child is hearing-impaired and that they must now learn and behave differently with their child than what they had expected. The answers indicate that there is an initial shock and it takes time until the parents recover from it.

***Summary:***

Each parent took coping with the impairment to a different place/ some cried, some decided to preserve the deaf identity, and some experiences a type of depression, but eventually it was a temporary stage and all of them accepted their children for who they were. With fathers ne can notice the difficulty in and an attempt to understand the impairment.

*A.2. Coping*

It should be noted that the parents describe the process they went through as one ranging from a difficulty accepting and living with the impairment to coping with the diagnosis. The excerpts taken from the interviews show that most parents describe the initial shock of accepting a hearing impairment, but also the immediate coming to their senses and realizing that it is not the end of the world and that one can live with this impairment and improve their child's condition through various means and ways

**B. Child-parent relationship**

The parents were asked how they view the relationship with their hearing-impaired child. The analysis of the answers reflects a difference between mothers and fathers on this issue. It appears that most fathers argue that there would be no difference in their relationship with their child had he been born hearing. Some of the mothers said that the relationship would have been the same and yet others argue that they are more protective of this specific child, more aware of his difficulties, more observant. All that was said may have been unconsciously said – meaning that they do these things naturally since the child has special needs and they feel they need to be more protective. They worry more about his later life and his future. The mothers explain the need to give more protection to the hearing-impaired child by the fact that he cannot hear his mother when she calls out to him at home or at the playground In Contact with a hearing-impaired child is very primal, since one needs to touch the child to get his attention.

*Summary*

It appears that most fathers argue that there would be no difference in their relationship with their child had he been born hearing, but the mother on the other hand are not of the same opinion. Some said that the relationship would have been the same and yet others argue that they are more protective of this specific child, more aware of his difficulties, more observant. All that was said may have been unconsciously said – meaning that they do these things naturally since the child has special needs and they feel they need to be more protective. They worry more about his continued life and his future.

**C. Primary caretaker**

When parents were asked who the child's primary caretaker is, the answer was pretty much unanimous: the mother. The majority of Israeli mothers and fathers admitted that the care for the hearing-impaired child is done mostly by the mother herself, contrary to one mother who stated that both parents are responsible for the child. The reasons for this answer are varied: the mother's work hours are shorter than that of the father, the mother's difficulty in releasing the child to be cared for by someone else, a dominant mother who "takes the reigns".

Summary

It appears that the interviewed mothers are very dominant in taking responsibility for the child and caring for him, while the father for the most part is busy with providing for the family.

**D. Parents experience in raising a HIC**

"Life goes on", running around, hospitals, consultation, with people – these are part of the things which the parents brought up when asked about their experience with raising a special needs hearing-impaired child. The parents also reported about the positive aspects of parenting a hearing-impaired child, and noted that they had learnt to take notice of being different, to be more tolerant, and to create more empowering relationships with their children.

*Summary*

What was said by the parents interviewed shows that support, continuation in life, a solid basis and way to make things easier for the children, appear to be of great importance for parents in their experience, which they would like to share with other people. It also shows the different way each parent reacts to the impairment. Some see the glass half-full and realize it is not "the end of the world" and sign language is a helpful thing. As opposed with the feeling of running around, and endless fighting for the child's rights and their investment in him.

**E. Getting support from family and friends**

As part of the process of accepting the impairment, the extended family also influences how parents cope with accepting a special needs child. They are a rock of help for the parents. Sometimes there is a feeling of concealment; that the matter should be concealed; shame; accusations; on the other hand, one can see the extended family as a source of power and patience for the difficulty that had been created. Some of the parents talked about the extended family's difficulties in accepting the situation: One mother said that she and her husband did not tell the extended family about the hearing tests and once the hearing-impairment was discovered her parents had difficulties accepting it.

In one family where the hearing impairment is recessive, the difficulty manifested itself in the form of guilt; the extended family (grandfather and grandmother) were the ones who took it upon themselves to take care of the child.

*Summary*

The abovementioned statements of the interviewed parents shows that the extended family is greatly involved in the acceptance of the impairment and in parents' support of their hearing-impaired child. It is the same for both fathers and mothers. As well, only a few parents try to get support from within the family. Most of them get support from various organizations or groups using social media.

