COPING WITH STUTTERING AT SCHOOL-AGE: A PARENTS AND CHILD PERSPECTIVE

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ABSTRACT

After years of focusing on preschool children who stutter, (Glauber, 1958; Johnson, 1959; Yairi and Ambrose, 2005) in the last two decades researchers have shown increasing interest in school-age children who stutter. Research has dealt with temperament,(Nicholas, Yairi, Davis, Mangeldorf, Cook & Hamilton, 2006) with children's attitudes towards their stuttering or speech situations, (De Nill & Brutten, 1991; Vanryckeghem & Brutten, 1997) and even with parents' attitudes; (Kigel & Lahat, 1987; Ramig, 1993) but seldom addressed the issue of the child's and/or parents' coping with the stuttering phenomenon. Coping of families with school-age children who stutter is the focus of our current research.

Lazarus and Folkman (1984) defined coping as a process in which there are "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person". These may take the form of either problem or emotion focused.

Semi-structured questionnaires written by Prof. Katz-Bernstein and Dr. Subellok for the German version of this research and translated into Hebrew by Prof. Katz-Bernstein were used for separately interviewing parents and their school-age children who stutter in 26 families. In addition the Family Adaptability and Cohesion Evaluation Scales (FACES III) first proposed by Olson, Russel and Sprenkle (1983) were used for evaluation of family and couple cohesion and adaptability.

Data was analyzed both qualitatively by finding categories of themes in the answers to the interviews, and quantitatively by finding frequencies of occurrence and statistical relationship between qualitative categories.

Results show that most of the parents demonstrated positive change in their attitude towards stuttering through the years. Stuttering frequency reports of children and parents were highly correlated but did not relate to change of attitudes.

This change of attitude was significantly related to couple cohesion, reported spouse support and reappraisal. There were significant gender differences in using strategies of coping: fathers used significantly more feelings suppression while mothers preferred more external support and reappraisal. The percentage of positive change towards stuttering was significantly lowered by despair and guilt feelings.

Parents' self-appraisal of coping reports were also related to couple cohesion: parents who expressed pain scored significantly lower on couple cohesion than parents who reported ambivalence or acceptance to different degrees.

In addition, couple and family cohesion were related to the child's easy speech at home and to the parents' acknowledgement of the child's advantages, respectively. The dominating coping strategy used by children was avoidance which was found to be indirectly reinforced by their parents.

Children who used avoidance were all reported as socially adaptive by their parents significantly more than children who did not.

Former stuttering in close family made it significantly harder for mothers to accept the possibility that stuttering wouldn't disappear but did not affect the fathers' acceptance.

These results and more are discussed in detail with regard to the process of coping with stuttering of parents and school-age children and its implications towards speech therapy.

PREFACE

Since the dawn of human history stuttering has been an unresolved enigma. Defining stuttering was always complicated since it usually expressed a specific approach regarding its etiology and nature, hence characterizing therapy as well (Yairi & Ambrose, 2005).

In the 1950's and 1960's the search for reasons that would explain the onset of stuttering prompted researchers to believe that parents' personality and behavior was the main cause of stuttering (Glauber, 1958; Johnson, 1959; Wyatt & Herzan, 1962; Andrews & Harris, 1964). Accordingly, therapy was focused on either psychoanalysis for the parents, therapy for mother-child relationship in order to resolve unconscious psychosexual conflicts, (Glauber, 1958) or counseling parents to ignore the symptoms in order to avert the child's awareness of his speech disfluencies (Johnson, 1959). It was believed that this awareness was raised by anxious and perfectionist parents and served as the reason for transition from normal developmental disfluency to stuttering in pre-school children.

With technological advancement and findings confirming organic and functional differences between people who stutter and those who are fluently speaking (Somer et al., 2002; Alm, 2007), the understanding of stuttering changed and today it is considered a disorder with constitutional origins interacting with environmental factors (Rustin, Botterill & Kelman, 1996; Yairi, Ambrose, Paden & Throneburg, 1996; Ambrose, Cox & Yairi, 1997; Yairi, 1997).

The purpose of the current research is to investigate coping with the stuttering phenomenon from the viewpoint of those who live with it every day: parents and their school-aged children. This point of view is rather unique since children and parents who participated in stuttering research

were often asked to report about others, but rarely about themselves. Even when they were asked to report about themselves, it was usually via written questionnaires rather than personal ethnographic interviews. The child's very first environment, and therefore the most influential, is the family, until reaching adolescence when peers become the preferable role model.

Investigating school-aged children's and their parents' coping, enabled us to picture the situation of coping a few years after onset but before adolescent rebellion and peer dominant influence.

Accumulative clinical experience and professional research literature confirm the complexity of the stuttering phenomenon and its being an expression of interaction between individual intrinsic and extrinsic factors. This idea led us to the notion that the way one copes with this problem may influence the impact it has on that individual's life. As we all know, children's coping is potentially influenced by their parents' belief systems (Rubin & Mills, 1992) and their families' coping. Coping research usually focused on children with learning disabilities (Dyson, 1993; 1996) autism (gray, 2003; 2006); C.P. (Lin, 2000) and chronic childhood illnesses (Fortier & Wanlass, 1984; Bristol et al. 1988; Ylven et al. 2006) but not on stuttering - potentially a chronic situation as well, especially from school-age years and on. In order to reach conclusions about the process of coping (Lazarus & Folkman, 1984), it is only logical to investigate people who are already going through it, such as school-aged children who stutter and their parents.

The purpose of this investigation is to learn about aspects of coping with stuttering during the school-age period, from both the parents' and children's points of view. These aspects will enable us to improve speech-therapy by taking into consideration factors that, up to the present, were either underemphasized or completely ignored in therapy.

They may be either stuttering reinforcing or fluency reinforcing and therefore have direct influence on the child's speech and self acceptance as well as on the resilience of both child and parents. These factors were referred to in previous stuttering research but not from the most reliable source - the subjects' personal points of view.

"I can't think of anything to write about except families. They are a metaphor for every other part of society."
Anna Quindlen

CHAPTE A: THEORETICAL BACKGROUND

1. What is stuttering?

Defining the stuttering disorder is a complicated task. Yairi and Ambrose (2005) exemplified it in the observation that "everyone knows what stuttering is except the expert".

They point out that many proposed definitions have been expressions of various points of view regarding the etiology and nature of the disorder, for example: Coriat (1943) regarded stuttering as psychoneurosis; Eisenson (1958) thought of it as a transient disturbance in communicative propositional language usage; Van Riper (1971) regarded it as a temporal disruption of the simultaneous and successive programming of muscular movement in the production of speech and Brutten and Shoemaker (1967) thought of stuttering as a form of fluency failure resulting from conditioned negative emotion.

Yairi and Ambrose (2005) cite The World Health Organization's definition (1977) "disorder of rhythm of speech in which the individual knows precisely what he wishes to say, but at times is unable to say it because of involuntary, repetitive prolongation or cessation of a sound". As illustrated, the different definitions describe stuttering as a psychiatric disorder, a language disorder, a motor disorder and a learned disorder, while the latter places considerable weight on subjective experiences of the person who stutters in addition to symptomatology.

Motsch (1992) points out the intermittent character of stuttering. Very few people who stutter demonstrate other language disorders. The appearance of the disorder depends on the subjective appraisal of the situation: how much stress does the person who stutters feel is put on him by the environment's expectation that he/she will be fluent. Therefore, according to Motsch, early interaction has to be considered for families with stuttering children as a part of the intervention.

In our research we were interested in the subjective point of view of children who stutter and their families so we continued searching for a definition that includes not only the symptomatology, but the consequences for the function of the individual in his environment as well. DSM4 includes additional symptoms such as blocking, circumlocutions and physical tension, and also indicates interference with academic, occupational achievements or social communication as diagnostic criteria for stuttering.

Yaruss (2007) suggested the World Health Organization's International Classification of Functioning, Disability and Health as a framework for considering the overall experience of stuttering disorder.

This classification describes Body Function (BF - what the body does) and Body Structure (BS - what the body has) and also Activities (how BF and BS relate to what a person wants to do on a daily basis) and Participation (what a person wants to do in his /her life as a whole). With regard to these elements, Yaruss (2007) goes on to describe the stuttering experience as follows:

Body Function: People who stutter experience uncontrolled speech fluency. They experience various degrees of impairment in body function related to fluency of speech, rhythm of speech and speed of speech.

Body Structure: Anatomical structures of the vocal tract, respiratory system and larynx are considered to be intact in people who stutter, however recent research revealed evidence of neuroanatomical differences between people who stutter and people who do not stutter. Confirming such evidence through additional research may warrant an application of a code indicating impairment in body structure.

Activities and Participation: People who stutter frequently experience difficulty producing messages and participating in conversations and discussions.

These difficulties may have a broader effect on the speaker's life. When dealing with school-aged children it may be expressed in forming relationships and interacting according to social rules, succeeding in education and participating in community events and various social interaction (with family members, friends, teachers, religious practices etc.) (Yaruss, 2007).

Contextual Factors: this section includes Personal factors and Environmental Factors.

In the fluency disorders literature the personal factors are referred to as the affective, behavioral and cognitive reactions a speaker may experience to his or her stuttering. These may include embarrassment, shame, anxiety and fear as affective reactions; tension and struggle during speech and avoidance of words or situations as behavioral reactions; and reduced self-esteem associated with the individual's ability to deal with stuttering as cognitive reactions.

Environmental factors include parents, teachers, peers, coworkers, employers and speech therapists.

This indicates that stuttering has a potential of interference in various aspects of social life and must be treated from this point of view.

Since families are the first social construct within which children live and grow, their significance in children's lives is obvious. This idea leads many clinicians to think that child stuttering may be affected by home environment, parents' personalities and their child-rearing habits (Rustin & Purser, 1991; Mallard, 1991; Motsch, 1992; Yairi, 1997). The reverse - the continuous influence of stuttering on a child's family - has usually been overlooked by researchers (Katz-Bernstein, 1992; Yairi & Ambrose, 2005; Subellok, 2005).

In this work we will try to shed more light on these two-way relations between the child's stuttering and the child's family from both the parents' and child's point of view.

2. <u>Why school-aged children?</u>

Clinical experience shows that therapy for school-aged children is somewhat more complicated than for younger children.

Why is that?

Usually the child goes to therapy because the parents think there is a problem of speech. The child either finds it hard to admit that there is a problem or thinks "I'm OK". In case the child does want therapy, it is due to a feeling of failing in social relations at school either with adults and /or with peers, and blames it on stuttering.

According to Erikson (1950), at this age the child enters a stage of industry, which means "he adjusts himself to the inorganic laws of the tool world". Consequently, "the child's ego boundaries include his tools and skills" at the end of this stage.

One of the major tools used in order to be industrial and productive at school either in social relationships with peers or in school tasks (with teachers) is speech. Hence being skilled in fluent speech may become

crucial for the child's developing industry. Failing to develop such competence may lead to a sense of inferiority (Erikson, 1950) which is a feeling expressed quite often in therapy by stuttering people, even in the more advanced stages of life.

School-aged children who stutter may need support in order to pass this stage with feelings of productivity. Family life may prepare them for school life (Erikson, 1950). The family has to play a role not only in preparing the stuttering child for school life, but also in coping with stuttering.

A further consideration is that social demands begin to be a central issue affecting the school aged child's self- estimation. Becoming aware of his or her lack of fluency, the family can no longer protect the child from comparing his or her speech to the speech competence of other children. This work deals with the question of coping from the family's perspective and therefore includes the child's perspective as well.

The family deals with rearing a child who has an apparently poorly honed "productive tool" called "stuttering". This, after some years of experience as parents to a child with an exceptional speech, since stuttering usually begins much earlier, in the preschool period (Rustin, Fry & Nicholas, 1987; Yairi, 1993). It seems parents are prone to be disappointed because spontaneous recovery never happened and feel burned-out on one hand, or that they developed better ways of coping which make life easier for them and /or their child, on the other.

One way or the other many families have to deal with the dilemma, as Featherstone (1993) expressed it:

"Do we have to accept the child's limitation in order to accept the child? Is it possible to accept it on one hand but still go on fighting for making a

change? Does acceptance not mean somewhat reducing efforts fighting for your child?"

Since coping is a process as mentioned above, interviewing parents of school-aged children makes it possible for us to learn from people who are going through the process in real time and have already gained some experience in that subject matter. This will provide us with a foundation to plan a better support system for the family as a part of clinical interventions.

We interviewed the children themselves in order to understand their point of view as well as their parents'. It was essential to speak with children who have some level of awareness as to their situation, and who have some history with their disability. This could be better achieved with school-aged children than with pre-schoolers. Like their parents, children also had to cope with the fact that spontaneous recovery is not going to happen. As soon as they enter adolescence, their peers would gain greater significance in their lives and would probably be a potential influence on their attitudes. Therefore, we felt it was important to interview children before major peer influence takes place.

In light of the above mentioned ideas we thought interviewing families with school-aged children would provide some relevant information, scientific or clinical, on coping with stuttering.

3. What do we mean by "coping"?

The term is defined by Lazarus and Folkman (1984) as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person".

They emphasize that this definition is process-oriented rather than trait-oriented. It also makes a distinction between coping and automatic adaptive behavior, since efforts have been invested.

These efforts to manage are not dependent on outcome, so "coping" includes "anything a person does or thinks, regardless of how well or badly it works."

The word "process" indicates that we are dealing with a time consuming phenomenon and not a single point event, in which case characterizing features of coping may change over years.

Circumstances are taxing for families who have a child with the kind of disability that oscillates between appearing and disappearing, and parents of stuttering school-aged children have been experiencing this for several years. Stress is caused not only by the stuttering itself, but also by its unpredictability.

According to Lazarus and Folkman's model of coping, people use two kinds of strategies to cope with stressful situations:

1. Problem- focused coping that is directed at managing the problem causing the distress.

2. Emotion-focused coping that is directed at regulating emotional response to the problem.

Both kinds of strategies are used after cognitive appraisal of the situation: problem-focused strategies are used when the problem is appraised as changeable. Emotion-focused strategies are used when there is an appraisal that nothing can be done to modify the distressing situation. Both kinds of coping strategies are used to different degrees in order to deal with external or internal demands posed by real-life stressful situations.

3.1. What are problem-focused strategies?

These kinds of strategies are similar to problem-solving strategies. They are usually directed towards defining the problem, generating some alternative solutions, weighing costs and benefits, choosing and acting on them.

Problem-focused strategies include not only processes focusing on the environment, but they may be directed inward as well. The latter strategies are directed at motivational or cognitive changes such as shifting levels of aspiration, reducing ego involvement, finding alternative channels of gratification, developing new standards of behavior or learning new skills or procedures.

3.2. What are emotion-focused strategies?

Emotion-focused coping strategies that are directed at *decreasing* emotional distress include avoidance, minimization, distancing, selective attention, positive comparison and wresting positive value from negative events. Sometimes emotion-focused strategies are directed at *increasing* emotional distress because "some individuals need to feel worse before they can feel better" (Lazarus and Folkman 1984). Consequently, they engage in self-blame or self-punishment.

Other emotion-focused strategies lead to changes in the way the problem is construed without changing the objective situation. This is called *reappraisal*. Although reappraisal is a cognitive process it is usually focused on changing emotions, a threat may be diminished by changing the meaning of the situation. For example: "I decided there are more important things to worry about" or "I considered how much worse things could be" (Lazarus and Folkman 1984).

One of this work's objectives is finding out what kinds of strategies are frequently used by parents of school-aged children who have a stutter in order to cope with the problem.

4. How do parents cope with a child who has a disability?

Since there is very little literature dealing with coping of parents who have stuttering children, we tried to find inspiration in literature about families with children who have other kinds of disorders.

When a special needs child is born, it usually violates the balance of the family system and has long term consequences for both the child and the family (Levy-Shiff & Schulman, 1998).

When the family does not discover the child's disability immediately after birth, but rather later on, the effect is similar and many researchers describe it as a crisis (Levy-Shiff & Schulman, 1998).

Theories about this crisis tend to describe a process with stages which are related to typical reactions. During the family's adaptation every stage involves different kinds of parental feelings about the situation. Fortier and Wanlass (1984) offered a 5 stages model families go through:

1) **Stage of impact**: characterized by anxiety and shock, fear, concern and disorientation, confusion when getting the message.

2) **Stage of denial**: characterized by disbelief, search for help in many places (shopping), feelings alternate between hope, despair and avoidance of feelings. Cognition includes fictionalized explanations, distorted expectations, not hearing.

3) **Stage of grief**: anger, helplessness, sense of loss, self pity, self doubt, guilt, sadness, impotence, feeling different, sense of isolation and revival of unresolved feelings. Questioning "how" and "why", death wish toward the child as possible solution, thoughts about what will be in future.

4) **Stage of focusing outward**: information seeking, increased friendliness and contact with others, reconsidering options, formulating plans, increased awareness of reality and some feelings of relief and confidence.

5) **Stage of closure**: feeling calm, beginning to meet needs of child and family, emergence of family solidarity as new goals are targeted, increased closeness with similar others. Cognitions deal with acceptance of child and situation.

Many parents report a continuous stress situation which has long term influences. According to Baruchin (Duvdevani, et al., 1998) parents of a child with special needs feel much more stress than parents of other children who are the same mental or chronological age. She found powerful correlation between feeling stress and parents' perception of their functioning: the higher the level of stress parents felt, the less normal they perceived their own functioning. Moreover, the higher the level of stress parents felt, the more they demonstrated negative behavior and speech towards their child.

Parents of special needs children showed a higher level of mental exhaustion in comparison to parents of normal children who are the same chronological or mental age (Viessman in Duvdevani et al, 1998). The same research showed that mothers of special needs children felt more mental exhaustion than fathers; a fact which is not surprising since the mother is more involved in the daily care of the child and probably has to give up personal and professional development more frequently than fathers.

Nevertheless, there are researchers who emphasize positive coping of parents. As Kelso, French & Fernandez (2005) point out: "While it cannot be disputed that parents of disabled children face a great deal of stress, this stress does not necessarily lead to dysfunction (Beckman 1991).

Outcomes range from successful adaptation to maladaptation. (Foster, Byron and Eiser, 1998 in Kelso et al. 2005). They interviewed parents of children with developmental disabilities and elicited stress sources when raising a child with a disability as well as coping resources accessed by parents. The most common cited by parents was social networks resources. These included marital relationships, friends, doctors, government disability services, church groups, teachers, babysitters, interim care, support groups, non profit organizations and Education Support Units, Centers and Schools.

There were parents who reported previous exposure to people with disabilities that required use of coping skills as positive in helping them cope. Half of the parents mentioned personality variables as an important factor in coping which included a sense of humor, a day-by-day approach to life, maintaining a positive outlook and the need to be in control. All parents referred to at least one emotion-focused coping strategy such as: relaxing; turning to religion; avoiding the stressful situation; releasing emotions by crying, laughing, humor, acknowledging personal success when raising the child; acceptance; seeking out social support for emotional release and developing as a person. Parents reported use of problem-focused strategies either directed externally (seeking information, negotiation to resolve conflict, learning a new skill etc.) or internally (cognitive reappraisal, reminding oneself how bad it could be etc.). Out of 26 parents in Kelso et al.'s research (2005), 24 noted they were coping well with stressors they faced when raising a child with a disability, which means they were generally successful in maintaining a healthy and positive approach to life. Many parents reported that the transition to "feeling better" took several years. The first two years of the child's life were extremely stressful but they perceived circumstances as getting better as the child developed.

Another positive coping research was conducted by Shu-li Lin (2000). He cites the Resiliency Model of Family Stress, Adjustment and Adaptation which defines family coping as "a specific effort (covert or overt) by individual members in the family or the family function as a whole to decrease or handle a demand on the family and to acquire resources to manage the situation associated with the demand." In his research he investigated families with children who suffered from CP aged 0-21 years. He found that coping strategies of families changed through the years: Parents of infants and pre-schoolers seemed to use coping behaviors related to increasing knowledge regarding CP and seeking more external resources than families with young adults. Families with school-aged children used more coping behavior related to positive family appraisal and had better positive social interactions than families with young adults. These families appeared to have better family adaptation than families with adolescents and families with young adults. This change in coping strategies over a life time is of interest to us since we are dealing with school-aged children who stutter and their families' strategies are also likely to change over the years - but is it the same change parents of children with other disabilities go through?

5. How can parents or families influence their stuttering child?

5.1 Genetics

According to Yairi (1997) the genetic factor is the most solidly established one in research concerning the family's influence on a child's stuttering.

There is a 42% chance for a stuttering child to have a stuttering parent and more than a 70% chance to have a stuttering member in the extended family (Ambrose, Cox & Yairi, 1997).

It seems that recovery also has to do with genetics. Yairi, Ambrose, Paden and Throneburg (1996) found that chronicity and children's recovery from stuttering were significantly related to the presence of similar trends among relatives. Chronic stuttering relatives either in the immediate or extended family elevated chances for continuous stuttering of the child, whereas recovered relatives did not.

5.2 Findings about speech rate

There are contrasting findings on this subject matter:

According to Izakson's (2001) findings, speech rate for parents of children who stutter was higher than for parents of fluently speaking children. Supporting this is a series of articles by Meyers and Freeman (1985) who found that mothers of stuttering children tended toward higher speech rates in general even when speaking to children other than their own.

In contrast, Kelly and Conture (1992) did not find any difference in speech rate between parents of children who stuttered and fluent ones. According to Yairi's review of 50 years of research, no difference was found in speech rate or disfluency of stuttering children's parents compared to fluently speaking children's parents. Miles and Ratner (2001) as well, did not find differences in speech rate between mothers of stuttering and fluent children.

Even if undoubtedly different speech rate had been found, it still would not have proven that it affects the child's stuttering. Yaruse and Conture (1995) found that the severity of stuttering was positively connected with the gap between the parents' and child's speech rate. This suggests that the child-parent speech rate gap may be more influential on stuttering severity than parent speech rate alone.

5.3 Findings about communicative-pragmatic indexes

Meyers and Freeman (as reported by Nippold & Rudzinsky, 1995) found that mothers of both stuttering and fluent children interrupted their children's speech 7 times more in disfluent than fluent situations. This indicates that a stuttering child, especially in moments of disfluency, has more chances of experiencing speech interruptions.

Kelly and Conture (1992) found that simultaneous speech of mothers to their 4 year olds was higher as stuttering severity was higher. No differences were found in reaction latency and in overall interruptions of speech between groups.

