Family-oriented early intervention programs have become a common practice in deaf education and intervention. This trend requires the extensive investigation of parents’ expectations about programs and professionals in order to enhance the efficacy of parent-professional collaboration. The goal of this study was to closely examine the expectations of mothers whose children were already enrolled in a comprehensive early intervention program for deaf children and their families. Three means of data collection were utilized: two open-ended written questions, an individual oral interview with the mother, and a set of formal questionnaires on various maternal, family, and child characteristics. A heterogeneous sample of 50 mothers of 2- to 5-year-old deaf children in Israel participated in the study. A wealth of maternal expectations emerged from this qualitative methodology, underscoring mothers’ impressive knowledge and awareness, as well as individual differences. Through cluster analysis, the mothers were sorted into four distinct groups, yielding interesting patterns of expectations for programs and professionals.

Early intervention programs are moving toward family-centered models that emphasize supporting and strengthening families of young children who have special needs. The philosophy of family-oriented intervention proposes that professionals’ provision of information, guidance, and support will empower parents to build a collaborative partnership in order to develop competence and involvement in their child’s education and development (Dunst, Trivette, Boyd, & Brookfield, 1994; Meadow-Orlans & Sass-Lehrer, 1995; Minke & Scott, 1995; Winton & DiVenere, 1995). Recent studies indicate that parents’ collaboration with professionals in clinical and educational services not only facilitates the family’s adjustment to the new situation of coping with an exceptional child (Shonkoff, Hauser-Cram, Krauss, & Upshur, 1992) but also increases the effectiveness of the intervention process itself with respect to the child’s emotional, social, cognitive, communicative, and linguistic development (Harrison, Dannhardt, & Roush, 1996; Meadow-Orlans, Mertens, Sass-Lehrer, & Scott-Olson, 1997; Meadow-Orlans & Steinberg, 1993).

In deaf education in Israel, as throughout the world, early intervention is a common practice (Froelich, 1998; Meadow-Orlans et al., 1997). In many parts of the world, deafness is identified early in life, and intervention begins as soon as the hearing loss is detected (Dromi & Ringwald-Fromerman, in press). In Israel, 11.3 months is the average age when severe and profound deafness is diagnosed (Froelich, 1998).

Studies on parents of children who are deaf (e.g., Fisiloglu & Fisiloglu, 1996; Harrison et al., 1996; Meadow-Orlans, 1995; Meadow-Orlans & Steinberg,
have indicated a strong resemblance to other groups of parents who experience the diagnosis of an exceptional child (e.g., Friedrich, Wilturner, & Cohen, 1985). When hearing parents are informed about the hearing loss of their child, they often manifest emotional responses including initial denial, stress, hopes that the diagnosis was incorrect, and a sense of loneliness (Meadow-Orlans, 1994, 1995; Meadow-Orlans et al., 1997; Meadow-Orlans & Steinberg, 1993; Moores, 1987). According to Handerson and Hendershott (1991), because the deaf child is born into a hearing environment, the hearing loss belongs not only to the child but also to the entire family, with a potential impact on the family’s integrity, identity, and cohesiveness. The psychological adjustment of the family to the birth or identification of deafness in a child clearly affects the mother-child interaction during infancy and is a crucial factor in predicting later social interactions of the child (e.g., Boothroyd, 1982; Fisiloglu & Fisiloglu, 1996; MacTurk, Meadow-Orlans, Koester, & Spencer, 1993; Schuyler & Rushmer, 1987).

In many educational centers for young deaf children, intervention programs are oriented toward the family as a whole (e.g., Freeman, Carbin, & Boese, 1981; Luterman, 1979; Luterman & Ross, 1990; Schuyler & Rushmer, 1987; Simmons-Martin & Glover Rossi, 1990). Despite this educational reality, relatively few researchers have directly investigated the effects of family intervention on deaf children and their parents. Almost 20 years ago, Luterman raised the concern that early family intervention might negatively affect the natural mother-child interaction and hence would reduce the child’s potential for successful development. He claimed that the information provided to mothers might lower their expectations from the child, thus affecting the child’s intellectual and communicative growth. Meadow-Orlans (1990), on the other hand, discussed the urgent need for hearing parents of children who are deaf to receive guidance, counseling, and information on deafness to support the initial interaction patterns they establish with their child. For example, it has recently been proposed that by observing natural communication patterns between deaf mothers and their deaf infants, hearing parents will improve their ongoing interaction with their deaf infants (Dromi, Guralnik, Zohar, & Reingold-Friman, 1993; Dromi & Ringwald-Frimerman, 1996; Mohay, Milton, Hindmarsh, & Ganley, in press).

Parental involvement in early intervention has been reported to generate positive effects on their children’s language acquisition, behavior regulation, and motor development (Harbin, 1993) and on the parents’ own development of more positive emotional responses to the needs of their children (Davis, 1985; Heinicke, 1993). The social support given in early intervention programs, for example, has revealed a significant positive effect on mothers’ interactions with their children who are deaf (Meadow-Orlans, 1993). Involved parents showed better spontaneous communication with their children and contributed to their children’s development and progress more than did parents who had not participated in such programs (Fallon & Harris, 1991; Hadadian & Merbler, 1995).

Positive effects of family-oriented early intervention programs were also reported with reference to the parents’ psychological adjustment. Rimmerman, Katz, and Kravetz (1987), Hadadian and Merbler (1995), and Meadow-Orlans (1995) reported that the anxiety and stress levels of parents were reduced when they were involved in such intervention programs. Other researchers found that early family intervention may decrease the pressure and guilt feelings of parents, enhance their sense of competence and self-confidence, and improve the family’s adjustment (e.g., Fallon & Harris, 1991; Vadasy, Fewell, Meyer, Schell, & Greenberg, 1984). The provision of professional support to families is a major goal of most early intervention programs. Social support is also recognized as a factor in parents’ stress reduction and improved well-being. Parents have often reported that they benefit much from meeting other people with similar problems and that their ability to cope with various problems that emerge in the family is greatly strengthened as a result of participating in early intervention programs (Dunst & Trivette, 1990; Handerson & Hendershott, 1991; Meadow-Orlans, 1994; Pasternak, 1981). Parents also expressed satisfaction with the information provided by programs that help them in coping and adjusting to their child’s hearing loss (Meadow-Orlans et al., 1997).