1. **Parental involvement in school**

The analysis of the interviews on this issue shows that mothers are much more involved in school than the fathers. The mothers' involvement is expressed in the following aspects: A relationship with the staff as opposed with the involvement at home by talking with the child and doing his\her homework together.

*Summary*

Mothers argue that having their child in a school for the hearing-impaired makes their emotional burden of having to worry for the child's every need lighter. The mothers trust the educational team to help them with that.

**F. Expectations from the special education teachers**

When the parents were asked about their expectations from the teacher who teaches their child in class a number of themes came up, which are in fact the basis of the parent – teacher relationship of trust. The fathers expected equal treatment, attention, sensitivity, that the teacher would be a sort of mother figure.

With the mothers, demands were wider: transparency in matters; that the teacher would be aware of the impairment, that she would know to love the child and to transfer information; to give equal treatment to everyone; to listen; to understand the child and be aware of his needs; take the child into consideration; adapt the material to his abilities; to know how to integrate the child socially… It was further said that she should also understand the parents and keep in continuous contact with them. These findings show that it is important for the parents that the teacher knows how to support their children but also support them. At the same time, some of the parents said that they want to the teacher to know how to integrate their children in the best way with the school's population so they are not disconnected from the rest. And the majority of parents noted that they would like the teacher to be of a "softer", understanding, and accepting nature so that she could totally be with their child, but on the other hand that she would not cut any corners for them or make their studies too easy for them.

In summary, as in the quantitative part, in the qualitative part too it was easier to interview the mothers than the fathers. The mothers easily opened up and were happy to tell their story of discovery as opposed to the fathers who had refused to be interviewed under various claims. The above analysis shows that the Israeli mothers in our sample (i.e. a relatively small sample, so with no intentions of generalizations) are the ones who take an active and wide part in their involvement in their hearing impaired child's school. They are also the ones who got the news about the deafness, stayed at home with their child in the beginning and are the ones who take care of him along the way. It is apparent that the Israeli fathers in our sample are more decisive about certain matters (related to their child education) and are aware of their lack of involvement (in their child school life) as a result of several aspects of their profession, which sometimes requires them to work outside the house for many hours.

## III.5. Findings referring to the third research question

The third research question was:

**What are the perceptions Israeli teachers and experts of HIC about parental involvement in school?**

The findings resulting from the interviews held with teachers and experts will be presented hereunder:

### III.5.1 Qualitative findings from the Interviews with the teachers

The participants were six teachers of hearing-impaired children from different schools in the northern district of Israel. Each one of the teachers had a different seniority within the educational system. The teachers were interviewed in order to realize how they feel about parental involvement: who is more involved, and how the parents cope with the impairment.

Some of the teachers had, in addition to their regular teaching duties in school, the role of HIC coordinator, and as such, their duties included:

* Coordinate meetings with the parents of HIC;
* Adapt the school curriculum so as to suit the needs of HIC;
* Attend staff meetings to assess the children's learning situation;
* Examine the other teachers' position on HIC's parental involvement in school;
* Examine the level of involvement of each of the parents;
* Assess the teachers' role in encouraging parents to be involved.

**A. Teachers perceptions about parental involvement / qualitative analysis**

Parental Involvement was divided by the teachers into two categories: the parents involvement with their child's school and the parents involvement at home. Some of the teachers defined parents' attempt to be involved as a *barrier (*or a lack of involvement, a lack of cooperation, a lack of interest). In lack of involvement the meaning is the sense of a lack of communication with the parents, the burden placed on the teachers, and that should problems arise at school – parents do not take part in handling the problem. Some teachers argued that parents try to be involved in several ways: helping kids with their homework, talking with the child about his / her school day, being active in the class parents committee and active in WhatsApp group and so on.

*Summary*

In the involvement filed the mothers, as aforementioned, take full control of matters. Some mothers claimed that special education enables them to release the tension and difficulty a little and to breathe.

**B. Who is more involved in the family and why?**

The teachers unanimously agree that the mothers are the ones who are more involved with hearing-impaired child’s education. The reasons for mothers taking a more active part in being involved in the children's school activities are perceived as diverse by the teachers. Most of the teachers argue that traditional roles still affect parental involvement. One teacher argues that the mothers are often protective of the child and therefore need to feel in control of what happens to him / her.