Izakson's (2001) findings that included data on 32 families who have children between 30-50 months of age, showed that parents of the fluently speaking group had more efficient communication on indexes of speech rate, questions, latency and reaction to subject. There were no differences in indexes of listening, turn-taking and direction between groups.

At the same time, she found that parents of stuttering children were more effective in non-verbal indexes than parents of fluent children.

5.4 Findings about linguistic complexity

Kelly (1995) found differences between fathers and mothers in interaction with their stuttering child. Fathers tended to require higher linguistic and cognitive levels of conversation.

Miles and Ratner (2001) deal with Starkweather's theory of stuttering which was called Demands and Capacities. This theory is based on the assumption that semantic and syntactic complex models of parents' language is an impossible challenge for their stuttering children since it is not suited to their cognitive, motor, linguistic and emotional abilities.

The theory emphasizes the gap between the parents' demands and the child's capacities. The gap does not mean the child's capacities are low, but rather shows that the parental demands lack adjustment. .

Even though it is a widespread theory of stuttering development, there are vague findings to reinforce it. One 1986 research found more questions and demands in the speech of mothers of stuttering children than in that of controls', but it was a small sample with too great an age range.

Miles and Ratner (2001) draw attention to a different aspect of looking at parents' speech. In their opinion, we have to take into account the change of speech style as a *result* of stuttering and not only as a stuttering supporting factor.

Kloth, Janssen, Kraaimaat & Brutten (1995) investigated mothers of children at risk for stuttering before onset and a year later, but did not find significant differences in speech rate or communicative style between mothers whose children had stuttered already and mothers whose children had stayed fluent. The only difference found was shorter MLU for mothers who had later stuttering children in comparison to the mothers of children who stayed fluent.

Miles and Ratner (2001) also couldn't find any difference in syntactic complexity between mothers of stuttering and fluent children shortly after onset. They did not find any differences in lexical diversity and rare vocabulary usage, or even in mean length of turn in conversation. Once again this shows no differences in the way parents of the two groups adapted their language to their children's development.

Nippold and Rudzinsky (1995) summarize their review about relationship between parent's speech and the stuttering of their child, acknowledging that until that time there were no consistent findings to support the existence of such relations between children's capacities and parent's demands.

5.5 Findings about parents' attitude towards their stuttering child

Thought and research about parents' attitudes have changed dramatically over the last century. Johnson (1959) believed that "stuttering begins in the parent's ear". He suggested that parental criticism of a child's developmental disfluencies leads to stuttering. In his view, the reason for stuttering was the parents' negative attitude toward their child's normally developing speech.

Glauber (1958) believed that stuttering children have a mother who is a "stutterer" in personality and usually married to an overtly stuttering father. She often marries a passive man and their relationship is sado-masochistic, propelled by the need to control and possess or by a sense of duty and little by positive satisfaction. The father is nearly absent in his father-role. He helps maintain the confusion of the parental roles in the family. Glauber thought that mothers contribute to the initiation of stuttering and fathers contribute to its maintenance.

Wyatt and Herzan (1962) thought stuttering could be traced to a disturbance in the mother-child relationship when the child practices grammatical speech between two and four years of age. She describes conversation "over the child's head" in which the child cannot learn to speak by listening because the words and concepts he hears are beyond his comprehension.

Research on the 1950's and 1960's suggested that parents of stuttering children were more prone to apply pressure and have negative attitudes towards their child than parents of fluent children (Yairi, 1997). They were identified as dominating, over-protective, having high expectations and perfectionists in child education (toilet habits, cleanliness, eating and

speech). In addition, they were characterized as rejecting and having an undesirable evaluation of their child's personality (Yairi, 1997).

Yairi (1997) added that according to his review children who stutter tend to be raised more frequently in less harmonious, more socially withdrawn families, who take less time to enjoy each other's companionship than are non-stuttering children. Inspiration for these ideas was drawn from Andrews and Harris' (1964) findings which suggested that stuttering children tended to come from socially deprived homes more than fluent children.

Glasner (1949) found that school-aged children who stutter are perceived by their mothers as being more sensitive, more susceptible to stress and more behaviorally inhibited than their non-stuttering peers (in Yairi & Ambrose 2005).

Wertheim (1973) found that parental ego dysfunction affects their stuttering child's ego function. She investigated perceptual attitudes of 16 families with 7.5-10.5 year old boys who stutter and 16 families with fluently speaking boys of the same age range. She claims that maternal and paternal constraints found more frequently in families with boys who stutter, encourage the offspring's excessive control over his own behavior and convey the idea that his control is inadequate. An additional finding shows that fathers of the boys who stutter score more often on perception of superior self-regulation and superior degree of competence. In contrast with Glauber's theory of a passive impotent father and a dominating mother, she claims that "by supporting the father's omnipotent self-perception in the framework of the family, the mothers reinforce the salience of the association between being a male and having a superior degree of competence."

She concludes that "the pathogenic impact of parental ego defects on the offspring is not a simple function of each parent's personality but rather

of the resulting balance. This balance was found to provide a highly efficient differentiation between stuttering and non-stuttering offsprings." With the same climate of differences between parents, Bernstein-Ratner and Silverman (2000) tell us about findings from the 1960's, according to which, mothers with stuttering children expected lower scholastic achievements and put forward lower standard targets for their child in comparison to control groups. In contrast, fathers tended to over-estimate their child's ability on coordination tasks and linguistic tasks.

With advances in research throughout the years, ideas of differences between parents of stuttering and non-stuttering children in attitudes towards their children were put to the test.

Cox, Seider and Kid (1984) studied subjects from 14 families with several stutterers (5 or more) and subjects from 10 control families with no stutterers to elucidate both genetic and non-genetic factors relevant to stuttering. In order to examine non-genetic hypotheses regarding the etiology of stuttering and environmental factors possibly predisposing stuttering, data was collected using 2 structured case-history interviews and 4 self-report inventories. Pre-natal, developmental, or medical factors did not distinguish stutterers from their non-stuttering family members. In addition, they did not find evidence of differing anxiety levels from among stutterers, their non-stuttering family members, and non-stuttering controls. Familial attitudes toward speech did not differ between non-stuttering family members of stuttering individuals and those of non-stuttering controls. There was no difference in ratings of parental behavior or children's traits that distinguished stutterers from non-stuttering family members.

Bernstein-Ratner and Silverman (2000) raised the possibility that the parents' over-estimation or lower expectations of their stuttering child

may have to do with the parents' beliefs and attitudes, but it also may express parental acquaintance with their children. They put this assumption to the test with children near onset, hypothesizing that a parent that estimates his child's communicative skills incorrectly will have high expectations which do not fit the child's actual abilities. They checked parents' attitudes towards their children's communicative development through questionnaires and the children's actual development through different language tests. They found that parents of stuttering children estimated their child's communicative development as significantly lower than parents of fluent children matched for age and SES.

When testing linguistic skills they found that stuttering children functioned within normal range both as individuals and as a group. Nevertheless, their mean function mark was significantly lower than that of fluent children in some tests and in others, lower with a strong tendency.

They also found that parents of stuttering children answered the questionnaires in a more adaptable way to their child's real development than the fluently speaking children's parents. There was also higher agreement between parents of stuttering children about the developmental level of the child than between the parents of fluent children.

In a preliminary study Nicholas, Yairi, Davis, Mangeldorf, Cook and Hamilton (2006) found that parents of school-aged children who stutter rated them lower than the children's ratings of themselves on a temperament questionnaire. Their parents rated them as (a) being less able to focus and shift their attention, (b) finding it harder to plan and to suppress inappropriate responses, (c) being more shy, and (d) gaining less pleasure from activities involving high intensity or novelty.

Children who stuttered did not estimate themselves differently from children who did not stutter.

The researchers point out that this is not the first time findings show that parents of children who stutter underestimate them, but they do not take into account the real objective abilities of the children since these have not been investigated yet.

Yairi (1997) himself notes that these findings, which rely on studies of parents some years after onset, may reflect changing parental attitudes over the years and their effort to cope with a chronically speech- disabled child. So they may reflect parental burnout.

When it comes to therapy, Conture in Rustin et al (1987) observed that the less objectively the parents are able to describe the problem, the less favorable the prognosis. This means that the parents' ability to describe their child's problem as realistically as possible cannot be underestimated and is an essential tool in therapy. Researchers' points of view about parents' attitude here is not how negative they are but how they portray their child's reality and support therapy. This point of view is less judgmental of parents' personality than the conventional one in the 1950's, 1960's and even the 1970's. It is constructive in looking for the reasons parents develop certain attitudes and how their attitudes are affected by reality.

Looking at the way stuttering influenced parents, Izakson (2001) examined parental burnout and found that fathers of fluent children felt more burnout than fathers of stuttering children. In Contrast, mothers of stuttering children showed more burnout than mothers of fluently speaking children. She poses that mothers usually see their essential role as taking care of their child's health so they may think it's their responsibility to make stuttering fade out of their child's life. When this

attitude is taken too rigidly it doesn't acknowledge the mothers' limited power as a human being, hence ending with burnout feelings.

As Featherstone (1993) claims in her book <u>A Difference in Family</u>: "usually we have to agree to two kinds of reality, close to each other. First we have to admit that our child is different from others in a meaningful way. Than we have to admit that in spite the fact we can help we're not able to cure him". Without admitting the second idea excessive burnout is inevitable.

Kigel and Lahat (1987) investigated 43 families with stuttering pre-school and school-aged children. In their opinion the families' reactions to stuttering was equivalent to an unfinished mourning process.

They argue that fluctuation in the stuttering phenomenon prevents stabilization of the emotional reaction. The family experiences an emotional pendulum between hope for fluent speech while denying stuttering on one hand, and despair about the possibility for positive change on the other. Inability to foresee the coming and going of stuttering and to find reason in it sabotages the family's ability to accept the impairment.

They claim to find some resemblance to psychosomatic families described by Minuchin. Those families are characterized by some impairment of the child and an overprotective mother while the father seems somewhat distanced. In the clinic the mother is interested in therapy while the father believes "it will fade away with time". In addition, they found that mothers of stuttering children tend to "translate" their child's needs to the environment: they answer the phone instead of the child or ask the teacher to avoid asking the child questions or to read aloud in class.

They continue describing how sometimes behavior boundaries are not kept by the parents because they want to protect their child from stressful situations. Parents fear that stress will increase disfluency, therefore the child gains secondary rewards, compared to the siblings, because of stuttering. Kigel and Lahat (1987) did get the impression that the father is usually interested in setting necessary boundaries, but the mother's overprotection does not allow for implementation.

30% of the examined cases had traumatic or at risk development such as prenatal distress events, motor developmental delays, speech delays, articulation problems or breathing disturbances. They emphasize that such situations may explain the mothers' overprotection in the first place, which is only reinforced by the stuttering onset.

When one of the parents, frequently the father, was a stutterer himself, they found a tendency to be less limiting regarding his child's behavior, explaining that he understands his child's feelings since he felt the same when he was younger.

Ramig (1993) shares his clinical experience that parents who stutter themselves may act in two ways: a) overly reactive, concerned and stressed over the child's stuttering problem, or b) minimally reactive, displaying little if any outward concern about their child's disfluent speech. The last group of stuttering parents view their child's stuttering as something that he/she will learn to improve or adjust to.

These parents are those who seem to have come to terms with their own stuttering. Subellok (2005) supports this experience with her findings. In 35% of the 104 investigated families, one of the parents stuttered himself. Two major coping styles with the stuttering were revealed in these families: extremely positive namely acceptance, and extremely negative namely non- acceptance of the child's stuttering.

As we have seen so far, parents' attitudes towards their children may be affected by stuttering in many ways and there may be a difference between parents who experienced stuttering themselves and those who did not.

A recent research with mothers of pre-school children by Anderson, Pellowski, Conture, and Kelly (2003) suggests that mothers of pre-schoolers who stutter perceived their children as more apt to exhibit temperamental profiles consisting of hyper vigilance (less distractibility), inadaptability to change and irregular biological functions, when compared to fluently speaking preschoolers. Yairi and Ambrose (2005) report that Conture (2001) and Guitar (1998) hypothesized that children who stutter are born with sensitive temperaments that persist over time and are heightened by the experience of chronic stuttering. Karrass, Walden, Conture, Graham, Arnold, Hartfield, and Schwenk (2006) examined relations between children's emotional reactivity, emotion regulation and stuttering. When compared to their normally fluent peers, children who stutter were significantly more reactive, significantly less able to regulate their emotions, and had significantly poorer attention regulation, even after controlling for gender, age, and language abilities. These results were taken from a questionnaire filled out by parents of pre-school stuttering children.

To summarize the findings reviewed above, research started out by placing a lot of the responsibility on parents' attitudes and personality for the onset and development of stuttering (Glasner 1949; Johnson 1959; Wyatt & Herzan 1962); but over the years continued on to the notion that, for parents ,stuttering by itself may pose difficulties of coping with their child rearing and may influence their attitudes and reactions

(Kigel & Lahat 1987; Yairi, 1997; Yairi and Ambrose 2005); and lastly, parents who stutter may cope differently than fluently speaking parents with the stuttering of their child (Kigel & Lahat 1987; Ramig, 1993; Subellok, 2005). Moreover, there may be specific temperamental characteristics which were found in parents' answers to questionnaires (Guitar 1998; Conture 2001; Anderson et al. 2003; Karras et al. 2006) that require specific parental adaptations in order to help their stuttering child, not because of parental failure, but because of their child's special needs.

5.6. Findings about stuttering Children's attitude towards themselves or their stuttering

The self-perception discussed here includes the attitudes, thoughts and feelings stuttering children report towards stuttering, speech situations, their position in peer groups and social and academic achievements. Gildstone (1967) found that high-school stuttering adolescents were less self-accepting than non-stuttering and perceived their parents to be less accepting of them.

De Nill and Brutten (1991) investigated speech associated attitudes of 70 stuttering and 271 non-stuttering children of elementary and middle school-aged children. They found that stuttering children had significantly more negative attitudes towards speech than their non-stuttering peers. Moreover, those speech-related attitudes of stuttering children became more negative with increasing age in contrast to non-stuttering children which became less negative after 9 years of age. Vanryckeghem and Brutten (1997) who investigated Dutch speaking Belgian school-aged children who stutter, confirmed these findings and added that children who stutter exhibit significantly more negative

speech-associated attitude than their peers as early as six years of age which is an earlier age than previously thought.

In a similar research in Japan (Kawai, Nagasawa, Healey & Vanryckeghem, 2006) which compared speech-associated attitudes of elementary school children who stutter and fluently speaking children, once again there were similar findings which showed no age or gender influence on communication attitudes of children who stuttered. Japanese children showed negative communication attitudes even in the first grade regardless of gender, much like Belgian children. Severity did not influence communication attitudes of children who stutter either. Children with mild stuttering showed the same degree of negative communication attitude as those who had very severe stuttering.

A Japanese investigation of factors relating to self-esteem of children who stutter (Nagasawa & Ota, 2005) reached some interesting findings: (1) The children who rated at the highest level of academic or athletic competence had more self-confidence than those who rated at the lowest academic or athletic competence. (2) Among the children who had talked about their stuttering with their parents, the fifth and sixth graders accepted themselves on the same level as the third and fourth graders. Among the children who did not talk about their stuttering with their parents, fifth and sixth graders accepted themselves less than the third and fourth graders did. (3) The parents who talked about their children's stuttering with them did not report a negative perception of stuttering. These findings indicate that negative self-esteem of children who stutter may be influenced by their parents' ability to talk with them about stuttering.

One of the above mentioned Japanese researchers, Ota Maki (2007a) investigated the factors relating to self-esteem of school-aged children who stutter in a two year longitudinal exploratory investigation. Six 3rd

and 4th graders who stutter and who were enrolled in special speech classes in public elementary schools participated in this investigation. He found that increases in scores children gave themselves on the confidence factor were related to experiences in which the children were acknowledged for their competences. These led to increased self-esteem. An additional finding showed that changes in self-acceptance factor scores children gave themselves were related to children's peer-relations at school homeroom and to home relationships.

In another study Ota Maki (2007b) examined whether the self-esteem of children who stutter is related to the communication domain. This is based on a model that holds that self-esteem for individuals is more strongly related to domains considered important for oneself, and less strongly related to domains considered less important for oneself. A self-perception scale was administered to 338 3rd – 6th grade children who stutter and who were enrolled in special speech classes in public elementary schools, and 692 children who do not stutter. Results were as follows: 1) There were 5 significant predictor variables of the self-esteem of children who stutter: self-evaluation of physical appearance, social acceptance, behavioral conduct, relations-with- parents domain and the importance of the communication domain for oneself.

2) The self-esteem of children who evaluated stuttering negatively was more strongly related to variables of the communication domain than was that of children who did not evaluate stuttering negatively.

3) Children who evaluated stuttering negatively **attached a higher value to the communication domain** than did children who did not evaluate it negatively.

These findings show that self-esteem of children who stutter may be related to their perceptions of stuttering and communication situations in general and not only to their relations with their parents.

Other findings show that children who stutter develop more negative feelings towards speech and social interactions with growing age.

The question remains about the role parents' perception of stuttering play and whether parents' feelings towards stuttering become the child's feelings as well, as Guitar and Peters (1985) claimed.

5.7. Findings about attitudes of children who stutter towards their parents

In the relationship between stuttering children and their parents as mentioned above, Gildstone (1967) found that stuttering children felt their parents were less accepting and more rejecting than the controls. Kinsler (1961) claims that one of the most frequently reported feelings by people who stutter is covert maternal rejection. Overt rejection is less harmful since it gives the child the ability to hate his parents because of their unfairness and to oppose their attitude. When parents don't give love but pretend to act for the child's well being they delegitimize the child's aggression. The child is usually frustrated and has to suppress aggression. Since children learn that speech may be a weapon, they begin to use it for expressing their feelings and stop it partially (unconsciously), practically stuttering.

Schulz (in Wingate 1962) found that people who stutter reported high expectations at home and described their parents as either demanding or irritating.

As opposed to these findings, Yairi and Williams (1971) found that school-aged children who stutter reported their parents were understanding and not critical, at the same level of prevalence as fluent speaking children.

Bourdon and Silber (1970) also failed to find differences between children who stuttered and fluently speaking children in their descriptions

of their parents' characteristics. They explain that children who stutter feel a need to protect their parents.

As Shown, children who stutter had a tendency to feel anger and frustration towards their parents on the grounds of rejection and high expectations. This tendency was especially prevalent in the 1960's but was not confirmed in later investigations.

5.8 Where does all that research lead to?

As mentioned earlier, defining stuttering is a complicated mission that usually expresses a specific point of view regarding the etiology, nature of the disorder and therapy (Yairi & Ambrose 2005). Multidimensional approaches to stuttering led clinicians and researchers to perceive emotional and social factors as critical components that influence stuttering behavior and are important factors to consider in therapy (Rustin & Purser, 1991; Mallard, 1991; Katz-Bernstein, 1991; Yairi, 1997). Since the onset of stuttering is often at pre-school age (Yairi & Ambrose 2005) when child-parents emotional and social interactions are just beginning, there is reason to investigate the parents' perceptions as well as the child's perceptions and the relations between them. Supposing coping is a process (Lazarus and Folkman 1984), families with school-aged children have gained some experience with this process. Taking into account that this age range enables emergence and stabilization of coping strategies and some perspective on the evolution of stuttering and coping with it, there are a few questions posed:

1) Is there any change in the way parents perceive stuttering and cope with it through the years according to their own perspective?

Since we know there is a genetic component in the way a family influences child's stuttering (Yairi, 1997; Ambrose, Cox and Yairi, 1993)

We also ask:

2) How does former stuttering in the family influence parents' coping with the child's stuttering?

Coping with a child's disability necessitates the use of a variety of strategies in face of long term, ongoing stress (Levy-Shiff & Schulman, 1998; Kelso, French & Fernandez, 2005) so it becomes important for us to find:

3) Are there any specific coping strategies concluded from the interview answers and if so, what are they?

And finally, what is the role parents' perception of stuttering plays? Do parents' feelings towards stuttering become the child's feelings as well, as Guitar and Peters claimed (1985)? Thus our last question is formulated:

4) Does parents' perception of stuttering and coping with it influence the child's perception of it and if so, how?

6. RESEARCH QUESTIONS

1) Is there any change in the way parents perceive stuttering and cope with it through the years according to their own perspective?

2) How does former stuttering in the family influence parents' coping with the child's stuttering?

3) Are there any specific coping strategies concluded from the interview answers and if so, what are they?

4) Does parents' perception of stuttering and coping with it influence the child's perception of it and if so, how?

CHAPTER B: METHOD

1. Participants

The participants included 26 school-aged children who stutter (ages 6-13; M= 9.96 years, SD=2.04) and their parents. Twenty-two of the children were boys and four were girls (male-to-female ratio=4.5:1). The children's stuttering was determined by two speech therapists, by the parents and by the children themselves.

All 26 families were recruited from public and private clinics offering therapy for stuttering. All were undergoing stuttering therapy or had undergone at least one round of therapy sessions for their children.

Of the 50 families referred to us, 26 agreed to participate in our project. Some did not agree to take part due to difficulties in speaking with the child about his or her stuttering or reluctance to admit the problem even though they had requested the therapy and were on waiting lists. Others refused to take part in the project because they were angry at the administration of their clinic, usually due to having to wait too long for therapy.

Every family was ensured that the information provided in the interviews and meetings would be used for research purposes only, coded and remain confidential.

Former fluency problems were present in 15 (58%) of the 26 families. In 12 (46%) of these families, the fluency problems were in the close family (parents and/or siblings).

Most of the families were of middle-high socioeconomic status, and four were of lower-middle SES. These four families were also the most

religious among the families, while the others were secular or traditional. SES was determined by parents' age, number of rooms in family residence and number of people living at the residence.

Most children in the sample were first-born (46.2%) or second-born (30.8 %) children in families of two (50%) or three children (23.1%).

The stuttering severity ratings of the children in the sample were rated subjectively according to parental reports, on a three-point scale (1-mild; 2-moderate; 3-severe). These stuttering severity ratings are summarized in Table 1.

Table 1: Stuttering severity rated by parents of children in the sample.

Stuttering severity rated by parents	% of parent rating stuttering	
	Mother	Father
Severe	3.8	3.8
Moderate	30.8	38.5
Mild	50	50
Unable to rate	15.4	7.7
Total	100	100

The differences between mothers and fathers were minor. As shown in the table, half the children were rated as "mild" stutterers by both mothers and fathers. The second most frequent rating was "moderate" stuttering, assigned to about a third of the children. Only one mother and one father rated their child as a severe stutterer (3.8%).