A number of negative effects may also occur when parents become directly involved in their child’s inter-
vention (Harbin, 1993). Parents sometimes experience “burnout” effects as the result of being deeply involved in the intervention program of their own child. Some parents express a concern that the strong emotional bond between them and the child is interrupted due to their intensive therapeutic interactions with the child. Other parents demonstrate poor understanding of the principles that underlie the intervention program, and therefore fail in its correct application (Fewell, 1987; Luterman & Ross, 1990).

Existing programs for deaf children and their families are generally designed on the basis of what experts believe they should contain, rather than on what parents wish to receive (Bernstein & Barta, 1988; Harrison et al., 1996). Bernstein and Barta found that families who received information about the language development of their deaf child would have preferred, in fact, to receive help with discipline problems. The researchers concluded that to close the gap between professionals and parents it is mandatory to study and understand the needs and desires of parents with whom professionals collaborate in the intervention program. Haas and Crowley (1982) also promoted the idea that parental expectations should be investigated to increase the efficacy of early intervention programs.

Studies on parents’ perceptions of early intervention have revealed diverse expectations, needs, and judgments of what is important at different times in parents’ lives (Freeman et al., 1981; Meadow-Orlans et al., 1997; Meadow-Orlans & Sass-Lehrer, 1995). Horowitz and Shfatia’s (1987) survey on the needs of parents of young deaf children in Israel, for instance, indicated that parents expected to receive emotional support in coping with the numerous implications of the hearing loss. Most parents expressed the expectation that professionals would help them solve the very complex task of raising a deaf child in a hearing world.

The development of successful family-oriented intervention programs requires active listening to the perspectives of each partner in the collaborative process. The exploration of parents’ expectations is especially important for the development of mutual respect between the professionals and the parents with whom they collaborate (Bailey & Simeonsson, 1988; Dunst & Trivette, 1990; Hiltonsmith, 1993). A comprehensive evaluation of the specific needs and expectations of different families can improve the awareness of professionals that, although parents do not hold homogeneous positions, their particular views may have a great impact on the process of intervention. If we can raise professional openness to the variability in parents’ views, the management of the child with special educational and habilitative needs will be greatly improved (Bernstein, 1993; Dromi et al., 1993; Dromi & Ringwald–Frimerman, 1996, in press; Hadadian & Merbler, 1995; Hershberger, 1991; Katz & Scarpati, 1995). The present research aimed to investigate the actual expectations of parents of young deaf children who were already participating in a family–oriented early intervention program in Israel. Using innovative methods of elicitation and analysis, we examined mothers’ expectations from the intervention program itself and from the professionals who administer such programs. The goal of the study was to better understand the diverse as well as the shared needs of parents of young children who are deaf.

Method

Participants

Fifty Israeli hearing mothers of young deaf children participated in the study. The mothers were recruited on a voluntary basis from a larger pool of 65 Hebrew-speaking mothers whose families had been attending three different family–oriented preschool programs in Israel. All families attended the program for at least one year prior to the beginning of the study. In all these families, Hebrew was the primary language spoken in the home. The three different preschool programs (in Tel Aviv, Haifa, and Beersheva) were affiliated with the National Council for the Education of Deaf Children (MICHA) and were participating in the “Kesher,” a national research and development project headed by Esther Dromi (ED). In this project language assessment tools and family-oriented early language intervention programs for young deaf children in Israel are developed and implemented (Dromi & Ringwald–Frimerman, 1996).

In response to a personally delivered letter from
“Kesher” inviting all 65 mothers in the three preschools to participate in a research study, four mothers declined to participate in the study, ten did not return the materials that they were asked to complete, and one mother was excluded from the sample because her son stopped attending the program while the data were being collected.

Mothers were selected as subject-informants for a number of theoretical as well as practical reasons: (1) they were more directly involved in the educational program than were fathers and hence were more accessible to research intervention; (2) according to the literature (e.g., Levy-Schiff, 1986; Waisbern, 1980, in Natovitz, 1990), mothers participate more actively in their children’s intervention even when fathers are involved and interested; and (3) research has indicated that mothers are more expressive and have more social support than fathers (e.g., Gumz & Gubrius, 1972; Goldberg et al., 1986, in Natovitz, 1990), indicating mothers’ suitability for the current open-ended methodology requiring participants to initiate discussion and express expectations from supportive services.

Forty-seven of the mothers were in intact families; two were divorced and one separated. The average education level was 12.68 years ($SD = 2.05$; range of 8 to 18 years) for the 50 mothers in the sample and 12.59 years ($SD = 2.47$; range of 8 to 20 years) for their husbands. Regarding size of the family, 11 mothers had only one child—the deaf child. The remaining families ranged from 2 to 8 siblings ($M = 2.58$, $SD = 1.53$). Regarding the number of deaf children in the family, the majority of families ($n = 39$) had only one deaf child, ten mothers had two children who were deaf, and one mother had three deaf children.

Of the 50 deaf children in the sample, 7 children had a mild hearing loss (40–70 dB), 19 had a severe hearing loss (75–90 dB), and 24 had a profound hearing loss (95 dB and higher). Thirty of the children (60%) were enrolled in an oral preschool (Tel Aviv), and the other 20 children (40%) attended a total communication preschool (Haifa and Beersheva). The number of boys and girls in the sample of deaf children was equal, and their ages ranged from 32 to 78 months ($M = 47.72$ months). The average age for the beginning of intervention with the children was 14 months ($SD = 5$; range of 6 to 25 months). Only 16% of these preschool deaf children were reported by their language clinicians as suspected of having additional handicapping conditions.

**Instruments**

Three methods were utilized for the collection of mothers’ expectations from early intervention programs as well as relevant maternal, child, and family characteristics: written open-ended questions, personal interviews, and structured questionnaires.

**Open-ended questions.** Two open-ended written questions were administered to obtain a free, unconstrained expression of maternal expectations from early intervention with her deaf preschool child: As a mother of a deaf child, what do you expect from your meetings with the professionals at the preschool? What do you suggest to include in early intervention programs with parents of deaf children?