*Summary:*

In summary, the interviewed teachers claim that Israeli mothers of HIC are the ones who take a very active part in their involvement in the school. Sometimes the mothers are overprotective of the child, but on the other hand it is traditionally the mother's role to be the caretaker and the father to be the breadwinner.

**C. Teachers' role in encouraging parental involvement**

Based on what the qualitative interviews reveal that in most cases involvement is encouraged by the teachers who try to get the parents to be more involved one way or another. It is important to note that the line between being involved and interfering is perceived as very thin and the teachers make sure they draw that line so the parents do not overstep their mark. Regarding parental involvement and the level of creativity the parents should reach, teachers argue that indeed, for the most part they are the ones to encourage parents to be involved.

*Summary:*

Despite changes in modern society, the interviews held show that the traditional division of roles in the family still exists in most homes and parental involvement is still higher among mothers than it is among fathers. The teachers attribute it to being a normal phenomenon and not an abnormality.

III.5.2 Experts' perceptions about parental involvement in school

Three Israeli specialists in hearing impairment (Special Education) were interviewed, all female (age between 40-50 years) who had worked with the hearing impaired children in the past and who are currently professors in various Israeli colleges and universities. All the specialists have been teaching hard-of-hearing children for at least 5 years.

Once the parents' questionnaires were codded and statistically analyzed, questions connected with the standardized questionnaires' results were presented to experts in the field of hearing-impairment.

Two main questions were presented to the experts, referring to the results regarding the involvement of Israeli parents of hearing-impaired children in their children's formal education:

1. **What is your own definition of parental involvement in the formal education of hearing-impaired children?**

Acceptance, sharing, being part of, involvement versus interference are part of the elements that the experts define as the definition of involvement. Each one of the experts brought her own definition of involvement, from involvement in school and up to being involved with doing homework, from personal experience with their own kids and up to the expectations of involvement from parents themselves, it is apparent that parental involvement has different interpretations, but all are in the same direction and they can be found in the definitions listed in the literature.

**2. How do you explain that there are scientific data that indicate that Israeli mothers of HIC are more involved in school than the fathers?**

Regarding the question of parental involvement in school, it appears all three experts argue that the mothers are the ones to be more involved for different reasons. All three experts argue that the mothers are more involved than the fathers in their children's educational institutions.

*Summary*

The answers of the three Special Education experts reveal that it is a unanimous agreement that the mothers are more involved in school with HIC. The experts argued that this is a process that women learn since childhood through playing with dolls and taking care of them. In fact there is a preservation of the traditional caretaking and involvement.

# CHAPTER IV: Discussions

This chapter discusses the study findings according to the research questions, while incorporating the relevant and updated literature for the topic of parental involvement in the school system of hearing impaired children.

## IV.1 Discussion of the findings related to the first research question

**Research question1:** What are the relations between the parent's background variables (gender, number of HIC in the family, and religious affinity) and parental authority, coping with a family crisis, and involvement in the educational institution.

### IV.1.1 Parental authority and background variables

**Gender and parental authority**

The research findings show that there is no significant difference between the Israeli mothers and fathers in the dimensions of parental authority. Although the findings show there are similar yet non-significant results, the Israeli mothers had higher scores on scale C than the fathers, in regards with the permissive approach. This finding showing the effect of gender over parental authority is in contrast with the findings of previous studies, which argue that fathers and mothers have different parenting styles (Conrade & Ho, 2001; Crnic, Arbona, Baker, & Blache, 2009; Mickinney & Renk, 2008). This finding may be explained by the fact that the previous studies had investigated the differences in parental authority between fathers and mothers in general, but not the differences between parents of hearing-impaired children. It may be that the parents in our sample adopted a similar parental style toward their hearing impaired children, i.e. both parents are less authoritative with a HIC. This finding was also found in the qualitative analysis of the content of the interviews, as noted in the previous chapter.