The age of stuttering onset among the children in the sample was computed, as shown in Figure 1.
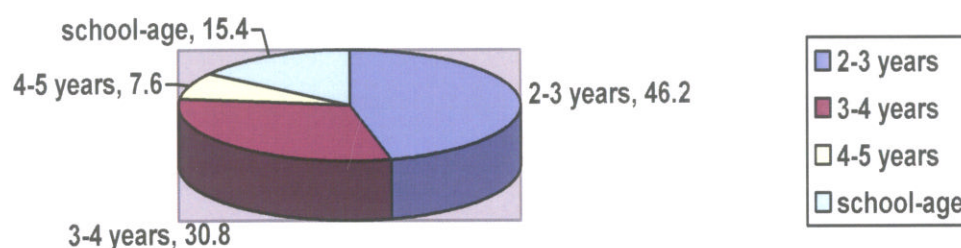
Figure 1: Age of stuttering onset among children in sample

46.2% of the children began stuttering between 2-3 years of age, 30.8% began stuttering between 3-4 years of age, 7.6% began stuttering between the ages of 4 and 5, and 15.4% began stuttering when they reached school age. The cumulative percentage for onset between the ages of 2 and 4 years is **77%**, representing the vast majority of children in this research. These data resemble those of Yairi and Ambrose (2005).

One of the measures used in this study was the FACES questionnaire, translated and normalized by Navon and Tichman (1990). For more details about the questionnaire, see the Attitude Measures section of this chapter. Our sample results were compared with results for normal population samples. Table 2 shows the FACES results for families in the sample compared to the FACES results for normal families (Navon and Tichman 1990).

Table 2: FACES results for the sample population compared to Israeli norms

	Sample mean	Sample S.D	Mean Israeli norm	Mean Israeli S.D
Couple cohesion	44.35	4.49	42.61	5.52
Couple changeability	32.6	4.48	33.57	5.62
Family cohesion	41.5	6.06	37.47	6.35
Family changeability	29	5.3	28.62	5.54

A t-test for independent variables comparing the means and standard deviations of both groups showed no significant difference between them. This indicates that the families who participated in this study do not differ from families in the normal Israeli population with respect to cohesion and adaptation (changeability) scores for couple or family relationships.

2. Research Measures

2.1 Attitude measures

Two questionnaires were used to measure the attitudes of the parents and their children: parent interview questionnaire and child interview questionnaire. The questions for both interviews were based on questions used in interviews in a similar study in Germany. They were adapted

based on years of accumulated clinical experience with families coping with stuttering.

The parent questionnaire was based on a questionnaire used in a previous study in Germany by Katz-Bernstein and Subellok (Subellok 2005) that investigated families with children who stutter and how they cope with their child's disability. This questionnaire was translated to Hebrew by Prof. Katz-Bernstein and used in our research. Subellok (2005) conducted an investigation with a follow-up questionnaire in order to examine the ethics and efficiency of the original parents' questionnaire. On that follow-up most of the parents reported the original interview helped them understand and process their experience of coping with stuttering more efficiently. This result reinforced the usage of the translated German parents' questionnaire in the current research as well.

The parents' questionnaire was semi-structured, i.e. the questions were open but aimed at specific themes. There were 13 themes, each with an associated list of questions. For example, on the theme "stuttering as a symptom" parents were asked:
a) Have you noticed any change in your child's fluency over time?
b) How do you estimate the severity of your child's stuttering?
   Mild   Moderate   Severe
c) How do you estimate the frequency of your child's stuttering?
   Occasional Often Very often
d) Under what circumstances does your child stutter most?
(The full questionnaire is attached as Appendix A).

The parents' answers were fully recorded and analyzed, even in cases where they added information and did not use or only partially used the answer options offered (when available).

The child interview questionnaire was written by Prof. Katz-Bernstein and Dr. Subellok for the German version of this research and was also translated into Hebrew by Prof. Katz-Bernstein.

The child questionnaire was also aimed at specific themes, but included open questions as well even when answer options were given. For example, the theme "reasons for the interview" included the following question:

*Did your parents talk with you about stuttering?

Yes   No   Not sure   No answer   Other _____

*If yes, what did they tell you?

(The complete child questionnaire is attached as Appendix B).

The questionnaires were given to two speech therapists, who were asked to read and evaluate question relevance, clarity and thoroughness in covering the subject of coping. The answers given in the interviews were categorized by two professional judges who analyzed the answers and discussed the analysis together.

2.2 Family adaptation and cohesion measures

Family adaptation and cohesion were measured by the Family Adaptability and Cohesion Evaluation Scales (FACES III), first proposed by Olson, Russel and Sprenkel (1983) and translated and adapted to Hebrew by Tichman and Navon (1990). In fact, there were two

questionnaires, one measuring adaptation and cohesion in the family and the other measuring the same criteria for the couple's relationship. Parents had to answer each question on the written questionnaire on a scale of 1-5 according to how they evaluated their family and their couple relationship. Each parent answered the family and couple questionnaires individually.

The FACES questionnaires were used to understand each parent's point of view about the family and the couple relationship and how these factors are related to how the family copes. (The English versions of the questionnaires are attached as Appendix E).

2.3 Child's History Measure

Every family completed a questionnaire about the child, including information about the family (parents, siblings), the child's development, history of the child's stuttering, the child's health history, academic and social functioning at school and other details. This questionnaire was sent by mail to the parents, who completed it by hand usually before the meeting with the researcher.
(The child history as a personal details questionnaire is attached as Appendix C.)

3. Data Analysis

Data was analyzed both qualitatively and quantitatively.

The primary analysis was a qualitative content analysis. Its purpose was to find common categories in the raw data that could help explain and understand the participants' answers.

Each question was analyzed separately. Two experienced speech therapists each made a separate categorization and then together decided on a final list of categories. After that, a quantitative analysis computed the frequency of appearance for every category in all the answers given in the sample. This analysis was performed by two professional judges who were asked to read the interviews and decide whether or not each category exists in the interview answers.

Inter-judge reliability was measured by percentage of agreement between them. Agreement was 85% or higher for all questions.

After the answer categories were defined and counted, several types of statistical analyses were applied to find relations between categories. These analyses included frequencies distribution of the categories and tests for relationships between categories using Chi square tests and Wilcoxon for non parametric variables, and t-tests and analyses of variance for parametric variables.

4. Procedure

The researcher set up appointments by telephone at the convenience of the family. All families were interviewed in their homes. Parents were interviewed for at least two hours, while the interview with the child who stuttered lasted about 45-60 minutes.

In most cases, both parents were interviewed together. In two cases, the mother and father were interviewed separately due to time and place constraints. In a third family the father left in the middle of the interview because of "prior obligations" even though both parents had been

informed about the length of interview and the necessity that both parents be present.

The order of the interviews depended on time and parental constraints. If the interview was scheduled for the evening, the children were interviewed first because of bedtime. Often parents wanted to be interviewed first in order to become better acquainted with the person who was going to interview their child and to gain some trust.
In most cases, the children were interviewed individually, though some parents would not leave their child alone with a stranger or were curious and listened to the child's interview from a distance. One child asked for his parents to sit close to him during the interview.

Both interviews were tape-recorded, and notes were taken as well.
The child's history questionnaire was sent by mail and usually completed by the parents before the meeting with the researcher. The FACES questionnaires were similarly filled out in advance. At the end of the interviews, parents had an opportunity to ask about anything they did not understand on the questionnaires, to finish filling them out and to submit them to the researcher.

CHAPTER C: RESULTS OF THE RESEARCH

For most of the parents' interview questions frequencies were calculated separately for mothers and fathers since we felt many of their answers were not identical through interviews.

1. RESULTS WITH REGARD TO RESEARCH QUESTION NO. 1

Our first question was: Is there any change in the way families perceive stuttering and cope with it through the years and what affects this change?

1.1. Aspects of Change

In order to answer this question we calculated frequencies of answers to the interview question asked of the parents: Has your attitude towards the stuttering of your child changed over the years?

Frequencies are presented in table 3.

Table 3: Frequency of mothers' and fathers' reports of change in attitude towards their child's stuttering

Answer	Frequency	Percent
No change		
Mother	2	7.7
Father	5	19.2
Positive change		
Mother	22	84.6
Father	19	73.1
Irrelevant answer or none		
Mother	2	7.7
Father	2	7.7
Total		
Mother	26	100
Father	26	100

As shown in table 3, 84.6% of mothers and 73% of fathers in our sample reported a positive change in their attitude towards their child's stuttering through the years since onset.

This means most parents regardless of gender felt a positive change of attitude towards their child's stuttering.

The Wilcoxon test revealed that the difference between mother and father tended to be significant ($p<.07$), resulting from a higher frequency of positive change among mothers.

Another aspect of change in the family's perception was asked in the parents' interview: What changes happened in the family due to stuttering during the years?

Table 4 presents frequencies of categories of change reported by the parents.

Table 4: Frequencies of parents' reports of changes in the family due to stuttering

Answer	Frequency	Percent
No change	10	38.5
Differences of opinion	2	7.7
Positive change	8	30.7
Negative change	6	23.1
Total	26	100

Table 4 shows that 61.5% (accumulated blue print percentage) of families reported some kind of change in their lives due to stuttering. Of these families 30.7% reported positive change, 23.1% reported negative change and 7.7% had differences of opinions between parents. However 38.5% reported no change in their lives due to stuttering.

In order to learn how families perceive their coping with their child's stuttering, we asked them how they think they as a family cope with the stuttering of their child.

Frequencies were calculated separately for mothers and fathers in order to examine differences between them.

Table 5 presents frequencies of parents' answers to that question.

Table 5: Frequencies of mothers' and fathers' self-appraisal of family's coping with stuttering

Type of coping	Frequency	Percent
Pain expression		
Mother	5	19.2%
Father	2	7.7%
Ambivalence		
Mother	10	38.5%
Father	10	38.5%
Acceptance to different degrees		
Mother	9	34.8%
Father	12	46.2%
No answer		
Mother	2	7.7%
Father	2	7.7%
Total		
Mother	26	100%
Father	26	100%

In 38.5% of cases both fathers and mothers felt ambivalence. 34.8% of mothers and 46.2% of fathers reported acceptance to different degrees. Wilcoxon test

revealed that the difference between father and mother scores for different degrees of acceptance was not significant.

Only 7.7% of fathers and 19.2% of mothers expressed pain.

Wilcoxon test revealed that the difference between father and mother scores for pain expression was not significant either.

As shown, most parents were ambivalent or reported some degree of acceptance of stuttering without any significant difference between mothers and fathers. Another aspect of change we investigated was parents' reports of changes in fluency during the years. The results are presented in table 6.

Table 6: Frequency of mothers' and fathers' reports of change in fluency through the years

Type of change	Frequency	percent
No change		
Mother	2	7.7%
Father	2	7.7%
Fluctuation		
Mother	14	53.8%
Father	14	53.8%
Positive change		
Mother	4	15.4%
Father	4	15.4%
Positive change after therapy		
Mother	6	23.1%
Father	5	19.2%
No answer		
Mother	0	0
Father	1	3.8%
Total		
Mother	26	100%
Father	26	100%

As shown, reports of both fathers and mothers are very similar in this case and most of the families (53.8%) had to deal with fluctuating fluency. 38.5% of mothers and 34.6% of fathers reported positive change either after therapy or without relation to it.

Further aspects of change were concluded from parents' answers to the FACES questionnaire. (Please note Method chapter p. 38).
[These questionnaires evaluate cohesion and adaptability of families according to their own written answers. The adaptability score is in fact a measure of the family's ability to change as reported by its member (Navon and Tiechman 1990).]
We measured cohesion and change for the family and couple relationships reported by each parent.

To sum up our main findings on the subject of change: Most parents did report change of attitude towards stuttering with a statistical tendency to a greater percentage of mothers.
Reported change in the family due to stuttering was less equivocal and frequencies ranged as follows: approximately 40% of families reported no change; a third reported positive change and approximately a fifth reported negative change.
Self-appraisal of parents was rather similar between mothers and fathers mainly consisting of ambivalence and different degrees of acceptance.
 As to change in the child's fluency over the years, more than half of the families had to cope with fluctuating fluency and approximately 40% felt positive change.

1.2 Father – Mother differences on FACES:

On the family questionnaire mothers scored higher (M=3.088) than fathers (M=2.83) on the **family's** ability to change, as revealed by the T-test (t= 2.067; p< .05).

The same tendency was found concerning cohesion. Mothers scored **family's** cohesion (M=4.379) higher than fathers (M=4.139) (t= 1.759; p< .09) on a nearly statistically significant level.

Fathers scores on **couple changeability** (M=3.26) were significantly higher than on family changeability (M=2.83), as revealed by the T-test (t= 2.91; p< .008).
They also tended to scored **couple** cohesion (M=4.38) higher than family cohesion (M= 4.13) (no significance, just by comparing mean scores).
This part of the FACES results show that fathers were more couple focused and mothers were more family focused.

Mothers did not score differently on changeability and cohesion when scoring family or couple relations.

With regard to the FACES' results, we found negative correlation between *fathers' perception of change* in *couple* relations and age of onset: the older the age of onset, the lower the ability to change in couple relations (r= -.525; p< .05).
 Mothers' scores did not show any correlation between change in the couple relations and age of onset.
On the other hand, *Mothers* showed positive correlation between their perception of *change in family* and age of onset. The later the onset age, the higher the ability to change in the family (r= .405; p< .05).

The main FACES results reflect differences between fathers and mothers:
Mothers did not show a discrepancy in scoring between family and couple questionnaires, but fathers scored higher on couple relations than family relations on both changeability and cohesion measures. In addition, mothers scored higher than fathers on family changeability and cohesion measures. Onset influenced mothers' and fathers' scores differently:
The higher the age of onset, fathers scored couple changeability lower.
The higher the age of onset, mothers scored family changeability higher.

1.3 Factors influencing parents' change reports

No significant relationship was found between change in attitude towards the child's stuttering and age of onset as determined by the Chi square tests.

On the x^2 tests no relation was found between reported fluency changes and parents' attitudes towards stuttering.

We tried to detect relations between reports of change in family life and age of onset. These frequencies are presented on table 7.

Table 7: Frequencies of reports of change in family at different onset ages

Age of onset		Parents' reports of change in Family due to stuttering of child	
		No change	Change
2-3 years	count	5	7
	% within onset	41.7%	58.3%
3-4 years	count	2	6
	% within onset	25%	75%
4-5 years	count	0	2
	% within onset	0%	100%
School-age	count	3	1
	% within onset	75%	25%
Total	count	10	16
	% within onset	38.5%	61.5%

Even though there was no statistical significance found in the x^2 tests, one may note a pattern of higher percentage of parents' reports of change with pre-school-aged onset and a lower percentage of change with school-aged onset. This conclusion should be treated cautiously due to small numbers of school-aged onset children.

Most parents attended professional consultation soon after onset (about 60%). However, approximately 27% waited more than 6 months and the rest waited more than a year.

We tried to determine relations between changes in attitude towards the child's stuttering and the time of parents' first professional counseling.

Table 8 presents results for both parents separately.

Table 8: Relations between changes in attitude towards the child's stuttering and time of first professional counseling for mothers and fathers

Time of first counseling	Parents reports of attitude change towards stuttering of child			
	Mother		Father	
	Positive change	No change	positive change	No change
6 months from onset				
count	11	4	9	5
% counseling	73.3%	26.7%	64.3%	35.7%
6-12 months from onset				
count	7	0	6	1
% counseling	100.0%	0	85.7%	14.3%
More than a year after onset				
count				
% counseling	4	0	4	0
	100.0%	0%	100%	0%
Total				
count	22	4	19	6
% counseling	84.6%	15.4%	76.0%	24%

50

No statistically significant differences were found between families who sought out counseling right after onset and those who did so later on.

Change of attitude was not influenced by the timing of their first professional counseling.

We tried to determine relations between parents' reports of change in family due to stuttering and former stuttering in family.

Table 9 presents the results.

Table 9: Parents' reports of change in family life due to stuttering in relation to former stuttering in family

Former stuttering in family	Parents reports of change in family due to stuttering		
	No change	Positive change	Negative change
No stutt. Count %change	4 40%	5 50%	1 10%
Stutt. in close fam Count %change	5 42%	2 16%	5 42%
Stutt. in remote fam Count %change	1 25%	3 75%	0 0%
Total Count	10	10	6

The X^2 tests revealed a nearly significant relation ($X^2 = 12.10$; p<.06) between families with former stuttering in the family and reports of change in the family. Families with former stuttering in close family reported a higher percentage of no change or negative change than families with no stuttering in the family or with stuttering in remote family only.

Reports of change in attitude towards the child's stuttering were related to couple cohesion reports on FACES for mothers and fathers.

Table 10: Relations between change of attitude towards stuttering reports and couple cohesion report on FACES for mothers and fathers.

	Positive attitude change report	No attitude change report
FACES couple cohesion report by mothers	N=17 M=4.5588* SD=.32	N=3 M=3.6* SD=1.4
FACES couple cohesion report by fathers	N=15 M=4.5333 SD=.31997	N=5 M=4.06 SD=1.18

The T-test revealed a significant difference between mothers of families who reported positive attitude change towards stuttering and those who reported no attitude change (t=2.75: *p<.01). The first group had significantly higher scores of couple cohesion than the other.

Results for fathers showed the same tendency as mothers, but with no statistical significance because of difference in group size. Families with positive attitude change towards stuttering reports tended to score higher on fathers couple cohesion of FACES.

We examined reports of change in family due to stuttering and couple cohesion scores on FACES for both parents.

Table 11 presents this relation for both fathers' and mothers' scores of couple cohesion.

Table 11: Fathers' and mothers' scores of couple cohesion with relation to reports of change in family due to stuttering

| | Reported change in family due to stuttering | | |
	No change	Positive change	Negative change
Fathers' couple cohesion score	N=8 M=4.125* SD=.477	N=7 M=4.54* SD=.43	N=4 M=4.77 SD=.32
Mothers' couple cohesion score	N=9 M=4.12 SD=.84	N=7 M=4.7 SD=.26	N=4 M=4.5 SD=.32

The T-test revealed that fathers who claimed positive change in family scored higher on couple cohesion than fathers who claimed no change with a statistical significant difference (t=1.99; *P<.05).

As illustrated, for mothers the same tendency was revealed but did not reach statistical significance.

To sum up this subject: positive changes of attitude towards stuttering were reported more by mothers with higher scores on couple cohesion. Fathers showed the same tendency without significance.

Change in family due to stuttering was also related to couple cohesion: fathers reporting of positive change in family scored higher on couple cohesion. For mothers there was the same tendency without significance.

Former stuttering in the family also influenced change in the family: more "no change" or "negative change" reports were given by families with former stuttering in close family in comparison to families with stuttering in remote family or with no former stuttering.

There was a tendency toward higher percentage of reported change in the family with preschool onset.

1.4 Relation between change of attitude towards stuttering and support of spouse

The X^2 test showed a significant relationship between support from spouse and a positive change of attitude towards stuttering only among fathers:

For fathers – 100% of those who reported support from spouse reported a positive change of attitude towards stuttering.

Only 65% of those who did not report support from spouse also reported a positive change of attitude towards stuttering. ($X^2 = 3.715$; $p < .05$).

For mothers – 100% of those who reported support from spouse reported a positive change of attitude towards stuttering.

78% of those who did not report support from spouse also reported a positive change of attitude towards stuttering. This is the same tendency as fathers but with no statistical significance.

2. RESULTS WITH REGARD TO RESEARCH QUESTION NO. 2

Our second question was: How does former stuttering in the family influence coping with the child's stuttering?

In order to answer this question we looked for relations between stuttering in family and the FACES results on one hand, and parents' answers to their interview questions on the other.

With regard to FACES, we looked for relations between adaptability which is in fact changeability (Navon and Tiechman 1990) and former stuttering in the family.

T-tests for independent samples comparing families with and without former stuttering on couple changeability of both parents, revealed a statistically significant difference between the groups (t (24) = 2.43; p<.02).

Parents with former stuttering in close family scored lower on couple changeability (M= 3.1: SD= 0.42   ) than parents without former stuttering in the family or with former stuttering in remote family (M= 3.49: SD= 0.403).

We did not find any relation between couple cohesion scores and former stuttering in the family.

No significant relationship was found between parents' perception of stuttering severity or its' frequency perception and former stuttering in family.

When searching for relations between parents' responses to the question what would happen if stuttering would not disappear and stuttering in family, we found differences between fathers and mothers.

Table 12: Mothers' and Fathers' responses in case stuttering would not disappear with relation to former stuttering in family

Former stuttering in family	If stuttering would not disappear					
	Acceptance		continued therapy		disappointment	
	M	F	M	F	M	F
Former stuttering in close family						
Count	2	8	3	1	8	3
%	15.4	61.5	23.1	7.7	61.5*	23.1
Former stuttering in remote family						
Count	2	3	1	0	0	1
%	50	75	25	0	0	25
No former stuttering in family						
Count	7	7	0	0	1	1
%	77.8*	77.8	0	0	11.1	11.1
Total						
Count	11	18	4	1	9	5
%	42.3	69.2	15.4	3.8	34.6	19.2

(M= mothers; F= fathers)

(This table includes data given by 24 out of 26 mothers and fathers who answered this interview question relevantly).

For mothers there was a statistically significant relationship on a X^2 test (X^2 =15.3; *p<.01) between former stuttering in close family and the answer to the question:

Without former stuttering in close family 78% of mothers reported they would accept the situation of stuttering. Mothers with former stuttering in remote family reported the same in 50% of cases.

Only 15% of mothers with former stuttering in close family reported acceptance of the situation. About 62% of them reported great disappointment if stuttering would not disappear.

For fathers no such relation was found. However, it is easily observed that fathers reported more acceptance of stuttering than mothers and less disappointment when there was former stuttering in close family.

Nevertheless, the Wilcoxon tests did not reveal a significant difference between parents in acceptance measures when there was former stuttering in the family.

We examined relations between reports of change in family life due to stuttering and former stuttering in the family. The results are shown on table 13.