**Personal interviews.** A 40-minute to one-hour interview with each mother was conducted by Sara Ingber (SI, an educational counselor with 20 years of experience in working with families of deaf children) in order to obtain mothers’ freely expressed expectations about intervention programs and service professionals. The interview was partially structured, using the mothers’ written responses to the two open-ended questions as a stimulus. The first questions were general, reiterating the mothers’ written responses to the two open-ended questions as a stimulus. The first questions were general, reiterating the two written questions or asking for elaboration of the mothers’ responses that led to more specific issues. The interview was audio recorded (with the mothers’ permission) and was later transcribed for further analysis.

**Structured questionnaires.** To obtain information on various parental, family, and child characteristics, a Background Information Questionnaire (KBIQ) that was developed in the “Kesher” project (Dromi et al., 1993) was administered. This demographic questionnaire compiled data on the child’s characteristics (gender, age, at diagnosis—when began attending preschool intervention, severity of hearing loss measured
in dB, presence of additional disabilities), the parents’ characteristics (age, country of origin, occupation, years of education), and the family’s characteristics (number of siblings, number of deaf siblings, and the mode of communication with the deaf child).

Six additional formal questionnaires were administered to the mothers (see the Appendix). All of these measures had been previously used in Israel by other researchers and had standardization or previous experience with other Hebrew-speaking exceptional populations. The questionnaire data were collected to further explore relationships between maternal, family, and child characteristics and expectations about early intervention. Further details on the instruments are available in Ingber (1995) and in Dromi and Ingber (1998). In the present study the data were used selectively to establish the groundwork for cluster analysis.

Procedure

In an initial personal meeting with each mother and SI in Tel Aviv, or with the social worker in Haifa and Beersheva, a letter introducing the research was given, and agreement to participate was requested. The purpose of the research was presented as having the potential to improve future services for families of deaf children. Following her agreement, each mother was given the two open-ended written questions, the KBIQ, and the six structured questionnaires to complete at home anonymously and return to the preschool within two weeks of receiving the materials. The questionnaires were numerically coded to maintain mothers’ anonymity during the analysis. Personal interviews were scheduled with SI, following return of the written measures; and the interviewers were audio recorded with the mothers’ permission. Audio recordings and transcriptions were numerically coded for anonymity, and confidentiality was strictly maintained. In Haifa and Beersheva, the social workers introduced SI to the mothers and described her role and experience. Research has demonstrated the facilitative effect on interviewees’ openness and candor when interviewers are familiar and work within the system (Sabar-Ben-Yehoshua, 1990).

Transcription and Analysis

As a first step in the examination of this rich body of data, all interviews were orthographically transcribed. Next, both the written responses to the two open-ended questions as well as the transcribed interviews were subjected to content analysis as follows: on the basis of a pilot set of 15 of the personal interviews that varied with reference to their detail and length, an initial detailed coding system (Version A) was generated for sorting mothers’ comments according to the different topics they raised and discussed. These 15 transcripts were carefully divided into propositions by SI in consultation with ED, each proposition containing a single content unit. Subsequently, the propositions were classified into content categories and subcategories. For example, all the propositions that expressed a mother’s wish to obtain information were classified as one category and were then subdivided into different subcategories: medical information, audiological information, information on speech and language development, child development, modalities of communication, etc.

To test the content validity of Version A of the coding system, we randomly selected an additional sample of five interviews and five sets of the two open-ended questions and had them independently analyzed by two judges, both professionals with extensive experience in deaf education. Without being exposed to the already existing Version A of the code, these two judges were asked to read the transcripts and to classify those topics discussed by the mothers into categories. Their proposed list of categories resulted in Version B of the code. We then conducted a comparison between Versions A and B, considering all cases of ambiguity and disagreement between the two codes and developing the final coding system.

The final version of the coding system (Version C) included two major domains of expectations that evolved from the open-ended questions and the interview transcripts themselves. The first included seven main categories of expectations about early intervention programs for deaf preschoolers, and the second comprised six main categories of expectations from those professionals who provide the services in such
programs (see Tables 1 and 2 in the Results section). As can be seen in the tables, 2 to 13 different subcategories were identified within each of the main categories, for a total of 83 expectation subcategories in the two domains (43 expectations from the program and 40 expectations from professionals).

The complete data set, which consisted of the 50 orthographically transcribed interviews and the 50 sets of responses to the two open-ended questions, was subjected to content analysis utilizing Version C of the coding system. Ten percent of the data was then randomly selected and re-coded by another independent judge, a language clinician with rich experience in deaf education. The interjudge reliability level was 85.3%.

Results

This section first presents the results of the content analysis performed on the two written questions and the personal interviews. Second, we present analyses conducted to classify the mothers into distinctive groups based on each group’s common expectations.

Content Analysis

The relative frequencies of mothers’ expectations in each content category and subcategory (in percentages) were calculated for the two domains: expectations about the intervention program and expectations about professionals.

Expectations About the Intervention Program

Table 1 presents the relative frequencies of maternal expectations about early intervention programs, in descending order. Each expectation category and subcategory was assigned a label by the researchers, to represent in table form the rich variety of maternal statements proffered in that content area.

All of the mothers in the sample asked to receive information of one kind or another as a part of the program. Information directly related to audiological issues, the maintenance of hearing aids, and language development was sought by over 80% of the mothers, indicating their wish to understand more about deafness and its implications for the child’s ability to communicate. As one mother stated, “Information enables coping with confusion. It’s like going into a dark tunnel, and slowly but surely it gets lighter, and only gray spots remain.” Other issues of major concern for many mothers were the child’s language development and the types of educational programs available for their deaf child.

Most mothers (94%) also expected the intervention program to provide professional guidance on a range of practical matters. Their expectations reflected first and foremost the mothers’ desire to be involved in the process of teaching language skills to their children (82%), with the view of language as the most important area necessitating intervention. The majority of mothers (72%) also wanted direct suggestions on how to raise a deaf child, implying perhaps their feelings of ignorance or insecurity or their perceptions that, as one mother stated, “all the rules change” when rearing a deaf child, thus preventing them from generalizing from their previous parenting experiences or from general knowledge on childrearing. Only 14% of the mothers in the sample requested a course in sign language. This might be related to the fact that hearing mothers find it difficult to cope with the possibility that their children might need a communication system that differs from their native language. In addition, this small percentage may be related to the professionals’ relatively limited skill in sign language as well as their current biases, together with the rudimentary involvement of deaf staff in the preschool programs in Israel to date.