**The number of children in the family and parental authority**

The data indicate that there is no significant difference between the Israeli parents who have one HIC and the parents who have more than one HIC at level of parental authority variable.The research literature does not present any evidence that there are differences between parents of one HIC and parents of several HIC's in regards with parental authority. This finding may lead to the conclusion that when a hearing-impaired child is born, his/her parents undergo the stages of accepting his / her impairment and try to find ways to cope with it. When another child is born with the same impairment, the parents might not change their parental authority towards the second or third child.

**Religious affinity and parental authority**

The study shows a positive correlation between scale A and scale C of Parental Authority and the level of religious affinity (self-perceived level of religiousness), so that the higher the level of religious affinity is, the higher the level of authority is in these scales. The findings of our study are in line with the study conducted by Ben David & Schori (2010), which had examined the differences in the parenting styles of religious women versus secular women and the inter-generation transfer, and had found that there is a correlation between religious belief and parental style. One can infer that religion, which can provide many answers, might help parents with their faith and how they educate their children.

In our study, a positive correlation was found between the religious affiliation and authoritative parental style and the liberal parental style. These findings might be explained by the cultural context of Israel, meaning that in religion, most of the answers are found with the rabbi and he is usually consulted on each matter. The authoritative style puts great emphasis on the fifth commandment "honor thy father and thy mother" (Exodus 20: 11), which proves the principal of this type of education - a hierarchical relationship within the family. Another biblical statement which teaches the duty of honoring the parents is: "*Ye shall fear every man his mother, and his father*" (Leviticus, 19:3). These statements point toward the fact that the authoritative style of education is embedded in religious rearing.

### IV.1.2 Coping with a family crisis and background variables

**Gender and Coping**

This section presents the interpretation of the data collected in the context of how the Israeli fathers and mothers cope with HIC (i.e. by asking help from the family and by seeking help from friends).

**Gender and asking for family support**

Review of the findings of the standardized questionnaires show that there is no significant difference between Israeli fathers and mothers of hearing impaired children in seeking the support of family. Contrary to these findings, previous studies have shown that the mothers seek more support from their family, friends, and other families in similar situations (Wang & West, 2016).

Regarding the parents' support bodies, the findings show that once their child is diagnosed with a hearing-impairment the extended family rallies to support them, they are present and helpful when needed, but the nucleus family mostly seeks the support of its surrounding, such as groups of parents who are faced with the same impairment or various frameworks and organizations. This finding does not coincide with the findings presented by Jackson (2011), which indicate that parents need the support of their surrounding family when facing a child with disability. Studies show that families who get support handle the situation better than families who do not (Poon & Zaidman-Zait, 2013; Lebel-Hagai, 2011). This aspect was also evident during the interviews (qualitative analysis of the in-depth interviews). The experts interviewed in this research argued that mothers do not need a number of support resources, since they get a shoulder to lean on in various places, like friends and support groups whereas the father needs more support, as they have difficulties containing the child's difficulties, while the mothers are the ones to come to their senses faster and take care of the child. Evidence of this can also be found in previous studies (Wang & West, 2016; Kayfitz *et al.*, 2010).

The quantitative findings of the study show that there are no significant differences between fathers and mothers of HIC's in their need for the support of friends. In addition, the findings reveal that the parents do not need excessive support from their friends, should the parents have more than one HIC. These data, too, lead to the conclusion that it might be the result of the parents being familiar with the hearing-impairment from the first child.

**Parents coping and number of HIC in the family**

The quantitative findings of the study show that the Israeli parents with several HIC cope better than parents of one HIC. These data show that families who have more than one HIC cope better with family crises. It is likely to assume that parents of more than one HIC already know the process and road ahead of them when receiving news of the hearing-impairment. These data may indicate that when a child with hearing impairment is born, all of the resources and care are centered around him/her, most probably due to the parents' lack of theoretical and procedural knowledge related to the specific disability. But when an additional child with the same type of impairment is born into the same family, the parents already have the procedural knowledge and the information to assist them in caring for both children, so they might not need a lot of support. In the literature, there has been no study that has examined the subject of how parents of several HICs cope with crises and how much they express their need of support from the family.