Table 13: Reports of change in family life due to stuttering in relation to former stuttering in family

Former stuttering in family	Reports of change in family due to stuttering		
	No change	Positive change	Negative change
No stutt. Count %change	4 40%	5 50%	1 10%
Stutt. in close fam Count %change	4 66.7%*	1 16.7%	1 16.7%
Stutt. in close and remote fam Count %change	1 16.7%	1 16.7%	4 66.7%*
Stutt. in remote fam Count %change	1 25%	3 75%	0 0%
Total Count %change	10 38.5%	10 38.5%	6 23.1%

In the X^2 tests there was a nearly significant relation ($X^2 =12.10$;*$p<.06$) between former stuttering in family and reports of change in the family due to stuttering. Families with former stuttering in close family reported a higher percentage of no change or negative change than families with no stuttering in the family or with former stuttering in remote family only.

In addition, families with no former stuttering or former stuttering in remote family only showed a higher percentage of positive change (50% and 75% respectively).

When taking into account only the stuttering parents in order to see any relation of former stuttering in the family to change in family life, we did not find any relation on a X^2 test. Nevertheless, most parents with no former stuttering in the family reported a positive change in the family (41.7%).
Most of the parents with former stuttering in the family reported no change (46.2%) or negative change (23.1%).

We conducted a X^2 test examining the relationship between reported parents' feelings towards stuttering and former stuttering in family.
For mothers – there was no significant connection found between stuttering in close family and feelings towards stuttering. 53.8% of mothers with former stuttering in the family reported "acceptance to different degrees" as opposed to only 22.2% of mothers with no former stuttering in the family who reported the very same.
For fathers – we found significantly more (X^2= 14.95 ¡P< .02) "acceptance to different degrees" than any other kind of feeling when there was former stuttering in the family (for 69.2% of fathers). Without former stuttering in close family fathers reported no prominently frequent specified feeling.

We looked for the answer to the question posed to parents: Can you imagine that stuttering would not disappear?
77% - 100% of fathers reported they could imagine that stuttering would not disappear regardless of former stuttering in the family.

Mothers showed a similar tendency with no influence of former stuttering in the family. 85% -100% of them reported they could imagine stuttering would not disappear regardless of former stuttering in the family.

We found that most of the influence to former stuttering in the family was with regard to differences between families with former stuttering in close family and with former stuttering in remote family or none.

One such difference was found in couple changeability. Other differences were found between mothers and fathers on the subject of what would happen if stuttering would not disappear and about feelings towards stuttering, with a higher percentage of acceptance for mothers with no former stuttering or only in remote family. Fathers tended to show a higher percentage of acceptance in case of former stuttering in the family.

Changes due to stuttering in the family were also different – most of them negative or no change in families with former stuttering in close family.

Both parents could imagine that stuttering would not disappear without relation to former stuttering in family.

3. RESULTS WITH REGARD TO RESEARCH QUESTION NO. 3

This question was: Are there specific coping strategies that arise from the interview? If so, what are they?

We counted categories of strategies arising from parents' and children's interviews.

These are presented on Table 14.

Table 14: Percentage of strategy usage by parents and children during interview

Strategy	Percentage of strategy usage		
	Father	**Mother**	**child**
Guilt feelings	34.6%	19.2%	0%
Suppression of feelings	23.1%	3.8%	0%
Looking for external support	26.9%	42.3%	7.7%
Problem-focusing	100%	100%	38.5%
Accusation	0%	3.8%	0%
Despair	3.8%	11.5%	0%
Compliance	34.6%	19.2%	0%
Concealing	3.8%	3.8%	0%
Pain expression	42.3%	42.3%	0%
Identification with the child	11.5%	7.7%	0%
Denial	0%	0%	15.4%
Avoidance	7.7%	3.8%	46.2%
Reappraisal	26.9%	46.2%	15.4%
Getting/giving support to spouse	15.4%	11.5%	0%
Self - calming	3.8%	3.8%	0%
Religious support	7.7%	7.7%	0%

The percentage in table 14 does not add up to 100 because the respondents could specify more that one strategy.

Wilcoxon tests (non parametric) that look for significance between two dependant samples were conducted for every strategy.

For "looking for external support" the difference between fathers and mothers was statistically significant (Z= 2.0; P< .046), resulting from a higher frequency of use of this strategy among mothers than among fathers.

"Reappraisal" was nearly significant (Z=1.89; P< .06), which means there was a strong tendency for mothers to use reappraisal more than fathers.

"Suppression of feelings" was used significantly more by fathers (Z= 2.23; P< .025).

For all the other strategies there was no statistical significance found.

As shown, fathers suppressed their feelings more frequently than mothers, a fact which was found statistically significant.

They also tended to report guilt feelings, and on the other hand, to show more compliance than mothers. However, we did not find any statistical significance for differences between genders in the use of the last two strategies.

Mothers looked for external support significantly more than fathers.

They also tended very strongly to report reappraisal of their reactions more frequently than fathers.

Both parents were equally frequent in expressing pain.

The cell of "avoidance" for children reveals children used this strategy much more than parents (46.2% of children as opposed to 7.7% or less of parents). This result was significant on the Wilcoxon tests comparing every parent with the child (for mother-child comparison: Z= 3.317; p< .001: for father-child comparison (Z= 3.162; p< .002).

Nearly 40% tended to focus directly on the problem. Surprisingly, there were children who were courageous enough to report looking for external support and even reappraise their ways of feeling/action.

Other children used "denial" which was unique because parents did not report using this strategy at all on this sample.

3.1 <u>Relation between changing attitude towards stuttering and strategy used during the interview</u>

In the case of "despair" – mothers who did not report despair reported positive change of attitude towards stuttering in 91.3% of cases. Mothers who reported "despair" reported positive change in attitude in only 33.3% of cases. The difference between groups was found statistically significant (X^2=6.851; P< .009) on a X^2 test.

For fathers, because there was too small a group of "despair" strategy for statistical analysis, we did not get meaningful results.

In the case of "reappraisal" – 100% of the mothers who reported "reappraisal" also reported positive change of attitude towards stuttering.

Mothers who did not report "reappraisal", reported change of attitude in only 71.4% of cases. The difference between groups was found statistically significant on a X^2 test (X^2=4.052; P< .04).

For fathers there was no such result since they made much less use of this strategy.

Chi square test revealed no relationship between parent's use of "external support" and positive change of attitude towards stuttering.

For fathers, the chi square test showed no significant relationship between use of the "feeling suppression" strategy and positive change of attitude towards stuttering. However, the results revealed a pattern in which the percentage of fathers who showed positive change was higher among those who did not use "feeling suppression".

In the case of "guilt feelings" – fathers who reported guilt feelings reported positive change of attitude towards stuttering only in 40% of cases. When they did not report guilt feelings, positive change of attitude towards stuttering went up to 85% of cases. The difference between groups was found statistically significant on a X^2 test (X^2=4.441; P< .035).

For mothers there were no results found on this strategy.

Results show that despair and guilt feelings lowered the percentage of positive change towards stuttering whereas reappraisal significantly supported it.

No relationship was found between both "external support" and "suppression of feelings" strategies and positive attitude change towards stuttering.

4. RESULTS WITH REGARD TO RESEACH QUESTION NO. 4

The question was: Does parents' perception of stuttering and coping relate to the child's perception and if so, how?

In the first section presented here are results with regard to children's perceptions and coping. The second section of this subject presents relations found between parents' and children's perceptions.

4.1 Results with regard to children's perceptions as expressed in their interview

Figure 2: Child's report about number of friends
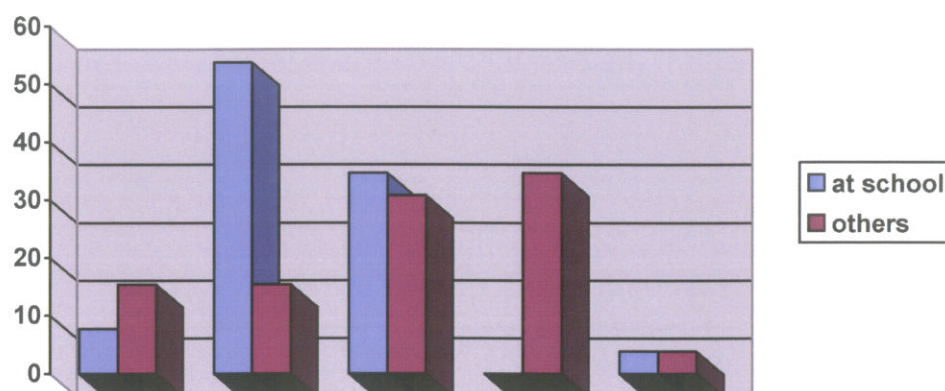
Most children (54%) reported having three to seven friends or more at school (35%). When talking about friends outside of school the percentage of friends was lower on the categories mentioned above or higher on categories of fewer friends (35% none and 15.4% 1 or 2 friends).

Figure 3: reason for interview
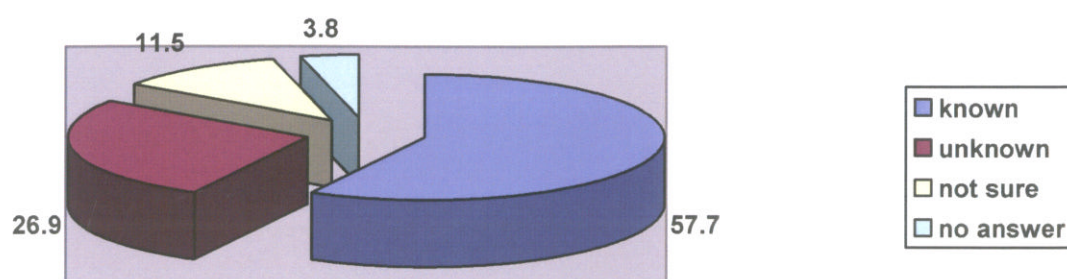
Almost 60% of children reported they knew the reason for the interview. 27% reported they did not know the reason and 11.5% were not sure. One child did not answer the question.

Figure 4: Reported talk with parents
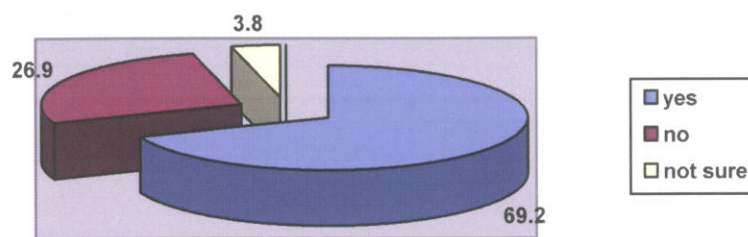
Almost 70% of children reported their parents had a talk with them about stuttering. 27% reported no such talk and 3.8% were not sure.

Figure 5: What did parents say?
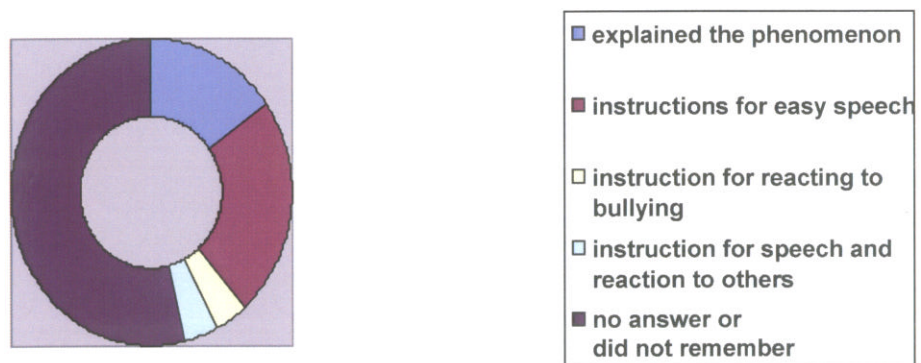
Most of the children did not answer or said they do not remember what parents said (54%). Among those who remembered, 23% reported getting instructions for easy speech, 15.4% reported getting an explanation about stuttering, 3.8%

reported getting instructions for reacting to other children's bullying and another 3.8% got both kinds of instruction.

Figure 6: Who is it easier to talk with in everyday life?

	siblings	friends	teacher	mother	father	no	new
■ people that the child feels easier to talk with	11.5	30.8	26.9	11.5	11.5	3.8	7.7
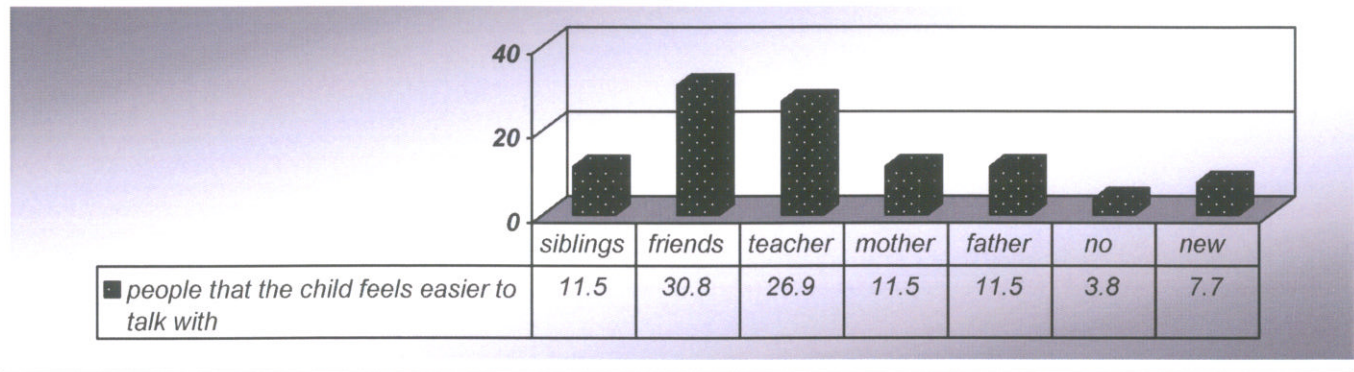
Most children reported it is easier for them to talk with friends (31%) or teachers (27%). Others found siblings or one of the parents (11% each) as easier to talk with. About 8% claimed that new people are easier to talk with and 4% did not comment about the subject at all.

Figure 7: Which situations are harder to talk?

	school	telephone	shopping	club	friends	others	stress	strangers	no such	no comm
■ hard to speak situations	53.8	34.6	23.1	11.5	15.4	7.7	7.7	3.8	19.2	3.8
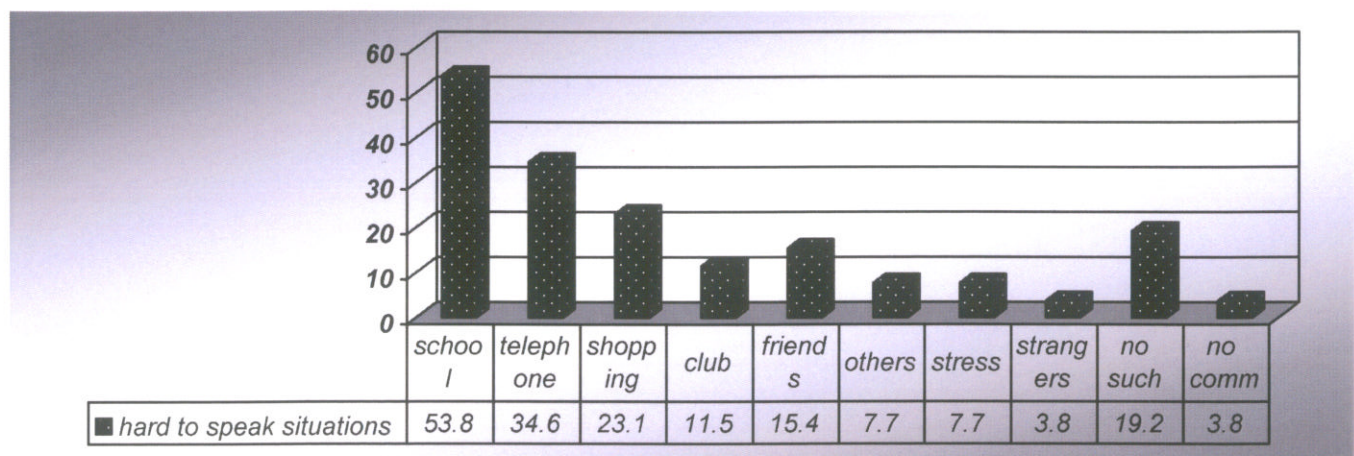
The first place children reported as a hard to speak situation was school (53.8%).

The next hard to speak situation reported was on the telephone (34.6%) and third was shopping (23.1%). 19.2% of children reported there are no such situations. 3.8% did not comment. Other situations that got minor percentages were at the club, friends, stress, strangers.

Figure 8: Children's reports about somebody telling them something about stuttering

	yes
	no
	no answer
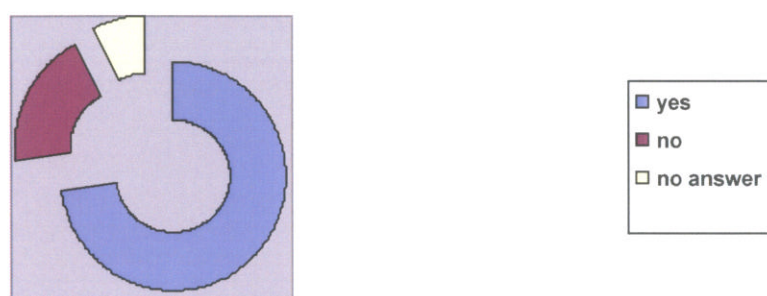
Figure 8 shows that most of the children (73%) reported they got some kind of remarks about stuttering from other people. 19% of the children reported no remarks from others and about 8% did not answer.

Figure 9: References to stuttering children reported to get from their families

normal ▪ patient ▫ bullying ▫ no answer ▪ interested ▫ helping
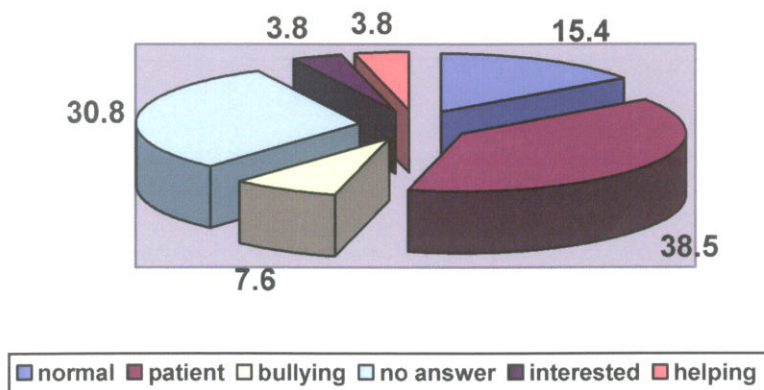
Almost 60% of the children reported normal and patient references to stuttering from their family. Another 8% reported interested and helping references. 8% reported bullying or impatience from family members. About 31% of the children did not answer that question.

Figure 10: References to stuttering children reported to get from their friends

normal ▪ patient ▫ bullying ▫ impatient ▪ no answer ▪ mixed
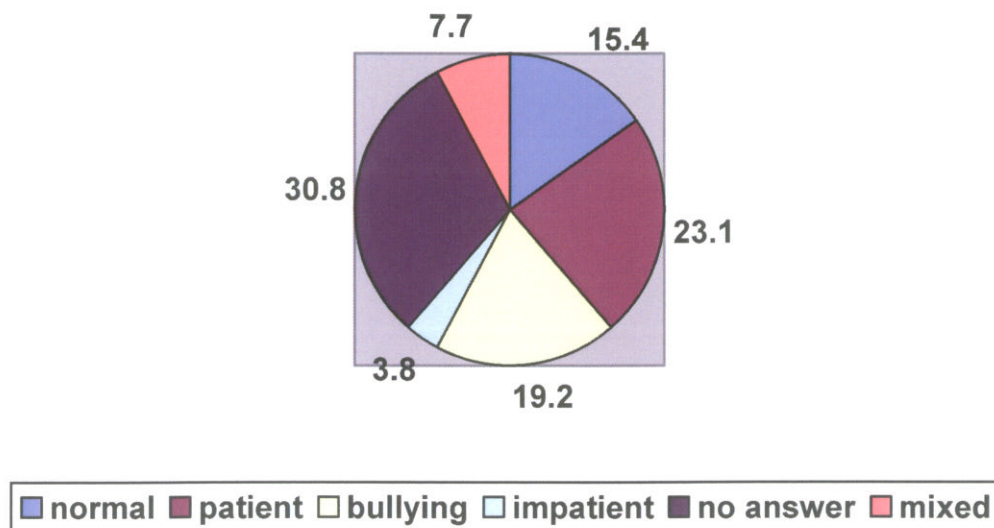
Almost 31% of the children did not answer this question.

About 39% reported normal and patient references to their stuttering, 23% reported bullying and impatience, and 7.7% reported mixed references (sometimes nervous or bullying, sometimes normal or interested).

This means that more than 30% reported they got negative references from friends and a third did not answer.

No significant difference was found with regard to the frequency of "patient" responses between family and friends as examined by the Wilkoxon test.

Figure 11: References to stuttering children reported to get from school friends
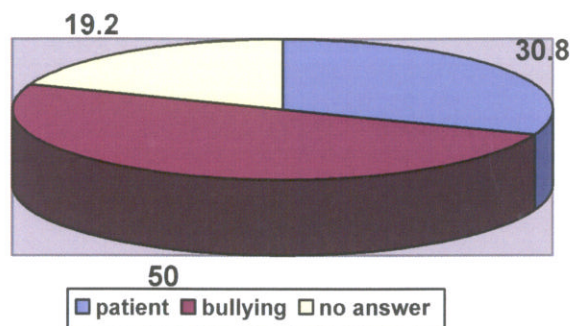
At school, 50% of the children reported being bullied or getting impatient references to stuttering. 19.2% reported getting patient references and 30.8% did not answer.