Almost all of the mothers (98%) expressed a need to receive emotional support from the intervention program, particularly in the form of opportunities to meet other parents of deaf children (80%) and also older deaf children (42%), reflecting the mothers’ hope of receiving help from others who have had similar psychological experiences. The need for family counseling (60%) and even marital counseling (12%) also emerged, highlighting the stress and psychological difficulties related to the identification of a child’s hearing loss and the mothers’ awareness of its impact on the parents as a couple and the family unit as a whole.

Forty-six percent of the mothers expressed a wish
Table 1  Expectations about the intervention program (in percentages)

<table>
<thead>
<tr>
<th>1. Information (100)</th>
<th>2. Professional guidance (94)</th>
<th>3. Emotional support organization of intervention (98)</th>
<th>4. Structure, components in program (90)</th>
<th>5. Focus of intervention (96)</th>
<th>6. Services and facilities (32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Audiology &amp; hearing aids (82)</td>
<td>2.1 How to teach language (82)</td>
<td>3.1 Meet with other families of deaf children (80)</td>
<td>4.1 Stages of intervention (60)</td>
<td>5.1 Ongoing assessment (76)</td>
<td>6.1 Family (82)</td>
</tr>
<tr>
<td>1.2 Language development (80)</td>
<td>2.2 How to raise child (72)</td>
<td>3.2 Family counseling (60)</td>
<td>4.2 Frequency of parental guidance</td>
<td>5.2 Report on child progress (58)</td>
<td>6.2 Child (80)</td>
</tr>
<tr>
<td>1.3 Educational options (60)</td>
<td>2.3 Preparation of learning aids (24)</td>
<td>3.3 Familiarity with deaf culture (46)</td>
<td>4.2.1 Highly structured program (60)</td>
<td>5.3 Clarification of expectations (56)</td>
<td>6.3 Community (44)</td>
</tr>
<tr>
<td>1.4 General development of deaf children (46)</td>
<td>2.4 Care of hearing aids (22)</td>
<td>3.4 Meeting deaf children (42)</td>
<td>4.2.2 Designed to accommodate parents' needs (60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5 Medical information (40)</td>
<td>2.5 Course in sign language (14)</td>
<td>3.5 Marital counseling (12)</td>
<td>4.3 Style of guidance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6 Rights (34)</td>
<td></td>
<td></td>
<td>4.3.1 Small group discussions (56)</td>
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</tr>
<tr>
<td>1.7 Communication modes (26)</td>
<td></td>
<td></td>
<td>4.3.2 Lectures (50)</td>
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<td></td>
</tr>
<tr>
<td>1.8 Deaf culture (24)</td>
<td></td>
<td></td>
<td>4.3.3 Individual guidance (42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.9 Intervention programs (22)</td>
<td></td>
<td></td>
<td>4.3.4 Written information (38)</td>
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<td></td>
</tr>
</tbody>
</table>

4.3.5 Observation room (34)

4.4 Flexible individual program (46)

4.5 Policy (40)

4.6 Frequency of child therapy (24)

4.7 Division of responsibilities (16)

4.8 Philosophy (6)

*Expectations removed following t tests or chi-square analyses.

*Expectations removed due to low frequency.
to become more familiar with the world and culture of deaf people, to cope better with the situation of being a hearing parent of a deaf child. This finding demonstrates the readiness of some of the mothers to move closer to their child by learning about the deaf culture he or she might be entering.

Almost all the mothers (98%) seemed to be interested in the planning, organization, and implementation aspects of early intervention programs. Sixty percent of the mothers wanted to know more about the intervention process planned for their child, including its stages and procedures. A similar number of mothers (60%) asked that the program be designed according to their own needs, taking into account their emotional state and personal circumstances. As one mother stated, “Parents want to understand what’s going on with their child. . . . When I’m in control of information, I can cope better. Be considerate of my emotional state. That will keep me from walking around frustrated.” Similarly, 60% of mothers asked for a highly structured, well-defined, and clearly explained program that would address the needs of the family and the child in order of importance to them. Surprisingly, only 6% of the mothers wanted to know the philosophy of the program, concerning what concepts formulate the basis of the intervention’s approach (e.g., oral versus Total Communication, identification of the targeted client: child, parent, family, community, etc.).

Three particular components of the intervention program were frequently requested. Over half (56%) of the mothers expressed the need to clarify their own expectations with professionals before the intervention program for the child was designed. Fifty-eight percent wanted a full report on the child’s progress during the intervention, and 76% expected the program to provide ongoing assessments of their children’s progress and information about follow-up activities.

On the issue of who should be placed at the focus of intervention, a similar number of mothers stated the view that the entire family (82%) and that the child himself or herself (80%) should be considered primary consumers of the educational and intervention services offered. An appreciable number of mothers (44%) suggested that the intervention should even be extended to the entire community, with guidance given to teachers, social workers, and other community employees (e.g., physicians, shopkeepers, bank clerks) who deal with the deaf child and his or her family. The latter finding accentuates the desire of a growing number of parents to receive help in coping from the family’s ecosystem as well as the community.

Relatively few mothers (32%) mentioned the need for technical assistance or more physical facilities. This may indicate that mothers are more focused on the educational aspects of the program and less on its peripheral services.

### Expectations About Professionals

Table 2 illustrates, in descending order, the relative frequencies of the maternal expectations about the professionals they encounter in dealing with the deaf child. Each expectation category and subcategory was assigned a label by the researchers, to represent in table form the rich variety of maternal statements proffered in that content area.

These results indicated that all of the mothers had a clear sense of which skills and qualities they think a professional should possess. Most of the mothers emphasized qualities that are crucial attributes for a good counselor or clinician: openness and readiness to listen (86%); caring, sensitivity, and consideration (62%); supportiveness (66%); and a host of other qualities. One mother said, “The professionals need to give the parents a big hug and to show them that they’re not alone out there, that everyone’s here for them and at their service, and that they and their child are number one.” Significantly, almost half of the group (48%) valued a candid, frank, and forthcoming professional, who did not shelter them from the truth, even when it was painful.