**Coping and religious affinity**

The analysis about relationship between Religious affinity and coping with a crisis in the family revealed that there is a significant positive correlation with a medium intensity and a clear connection (r = .32, p <.05(. This finding indicates that the higher the level of religious affinity is, the better the level of coping with a crisis is reported by the parents. This finding is in line with the research literature, which argues that one of the factors associated with a better coping is the religiousness. Thus, support to this finding can be found in Ohanlon (2013), who argues that families with a religious affinity cope better with the challenge they are faced with when raising a special needs child. In Zimmerman (2011) too, one of the hypotheses is that ultra-orthodox Jewish mothers rely on their belief in god for security, meaning that they might feel that God protects and safeguards them and therefore they cope better with different challenges. Similar findings can also be found in Kirkpatrick & Shaver (1990). Another possible explanation of the correlation between religious affinity and coping with family crisis in our study lies in the fact that the religious population has large families, where grandparents find it difficult to help each and every one of their children, so their children do not ask for help, should a special needs child be born (Zimmerman, 2011).

### IV.1.3 Involvement in the educational institution and background variables

Involvement of parents in school was assessed using the questionnaire developed by Friedman & Fisher (2003), *Parents and school: positions and level of involvement (Parents self-reporting questionnaire)*. The questionnaire referred to contents of being acquainted with the class, school staff, initiating various projects at school, and being familiar with the study material.

**The parental gender and the involvement in school**

It was found a significant difference between the Israeli fathers and the mothers in their involvement in school. These findings show that the Israeli mothers in our sample were more involved in communications with the school which their children attend compared to the fathers. These findings are supported by Hui-Ting's research (2016), which claims that mothers' feeling that once their child is placed in a special class, there is someone there to look after him/her and understand his/her needs, so they can share some of the burden which is placed on them.

One of the reasons that can explain the fathers' lack of involvement in school is their difficulty in understanding and accepting their child's diagnosis and in seeing them in a special class with many children of the same condition. Mothers are usually the ones to take upon themselves most of the responsibility for taking care of the hearing-impaired child. The gender role as it is defined by the professional literature is a traditional role. The present study indicated that the Israeli fathers of the hearing impaired children enable and leave the school involvement and rearing of the child to the mothers.

**Number of HIC in the family and involvement**

The quantitative findings show that there are no significant differences in regards with parental involvement between the Israeli parents of a single HIC and parents of several HICs. Previous studies did not investigate the issue of parental involvement according to the number of HICs in the family. A possible explanation to this was that the parent who is involved with the education of his first child, who was diagnosed as hearing-impaired, continues to be involved even when there is more than one HIC.

**Religious affinity and involvement**

The study's findings show a relatively weak and insignificant negative correlation between religious affinity (self-perceived religiousness) and parental involvement - the higher the religious affinity scores are, the lower parental involvement is reported.

The literature review did not reveal any studies which examine the connection between religious affinity and parental involvement of parents of HICs. In our study, the data indicated that the higher the religious affinity, the lower was the parental involvement in school. This could be explained by the fact that religious parents in Israel usually have a greater number of children and therefore have less time for meetings and involvement with school and the educational system.

## IV.2 Discussion of the findings related to the second research question

***How do Israeli parents (fathers and mothers) to HIC's cope and are involved in their child education?***

The findings related to this research questions were derived from content analysis of in-depth interviews conducted with parents of HICs.

A discussion will be presented at the end of this section regarding each one of these topics.

### IV.2.1 Discussion about challenges and coping in raising HIC

. Parents describe reactions of grief such as crying, denial, and not accepting the news, when they found out that their child was hearing-impaired (Dromi & Ringwald-Frimerman 1996; Laski & Karaj, 2011; Krishpin, 2008). These findings are in line with some of the stages of grief as it is discussed by Kübler-Ross (1986), which include crying, collapsing, denial, depression and more.

Few parents noted that they sought help from their extended family. These data are in line with the quantitative questionnaires, where it also appeared that the parents did seek the assistance of their families. This finding is also supported by the literature, where studies argue that parents need the appropriate support and tools to deal with the birth of an HIC (Dromi & Ringwald-Frimerman, 1996; Prakash, Prakash et al., 2013; Dirks, Uilenburg, & Rieffe, 2016)**,** but once the parents accept their child's impairment they regain control of their lives (Dardas & Ahmad, 2015).