Figure 12: Children's reported reactions to negative comments

Bar chart values:
- continues normally: 38.5
- does nothing: 19.2
- beating: 11.5
- talking to the other: 19.2
- calling an adult: 11.5
- no answer: 19.2

Legend: childre's reported reactions to negative comments
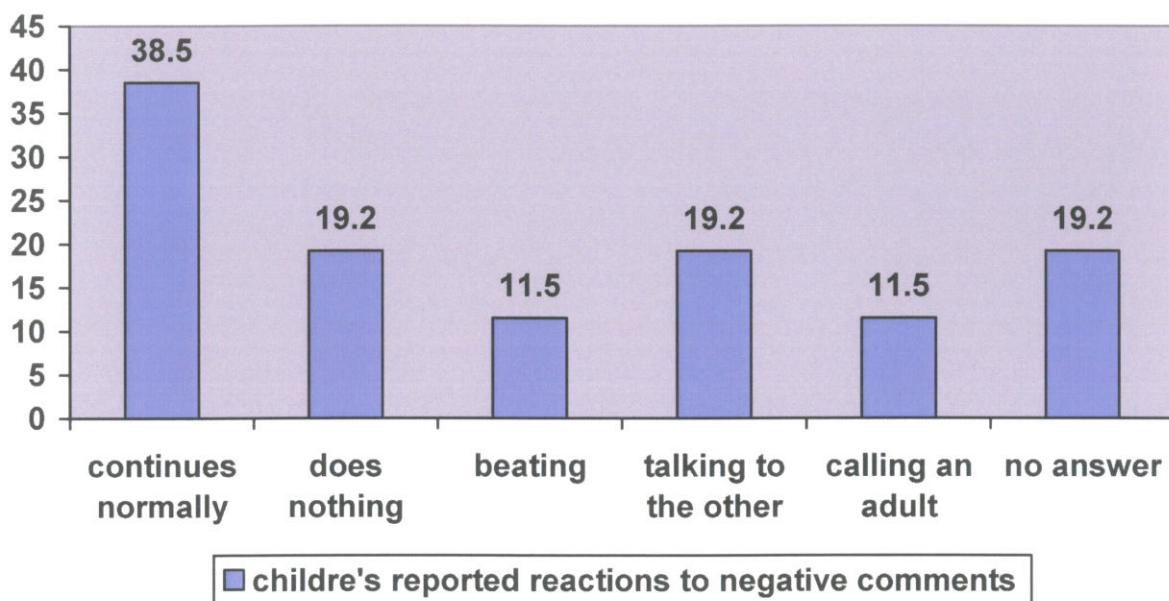
Almost 60% of the children's reported reactions were avoidant ones, such as continuing to do what ever they were doing before the negative comment or doing nothing in reaction to a negative comment.

More than 40% reported reactions were various active ones such as beating, cursing etc., talking with the other child, or calling an adult, especially the youngest children in the sample group. 19.2% did not answer.

The total percentage is more than 100% because there were children who reported more than one reaction depending on the mood and situation.

Figure 13: Children's opinion about other people's reaction to stuttering

Pie chart values: 27, 23, 50

Legend:
- negative
- positive
- do not know or no answer
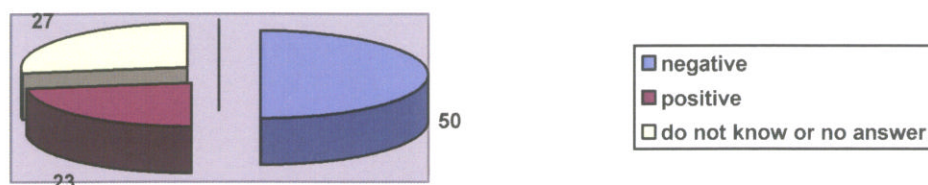
Figure 13 shows that half of the children reported negative reactions to their stuttering. 23% of the children reported positive reactions and 27% of them did not know or did not answer at all.

Figure 14: Reactions children reported they would prefer
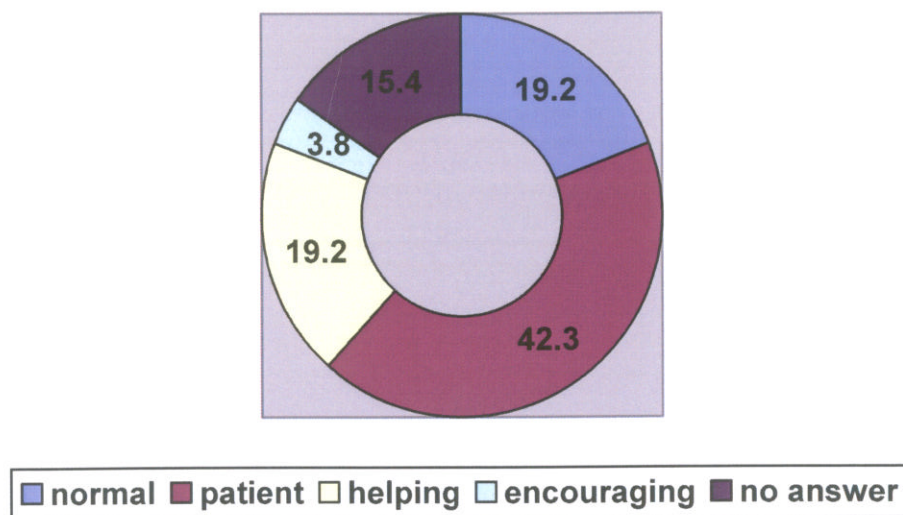
Figure 14 shows that 42.3% of the children reported they would like to get patient reactions to stuttering, 19.2% reported they would like to get normal reactions, 19.2% reported they wanted to be helped, 3.8% wanted to be encouraged and 15.4% did not answer.

Figure 15: Children's reports about something they do well or not as well as others

	know what they are	do not know what		
■ *things children do well*	100	0		
□ *things childrenknow they do not do as well as others*	80.8	19.2		
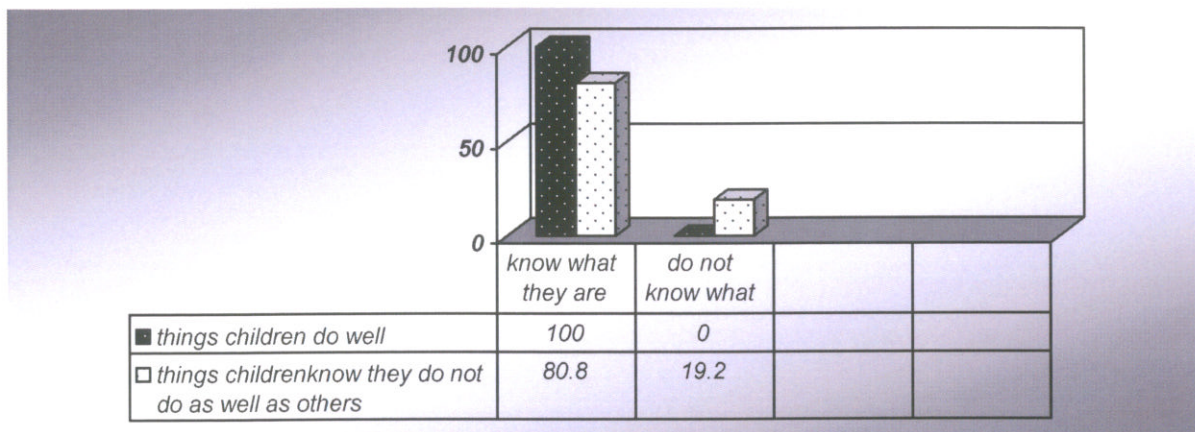
Figure 15 shows that 100% of the children reported they know about something they do well. Only 80.8% reported they know about something they do not do as well as others (football; mathematics; history; being popular etc.). 19.2% couldn't think of anything they do not do as well as others.

Figure 16: Children's Reports about who tells them things they do well

■ friends	■ parents
□ teacher	□ nobody
■ not mentioned or no answer	■ grandparents
■ siblings	
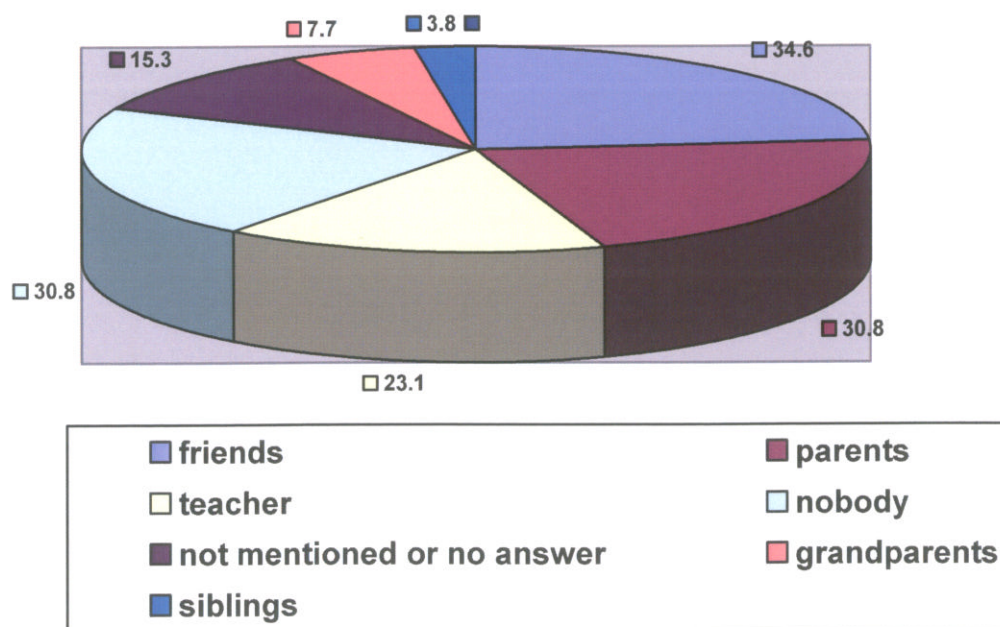
Figure 16 shows that when children were asked who tells them things they do well, 34.6% of them reported friends, 30.8% reported parents, 23.1% reported teachers, 7.7% of the children reported grandparents, 3.8% reported siblings, 30.8% reported nobody tells them what they do well and 15.3% gave no answer. Numbers exceed 100% because there were children who reported more than one source of support or knowledge about the things they do well.

Figure 17: Children's attitude towards their stuttering
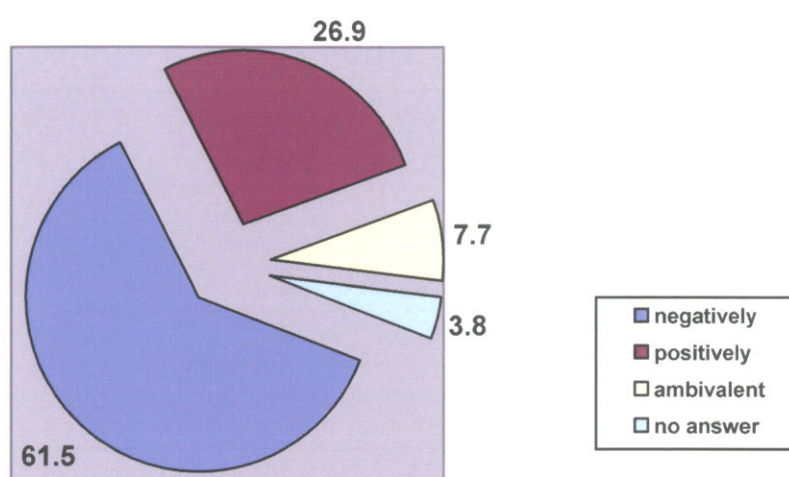
Figure 17 shows that 61.5% of children reported negative attitude towards their stuttering and wanted to eliminate it. 26.9% of children reacted positively and said they liked their stutter or wanted to keep it in some form. 7.7% were ambivalent and 3.8% did not answer.

In a chi square test there was no significant relationship between the parents' positive change of attitude towards stuttering and the child's attitude towards stuttering.

To sum up the main results of the children's questionnaire:

Most children reported they have 3-7 friends or more.

Most children knew the reason for the interview but about 40% did not know or were not sure.

The majority of sample children reported their parents talked with them about stuttering, but more than a half of them couldn't tell what their parents said.

Many children reported it is easier to talk with friends or teachers. Difficult to talk situations were reported at school, on the phone and shopping.

Most children reported they got some reaction to stuttering. Most reactions in the family and with friends were patient, with no significant difference between friends and family on this subject. At school the most prevalent reaction to their stuttering was bullying and children reported that they reacted either with avoidance or, in the least amount of cases, actively.

Children reported they prefer patient and normal reactions and some even wanted help or encouragement.

Most children found something they do well, but almost 20% couldn't think of anything they do not do as well as others.

Children reported many sources for knowing things they do well: friends; parents; teachers; grandparents, but about a third did not report any such source.

Verbal reaction of most children to their stuttering was negative but more than a third of them reacted positively or ambivalently.

4.2 Results relating parental and child's perceptions

High correlation coefficients were found between frequency of stuttering reports of parents and children.

Between mothers' and children's reports of stuttering frequency r=.746 (P< .001).

Between fathers' and children's reports of stuttering frequency r=.722 (P< .002).

This indicates that parents and children felt the same about the stuttering frequency.

We compared children who reported their family tells them what they are doing well and children who did not report this about their family.

In a T-test the first group was found to have a significantly higher family cohesion score by both parents (t= 2.0; P< .05).

We compared children's reports about difficulty when talking in the family and both couple and family cohesion scores on FACES.

A negative correlation was found between couple cohesion scores and difficulty to talk reports of children (r= -.456; P< .05).

This indicates that the higher the couple cohesion scores given by parents were, the lower the difficulty to talk in the family was reported by the child.

Family cohesion scores also showed a strong tendency to be higher for lower difficulty to talk in the family reports given by children(r= -.353: P< .06).

When comparing parents' feelings towards stuttering and child's reaction to stuttering we couldn't find any correlation because negative reaction to stuttering was the most common one, regardless of parents' feelings.

The same was found for correlation between the child's reaction to stuttering and the parents' positive change of attitude towards stuttering. Most children reported negative reaction to stuttering regardless of their parents' change of attitude.

On the parents' questionnaire we asked them their opinion of their child's coping with stuttering. On the child's questionnaire we asked how he/she reacts to negative provocation to their stuttering.

We tried to find a correlation between these answers.

When we used categories found in parents' answers we could not find any correlation since there were not enough children in each category.

We compiled categories of the parents' answers - those who reported their child as adapting and those who did not report adaptation.

Here are results of the X^2 tests for mothers' reports and children's reports to the questions cited above:

When children did not report hitting – 73.9% of mothers reported adaptation.

When children reported hitting others – not even one mother reported adaptation. ($X^2 = 6.4$; P< .01)

For children who reported avoidance – 100% of mothers reported adaptation.

For children who did not report avoidance – 47.6% of mothers reported adaptation.= ($X^2 = 4.54$; P< .03).

The same pattern is evident in the fathers' results:

When children did not report hitting others – 65% of fathers reported adaptation..

When children reported hitting others – not even one father reported adaptation ($X^2 = 4.62$; P< .03)

For children who reported avoidance – 100% of fathers reported adaptation.

For children who did not report avoidance – 47.6% of fathers reported adaptation ($X^2 = 4.54$; P< .03).

To summarize the results of this part of the question: in families with higher couple and family cohesion, children found it easier to talk and were acknowledged for things they do better than others.

It is important to stress that children's and parents' frequency of stuttering reports were in high correlation.

Parents reported their children as socially adaptive in higher ratings when the children reported avoidance and not hitting others.

5. Additional Results- A glance at families' needs, thoughts and wishes

Although unrelated to the research questions, the following results provide information about the processes families go through with their children who stutter, and offer a glance at families needs, thoughts and wishes.

We asked parents about the first time they spoke with friends and family about their child's stuttering.

Figure 18: Percentage of parents sharing their concerns after onset of child's stuttering
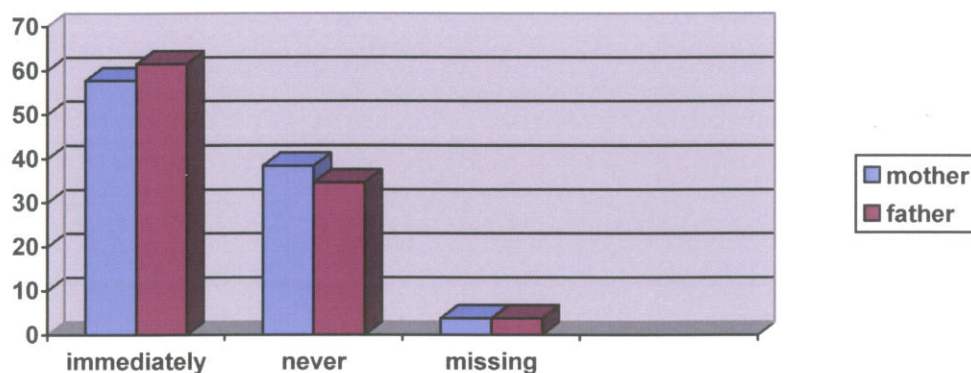
As seen in figure 18, most parents did share their concerns with others (about 60%) but more than a third of them did not.

Frequencies of answers to the question "how did family and friends react?" are shown in figure 19.

Figure 19: Reactions families got after sharing their concerns about their child's stuttering
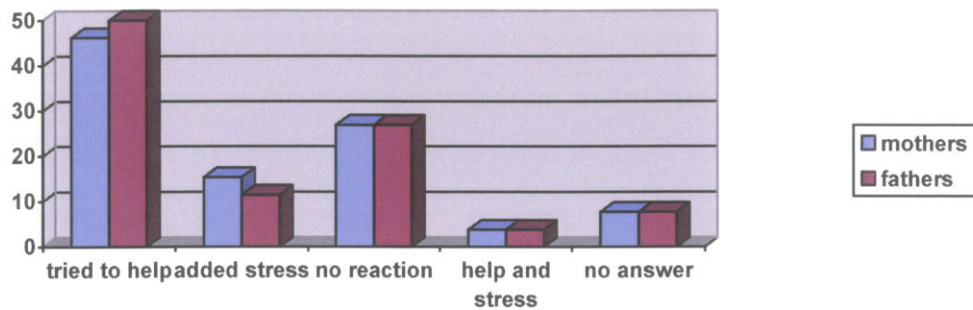
Figure 19 shows that almost half of the families got reactions of willingness to help.

About a third of the sample families did not get any reaction due to various reasons: not sharing their concerns, bad intergeneration relationship, not paying much attention or not attaching significance to the stuttering of the child.

In addition, some families became more stressed after sharing their concerns because of their family or friends' reaction (about 15%).

Asking parents whether they believe the family can influence the child's coping elicited a positive answer in most of families (88.5%). A minority thought that family does not influence the child (11.5%).

Figure 20: Thoughts about the future of the child
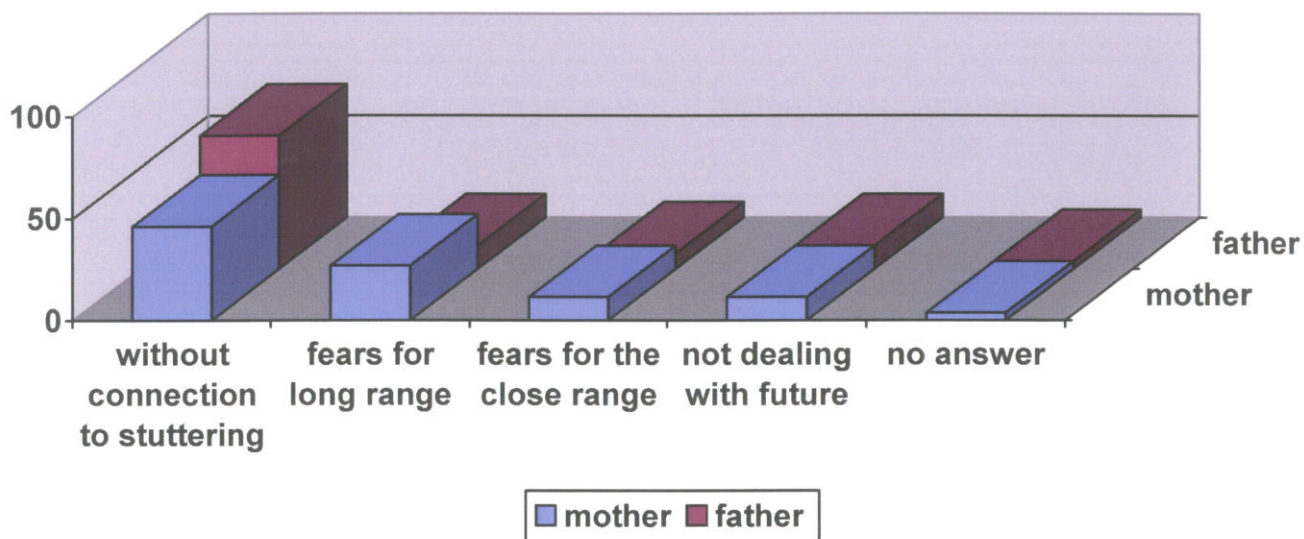
Most fathers (65.4%) and most mothers (46.2%) reported plans for the future, like for any other child in the family, which usually referred to some kind of studies for a future occupation.

Wilcoxon tests revealed a significant difference between genders about future planning (Z=2.23; p<.o25). Fathers planned their children's future with no connection to stuttering in a higher percentage than mothers.

About 27% of mother reported fears for future on the long range but only 11.5% of fathers reported the same. Even fewer mothers (11.5%) and fathers (7.7%) reported fears for the close range, usually regarding the Bar-Mitzvah ceremony in a synagogue in front of a large crowd. Others either reported not dealing with the future at all because of the energy invested in the present or did not answer at all.

To summarize the main results of parents' questionnaire:
Most families shared their concerns immediately after onset, but many others did not. Those who did share concerns usually got helpful reactions, but some were even more stressed afterwards.

The majority of parents in our sample believed that family influences the child's coping.

As for planning the future, there was a difference between mothers and fathers: most parents planned their child's future without relation to stuttering, fathers significantly more so than mothers.

CHAPTER D: D I S C U S S I O N

1. CHANGE IN FAMILIES' PERCEPTION OF STUTTERING AND COPING THROUGH THE YEARS AND FACTORS INFLUENCING IT

"We both step and do not step in the same rivers. We are and are not". This Heraclites' epigram on the river flux demonstrates the philosophical idea that the world is constantly changing. The river is changing and at the same time we are changing as well. Small changes on the river banks are sometimes hardly noticeable but there are moments in life when people have to face surprisingly unexpected changes that affect the flux of the river of life such as illness or disability of loved ones in the family.

The external change life imposes on people sets off a crisis leading to a totally different journey in their lives.

Our investigation tried to picture a moment in the middle of this journey of 26 families – parents and their school-aged children who stutter and to describe some aspects in their coping.

Results showed that at the point in our families' journeys that we investigated about 85% of mothers and 73% of fathers of school-aged children who stutter reported a positive change in attitude towards their child's stutter. The strong tendency towards statistical significance regarding the difference in percentage between mothers and fathers may imply that more mothers than fathers made such a change in attitude. That may stem from the fact fathers and mothers begin from a different starting point when dealing not only with stuttering but with any offspring's disability in general. Research shows that mothers of young developmentally disabled boys report a significantly greater number of

depressive symptoms than fathers (Bristol, Gallagher, & Schopler, 1988) and in the case of autism specifically, are more likely to claim that their child's disability affected their emotional well-being (Gray, 2003).