The tendency of mothers to highly respect interpersonal and counseling expertise is reflected in the finding that most of the mothers in the sample expected professionals to be able to provide guidance (88%) and to have professional training in counseling (86%). Forty percent of the mothers expected that professionals would have the didactic experience necessary to provide parents with scientific information about hearing loss and related academic subjects. Yet many mothers (58%) also hoped that professionals would be dependable individuals, on whom they could rely at
Table 2  Expectations about professionals (in percentages)

<table>
<thead>
<tr>
<th>1. Qualities and interpersonal skills (100)</th>
<th>2. Expertise (98)</th>
<th>3. Style of communication (64)</th>
<th>4. Cooperation with parents (98)</th>
<th>5. Regularity of meetings (82)</th>
<th>6. Most significant contact person (94)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Readiness to listen (86)</td>
<td>2.1 Ability to provide guidance (88)</td>
<td>3.1 Openness to receiving information from parent (46)</td>
<td>4.1 Consults the parent to help design the program (86)</td>
<td>5.1 Constant availability (70)*</td>
<td>6.1 Language clinician (74)</td>
</tr>
<tr>
<td>1.2 Support (66)*</td>
<td>2.2 Counselor (86)</td>
<td>3.2 Ability to deliver a comprehensive message (38)</td>
<td>4.2 Reports on the child's progress (64)</td>
<td>5.2 Scheduled meetings (50)</td>
<td>6.2 Nursery school teacher (48)*</td>
</tr>
<tr>
<td>1.3 Caring, sensitivity, and consideration (62)</td>
<td>2.3 Somebody to rely on (58)</td>
<td>3.3 Ability to establish rapport (18)</td>
<td>4.3 Allows mutual flow of information (46)</td>
<td>5.3 A single educational therapist (38)</td>
<td>6.3 A single educational therapist (38)</td>
</tr>
<tr>
<td>1.4 Candor, genuineness, and responsibility (48)</td>
<td>2.4 Didactic experience (40)</td>
<td>3.4 Proficiency in sign language (6)</td>
<td>4.4 Legitimizes parental choices (46)</td>
<td>5.4 Psychologist (34)</td>
<td>6.4 Psychologist (34)</td>
</tr>
<tr>
<td>1.5 Initiative (44)</td>
<td>2.5 Can learn from parent (28)</td>
<td></td>
<td>4.5 Acknowledges the diverse roles of parents (24)</td>
<td>5.5 Multidisciplinary team (30)</td>
<td>6.5 Multidisciplinary team (30)</td>
</tr>
<tr>
<td>1.6 Warmth and acceptance (40)</td>
<td></td>
<td></td>
<td>4.6 Accepts parent burnout (12)</td>
<td>5.6 Social worker (20)</td>
<td>6.6 Social worker (20)</td>
</tr>
<tr>
<td>1.7 Empathy and understanding (40)</td>
<td></td>
<td></td>
<td>4.7 Appreciates the parental role (12)</td>
<td>5.7 Audiologist (16)</td>
<td>6.7 Audiologist (16)</td>
</tr>
<tr>
<td>1.8 Respect for others (30)</td>
<td></td>
<td></td>
<td></td>
<td>5.8 Educational counselor (12)</td>
<td>6.8 Educational counselor (12)</td>
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<tr>
<td>1.9 Ability to accept criticism (14)</td>
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<td>6.9 Otologist (6)</td>
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<td>1.10 Tolerance (12)</td>
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<td></td>
<td>6.10 Educational director (6)*</td>
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<td>1.11 Ability to identify with parents' problems (10)</td>
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<tr>
<td>1.12 Flexibility (4)*</td>
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</table>

*Expectations removed following t tests or chi-square analyses.

*Expectations removed due to low frequency.
Mothers’ expressed a wish that the language clinician be their personal consultant in the intervention center. Forty-eight percent identified the nursery school teacher as the professional who should maintain regular contact and inform them of their child’s progress. Only 38% said that they had no preference as to who would be the contact person, as long as a single educational therapist coordinated the intervention program.

As one mother said, “A professional who will be there to accompany me throughout the process, will be informed by all the parties treating the family, and who will be a channel of information for the parent and will take responsibility for passing that information on to the parent.”

These results indicated that mothers preferred to be in contact with one experienced, reliable professional on whom they can rely. They preferred an educator (preschool teacher or language clinician) who has a regular and direct contact with the child, over the more highly trained professionals such as child psychologists, educational counselors, or the director of the educational center.

Identification of Profiles

In view of the wealth of maternal expectations elicited by the open-ended methodology, we selected cluster analysis as the method of choice, in order to classify the mothers into four distinctive groups based on each group’s shared expectations. As a large number of expectations were shared by many mothers, we sought to identify those with differentiating capacity in an attempt to establish maternal profiles of expectations. We performed a cluster analysis in which the number of clusters was set at four, due to the size of the sample (n = 50) and the wish to avoid groups with very small numbers of mothers.

We conducted a series of preliminary steps to prepare the data for cluster analysis. For statistical reasons, it was important to lower the number of expectations entered into the analysis. This was attained by excluding those expectations with a very low frequency among mothers (i.e., two subcategories: maintenance of hearing aids invoked by only 2% and professionals’ flexibility discussed by only 4%) and by eliminating those expectations that did not discriminate between
mothers in terms of the relationship each expectation showed with the child, or family background characteristics. Further details on this factor analysis are available in Ingber (1995) and in Dromi and Ingber (1998).

Only 70 expectations (out of the total number of 83) that were identified as significantly related to one or more child/mother/family characteristics \((p < .05)\) were entered into the cluster analysis (see items with superscripts a and b in Tables 1 and 2 for expectations thus removed). The four groups obtained were unequal in size: Group A included 7 mothers, Group B included 13 mothers, Group C included 23 mothers, and Group D included 7 mothers. An expectation was considered shared by the members of each group when it was present in the majority of the mothers who composed the group (with a loading of more than 0.4). It is important to note that even after the division into groups, many of the expectation categories were shared by the majority of mothers in more than one of the groups, as illustrated by Figure 1, which shows the overlap between the four groups with regard to their characteristic expectations.

Table 3 lists the expectations characterizing the mothers in each of the four groups and those that were prominent in all four of the groups. As can be seen in the Most Mothers in All Groups column in Table 3, 15 expectations were shared by most of the mothers (but not necessarily all) in all of the groups at a moderate frequency. Although some expectations appeared in all four groups, a unique profile with its specific nuances can be drawn for each group of mothers. An examination of the characteristic expectations in each group (by column in the table) and the differences between groups (by row in the table) facilitated the generation of the following profiles. The four groups’ names are proposed tentatively on the basis of our understanding of the major defining characteristics of each group as represented in Table 3.