### IV.2.2 Discussion about child - parent relationship

The fathers argue that the fact the child is hearing-impaired has no effect and that they would have treated him the same whether or not he/she was able to hear. The mothers have different opinions about how they treat their hearing impaired child. Some of the mothers argue that the relationship would have been the same whether or not their child could hear, while some mothers say they are overprotective of their child because of his hearing-impairment. The mothers appear to be more aware of his/her difficulties, and there is concern about the future of their HICs. These data are reinforced by a number of articles which argue that mothers are the ones to overprotect their children (Aydin & Yamaç, 2014; Haramatie, 2015. Aydin & Yamaç (2014) examined in their study the acceptance – rejection relationship of a parent and his/her mentally disabled child. They found that there is indeed a difference between mothers and fathers in regards with the acceptance / rejection of the child.

The aforesaid interpretations lead to the conclusion that for the fathers there is no difference if the child is hearing-impaired or not, while mothers do realize that there are differences in how they relate to a hearing child and a HIC. This situation might be explained by the fact that mothers spend more time with the child and can perceive the needs and the specific communication with HICs, whereas the fathers spend less time with the children. Another possible explanation is that the fathers have yet to reach the acceptance stage in regards with the impairment, and are still in the denial stage, which is why they would argue that they treat the HIC just the same as a child born hearing.

### IV.2.3 Primary caretaker

The findings of the interviews and questionnaires show that the mothers take on more responsibility for raising their children. The literature in recent years has started to refer to the difference in parental involvement significantly and more resolvedly (Wegner, 2015). Carpenter & Tower (2008) claim that there are several terms in the literature which refer to the father's role in the family, specifically referring to their lack of involvement: "hard to reach", "shadow parent", "the invisible parent". The findings of the qualitative interviews with the teachers in our study reinforce the impression that mothers take on a more active role in caring for their HICs and manage their education and inclusion. This may be the teachers' concession and unwillingness to try and change the way things are, as mothers were the ones to take care of children and fathers were the breadwinners, since the dawn of time (Dokins, 1991; Darwing, 1859; Pinchi-Dotan & Cohen, 2015; Gunt, 2007).

### IV.2.4 Support from family and friends

Based on the qualitative findings analysis the parents reported to have the feeling that the family's friends start to leave them when they have a baby which is found to be hearing impaired. The parents argued that once their child was born hearing-impaired, they had felt their friends were distancing themselves from them. Support to this finding can be found in the literature- Hazarika, Das, & Choudhury (2017) proves that parents of special needs children are afraid of the stigma placed on them by their surroundings. Support of this statement can be found in studies about different special needs populations (Mohammadi et al., 2016; Hazarika, Das, & Choudhury, 2017).

### IV.2.5 Parents involvement in school

The triangulation of the findings of the interviews with the parents, with the standardized questionnaires regarding their involvement in school and with the findings of the interviews with parents and experts, indicates the following aspects:

1. Current changes in the attitude towards mothers working and the technological means enable online involvement and not necessarily face-to-face involvement – this was found in both the findings of the interviews and the literature.
2. Parental involvement of parents whose children have moved to the special education system - In some cases, parental involvement decreased in comparison with their involvement when the child was in a regular school, because parents trusted the special education teacher would know how to manage the various situations concerning the HIC (e.g. replacing batteries of the hearing aids, communicating with the child through sign language etc.

The Israeli fathers in our sample mostly mentioned being involved at home with doing homework, preparing for tests, trying to understand what the children are studying at school**.**

The literature on the subject also reinforces this aspect of parental involvement, that the mothers of HICs are more involved in their children school's life and at home (homework, talking about matter in school), and the fathers are mostly involved in checking if the child made his homework or he/she has learnt for a future test (Hodtov, 2001; Bernham, 2010; Zaidman-Zait et al. 2017; McMunn *et al.* 2017).

These findings lead to the conclusion that although the mother is perceived as the main caretaker of the child, the decisions concerning the education of the child are agreed upon by both parents together.

Contrary to the findings that fathers are less involved in the school system of their children, some studies indicate that fathers today tend to be more and more involved, since the mothers themselves work outside the home in various jobs, which do not always correspond with the school and pre-school timing. )Cohen-Arkin, 2011; Zaidman-Zait, Most, Tarrasch, & Haddad, 2017; Sung &Park, 2012; Wegner, 2015).

