

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 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?

C.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

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

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

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

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 in 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.)

[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 the families had to cope with fluctuating fluency and approximately 40% felt positive change.

C.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.

C.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

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

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 their 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

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

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 and former stuttering in family.

Table 9 presents the results:

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

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

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.

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

SD=1.18	SD=.31997	by fathers
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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.

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

The χ^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 that 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. ($\chi^2 = 3.715$; $p < .05$).

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

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

(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

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

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 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 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 fade away?

77% - 100% of fathers reported they could imagine that stuttering would not fade away 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 fade away 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. 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:

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

The percentage in table 14 does not add up to 100 because the respondents could specify more than 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 parents 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 Relation between changing attitude towards stuttering and strategy used during the interview

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 χ^2 test ($\chi^2=4.441$; $P < .035$).

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.

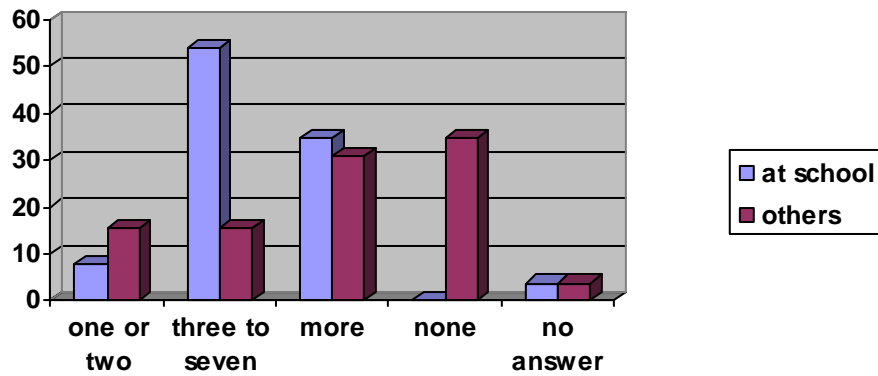
4. RESULTS WITH REGARD TO RESEACH QUESTION NO. 4

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.

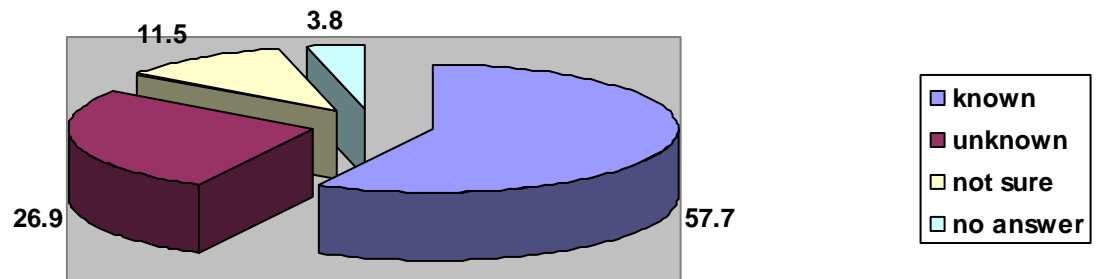
4.1 Results with regard to children's perceptions as expressed in their interview

Figure 2: Child's report about number of friends



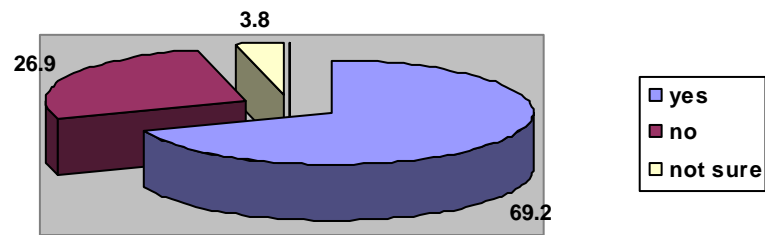
Most children (54%) reported having three to seven friends or more at school (35%). When talking about friends outside of school the percentage of friends was lower on the categories mentioned above or higher on categories of fewer friends (35% none and 15.4% 1 or 2 friends).

Figure 3: reason for interview



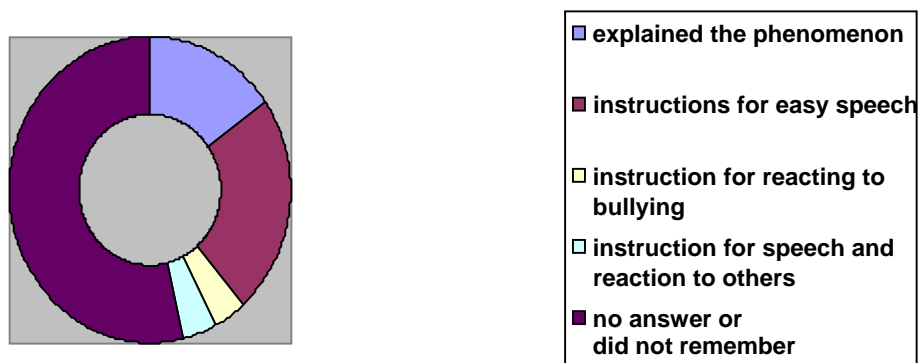
Almost 60% of children reported they knew the reason for the interview. 27% reported they did not know the reason and 11.5% were not sure. One child did not answer the question.