**Group A: “Independent Decision Makers.”** The relatively small group of mothers in Group A \((n = 7)\) wanted to take full responsibility for decisions affecting their deaf children's lives and demonstrated a high level of confidence in their own ability to educate and rehabilitate their children. They viewed the intervention program...
<table>
<thead>
<tr>
<th>Expectations</th>
<th>Group A (n = 7)</th>
<th>Group B (n = 13)</th>
<th>Group C (n = 23)</th>
<th>Group D (n = 7)</th>
<th>Majority in all groups</th>
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<td><strong>ABOUT PROGRAMS</strong></td>
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<td>Information</td>
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<td>General development; Communication modes; Educational options</td>
<td>Rights; Educational options</td>
<td>General development; Deaf culture; Rights; Educational options; Communication modes; Programs</td>
<td>Audiology; Speech and language development</td>
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<td>Professional guidance</td>
<td>Care of hearing aids</td>
<td></td>
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<td>How to teach language; How to raise the child</td>
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<td>Emotional support</td>
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<td>Family counseling</td>
<td>Family counseling</td>
<td></td>
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</tr>
<tr>
<td>Structure and organization of intervention</td>
<td>Highly structured program; Designed to accommodate parents’ needs; Written information</td>
<td>Division of responsibilities; Highly structured program; Designed to accommodate parents’ needs; Individual guidance; Groups; Policy</td>
<td>Designed to accommodate parents’ needs</td>
<td>Frequency of child therapy; Written information; Groups; Individual guidance</td>
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<td>Ongoing assessment; Report on child progress; Clarification of expectations</td>
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<tr>
<td>Focus of intervention</td>
<td>Community</td>
<td>Community</td>
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<td>Services, facilities</td>
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<td><strong>ABOUT PROFESSIONALS</strong></td>
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<tr>
<td>Qualities and interpersonal skills</td>
<td>Warmth; Acceptance; Empathy; Understanding; Respect for others; Candor; Genuineness; Tolerance</td>
<td>Empathy; Understanding; Candor; Genuineness; Initiative</td>
<td>Warmth; Acceptance</td>
<td>Warmth; Acceptance; Candor; Genuineness; Initiative; Respect for others</td>
<td>Readiness to listen; Caring, sensitivity, and consideration</td>
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<tr>
<td>Expertise</td>
<td>Didactic experience; Someone to rely on</td>
<td>Ability to provide guidance; Can learn from parent; Someone to rely on</td>
<td>Didactic experience; Ability to provide guidance; Can learn from parent</td>
<td>Didactic experience; Ability to provide guidance; Can learn from parent</td>
<td>Counselor</td>
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<tr>
<td>Style of communication</td>
<td>Ability to deliver a clear, comprehensive message; Openness to receiving information from parent</td>
<td>Ability to deliver a clear, comprehensive message; Openness to receiving information from parent</td>
<td></td>
<td>Openness to receiving information from parent; Proficiency in sign language</td>
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<tr>
<td>Cooperation with parents</td>
<td>Legitimizes parental choices; Appreciates parental role</td>
<td>Legitimizes parental choices; Allows mutual flow of information</td>
<td>Legitimizes parental choices; Allows mutual flow of information</td>
<td>Consult parents in designing program; Reports to parents on child’s progress</td>
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<tr>
<td>Regularity of meetings</td>
<td>Scheduled meetings</td>
<td>Scheduled meetings</td>
<td>Scheduled meetings</td>
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<tr>
<td>Significant contact person</td>
<td>Multidisciplinary team</td>
<td>Psychologist; Multidisciplinary team</td>
<td>A single educational therapist</td>
<td>Psychologist; Multidisciplinary team</td>
<td>Language clinician</td>
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and the professionals as important resources to be exploited among a multitude of resources available for themselves and their children. Thus, this group expected the intervention to promote their own in-depth understanding of the child’s hearing loss, including its developmental and medical implications, as well as to expand their knowledge about the deaf culture and community. These mothers wanted a systematic, comprehensive, and personalized intervention that would include an array of features such as community outreach, extracurricular activities, support and counseling for the whole family, and an interdisciplinary professional team. They wanted to be deeply and actively involved in decision making and implementation of the program at all stages, viewing themselves as carrying the primary responsibility for their child’s intervention, even beyond that of the professionals. The professional was viewed by Group A mothers as a knowledgeable, respected figure who should deliver to parents both extensive amounts of information and frequent reports on their child’s progress. At the same time, the professional was expected to be open to receiving parental input, appreciate parents’ crucial role in the intervention process, and furnish positive feedback and reinforcement for the parents’ activeness and competence.

**Group B: “Well-Socialized.”** Mothers in this group (n = 13) appeared to have almost unquestioningly accepted the services provided by their current intervention program, describing its features as those most desirable (e.g., a multidisciplinary team; family therapy; regular progress reports; information on child development, methods of communication, and educational opportunities; community intervention; etc.). They seemed to want some level of involvement in their child’s intervention, seeing not only their children but also themselves as legitimate clients of the program; but their desire for partnership with professionals was not as developed as in Groups A or D. These mothers sought a structured, organized program that would focus on the practical aspects of deaf education. They expressed an interest in the intervention program’s processes, practices, and organization and in the areas of specialty held by each clinician in the team. They hoped that their opinions as well as specific information about the family would be considered by the professionals planning the intervention.

**Group C: “Minimalist, Relinquishing Responsibility.”** This group (n = 23) was by far the largest in the sample. These mothers had the fewest number of expectations, seeming to reflect a conservative style characterized by greater passivity and a lower tendency to become involved in or responsible for their child’s intervention. They did not ask for control or involvement in the intervention process, but rather viewed the professionals as solely responsible for planning intervention and educating their children who are deaf. Their expectations centered on receiving practical information in specific areas such as knowledge about their children’s social rights and educational options. Most of them wished that one therapist, preferably the speech-language pathologist or deaf educator whose specialty is to work with the child, would coordinate the intervention. They expected only periodic reports on the child’s progress. These mothers did not expect to receive counseling for themselves and did not relate to their own psychological needs. They did not expect any empathy or reinforcement of their own functioning from professionals.