**IV.3. Discussion of the Third Research Question**

***What are Israeli teachers and experts' perceptions about parental involvement in school?***

The findings of the interviews with the teachers show that some of the teachers feel that the lack of involvement is created as a result of the lack of trust parents of HICs have in the teachers. Fischer (2010) argues that teachers often fear parents, which affects their functioning in class. The interviews show that most of the teachers feel they should make the parents more involved and make sure that this involvement does not turn into interference.

**The differences between the parents and the teachers' perceptions of parental involvement in school**

In their interviews, some of the teachers stated that the parents are not involved enough and that sometimes they feel they should make the parents more involved. It may be that the lack of involvement stems also from the distance of their place of residence and the school. The school is a regional school, so it "gathers" children from all over the northern district of the State of Israel, which makes it difficult for the parents to be involved within the school premises, and therefore they prefer to be more involved at home.

The experts also argue that the mothers are more involved with their HIC's school. They claim that the reasons for this are probably derived from the mothers' difficulty to let go of the child and they actually hold the reins of his/her upbringing and lead it forward. An additional argument was that the mothers spend more time with the children and therefore are the ones to be more involved in school.

In summary, Israeli parents, teachers, and experts all agree that the mothers take a significant part in their involvement in their HICs lives in general and in formal education in particular. Some of this involvement might be a result of their need for control. Some of it is something very primal, which has existed since the dawn of man – women take care of the home and children while the men support the household. The teachers feel that the mothers' involvement in school is not always due to their own will, but sometimes they are encouraged to do so by the teachers.

## IV.4 Discussion of study limitations

1. The first limitation refers to the qualitative research’s nature, which can be subjective and interpretive. Interpretation is as aforesaid subjective to the researcher, her occupation and her life, which are all part of the processes that hearing parents, especially fathers, of HIC had undergone.
2. Geographical location – the study was carried out in the northern region of the State of Israel, which may narrow down the research population.
3. An additional limitation was that the researcher was too close to the subject of the study – at least during the last stage of the study, when she had discovered her own son is also hearing impaired. The researcher was aware of this limitation and did her best to minimize the effect her dealing with the issue of hearing-impairment and personal knowledge.

# CHAPTER V: Conclusions and Recommendations

This doctoral research examined Israeli parents' of hearing impaired children and their coping and involvement in their children's school life. This chapter will reintroduce the research goals and questions and discuss the conclusions drawn, and the implications regarding the research findings. This chapter refers to factual and conceptual conclusions, research innovations and recommendations for further studies.

## V.1 Factual conclusions

1. The factual conclusions drawn from this study show that there is a different acceptance of a HIC by Israeli parents, which reflects a difference in the way mothers and fathers cope with the disability of the children. The study shows that although fathers today are more involved with their children's upbringing, and the mothers work outside the home, the mothers are still the ones to bear most of the burden of raising a special needs child.
2. The research findings show that Israeli mothers in this sample are also key factors in all the aspects regarding their involvement in the school life of their HICs, but as these designated schools are regional, where children from different areas come together, they are usually at a great distance from the home, and the mothers' involvement is different.
3. Israeli teachers on their part argue that there is not enough involvement in school of parents, but on the other hand, they do not feel the need to have parents be overly involved. Sometimes teachers view parental involvement in school as a burden and an obstacle, since parents do not always support the teachers' teaching methods or do not comply with various requests by the teachers. Therefore, teachers should be given guidance on how to find ways to see eye to eye with parents and finding the right extent of involvement, which will be suitable for both parties.
4. The present study shows that there is a perceived parental stigma attached to special needs children. The parents felt that when their HIC was born, society stigmatized them, and their friends stayed away from them, which created another issue for them to cope with, which was finding the right society, which is familiar with the hearing-impaired population.
5. In addition, the research brought up the issue of how religion accepts the HIC. It can be said that the mutual assistance in the religious sector is a great source of help for his family, as well as their strong faith in God, which makes it easier for them to accept a HIC to their family.
6. In regards with parental authority, there is no difference between parents (with one or numerous HICs) and their type of parental authority towards children. Parents who have one HIC have difficulty in their initial coping with the situation of having a child with hearing impairment, and they undergo a process of achieving acceptance. As part of the coping process with the aspects of disability, parents prefer to consult with professionals or people who have had the same experience of managing with a HIC.