We set out to trace factors which supported that positive attitudinal change parents reported towards stuttering. No relation to onset age was found.

Clearly, the time since onset alone was not enough to induce such a change, so there must have been other influential factors such as actions families had taken in order to cope.

Onset age did not relate to reports of change in the family due to stuttering, either. However, a pattern emerged where a higher percentage of parents reported change in the family due to stuttering with pre-school onset age. Cautiously treated, this finding supports the notion that coping (e.g. changes in ways of thinking and/or behavior) must be observed over time, as a process (Lazarus & Folkman, 1984). About 39% of parents did not sense any change in the family. 75% of them had children with school-age onset, a fact which did not afford them enough time to go on with the process which could have influenced their feelings.

Reports of change in attitude towards stuttering or change in the family due to stuttering were not affected by changes in the child's fluency, according to our findings. More than half of the families reported fluctuating fluency through the years and only about 40% reported positive change in the child's fluency. Since about 80% of parents reported change in attitude and about 61% of parents reported change in the family, there were probably other factors affecting the feeling of change in the family, too.

One of these factors could be the time of their first professional counseling.

When reporting change of attitude towards stuttering a pattern emerged indicating that the later the first professional counseling, the higher the percentage of positive change in parents' attitude towards the child's stuttering. Since our sample is rather small we should be cautious in our conclusions. Nonetheless, this pattern may imply that professional counseling helped only when parents were emotionally ready to accept it: some time after onset but not necessarily immediately thereafter. This notion concurs with clinical insights on counseling. As Luterman (2008) designates: "the information given by the professional early in diagnosis is seldom retained by the clients because affect is so high". Parents need time to progress to another stage of coping in order to be able to listen to information and accept reality (Fortier & Wanlass, 1984).

Another prominent factor influencing the family's sense of positive change was former stuttering in the family. Families with stuttering in close family reported a higher percentage of no change or negative change in the family than families with either stuttering in remote family only or no former stuttering at all. Clinical experience with other developmental disabilities like autism, Down's syndrome or learning disabilities shows that recurrent cases in the family make it harder for parents to cope because of the energy invested in the first child and, the hope of bringing a healthy child into the world in order to compensate for the feelings of unsuccessful parenting. Sometimes parents fantasize about having a fluently speaking child despite being married to a stuttering person or having a stutter themselves. This fantasy stems from "being there" and knowing how stuttering affected their own lives (Kigel & Lahat, 1987).

Couple cohesion was also an important factor relating to change of attitude towards stuttering. Families whose father and especially mother

scored their couple cohesion higher reported significantly more positive changes in attitude towards the child's stuttering.

Such findings may indicate that couple cohesion affects the individual ability of men and women to change their attitudes towards a stressor like the stuttering of their child.

Former research about parents of children with other disabilities supports these findings. Pederson (Luterman, 2008) examined families with a disabled child and found that when there was an emotionally distant father, there was an emotionally distant mother as well. The mother's ability to parent was, to a great extent, a function of the satisfaction she obtained in her marriage. In our case, couple cohesion was found to correlate to the mothers' ability to positively change attitude towards stuttering, a change which surely has an impact on their motherhood style. Gallagher, Cross and Scharfman (Luterman, 2008) identified characteristics of parents who were judged by professionals to have made a successful adjustment to the birth of a child with a disability. They found the major sources of strength were the parents' personal qualities and the quality of husband-wife relationship.

In light of this data, it is reasonable to assume that women who feel supported by their spouses overcome the possible feelings of pain and failure in motherhood and let go of guilt feelings associated with having a child with a disability; hence, they are afforded the opportunity to change their perspective on the stuttering of their child.

Nonetheless, there is a possibility of a reverse effect in which positive change of attitude enhances couple cohesion, since it diminishes spouse blaming or guilt feelings that have the potential of distancing the couple.

Not only positive changes of attitude were related to couple cohesion but reports of change in the family due to stuttering were related to it as well.

Parents, especially fathers, who reported positive change in the family scored significantly higher on couple cohesion than those who reported no change or negative change.

Another aspect of change was found in the answers parents gave to the question about self-appraisal of coping with stuttering as a family. Most parents were either ambivalent or had some degree of acceptance towards stuttering without a significant difference between mothers and fathers. Parents, especially fathers, who expressed pain scored significantly lower on couple cohesion than parents reporting ambivalence or acceptance to different degrees. Once again we see that couple cohesion is a powerful factor relating to the ability of a parent to move forward on the coping path from being immersed in pain to ambivalence and to some kind of acceptance. In our opinion, the ambivalent period and the different degrees of acceptance in our findings are equivalent to Fortier & Wanlass' (1984) stages four and five, previously mentioned in the theoretical background chapter (page 13). In stage four the focus moves to the external world: looking for information, which at this stage becomes more emotionally acceptable as mentioned earlier, choosing between alternatives (therapies; strategies of coping), planning, admitting the reality of having a child who stutters and beginning to feel some relief. Stage five is a stage of compliance: family solidarity and recognition of the child's needs. This solidarity enables acceptance to different degrees. Other researchers have found some similar findings studying families with children who have other disabilities. Kersh, Hedvat, Hauser-Cram, and Warfield (2006) studied marital quality and its contribution to the well-being of parents of children with developmental disabilities. Among the 67 families who participated they found that for both mothers and

fathers, greater marital quality predicted lower parenting stress and fewer depressive symptoms above and beyond socio-economic status, child characteristics and social support.

Margalit and Klietman (2006) studied maternal stress, reported by mothers whose infants were diagnosed as having developmental disabilities at the beginning of participating in an early intervention program. They found that mothers who considered their family members as being close and supportive (according to their family cohesion scores on the FACES III questionnaire) experienced lower levels of stress. These findings support the notion that couple cohesion, which is in fact a measure of marital quality, may help change the exclusivity of pain feelings to a wider range of mixed feelings allowing for the possibility of a more positive view on the situation: pain is inevitable but there is more to it than that. Mixing the color of pain with colors of another perspective creates the option for a new painting of the coping experience.

At the same time, moving forward on this path towards relief and/or positive coping may enhance couple cohesion as well.

Lavee (2004) who studied couples under daily stressors found that stressful days were associated with an increased dyadic distance, which is in fact a temporary decrease of couple cohesion.

According to Lavee (1997), the majority of research about the effect of stressful situations on marital quality has employed quantitative analysis (correlation or group comparison) and has supported the assertion that stressful events have a deleterious effect on marital relationships. However, he points out that stress may also affect the relationship in a positive way. This has been found with regard to certain lifecycle transitions, particularly that of the empty nest syndrome (Menaghan, 1983b; White & Edwards, 1990) and non -normative transitions (Hartman & Hartman, 1986), as the result of coping with a serious illness, such as a

spouse's cancer (Gritz, Wellisch, Siau, & Wang, 1990) or a child's cancer (Barbarin, Hughes, & Chesler, 1985). It appears that stressful experiences have the potential of strengthening the relationship resulting in increased cohesiveness and a more tightly bonded couple. (Lavee, 1997).

Luterman (2008) shares his own experience working with groups of healthy spouses of individuals with chronic illnesses. He found that the families that grow and prosper through the adversity of the disability are the older, longer married couples whose companionship has been tested over time. Other families that succeed are newly married couples who enter into the marriage knowing about the disability and have openly and honestly made the choice. "The couples most at risk" says Luteman "are those who have been married only a few years and have not been subjected to enough external stress to strengthen them, or those who have not yet established openness in their marital communication."

The deduction from this experience may be applied to our families with school-aged children who stutter, and confirms that couple cohesion does influence a sense of resilience in the family, especially if the parents are married long enough. Families in our sample group had school-aged children, which means they probably have been married longer than families whose children are at the onset of stuttering, which often takes place in the pre-school years. This may also contribute to our results but further research is required to confirm such a hypothesis.

There is nothing new in claiming that stress has the potential for personal growth. Kazak and Marvin (1984 in Luterman 2008) found that out of 56 families in which a child had spina bifida, a significant portion of the parents reported that their marriage was strengthened as a result of the child. Our results show that although most parents reported having to deal with fluctuations in their child's stuttering, a fact that surely made it

harder for them to accept it (Kigel & Lahat, 1987), most of them reported a positive change in attitude towards stuttering which was strongly correlated to couple cohesion.

The significant difference between parents who express pain and those who are ambivalent on couple cohesion scores, may imply that we are dealing with two distinct stages parents go through on the way to acceptance or compliance with their child's stuttering.
Luterman (2008) quotes Matson and Brooks' (1977) stages of coping which were found in interviews with people who had multiple sclerosis. These were denial, resistance, affirmation and integration. Luterman explains that resistance differs from denial in that people acknowledge to themselves that they have a problem and they work very hard to defeat it. This is reminiscent of the ambivalence reported by families in our research. Parents did acknowledge the stuttering but were very sure of discovering a way to defeat it. For them it was only a matter of finding the right speech therapist or doing more exercises that would make everything alright.
In our opinion, parents who expressed pain were in a stage more advanced than denial. They acknowledged the problem and were grieving it. Luterman (2008) claims that denial occurs any time there is a new demand on parental resources, requiring that they be wise or strong. This usually happens at the time of diagnosis. Most of the parents in our research were several years post-diagnosis because their children were already school-aged and most onsets are diagnosed at pre-school age. This could explain the fact that parents expressed pain (in more than 42% of cases) instead of using denial (not even one case!) during the interviews.

In addition to couple cohesion, spouse support reported by parents was also found to be a powerful correlate to positive change of attitude: all of the parents who reported spouse support reported positive change of attitude towards their children's stuttering. Other parents, mostly fathers, who did not report spouse support, reported positive change of attitude in a significantly lower percentage (65%). In fact, couple cohesion scores and spouse support reports are two different measures describing the same entity. This result is reinforced by findings concerning families with young developmentally disabled children where spouse support was the best predictor of the fathers' parental functioning (Bristol, Gallagher & Schopler, 1988). Another finding was quoted by Margalit et al. (2006) in which maternal stress has been linked to limited spousal support and may have negative effects on family cohesion in families with children who have disabilities (Mahoney et al., 1992).

Interestingly enough, we found that couple or family adaptability (as scored on FACES III) was not significantly related to change of attitude or change in the family due to stuttering, as reported by parents in the interview.

In accordance with our findings, we believe that family and especially couple cohesion enables the change of attitude and other necessary changes in the family's coping. When parents feel they have a "safe place" (Katz, 2000) at home they allow themselves changes in beliefs, thoughts, attitudes etc., thus employing more efficient strategies of coping.

It seems flexibility and adaptability are not constant traits but rather affected by conditions of couple relationship and family climate.

As Froma Walsh puts it in her book "Strengthening family resilience", change may be frightening largely because family members fear losing

control of their lives in a runaway process which might leave them even worse off than they are in their present predicament. In case of changing attitudes towards stuttering parents may feel that change of attitude will leave them with no resources for fighting stuttering and saving their child. This may serve as a major obstacle to flexibility and adaptability. Changes are not possible under threatening conditions.

Walsh (1998) offers nine keys to family resilience and divides them into three categories which are: family belief systems; organizational patterns and communication processes. Connectedness is one of the keys under the organizational patterns category. She explains that members of the family need to believe that they can turn to one another in face of adversity and at the same time their own efforts, sense of competence and self-worth will be nurtured and reinforced.

Cohesion as expressed in our investigation is the parallel of Walsh's concept of connectedness as a key to family resilience and serves as the buffer of the couples' fears hence enabling adaptation and positive change of attitude towards stuttering.

2. INFLUENCE OF FORMER STUTTERING IN THE FAMILY

When correlating FACES results for couple changeability scores and former stuttering in the family, we found significant difference between parents with stuttering in close family and in remote family or none at all. The first group scored lower couple changeability than the others. Clinical experience shows that parents of stuttering children experience elevated levels of anxiety which may be even higher when there is another case of the same nature in the family. Parents who stutter themselves may be overly reactive, concerned and stressed over the child's stuttering problem (Ramig, 1993).

The couple may already feel exhausted because of coping with the former case, and may need any and all remnants of energies in coping with another one. In order to avoid additional stress, both feel that a change in their marital relations is "not urgent". As mentioned in the first section of our discussion, stress does not serve as fertile soil for change.

Some data showed differences between mothers and fathers with former stuttering in the family. One of them was in response to the question about what will happen if stuttering will not disappear. For mothers there was a statistically significant difference in answers between those with stuttering in close family and those without. 78% of mothers with no former stuttering in the family reported they would accept the situation of stuttering. 62% of mothers with stuttering in close family reported great disappointment in case stuttering would not disappear.

Fathers reported a higher percentage of acceptance of stuttering than mothers, and a lower percentage of disappointment when there was former stuttering in close family (usually their own).

From an evolutionary perspective mothers are perceived by society and thus perceive themselves as the one in charge of the child's well being. Having a child with some kind of disability already has the potential of causing a mother guilt feelings on the grounds of not fulfilling her duty as expected. After coping with this feeling with a spouse or herself, experiencing it for a second time may cause greater frustration and a greater need for a "correcting experience", an opportunity to prove she is a "good mother". It is hard to accept a phenomenon that may be interpreted as failing as a parent because of an inability to prevent and/or get rid of stuttering, which might be a hereditary trait passed on to her child, or because she was "irresponsible" for marrying a man from whom the child might inherit stuttering.

As previously mentioned, another aspect of change influenced by former stuttering in the family was reports of change in the family due to stuttering. Stuttering in close family had a strong tendency to influence a higher percentage of no change or negative change reports, compared to families with no stuttering in the family or with stuttering in remote family only. This result can be explained by the fact that families with former stuttering may prefer to ignore the situation, or alternatively, feel a great deal of pain because of recurrent stuttering and find it more difficult to be empowered compared to families with no former stuttering. Again, we find the fingerprints of excessive stress that would not allow positive change.

Rolland & Walsh (2006) denote that it is important to understand the family's coping strategies in response to past stressors and specifically to past illness, disability or loss. These patterns are transmitted across generations in family beliefs, such as shared pride or shame, myths, taboos and expectations. Such inquiry helps the therapist to understand the meaning of the current illness or disability experience for the family and to predict its coping style.

In light of this insight we believe that the parents' ability to accept stuttering may stem from the family's narrative of coping with the former case of stuttering within it. Narratives of resilience may encourage acceptance of the recurrent case of stuttering in the family, but pessimistic narratives of failure or depression are prone to end up with great disappointment with recurrent cases in the family. There is a possibility that fathers are influenced by their own feeling of success in living with stuttering but mothers may have a different narrative. For example, in one of the families we interviewed the father said "I think it (stuttering) will disappear... I feel like I got over it, I rarely have it

today…people survive it and it makes them tougher" at the same time his wife answered "but what if he (their son) won't be like you?" and elsewhere, she told the interviewer about her husband "He was a mechanic and today he is a taxi driver, he is doing things he is good at but I don't want my son to be a mechanic… for that he needs good speech". The father's narrative asserts that he overcame stuttering but his wife's narrative asserts that he overcame stuttering by having jobs where he didn't have to do much talking, which means being satisfied with very little in life. She expects much more of her son. Her husband's narrative is not an optimistic one from her perspective.

Kigel and Lahat (1987) found that when one of the parents, frequently the father, stuttered himself, he tended to be less limiting regarding his child's behavior explaining that he understands his child's feelings since he felt the same when he was younger.

This kind of "total acceptance" of child behavior even when it is not desirable may pose differences of opinions about child rearing between the couple ending with a decline in couple or family cohesion. But this was not the case in our research; we did not find any relation between couple cohesion scores and former stuttering in family.

Regarding results dealing with former stuttering in the family and its influence on parents' perception of the child's stuttering, there is a possibility of differences between stuttering mothers and stuttering fathers. Waters, Doyle, Wolfe, Wright, Wake and Salmon (2000) reported parental gender and self-reported health influence on parent-reported child health. In a survey of 5340 parents' health-reports for themselves and for their children, they found increased odds of mothers with self-reporting poor global health reporting their children with poor global health, that were not observed for the fathers. This effect may be relevant

to stuttering too, and affect the mother's self-blame and acceptance of the child's stuttering (since mothers tend to think their children's problems resemble their own and see themselves as the reason for the problem).

There was no relation found between the parents' perception of stuttering severity or frequency and former stuttering in the family.

It seems that former stuttering in the family did not affect parental judgment of stuttering severity measures.

Answers to the parent interview question "can you imagine stuttering will not disappear" were not influenced by former stuttering in the family either ; most fathers and mothers reported they could imagine such a situation, which is a rather realistic perception of stuttering potentially reflecting therapy's influence. Yet we have to bear in mind that being realistic does not necessarily mean giving up the hope for healing which in turn, keeps the coping journey on-going. In the words of Martin Luther King: "We must accept finite disappointments but we must never lose infinite hope" (in Walsh, 1998). Sustaining hope in the face of life adversities enables us to carry on. Walsh (1998) reports Beavers' and Hampson's findings about high-functioning families who have been found to hold a more optimistic rather than pessimistic view of life.

3. STRATEGIES USED BY PARENTS AND CHILDREN

3.1 Parents' Strategies

Results showed that both parents were equally frequent expressing pain. This confirms the fact that both parents are worried and stressed by their child's stuttering but according to our findings each gender has its own typical way of coping with it.

Mothers used the strategy of "external support" significantly more than fathers. This is similar to Altiere (2006) who found the same results with parents of autistic children. Importance of accessibility to external support is emphasized by our following findings:

Many parents reported they shared their concerns about their child's speech immediately after onset, but more than a third of them did not. Out of those who shared concerns only about a half were offered help by their families or friends. When taking into account the fact that mothers sought out external support more than fathers - lack of such support due to various reasons such as poor intergeneration relationship, the grandparents' tendency to be more stressed than their children (the child's parents) or because of shame and embarrassment - an important resource of coping is taken from these mothers hands and may affect their overall coping. It definitely decreases their alternative resources for coping, if they don't find couple cohesion satisfactory.

Another strategy used more by mothers than by fathers, on a nearly significant difference, was "reappraisal".

All mothers who used "reappraisal" reported a positive change of attitude towards stuttering. Among mothers who did not report use of "reappraisal" one third did not report change of attitude towards stuttering with a statistically significant difference between groups.

Mothers who did not use the "despair" strategy, reported positive change of attitude towards stuttering in more than 90% of cases. Mothers who used "despair", reported positive change of attitude in only one third of the cases. These results show that the strategy in use had a dramatic influence on positive change of attitude towards stuttering. Such a change

means relief and more efficient coping not only for the mother but for the whole family as well.

 Fathers used "suppression of feelings" to a significantly greater extent. This finding is similar to Gray's (2003) who investigated gender differences in coping regarding parents of children with high functioning autism. He reported that fathers on his sample were much more likely to report suppression of feelings as a coping strategy even when they experienced considerable emotional distress.

Resuming our findings: fathers also tended to report more "guilt feelings" on one hand, and to show more "compliance" than mothers on the other, but we did not find any statistical significance for the gender differences in use of these strategies.

The fathers' coping was also influenced by the strategies used. As for "guilt feelings" – fathers who reported "guilt feelings" reported a positive change of attitude towards stuttering only in 40% of cases. When they did not report "guilt feelings" positive change of attitude towards stuttering went up to 85% of cases! There is no doubt that a positive change of thoughts by giving up guilt feelings, paves the way to positive feelings thus to a positive change of attitude.

That is a good reason to deal with these feelings during counseling and try to lessen their influence on parents' coping.

Both parents' results confirm common personal experience that it is more difficult to change your attitude to a positive direction when you're feeling guilty or desperate.

As for the "compliance" strategy, gender differences were referred to by Goldberg, Marcovitch, Macgregor and Lojkasek (1986) who investigated parents of children with Down's syndrome: "effects of a child's handicap on fathers differ from those upon mothers. Fathers reported fewer distress symptoms, higher self-esteem, a more internal locus of control, and less

support than did mothers, possibly reflecting traditional role divisions in the family."

From our point of view, "reappraisal" may have made it possible for mothers in our sample to move away from "guilt feelings" albeit with the combination of spouse support or other kinds of support. Moving away from guilt feelings enabled positive change of attitude towards stuttering and some relief.

We think this is part of the evolutionary and traditional role division in the family between the genders as Goldberg et al. (1986) pointed out. Women see themselves as responsible for their children's well-being and health. If there is any difficulty in these domains in a child's life and it is incurable, women perceive it as failure of motherhood which makes it harder to comply with the problem. There were mothers who expressed it literally during the interview: (What if stuttering won't disappear?) "I'll never forgive myself".

Fathers tended to "suppress feelings" thus not having to face their emotions. At the same time, we couldn't find any relation between using this strategy and positive change of attitude towards stuttering. In fact, the results presented a pattern in which the percentage of fathers who reported positive change of attitude was higher among those who did not use "feeling suppression"! It seems this strategy is efficient for immediate pain relief but not for efficient coping in the long run.

In accordance with the above-mentioned role division theory, fathers see themselves in charge of the family's maintenance and protection, therefore they are less responsible for health and well-being problems. Naturally it is easier for them to accept or comply with problems in this domain.

Walsh (1998) delineates differences in gender socialization that may explain these differences in strategy use: women are socialized to define

themselves within a relationship while men are reared to define themselves through individuation and separation from a relationship. Not surprisingly, this leads to differences in comfort with intimacy and dependence. In times of crisis, men who are uncomfortable with vulnerability tend to distance emotionally from their partners and sexualize their needs for closeness, comfort and support.

Brizendine a neuropsychiatrist (2008) suggests more support of the evolutionary difference between the genders' strategy use. She assumes females have an additional reaction to stress situations beside the well known "fight or flight" typical male reaction. This reaction is called "tend and befriend" and is expressed by leaning on social networks which were created early in the evolution of mankind anytime someone threatened breastfeeding females or mothers caring for young babies. These female social networks supported their members in offspring rearing and offered defense against threatening invaders. Their support and defense had a calming influence which stimulated the secretion of Oxytocin hormone in the threatened female bloodstream - a social hormone controlling the pleasure women feel in social intimate relationships. This may explain the tendency of stressed mothers in our sample to seek external support from social networks.

On the other hand, males had to deal with threats during the hunt or defending their territory. Such a situation does not allow dwelling upon feelings but demands immediate physical response. In that case suppression of feelings is an optimal strategy, which was found to be frequently used by stressed fathers in our sample.