**Group D: “Full Collaborators.”** This small group of mothers (n = 7) seemed to evidence a deep understanding of the complexity inherent in their child’s intervention and of the importance of mutuality in collaboration with professionals. Expressing a large number of expectations, they asked for information on a wide range of topics such as the child’s development, hearing loss, and deaf culture; and they suggested that parents should have available a variety of program activities such as discussion and counseling groups, individual parental guidance, and newsletters from teachers and clinicians. These mothers exhibited an awareness of their own strengths and weaknesses, recognizing that being a parent of a deaf child does not qualify one as an expert. While they attributed the primary decision-making role to the professional, they wished to have significant input and to be given legitimacy and respect for gradually taking over the decision making. Mothers in Group D revealed a high level of respect for the expertise of professionals, hoping to be
enriched by staff members’ knowledge, support, and counseling in order to increase their own competence over time and thereby to become better partners involved in the education and development of their child. Thus, the professionals were expected to be as highly trained and skilled and as oriented to the child’s needs as possible, even requiring a proficiency in sign language.

In conclusion, the results clearly indicate that mothers do not constitute a homogeneous group with regard to their expectations. It is possible to characterize subgroups that vary with respect to how intervention is defined (i.e., child-centered vs. family-centered) and to what extent mothers wish to be involved (i.e., levels of collaboration). The largest group of mothers in the sample (Group C) had few expectations for themselves and viewed intervention as primarily for the child, exhibiting low expectations for collaboration or parental involvement. The second-largest group of mothers (Group B) espoused the view that intervention is an interdisciplinary challenge. They trusted a team approach, hoping that their own opinions would be strongly considered in making important therapeutic decisions. Yet these mothers were mainly interested in practical issues and did not expect many family-oriented activities.

In contrast, the two smaller groups shared the view that intervention should include parents as active partners. Both groups highlighted the need to learn from the professionals and to be partners in the design and implementation of the program. Whereas the mothers in Group A exhibited much self-confidence in their own capabilities and seemed to want total control over early intervention, the mothers in Group D held an attitude of openness to learning as much as possible from professionals and seemed interested in receiving psychological support both to help them grow and to give them legitimacy and respect in their increasingly instrumental role and contribution in the partnership.

Discussion

The results indicate that the Israeli mothers of deaf children who participated in this study expressed a wide range of clearly defined expectations from early intervention programs as well as from the professionals who administer the programs. The mothers generally sought information, guidance, and support from the intervention and hoped that professionals would be well trained and proficient in interpersonal skills, highlighting cognitive, behavioral, and emotional issues. Strikingly, most of these mothers seemed to understand the complexity involved in the challenge of raising a deaf child. Although some expectations were certainly common to a majority of mothers, it was possible to distinguish four subgroups of mothers who differed with respect to who should be the primary target of the early intervention (child only, both child and family, or the family as a whole) and in how they defined collaboration between themselves and the professionals. These findings underscore the importance of attending to the specific needs, hopes, and expectations that each family expresses about early intervention. A careful evaluation of individual differences in mothers’ willingness, style, and capability to become involved in their children’s education and intervention—whether as primary decision makers, collaborators, partners, or cooperative recipients of services—will have ramifications on the development of individual families’ intervention plans.

This study offered a unique contribution in its qualitative data collection procedures, particularly in its emphasis on gaining access to the mothers’ spontaneous ideas and opinions through personal interviews, in contrast to the bulk of previous research that utilized mailings, structured telephone interviews, and formal written questionnaires. When offered the opportunity to freely voice wishes and expectations, these mothers, who were not formally trained, revealed not only an impressive extent of knowledge in a vast diversity of areas relating to their child’s hearing loss, education, and development but also a depth of awareness of available resources, options, and their own needs.

Whether one can generalize from the expectations gathered through direct interview with Israeli mothers of young deaf children to other mothers in different countries is an interesting question. The following discussion considers this question by comparing our results to those findings already published by researchers in other countries using diverse methodological approaches, almost exclusively based on questionnaire data (e.g., Bailey & Simeonsson, 1988; Davis & Get-
tinger, 1995; Dunst & Trivette, 1990; Sexton, Snyder, Rhems, Barron-Sharp, & Perez, 1991).

The subgroups of mothers in the Israeli study differed in their expectations concerning the extent to which they wanted to be involved in the intervention with their deaf child, corroborating prior studies reporting parental ambivalence in this area (Bailey & Simeonsson, 1988; Dunst, Trivette, & Deal, 1988; Harbin, 1993; Hershberger, 1991). Leighty-Troester, Doubledee, Deakin, and Rider (1991) claimed that parents are the experts in their own way of life and in their own child's functioning, therefore emphasizing parental input to the intervention and the utility of a clear division of responsibility for the child's progress between the parent and the professional. Leighty-Troester et al. likewise accentuated the significance of consistently providing parents with progress reports and of involving them in the planning and implementation of a program to increase their awareness of the program's goals and to enhance their ability to become more caring and knowledgeable.

Many Israeli mothers wished that one professional be a case manager for them, preferably the speech pathologist or deaf educator, who were seen as best acquainted with their child and best able to transfer information to the parents in a language that would be clear and understandable. This finding substantiated previous research identifying the teacher or speech pathologist as most helpful (Meadow-Orlans et al., 1997) and demonstrating that one case manager can gather and disseminate all of the information available on the child and interpret it to the parents (Laughton, 1994; Lowenthal, 1992), whereas the interaction of parents with professionals from many disciplines is liable to provide an added burden (Haas & Crowley, 1982).

In corroboration of various studies discussing the benefits of parents learning about schools and services for the deaf and hard of hearing, as well as communication, development, and parents' rights (Able-Boone, 1993; Atkins, 1992; Bernstein & Barta, 1988; Cooper & Allred, 1992; Harrison et al., 1996; Laughton, 1994), the mothers in the Israeli sample asked for detailed information about many aspects of their children's hearing loss. They expressed a need to become more well-informed regarding audiology, language development, the general development of a deaf child, and educational opportunities.

The mothers in the Israeli study also expected to receive practical suggestions and direct instruction on how to develop communication skills. They reported that by watching practical examples of how to communicate with their child, they could become more aware of their child's needs. Such practical guidance has been attributed with a positive effect on the child's development and on the parents' coping ability, sense of control, and self-confidence in their parental role (Able-Boone, 1993; Bronfenbrenner, 1974; Fallon & Harris, 1991; Laughton, 1994; MacTurk et al., 1993).