## V.2 Conceptual Conclusions

The findings of the study lead to the following conceptual conclusions:

1. All role partners in this study – hearing-impairment specialists, teachers, and parents expressed agreement regarding the importance of parental involvement in the school life of HICs in Israel.
2. When parents face the news of a hearing-impairment diagnosis of their children, the reported a need to consult with different people who have had the same experience. Usually these people are not within their circle of friends or family.
3. Another conclusion driven from the research findings and their analysis is that the parental authority of Israeli fathers and mothers of HICs is similar in regards to their hearing impaired children, although their level of involvement is different.

## V.3 Contribution to knowledge, innovation, and originality

**From gap in knowledge to contribution to knowledgebase**

The gap in knowledge which led to this research was the need to investigate the pedagogic and psychological (social and emotional) aspects related to the optimal interaction in relation to school between teachers and hearing parents of hearing impaired children in Israel. There is little research on the father’s involvement in the school life of HICs (Iingber & Most, 2012; Mavrogianni & Lampropoulou, 2015). That is why in this study aimed to examine the coping strategies with disability and educational needs of the fathers and the mothers of children with hearing impairment and how they are involved in the school life of their children. The main innovation in this study was the concept of the involvement of parents of HICs who study in specialized classes for hearing-impaired children in Israel. No previous study was found on the investigation of how fathers and mothers of HICs cope with the hearing-impairment condition of their children and their involvement in school in Israel. The study examined another original aspect – the effect of gender, the number of HICs in the family and the level of religious affinity on parental authority towards children. Contribution to the knowledge from the practical aspect – the study leads to the following recommendations:

1. In light of all of the above, it is greatly important that both parents should be constantly involved in raising and upbringing the HIC in general and in the school life of their children in particular.
2. In addition, workshops/training for teachers should be organized, which have the potential to provide them with tools (information, awareness and procedural knowledge) to cope with parents in different situations, based on real data. This kind of workshops can help Israeli teachers better understand the parents and the difficulties they face with the birth of a HIC, and could guide the teachers toward the right approach to get parents more effectively and efficiently involved in school, as there is no doubt that a good education comes from both home and school and an integration of the two. An appropriate training at school will be beneficial in cases of stigmatization and in changing perspectives, first with the school children and then through them to their parents.
3. The aspects of parental involvement found in the present study as well as in the literature are divided into two: involvement in the home and involvement at school. Israeli fathers as aforementioned are less involved than the mothers, but when they are involved they claim to be involved in matters belonging to the home, such as doing homework, studying for a test, and the like. Israeli mothers on the other hand are more involved in both cases – in the home and at school.

The current study answers the research questions and it fills the gap in the current existing knowledge about parental involvement and fathers’ involvement in the formal education of HICs in the context of Israeli educational system. The gap was filled by examining both categories of parents (mothers and fathers), and how they cope with the birth of a HIC, and later on their involvement in the school life of their children. This doctoral study has shed a new light on several aspects relevant to the parental population of the State of Israel in regards to family-school connections. A paper by Zaidman-Zait, Most, Tarrasch, & Haddad (2017) was recently found in the literature which also addresses the important issue of parental involvement in the school life in Israel. Their article discusses parents from the Arab and the Jewish sectors. The results were similar to this doctoral research, in terms that the mothers were found to be more involved in school than the fathers.

## V.4 Suggestions for future studies

* To study and examine the varied and different populations with HICs in the State of Israel: different sectors such as Christian and Muslim Arabs; different levels of religiousness among religious people. This study indicates that cultural and religious factors can affect parental involvement and coping strategies. Further research might help researchers and educators to assist better this population.
* Examining how fathers and mothers of children with disabilities accept the essence of their traditional gender role and act accordingly as parents. This study provides the premises that the way parents perceive their gender role can affect the process of parental involvement in the formal education of their special needs children.
* To search the effects of training program for regular teachers concerning teaching HIC in their class in relation to the parental involvement in the formal education of the children and the current educational reform in Israel.

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