The results dealing with parents' thoughts about the child's future once again revealed a father-mother difference. Though a high percentage of both parents reported future planning without relation to stuttering, fathers did so significantly more. Mothers found it harder to see the future

without the stutter's influence. This result reflects the above-mentioned findings regarding differences between genders in the family according to traditional roles and societal expectations, which affect the self image mothers and fathers have about the role they play.

Further confirmation of this notion, via additional contextual insight is presented by Lazarus (1996), who stresses in his data, that gender differences were interpretable in terms of differences in the source of stress, namely, the well-being of a family member or any other external problems.

Looking at the parents' strategies, we see that beyond problem-focused strategies such as finding therapy (which all of them did) or exercising fluency techniques with their child, most of the other strategies used were emotion-focused: looking for external support (emotional), reappraisal, despair, suppression of feelings, guilt feelings, compliance etc.

Gray (2006) who investigated coping over time of families who have autistic children in a longitudinal study, found that coping strategies changed from problem-focused in the initial study to more emotion-focused 10 years later in the second one. He supports Lazarus' (1996) assumption that aging is linked to the use of more emotion-focused coping strategies. It seems that parents' coping strategies found in our sample concur with this idea. However, in order to get a realistic perspective of changes in coping with child's stuttering over the years more research must be done on coping with parents of pre-school children who stutter on one hand and adolescents who stutter on the other.

3.2 Children's Strategies

Children showed a totally different profile from parents with regard to strategy usage. They used avoidance much more than parents. Not only did they report avoidant behavior but they practically avoided answering questions during the interview as well.

On top of it all, we found that their parents encouraged them to do so. Both parents described their child as socially adjusted mostly when he or she avoided direct violent reaction to teasing or bullying. For children who reported avoidance **all** parents reported adaptive behavior. For children who did not report avoidance only less than half of the parents reported adaptive behavior. For children who reported hitting behavior not even one parent reported adaptive behavior. These results show that parents perceived avoidance as a positive reaction strategy and seemed to reinforce their children's use of it.

These results concur with clinical experience which shows that children are expected to refrain from stuttering by controlling their speech and at the same time to control their behavior even when they are verbally attacked or bullied by peers. Wertheim (1973) also found that children who stutter are reinforced to over-control their feeling regulation which in turn results in deterioration of speech fluency.

Nearly 40% of the children tended to focus directly on the problem. This focus was expressed by explaining stuttering to the bully, calling attention to the bully's disadvantages or hitting the bully. We called these reactions problem-focused strategies (Lazarus & Folkman, 1984). Surprisingly, there were children who were courageous enough to report seeking external support and even reappraising their feelings or actions.

Sandstorm (2004) cited Causey and Dubow's results which suggested a positive association between seeking social support and self-esteem. Kochenderfer-Ladd and Skinner (in Sandstorm 2004) examined the role of coping strategies as potential moderators of the effects of peer victimization on children's adjustment. Interestingly, they found that the effectiveness of particular strategies also appeared to vary as a function of gender. For example, victimized girls benefited from the use of support seeking, whereas victimized boys did not.

In our sample there were only 4 girls, and every one of them reported avoidant reactions, partly with parents' guidance, one of them denied having difficulty with speech during the interview and another one described using different strategies in different circumstances: when speaking with strangers who asked about stuttering, she explained what she knows about it (problem-focused). When reacting to bullying at school she tried to ignore it, as if nothing happened (avoidance). In any case, the small number of girls does not allow us generalizations but the impression is of a wide use of avoidance, partly reinforced by parents but partly due to typical gender role expectations; as Sandstorm (2004) delineates in light of her findings: "Gender atypical coping strategies were associated with poorer functioning, raising the possibility that gender role expectations contribute to the relation between coping and adjustment. For example, girls who approach peer problems in a direct, assertive, or solution-oriented fashion may be disliked or viewed as maladjusted because their behavior contradicts the stereotyped expectation that females should be introspective and more attuned to feelings than instrumental goals. Similarly, boys who ruminate about interpersonal dilemmas may be particularly prone to ostracism because males are expected to act on problems rather than dwell on emotions."

Since the number of girls in our sample is too small to speculate about gender differences this may serve as another subject for continued strategies oriented research with a greater sample of stuttering girls.

About 15% of the children in our sample used "denial" which was unique because parents did not report or demonstrate using this strategy at all during their interviews.

Anna Freud in "Ego and The Mechanisms of Defense" (1977 translated to Hebrew) regarded denial as a typical childhood defense mechanism in which "the childish ego is free to get rid of undesirable facts by denying them but nevertheless it keeps the ability of reality judgment intact".

Sandstorm (2004), who investigated how elementary school-aged children cope with common rejection experiences, found that poorly accepted children who used high levels of cognitive restructuring, minimization, and ignoring in response to peer rejection experiences were viewed as *less* aggressive by peers than their more realistically minded counterparts. This finding, consistent with a growing body of literature on the benefits of positive illusions, suggests that the ability to ignore, de-emphasize, or reinterpret potentially hurtful rejection experiences may be particularly adaptive for unpopular children. Sandstorm (2004) speculates that the use of denial might allow rejected children to distance themselves from an *immediate* rejection experience, and therefore minimize the engagement of automatic aggressive responding. After all, children who do not acknowledge feeling hurt or rejected are unlikely to generate hostile attributions about their peers' negative behavior, or initiate retaliatory behavior against them.

Another study by Rudenberg, Jansen and Fridjhon (1998), who investigated children's coping with an ongoing climate of violence in

South-Africa, found that denial and distancing appeared to be the most commonly used defense mechanisms in the face of violence.

Both of these findings encourage thinking that denial may serve as a very useful strategy in avoiding direct conflict and its consequences on one hand, and keeping social status balanced on the other , for school-aged children who stutter just as for any other child.

At the same time, complete denial of social difficulties is likely to carry its own set of problems. As Sandstorm (2004) points out, poorly accepted children who remain completely blind to their lowly status are unlikely to make needed improvements in their interpersonal strategies, resulting in continued rejection over the long term. For children who stutter the same notions are valid with the addition of reaction to stuttering itself: Denial of inefficient strategies of coping does not enable looking for other, more efficient ones.

Avoidance, looking for external support, reappraisal and denial were all used by children and are all emotion-focused strategies. Lazarus and Folkman (1984) denote that whereas problem-focused efforts may be more effective when used in situations perceived as controllable, emotion-focused efforts may be more adaptive in situations perceived as uncontrollable. Children in our sample too, showed a variety of coping strategies which we suppose were used according to their conceptualization of the extent to which the bullying situation was controllable. This notion may be another factor influencing children's coping beyond parents' perceptions and gender expectations and may serve as a subject for further research.

3.3 Additional conclusions with regard to the child's interview

Children were asked how many friends they had. Most of the children (89%) reported they had 3 - 7 friends or more at school. This datum is rather optimistic since children on this sample feel they do have friends at school more than in any other place even though they often suffer from bullying or teasing at the same place (Subellok, Katz-Bernstein & Vinbruck, 2008). This means children may not be as lonely as parents or therapists are anxious to think and not even as much as they themselves tend to think sometimes, because of stuttering. They may feel lonely because "nobody understands their problem" but not necessarily due to lack of friends. Wood's (1974) results confirm this notion. He found no significant differences between stuttering and fluent boys on social position measures, suggesting that whether or not an elementary school-aged boy stuttered was of minor importance in determining his social role among his peers.

 In order to further investigate this assumption we looked for data about fluent children and their distribution of friends. Strauss and Polack (2003) investigated social marginalization of overweight children in a cross-sectional cohort study of 90,118 adolescents aged 13 to 18 years. They found that overweight adolescents received significantly fewer friendship nominations from others (mean number of friendship nominations was 3.39) than were received by normal-weight adolescents (M=4.79). Using their means of normal and over-weight children we can see that both means of nominations they found fall between 3 - 7 friends, just as reported by the children who stutter in our research.

With regard to stuttering children we found that Marge (1966 in Furnham & Davis, 2004) reported that dysfluent children held a lower social

position than fluent ones. Davis, Howell and Cook (2002) found that children who stutter were rejected significantly more often than were their peers and were significantly less likely to be popular. When compared to children who do not stutter, the children who stutter were less likely to be nominated as 'leaders' and were more likely to be nominated to the 'bullied' and 'seeks help' categories.

When the children were asked if they knew the reason for the interview most of them reported they did know, but approximately 40% were not sure or reported they did not know.

When asked whether their parents had a talk with them about stuttering, 70% of the children reported their parents did talk with them but 54% reported they did not remember what their parents said. In addition, out of the 27% who reported their parents did not have a talk with them, there were parents who reported they did.

In general, the children's interview questions were quite often answered "I don't know" or sometimes not answered at all.

We interpret this behavior as reflecting the avoidance or denial strategies mentioned previously.

When asked who was it easier to talk with, the children reported friends and teachers in 58% of the cases. It seems that most of them preferred talking with non-authoritarian figures or figures whose authority wasn't emotionally biased. Some even preferred talking with people who did not know them at all. Maybe they felt like "opening a new page" in a relationship without the history of stuttering or maybe they felt strangers don't really care how they talk and there is a fair chance they would not meet again so it was not important what the stranger/s thought.

The most difficult to talk situations were at school, on the phone or shopping, but about 19% reported no difficult to speak situations. Some of them reported that speech is always the same for them - either hard or easy; or that the difference is not dependent on the situation but rather on stress and non-stress periods.

When asked if they get remarks about their speech, 73% reported they did get such remarks. This result confirms the clinical experience of children and adults who stutter and suffer from environmental remarks.
Since the environment deals with stuttering, and not always in a preferable manner, it becomes vital to guide parents to talk about it with their children as part of their professional counseling.

When asked about the kind of reactions they got within the family, 31% of the children did not answer! Another 68% reported normal to supportive reactions to their stuttering. Another 8% reported bullying. The high percentage of "no answer" once again raises the possibility of unpleasant experiences that were denied, while talking to a stranger (the interviewer) whom the children could have tried to impress.
At the same time, we have to keep in mind that many parents did not want to leave their child alone with a strange woman (the interviewer) and listened in nearby or from a distance. There is a possibility that the children were aware of this and couldn't answer freely thus preferred not to answer at all.
Questions about outside of school friends' reactions resulted again with 31% who did not answer. Another 30% reported bullying and about 40% reported normal to supportive reactions.
No significant difference was found with regard to the frequency of "patient" responses of family and friends outside of school.

This accentuates the fact that family may be a safe place but potentially it is another "battlefield" for the stuttering child. On the other hand, friends may be supportive no less than family with their reactions to stuttering. In any case, admitting such unpleasant experiences takes courage and is not always obvious.

As previously mentioned, the pattern of "no answer" is understood as part of a defense strategy children used.

When asked about school the percentage of children who reported being bullied went up to 50%, while another 31% did not answer. It seems as though it is hard to admit such experiences, but children tend to be more willing to admit they happened at school since it is more likely to be experienced there (Subellok, Katz-Bernstein & Vinbruck, 2008). School is a highly competitive society and as such encourages impatience and violence, consequently the bullying experience there may be more intense than in any other social ground children may choose.

Nearly 60% of the children reported avoidant reactions to bullying such as continuing to do what they were doing before the negative comment or not reacting at all to that comment.

About 40% of children's reported reactions were either being active in a more socially acceptable way (talking with the child; calling an adult for help) or in a less socially acceptable manner (beating, cursing etc.). The manner of reaction was found to be related to the parents' perception of their child's adaptive behavior, as detailed earlier in the context of avoidance strategy.

50% of the children reported they got negative reactions to stuttering. This datum confirms that the social reaction to stuttering has to be dealt with through therapy since most of the children suffer negative feedback

that may aggravate their stuttering if they do not receive sufficient support. It is prone to affect their self-image without relation to stuttering and thus affect their present achievements and even affect them later on in life.

With regard to reactions children wanted to get, about 62% reported wishing for normal or patient reactions. This wish also reflects clinical experience where children complain about impatience, which impacts their adult life as well since they are already conditioned to think people don't have time to listen to their speech. It was interesting to find that 19% of the children wished to be helped and an additional 3.8% wished to be encouraged. Clinical experience shows children usually do not like their listener to say the words instead of them; despite this, the above mentioned children may be either special in their ability to get and use help or very dependent.

All the children could find something they do well.
When asked about something they do not do as well as others, more than 80% did find that something, but 19% did not. This 19% may be part of the hard core of children who avoided answering questions dealing with unpleasant subjects by not knowing the answer - using denial as a major strategy.
It is rather natural to avoid saying things about yourself that make a bad impression when talking with an adult stranger like the interviewer, but most of the children overcame this. It is plausible that these children are the kind we meet in the clinic who think they have to do everything perfectly and without mistakes.

More than a third of the children reported their friends tell them what they do well and another third reported their parents are the ones who tell them. This illustrates that friends may also be a source for comfort and resilience, a source we should look for with the child at the clinic. It is startling that even today, with so many readily available ways of acquiring information about parenting such as on the internet and books that come out everyday, not all parents realize the importance of acknowledging the child's abilities and therefore it is essential that they be guided to do so through counseling in the clinic (Faber & Mazlish, 1998).

Other children reported teachers, grandparents and siblings as those who acknowledge their abilities. These sources of positive feedback may in some cases replace low parental awareness of such needs and help build up the child's resilience in the clinic.

Werner and Smith (Walsh 1998) reported studies of children's resilience. They spent 40 years following the lives of nearly 700 children reared in hardship on the island of Kauai. The children were mostly born to poor unskilled sugar plantation workers of various racial descent and a third of them were "at risk" because of exposure before age 2 to at least four additional risk factors such as serious health problems, familial alcoholism, violence or mental illness. Another Werner article quoted by Walsh (1998) emphasized that all the resilient children in the Kauai study had "at least one person in their lives who accepted them unconditionally, regardless of temperamental idiosyncrasies, physical attractiveness or intelligence".

In our research, teachers and grandparents may be the benevolent adult children reported about, who strengthened their resilience.

As a clinical recommendation we should keep in mind asking and encouraging children to find an adult mentor when parents' support is not available for some reason.

In about 62% of the cases, the children's reaction to their stuttering was negative, usually meaning they fantasized about the elimination of their stutter. As they put it in their own words: "Please, light a fire and throw the stutter into it" (11 year old boy); "I would like to throw it away to the garbage can" (8 year old boy); "destroy it" (10 year old boy). This percentage is somewhat low compared to our expectations that all the children would feel negatively towards their stutter.

In fact 27% of the children had positive feelings towards their stutter and did not want to eliminate it ("I would make the stutter smaller and add it to the good things I have" – 11 year old girl). However, even the positive attitude towards stuttering depended on some change – making it smaller. About 8% were ambivalent, for example: "I would keep the ball of stuttering or maybe not, I prefer swimming but if I had to choose between having a fight and stuttering I would choose stuttering" (7 year old boy). Some children demonstrated a complex relationship with their stuttering which cannot be addressed in a simple "positive or negative" categorization.

When comparing children's attitude and parents' change of attitude towards stuttering there was no significant relationship. The vast majority of children had a negative attitude towards stuttering although most of the parents reported a positive change in their attitude towards stuttering.

4. RELATIONS BETWEEN PARENTS' AND CHILD'S PERCEPTION OF STUTTERING AND COPING WITH IT

A high Correlation coefficient was found between frequency of stuttering reports given by parents and children. This indicates that parents and children felt the same way about the stuttering frequency and were either rather realistic or mutually influenced. Zebrowsky (1993) concluded that parents' perceptions of their child's speech are formed, at least partially, in response to what the child is actually doing. Prizi-Jakovac (1999) found that parents' attitudes toward and understanding of children's stuttering correlated with objective measurements of stuttering frequency, block duration, and physical concomitants, as well as with stuttering intensity assessments and stuttering intensity self-assessments of the children. In our sample the result was similar regarding parent and child perception of stuttering frequency as a measure of severity.

It is quiet surprising that even though frequency of stuttering is perceived similarly by parents and children, in the clinic parents are more eager for therapy than the child who usually denies the problem or the feelings involved.

We compared children who reported their family tells them things they do well to children who did not report their family tells them things they do well.

The first group was found to have a significantly higher family cohesion score by both parents. It seems that in families with higher family cohesion, parents tend to talk with children about their positive traits or functioning and not only about their problems or disadvantages.

In addition, children reported easier speech in the family where parents' couple cohesion reports were significantly higher. The same tendency was found for family cohesion reports of these children.

In our sample we found that family cohesion, and especially couple cohesion, is strongly related to easy speech in the family and children's acknowledgement of their advantages.

As previously mentioned, the same factor of higher couple cohesion was strongly related to the parents' positive attitude change towards stuttering and positive change in the family. It was also related to ambivalence and different degrees of acceptance as reported by parents with regard to self-appraisal of the family's coping.

Integration of all these findings implies that the best thing that can happen to a stuttering child is having parents who keep close and supporting relationships first of all between themselves as a couple. It seems that a positive relationship between parents inspires them to view their child who stutters and the disability in spite of its existence, in a positive manner. They are able to acknowledge and verbalize the child's advantages and even to "forgive" the stuttering, and by doing so facilitate the child's talk with them and with other family members. It is as if they are saying "when we're together the problem becomes smaller".

This is not the result of ignoring the stuttering because we have seen that parents are rather realistic with regard to stuttering frequency and to the fact that it may not disappear. Instead it is the parental ability to see some more colors in the picture, other aspects of their child as well. It prevents identifying the child and the stuttering as a united entity and enables differentiation between them. It is realizing that there is a living, breathing child who has a problem, as an alternative to thinking that the child **is** the problem.

Couples who are close and supportive give one another a "safe place" to be as both people and parents, thus each enables the other to support their child who stutters. In order to support someone else, especially one's own child, people first and foremost must feel they themselves are supported.

This notion is supported by Walsh's (1998) family resilience theory who emphasizes that in times of trouble, family members do best when they can turn to one another for support and collaboration. She refers to Stinnett and his colleagues who found that pulling together is one of the most important processes in weathering crises.

As mentioned above, when discussing "avoidance" as a typical strategy used by stuttering children, it is important to stress in this context once again: both parents described their child as socially adjusted mostly when he or she avoided direct violent reaction to teasing or bullying but not when the child reported hitting behavior. These results show that parents perceived avoidance as a positive reaction strategy and seemed to reinforce their children's use of it. Given that this strategy was so widely used among our subjects it is inevitably concluded that the parents' perceptions influenced the children's behavior in implementing the "avoidance" strategy.

To summarize our conclusions on this subject, we didn't find any direct influence of parents' perceptions on their children through comparing attitudes towards stuttering. Nevertheless, we found indirect expressions of parental influence through family and couple cohesion affecting the child's self-image (acknowledgement of the child's advantages) and stuttering severity (difficulty of speech with family members). In addition, we found influence of parental demand to avoid overt aggression expressions in society and over-control of behavior on children's avoidant behavior in social situations.

As professionals we know that the parental image of the child (as characterized by negative or positive traits and abilities) may affect the

child's self-image, and by doing so, impose either mental stress or relief. This in turn and excessive control of behavior in general and of speech in particular, may affect either fluency or stuttering severity. In our sample we can see that family cohesion, especially the relationship between parents as expressed by couple cohesion, has an influence on speech as well.

Yet we have to take into account that there may be an interactive relationship between speech and couple cohesion which means that changes in fluency or stuttering severity may affect couple cohesion by the mere fact that the child's stuttering is in itself a stressful situation for the parents. Given that stress has the potential of distancing the couple and reducing couple cohesion (Lavee, 2004), relieving the stress by lessening the severity of stuttering may have the effect of drawing them closer once again.

5. CLINICAL IMPLICATIONS

1. When counseling one parent, the professional should keep the other parent in mind as a supporting person in the background. The other parent should be kept informed in order to take part in making decisions concerning the child and the therapy, according to the relationship and the possibilities.

2. In the best case scenario and if possible the professional can try to make parents aware of their couple cohesion by inviting both of them to come to therapy and during the meetings, accentuate the moments when they can empathize with one another by expressing their feelings about the stuttering of their child.

In addition, the fact that both parents work together with their child in a common effort towards easy speech and communication has a cohesive

value of its own, provided the child's age and developmental needs are taken into account. This does not imply that both parents at the same time have to take the child to therapy, do exercises or get counseling, but rather that both are involved in therapy in a way that is suitable to both of them and engenders a feeling of reciprocal support. During the interviews some mothers reported shared responsibility even though they were the ones' taking the child to therapy, exercising or receiving counseling. In spite of all that they felt supported by their spouses and did not perceive it as carrying the burden alone.

These recommendations do not necessarily suggest that the speech therapist professional is in charge of couple cohesion during stuttering therapy, but rather that by using professional tools the therapist can contribute to couple cohesion, which in turn generates progress in the parents' coping and consequently, their child's coping as well.

Couple cohesion may enhance parents' ability to keep the boundary between the couple unit and the children's unit in the family thus avoiding undesirable parent-child coalitions which may contribute to stuttering maintenance by the child who stutters through becoming the "identified patient".

Another recommendation regarding couple cohesion is encouraging parents to take care of their own well-being and their own relationships in various ways outside the therapy room (spending time together; sharing; going to family therapy if needed).

2. Given that the environment will always react to stuttering but not always in a desirable manner, it is vital to guide parents, as part of professional counseling, on how to talk with their children about responses to remarks aimed at their stuttering,.

3. Counseling of parents should refer to behavior control demanded from the child, to the range of possible assertive behavior strategies, and to

encouraging the child to consider these strategies, if they are effective and suitable, as plausible options. At the same time counseling may offer other ways to discharge negative energies children may have such as Marshall Arts or other physical activities.

4. It is important to get information about the parents' coping resources within and outside of the family and to refer to them during counseling.

5. It is necessary to deal with guilt feelings and despair during counseling and try to lessen their influence on the parents' coping.

Both parents' results confirm a common personal experience that it is harder to change to a positive attitude when one is feeling guilty or desperate.

6. It is important to reveal the family's narrative about stuttering especially for families with former stuttering. That narrative may have a dramatic impact on both the parents' and child's coping. Sometimes there has to be invested effort in order to change their narrative so that progress can be made in therapy.

6. SUGGESTIONS FOR FURTHER RESEARCH

1. In order to get a realistic perspective of changes in coping with a child's stuttering over the years, more research must be done on coping with parents of pre-school children who stutter on one hand and parents of adolescents who stutter on the other. A longitudinal study may fulfill the same purpose.