The desire to meet with other parents of deaf children is in line with literature suggesting that peer support leads to a feeling of well-being (Dunst & Trivette, 1990; Frey, Greenberg, & Fewell, 1989; Shonkoff et al., 1992). The encounter with other parents from similar backgrounds who face comparable problems provides support, alleviates feelings of isolation, and offers models and strategies for coping (Cooper & Allred, 1992; Freeman et al., 1981). Group meetings give the opportunity to express feelings freely in a supportive atmosphere that provides participants with an empathic response (Atkins, 1992; Bernstein, 1993; Rimmerman et al., 1987).

Some mothers in our sample expressed a desire to become more acquainted with deaf culture and the deaf community in Israel. Their wish to meet other deaf children and deaf adults indicates their desire to better understand their child's condition, to develop new expectations and hopes, and to reduce fear and anxiety. These findings are in line with those of Harrison et al. (1996), who found that most parents expressed an interest in meeting deaf adults. As one Israeli mother stated, "They're always telling my daughter to try to feel as if she were hearing. Why don't they tell her parents to feel as though they were deaf? Imagine what it would do for my daughter if her mother could share her feelings, language and culture?!" This expectation from intervention is supported by the cultural upheaval of the last few years in the United States and elsewhere. All over the world, deaf societies are increasingly emphasizing that deaf people in fact belong to an ethnic minority that has special cultural needs (Dromi & Ringwald-Frimerman, 1996, in press; Rea-
gan, 1990). In Israel, this trend is only in its early stages, as reflected for example by the very limited number of educators who themselves are deaf and who work within the educational system.

In describing attributes that Israeli mothers think professionals should possess, they highlighted the importance of good counseling skills such as openness, active listening, empathy, and thoughtfulness. Discussing their need for support and acceptance, mothers described the professional as someone they should always be able to rely on and to whom they can turn at all times. In one of the few studies using interviews (with only five mothers), Morgan–Redshaw, Wilgosch, and Bibby (1990) stated that mothers remembered positively those therapists who related to them with sensitivity to their needs. Motta and Lynch (1990) reported that mothers felt that empathy for their needs contributed more to the habituation of their deaf child than did the actual techniques of the therapy. A family-centered approach needs to be contingent on both the program’s and professionals’ philosophy and on the parents’ beliefs and expectations. If families are to become more involved in intervention programs, those programs must adopt approaches that encourage parents to take on more responsibility and to become active and effective in facilitating the intervention process (Dromi & Ringwald–Frimerman, 1996; Dunst et al., 1994; Roberts, Rule, & Innocenti, 1998). Even parents who are more compliant or dependent on professionals for decision making can be empowered to increase their competence and involvement through a family-centered intervention in which professionals provide support, information, and reinforcement of the parent–professional partnership rather than providing answers or solutions to problems (Dunst et al., 1988).

The abundance of information gathered in this Israeli study and its commonalities with other studies using different methodologies for data collection and analysis underscore that the issues important to these mothers are highly relevant to professionals around the world who provide services for deaf children and their families. It is clear that we can learn as much from parents as they can learn from us, and that the challenging goal of successful collaboration with parents requires a close, serious examination of the multifaceted issues elicited in conversations with them.

Important questions remain open for further investigation, such as what determines the individual differences among parents that we identified here; how the timing of investigation in the long timeline of early intervention affects mothers’ expectations; how closely mothers’ expectations reflect actual patterns of parental behavior; and how various background factors such as child characteristics, maternal and family attributes, and cultural features correlate with mothers’ expectations. Another significant issue calling for future research is to what extent mothers’ expectations are influenced by the preschool program philosophy (i.e., the attitudes and behaviors of the professionals with whom they interact), and how programs’ and professionals’ philosophies interact. Finally, future research efforts should be directed at revealing how professionals can promote parental involvement, increase the partnership with parents, and enhance individual parents’ efficacy.

Appendix

Six structured questionnaires were administered to the mothers to further explore relationships between expectations and child/family/mother variables. Further details on the instruments are available in Ingber (1995) and in Dromi and Ingber (1998). Hebrew adaptations of the original instruments in English were used for the Faces 2, QRS-R, STPI/H, SCS, and SNF scales.

- QRS-R: Questionnaire on Resources and Stress (Holroyd, 1974). Measured mother’s perception of the family’s ability to cope and adjust to the child with special needs in three dimensions: family problems, pessimism about the deaf child’s potential, and perceived severity of the deaf child’s behavior and difficulties.
- TPI/H: State–Trait Personality Inventory (Spielberger et al., 1979). Measured three maternal emotions (anxiety, anger, and curiosity) as two dimensions (emotional state and personality trait) comprising a total of six subscales.
- SCS: Sense of Coherence Scale (Antonovsky,
Measured mothers’ generalized world view expressing the extent to which they have an enduring, dynamic confidence that their internal and external environments are predictable and that life situations will work out as well as can be expected, including three subscales: comprehensibility (a cognitive dimension), manageability (a behavioral dimension), and meaningfulness (an emotional dimension).

SNF: Social Contacts and Social Support (Weinraub & Wolf, 1983). Measured the type and extent of social support available as perceived by mothers, in 10 subscales: social contacts, emotional support, support in parenting, practical support with household, practical support with children, ability to cope with life situations, and satisfaction from support in emotional, parenting, and practical (household and childrearing) domains.

ECD: Evaluation of Communicative Development (Dor, 1989). Measured the mother’s evaluation of her deaf child’s communication regarding use of gestures, sign language, and oral language.

Notes
1. These parental characteristics enabled the calculation of socioeconomic status (SES) using Hartman’s (1975) scale of professional prestige, according to the following equation: \[\text{(maternal education + paternal education)/2 + (paternal occupation)/2}.\]

2. The relationship between each expectation (mentioned/not mentioned by mothers) and the demographic variables was calculated by means of \(t\) test for independent samples for nominal variables (81 expectations × 6 variables), and by means of chi-square test for categorical variables (81 expectations × 4 variables). The nominal variables were age, age at diagnosis, hearing loss measured in dB, father’s and mother’s education levels, and SES. The categorical child variables were oral versus Total Communication mode, the presence of additional disabilities, gender, and presence of an additional deaf sibling. In addition, the mothers’ characteristics were gathered into nine factors through a principal components factor analysis, and \(t\) tests for independent samples were calculated (81 expectations × 9 factors).

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