2. A larger sample would enable researchers to get significant results on several issues such as, among others, the following: parental perceptions influence on child perceptions, gender differences in strategy use of school-aged stuttering children. The latter may serve as a subject for continued strategies oriented research with a greater sample of girls who stutter.

3. It is necessary to add some objective measures to subjective reports on a number of issues, for example: an objective measure of stuttering severity besides the subjective assessment of child and parents. Another issue is social marginalization of stuttering children not only according to their own report but through their peers' reports as well, so that results would be as objective as possible. It is desirable in this case not to give children a range of numbers in advance, as it was done on our research questionnaire, but to ask for specific names and numbers of friends they and their peers have in mind. Having this kind of results will enable examination of relations between the number of friends, stuttering severity and temperamental factors of school-aged children who stutter.

4. We assume that the children in our sample demonstrated coping strategies use according to their conceptualization of the extent to which the bullying situation or speech situation was controllable. This notion may be another factor influencing children's coping beyond parents' perceptions and gender expectations and may serve as subject for further research.

5. The subject of individual differences between stuttering children according to personal traits, requires further study. In that way we will be able to offer different children the suitable therapy according to their needs.

6. In order to find the proportion of parental influence contrasted to peers influence and to the child's self-image and coping strategies with stuttering it is desirable to use a variety of measures for each of these subjects and find their relative influence on coping in order to consider them properly in the clinic.

7. Walsh (1998) draws attention to the fact that her concept of "family connectedness", which is in fact synonymous with our concept of cohesion, is culturally biased. High cohesion or separateness is not

necessarily pathologic but frequently dictated by ethnic group norms. Comparison of the results of this study with a similar one that was already conducted in Germany (Subellok 2005) will enable us to examine cultural influences on family and couple cohesion and on the coping in families of school-age children who stutter.

7. SUMMARY AND CONCLUSIONS

The onset of stuttering is in fact the onset of a family crisis, like the discovery of any other developmental or childhood disability. This crisis sets into motion a coping process with specific stages and involves the use of strategies that may be efficient to different degrees in their contribution to resilience.

Self-appraisal of parents in our research seems to reveal stages they go through coping with their child's stuttering during the school-age period which resemble stages of coping with other childhood disabilities, as detailed below:

1. Feeling pain and sadness when acknowledging the problem.

2. Ambivalence – feeling pain and at the same time hope, trying to treat stuttering in order to eliminate it.

3. Acceptance to different degrees – beginning to acknowledge stuttering would not disappear and accept it first in specific conditions (home environment; family; intimate conversations etc.) and later on in some public situations as well.

Transition between these stages is achieved with growing couple cohesion, especially between the stage of pain expression and sadness and the stage of ambivalence.

Couple cohesion and spouse support enabled positive attitude change towards stuttering through the years for parents of school aged children and positive change in family due to stuttering as well. Stuttering

frequency reports of children and parents were highly correlated but did not relate to positive change of attitudes.

In families with higher couple cohesion children felt it was easier to talk with family members and were acknowledged for their advantages and thus were able to build a versatile self-image composed of abilities, instead of exclusively identifying with the stuttering disability.

In families with former stuttering there was a tendency to report negative or no change in the family due to children's stuttering.

Former stuttering in close family made it harder for mothers to accept that stuttering would not disappear and caused them great disappointment. On the other hand, fathers in these families accepted the idea more easily. Strategies of coping differed between mothers and fathers moving ahead in the coping process. Fathers used more suppression of feelings and mothers used more external support and reappraisal. The last strategy was the only one found to be related to positive attitude change towards stuttering. Parents reporting despair or guilt feelings found it harder to change their attitude towards stuttering.

Children's coping was characterized by avoidance which was a strategy evidently encouraged by their parents. Children who used avoidance were all reported as socially adaptive by their parents, which was significantly more than children who did not.

Our major general conclusion of this study confirms once again the importance of supporting and counseling parents of stuttering children as a part of the interventions (Rustin & Purser, 1991; Katz-Bernstein, 1991; Rustin, Botterill & Kelman, 1996). Derived from that conclusion is the imperative need to train Speech Clinicians to master the skills of counseling parents, both as a basic skill for informal talks during treatment of the child, as well as a specialized skill, included as part of the treatment (Katz-Bernstein, 1991).

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Appendixes:

PARENTS' QUESTIONNAIRE

1. **First symptoms**

- When did you first notice something different about your child's speech?

2. **Environment**

   -After stuttering onset, when did you have your first talk with friends or family about it?

   -What was their initial reaction?

   -What was their reaction later on?

3. **Time of first professional counseling**

   -When was the first time you talked about stuttering with a professional?

   -How informative was the meeting? What was the atmosphere?

   -How did you react? How did you feel? What did you discover?

4. **Professional support**

   -Was any professional support suggested for your child such as psychological support, special education, speech therapy or any other kind of help?

   -What kind of professional help have you looked into for yourself, your child or your family?

   -What kind of professionals (private or public) have helped you? For how long?

   -How have you been kept up to date about the therapy course and

methods? How have you been included in therapy?

-What are the characteristics you expect a professional to have? What would convince you to trust him/her? Have you found such a professional?

5. **Stuttering as a symptom**

-Has your child's fluency changed over time?

-How would you estimate stuttering frequency?

*Sometimes   *Often   *Seldom

-In what situations is your child more likely to stutter?

6. **Parents' attitudes towards stuttering**

-Has your attitude towards your child's stuttering changed over the years?

-To what extent does your child's stuttering bother you? In what circumstances does it bother you more? In what circumstances does it bother you less?

-What are your child's characteristics without relation to stuttering?

-Do you think stuttering will disappear with time?

-What do you think has to happen in order to make stuttering disappear? (therapy; self confidence etc.)

-Can you imagine that stuttering would not disappear? What would happen then from your point of view?

-What are your feelings towards your child's stuttering today?

-Have you ever spoken with your child about stuttering? When? How?

-Have you ever used the word "stuttering"? If so, with whom? (your child; spouse or with professionals)? Do you use another word instead of "stuttering" to describe the symptoms?

-Describe your child: Is he/she introvert or extrovert, what are his/her hobbies, characteristics?

7. **The child's attitudes towards stuttering**

-What do you think your child's attitude towards the problem is? Does it affect his relationships with friends and school-mates?

8. **Family**

-Is someone in the family especially worried or stressed due to the child's stuttering? Does someone feel responsible for the stuttering?

-What do you think are the reasons for stuttering?

-Who is taking care of therapy?

-How do the child's siblings react and how are they influenced by the situation? Are their relationships with their friends influenced by the child's stuttering?

-What has changed in the family due to stuttering since its onset?

-Do you think the family can help the child cope with stuttering?

-To what extent is the child's coping influenced by the family's coping or worries about stuttering?

9. **The situation today**

-Who is counseling you today about specific child rearing problems?

-Who helps you in everyday education? Do you have any support? Since when?

10. **Rerospective**

Can you recall any critical periods you've had with your family over

the years?

-Infancy

-Kindergarten

-School age

-Adolescence (junior high school)

11. **Looking to the future**

-Do thoughts about your child's future keep you busy? Since when?

-Do you have specific plans for him/her? Have you taken any steps

towards implementation of these plans?

12. **Additions**

-Do you feel like adding something to the conversation with regard to

the family, therapy, school or society?

-Do you have any suggestions, recommendations or ideas to add?

13. **Self reappraisal**

-How do you think you and your family are coping with stuttering?

CHILD QUESTIONNAIRE

1. Personal Details

Name:

Age:

Who is your family: *Parents   *Father   *Mother   *Other caring adult

 *Brother   *Sister   *None

School: _____

How many school-friends do you have: 1-2   3-7   more none

How many other friends do you have: 1-2   3-7   more none

Hobbies:

_____

_____

_____

2. Reasons for the interview:

Do you know why we are having this conversation?

*Yes   *No *Uncertain   *No answer

*Other _____

Have your parents ever spoken with you about stuttering?

*Yes   *No   *Uncertain   *No answer

*Other _____

-If the answer is yes, what did they say?

_____

3. Child's symptoms

-How frequent is your speech difficulty?

*Always   *Often   *Sometimes   * Rarely

*Other_____

-With whom do you feel it is less difficult for you to speak?

*Father   *Mother   *Teacher   * Friends   *Siblings   *School-friends

*Others _____

-With whom do you feel it is difficult for you to speak?

*Father   *Mother   *Teacher   *Friends   *Siblings   *School-friends

*Others _____

-In what situations do you feel it is difficult for you to speak?

*At school   *Telephone   *Shopping   *after school activities

*Friends

*Other _____

-In what situations do you like to speak a lot?

*At school   *With friends   *At home   *Nowhere

*Other situations _____

-What do you like to talk about?

_____

_____

-What do you like to do most?

_____

_____

_____

4. Environment

-Has anyone ever spoken to you about your stuttering?

*Yes   *No

-If the answer is yes, who was it and how would you describe his or her attitude?

Family:

*Ordinary * Patient   *Nervous   *mocking   *Impatient

*Repulsive

*The child's words:

_____

Friends:

*Ordinary * Patient   *Nervous   *mocking   *Impatient

*Repulsive

*The child's words:

_____

At school:

*Ordinary * Patient *Nervous *mocking *Impatient

*Repulsive

*The child's words:

_____

Strangers:

*Ordinary * Patient *Nervous *mocking *Impatient

*Repulsive

*The child's words:

_____

-How do you respond if someone has a negative attitude?

*Continue to talk   *Do not respond   *Escape   *Bit him   *Do not know

*Other

_____

*How would you describe other people's reactions?

*Indifferent   *Uncertain   *Aggressive   *Ordinary

*Restrained

*Other

_____

5. Child's resources

What are your advantages?

_____

_____

_____

What are your disadvantages?

_____

_____

_____

_____

Do your friends, parents, siblings and teachers tell you what are you good at?

_____

_____

_____

_____

6. Epilogue

Suppose we have two balls of yarn on the table. One of them is your stuttering and the other is the thing you do best. What would you like to do with each one?

_____

_____

_____

PERSONAL DETAILS QUESTIONNAIRE

Dear parents,

This questionnaire is used for research purposes only and will not be available to anyone other than the researcher herself.

We are committed to keeping the information given here fully confidential.

Thank you for agreeing to fill out this questionnaire.

Date: _____

Name of questioned person: _____

1. Family

Members	Name	Age	profession/school class	stuttering
Father				*yes *no *stopped
Mother				*yes *no *stopped
First born				*yes *no *stopped
Second				*yes *no *stopped
Third				*yes *no *stopped
Fourth				*yes *no *stopped
Fifth				*yes *no *stopped
Sixth				*yes *no *stopped

2. Information about the child

*Was the child exposed to more than one language? If so, how many?

*Does your child have any difficulty in one or more of the following:

Motion	*yes *no
Hearing	*yes *no
Sight	*yes *no
Perception/touch	*yes *no
Body awareness	*yes *no
Social behavior	*yes *no
Learning	*yes *no
Other subject matters	

_____

_____

*Does your child demonstrate any special behavior connected to speech such as the following:

Limited vocabulary	*yes *no
Restricted comprehension of speech	*yes *no
Omission of word-sounds	*yes *no
Distortion of word-sounds	*yes *no
Nasal talking	*yes *no
Disfluency of speech	*yes *no
Other disorder	

_____

_____

3. Other difficulties

*Has your child ever suffered violence/abuse? If so, by whom?

Mother	*yes *no

Father   *yes *no

Siblings   *yes *no

Grandparents   *yes *no

Relatives   *yes *no

Others   *yes *no

*Were there any dramatic significant events in your child's life such as
the following, and if so, when did they happen?

-school change   *yes *no

-moving to a new neighborhood   *yes *no

-moving to a new apartment   *yes *no

-unemployment   *yes *no

-birth of sibling   *yes *no

-separation   *yes *no

-accident   *yes *no

-death   *yes *no

-other events   *yes *no

Please describe:

_____

_____

_____

*Does a family member suffer from the following:

-Asthma   *yes *no

-Epilepsy   *yes *no

-Stuttering   *yes *no

-Speech disorders   *yes *no

-Other health problem   *yes *no

Please describe:

_____

_____

_____

*Does one of the child's caregivers speak too rapidly?   *yes *no

4. Information about child's stuttering

*When did your child start speaking (first words)?

-1-1.5 years

-1.5-2 years

-2-3 years

-later

*At what age did your child's stuttering start?

- between 12-24 months

- between 25-36 months

- between 37-48 months

- between 4-5 years

- between 5-6 years

- between 6-7 years

- between 7-8 years

- between 8-9 years

- later

*How severe is your child's stutter?

-mild   *yes *no

-moderate   *yes *no

-severe   *yes *no

*In what situations does your child stutter most?

-in kindergarten   *yes *no

-at school   *yes *no

-with friends   *yes *no

-with relatives   *yes *no

*Does your child have friends?   *yes *no

*Did your child get stuttering therapy?   *yes *no

If the answer is yes:

When?

_____

_____

_____

Where?

_____

_____

_____

For how long?

_____

_____

_____

Please, note positive and negative aspects of therapy, in your opinion.

_____

*How do you react when your child stutters?

-tell the child to speak slowly   *yes *no

-give the child the feeling there's plenty of time   *yes *no

-ignore the stuttering   *yes *no

-give the child the words or complete the child's sentence   *yes *no

-other

_____

_____

_____

*How does your child cope with stuttering?

- is aware of it   *yes *no

-suffers   *yes *no

-doesn't care   *yes *no

-other

_____

_____

_____

5. Satisfaction of support you get

On a scale of 1 (very pleased) to 5 (not at all pleased) how would you rate the following:

.

-speech therapist   1   2   3   4   5

-doctor   1 2 3 4 5

-psychologist   1 2 3 4 5

-follow-up   1 2 3 4 5

-nursemaid   1 2 3 4 5

-teacher   1 2 3 4 5

-health insurance services   1 2 3 4 5

-support groups for parents/children   1 2 3 4 5

-other institutions you get support from   1 2 3 4 5

Please describe:

_____

_____

6. Information about your child's educational background

 -ordinary kindergarten

-special education kindergarten

- no kindergarten at all

*Does your child attend

-elementary school

-junior high-school

-special education school

Please describe your child's school

_____

_____

_____

*Does your child follow school demands?   *yes *no

7. Economic situation

-bad

-average

-good

-very good

8. Continuous support

*Do you get any support from your family/friends/relatives with regard to your child's stuttering?

-financial help

-talks

-everyday matters

-other

_____

_____

_____

*if you would like to add something, please do so in the following space:

_____

_____

_____

Thank you very much for your time and effort!!!

Appendix D

<div dir="rtl">

שאלון תיאור משפחה

(טייכמן ונבון 1990)

שם: _____ גיל: _____ מין: ז נ (הקף בעיגול)

מצב משפחתי (הקף בעיגול): רווק/ה נשוי/נשואה גרוש/ה אלמן/ה

להלן מספר משפטים, שבהם אנשים משתמשים בדרך כלל כדי לתאר את משפחותיהם.

קרא/י כל משפט בעיון . בחר/י בספרה המתאימה ביותר לתיאור משפחתך והקף/י אותה בעיגול.

ענה על כל הפריטים.

אין תשובות נכונות או בלתי נכונות.

תשובותיך תישמרנה בסודיות מוחלטת.

5	4	3	2	1	
כמעט תמיד	לעתים קרובות	לפעמים	לעתים רחוקות	כמעט אף פעם	

5	4	3	2	1	1. בני משפחה מבקשים עזרה זה מזה.
5	4	3	2	1	2. כשצריך לפתור בעיות, שומעים להצעות של הילדים.
5	4	3	2	1	3. אנחנו מקבלים בחיוב זה את חבריו של זה.
5	4	3	2	1	4. לילדים יש מה לומר ביחס למשמעת הנדרשת מהם.
5	4	3	2	1	5. אנו אוהבים לעשות דברים במסגרת משפחתנו המצומצמת בלבד.
5	4	3	2	1	6. לכל אחד מבני המשפחה תרומה בהחלטות משפחתיות חשובות.
5	4	3	2	1	7. בני המשפחה מרגישים קרבה לשאר חברי המשפחה יותר מאשר

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לאנשים מחוץ למשפחה.

5	4	3	2	1	8. משפחתנו משנה את דרך טיפולה במשימות.
5	4	3	2	1	9. בני המשפחה אוהבים לבלות זמן פנוי זה עם זה.
5	4	3	2	1	10.המשפחה שלנו מנסה דרכים חדשות לטפל בבעיות.
5	4	3	2	1	11.בני המשפחה מרגישים קרבה זה לזה.
5	4	3	2	1	12.הילדים הם מקבלי ההחלטות במשפחתנו.
5	4	3	2	1	13.כל חברי המשפחה נוכחים בפעילויות משפחתיות.
5	4	3	2	1	14.הכללים משתנים במשפחה שלנו
5	4	3	2	1	15.אנו יכולים למצוא בקלות דברים לעשות יחד במשפחה.
5	4	3	2	1	16.אנו מחליפים בינינו את החובות במשק הבית.
5	4	3	2	1	17.בני המשפחה מקבלים מה שהמשפחה מחליטה.
5	4	3	2	1	18.קשה לזהות מי המנהיגים במשפחה שלנו
5	4	3	2	1	19.ה"ביחד" המשפחתי חשוב מאוד.
5	4	3	2	1	20.קשה לומר מי עושה מה בעבודות משק הבית.

Appendix D

שאלון תיאור יחסי זוג

(טייכמן ונבון 1990)

שם: _____ גיל: _____ מין: ז נ (הקף בעיגול)

מצב משפחתי (הקף בעיגול): רווק/ה   נשוי/נשואה   גרוש/ה   אלמן/ה

להלן מספר משפטים, שבהם אנשים משתמשים בדרך כלל כדי לתאר את משפחותיהם.
קרא/י כל משפט בעיון . בחר/י בספרה המתאימה ביותר לתיאור משפחתך והקף/י אותה בעיגול.
ענה על כל הפריטים.
אין תשובות נכונות או בלתי נכונות.
תשובותיך תישמרנה בסודיות מוחלטת.

5	4	3	2	1	
כמעט תמיד	לעתים קרובות	לפעמים	לעתים רחוקות	כמעט אף פעם	

5	4	3	2	1	1. אנו מבקשים עזרה זה מזה.
5	4	3	2	1	2. כשמתעוררות בעיות, אנו מתפשרים.
5	4	3	2	1	3. אנחנו מקבלים בחיוב זה את חבריו של זה.
5	4	3	2	1	4. אנו גמישים בטיפול בחילוקי-הדיעות בינינו.
5	4	3	2	1	5. אנו אוהבים לעשות דברים זה עם זה.
5	4	3	2	1	6. בחיינו כזוג אנו מתחלפים במנהיגות.
5	4	3	2	1	7. אנו מרגישים יותר קרבה זה לזה מאשר לאנשים אחרים.
5	4	3	2	1	8. אנו משנים את הדרך שבה אנו

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מטפלים במשימות.

5	4	3	2	1	9. אנו אוהבים לבלות זמן פנוי זה עם זה.
5	4	3	2	1	10.אנו מנסים דרכים חדשות לטיפול בבעיות.
5	4	3	2	1	11.אנו מרגישים קרבה רבה זה לזה.
5	4	3	2	1	12.בחיינו כזוג אנו מקבלים יחד את ההחלטות.
5	4	3	2	1	13.אנו משתפים זה את זה בתחביבים ובתחומי התעניינות.
5	4	3	2	1	14.הכללים משתנים במסגרת חיינו כזוג.
5	4	3	2	1	15.אנו יכולים למצוא בקלות דברים לעשות יחד כזוג.
5	4	3	2	1	16.אנו מחליפים בינינו את החובות במשק הבית.
5	4	3	2	1	17.אנו מתייעצים זה עם זה בקשר להחלטותינו.
5	4	3	2	1	18.קשה לזהות מי המנהיג בינינו.
5	4	3	2	1	19.להיות ביחד זו עדיפות עליונה.
5	4	3	2	1	20.קשה לומר מי עושה מה בעבודות משק הבית.

Appendix   E:

FACES III FAMILY AND COUPLE VERSIONS

FACES III

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
ALMOST NEVER	ONCE IN AWHILE	SOMETIMES	FREQUENTLY	ALMOST ALWAYS

DESCRIBE YOUR FAMILY NOW:

_____ 1. Family members ask each other for help.

_____ 2. In solving problems, the children's suggestions are followed.

_____ 3. We approve of each other's friends.

_____ 4. Children have a say in their discipline.

_____ 5. We like to do things with just our immediate family.

_____ 6. Different persons act as leaders in our family.

_____ 7. Family members feel closer to other family members than to people outside the family.

_____ 8. Our family changes its way of handling tasks.

_____ 9. Family members like to spend free time with each other.

_____ 10. Parent(s) and children discuss punishment together.

_____ 11. Family members feel very close to each other.

_____ 12. The children make the decisions in our family.

_____ 13. When our family gets together for activities, everybody is present.

_____ 14. Rules change in our family.

_____ 15. We can easily think of things to do together as a family.

_____ 16. We shift household responsibilities from person to person.

_____ 17. Family members consult other family members on their decisions.

_____ 18. It is hard to identify the leader(s) in our family.

_____ 19. Family togetherness is very important.

_____ 20. It is hard to tell who does which household chores.

FACES III: Couple Version

David H. Olson, Joyce Portner, and Yoav Lavee

1	2	3	4	5
ALMOST NEVER	ONCE IN AWHILE	SOMETIMES	FREQUENTLY	ALMOST ALWAYS

DESCRIBE YOUR FAMILY NOW:

_____ 1. We ask each other for help.

_____ 2. When problems arise, we compromise.

_____ 3. We approve of each other's friends.

_____ 4. We are flexible in how we handle our differences.

_____ 5. We like to do things with each other.

_____ 6. Different persons act as leaders in our marriage.

_____ 7. We feel closer to each other than to people outside our family.

_____ 8. We change our way of handling tasks.

_____ 9. We like to spend free time with each other.

_____ 10. We try new ways of dealing with problems.

_____ 11. We feel very close to each other.

_____ 12. We jointly make the decisions in our marriage.

_____ 13. We share hobbies and interests together.

_____ 14. Rules change in our marriage.

_____ 15. We can easily think of things to do together as a couple.

_____ 16. We shift household responsibilities from person to person.

_____ 17. We consult each other on our decisions.

_____ 18. It is hard to identify who the leader is in our marriage.

_____ 19. Togetherness is a top priority.

_____ 20. It is hard to tell who does which household chores.