Figure 4: Reported talk with parents



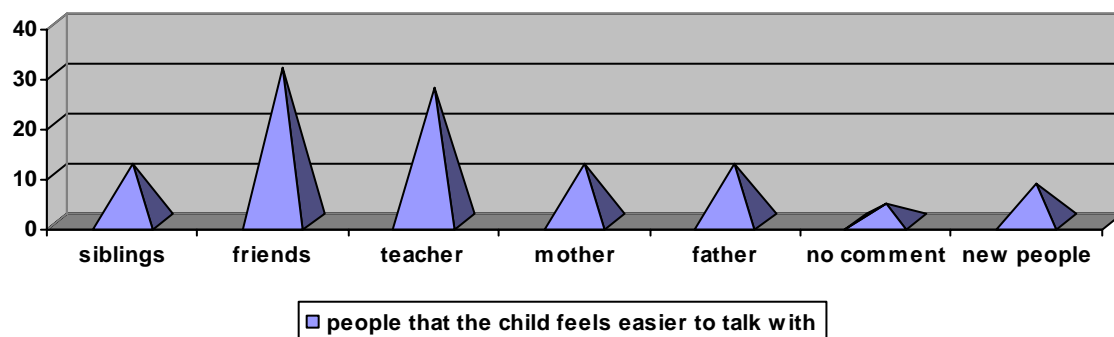
Almost 70% of children reported their parents had a talk with them about stuttering. 27% reported no such talk and 3.8% were not sure.

Figure 5: What did parents say?



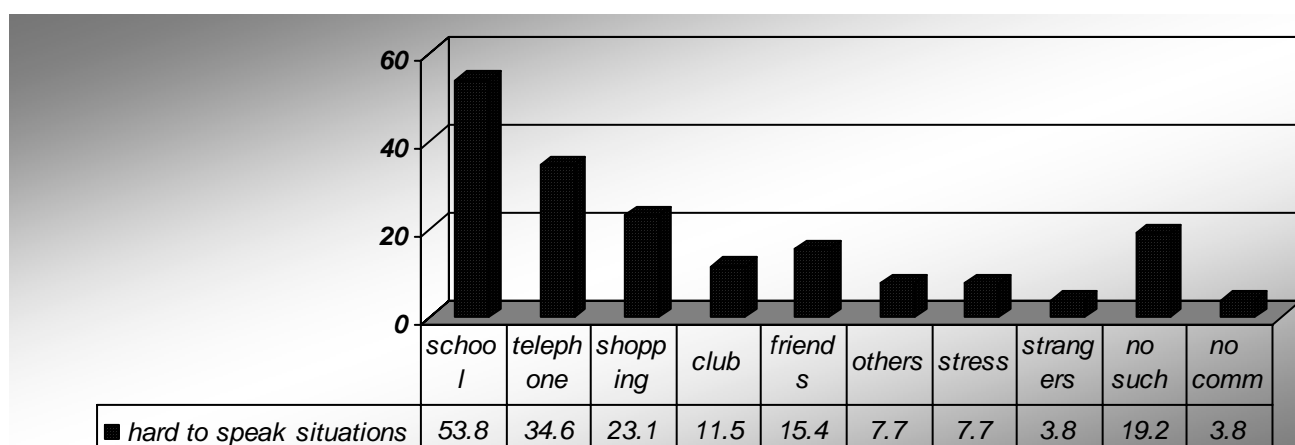
Most of the children did not answer or said they do not remember what parents said (54%). Among those who remembered, 23% reported getting instructions for easy speech, 15.4% reported getting an explanation about stuttering, 3.8% reported getting instructions for reacting to other children's bullying and another 3.8% got both kinds of instruction.

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



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?



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

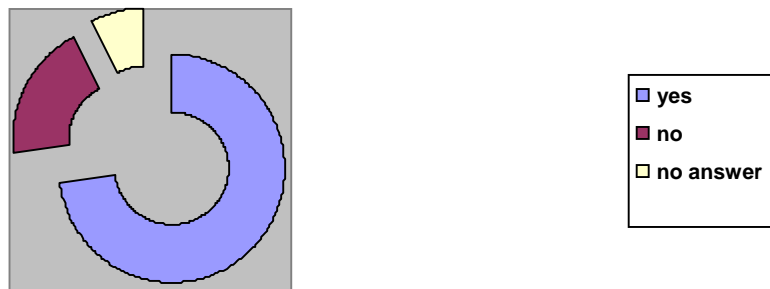
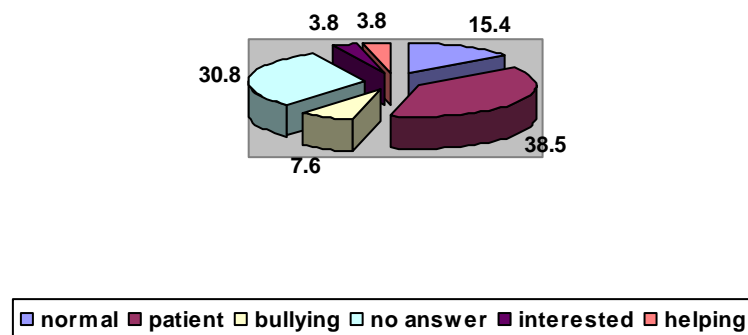


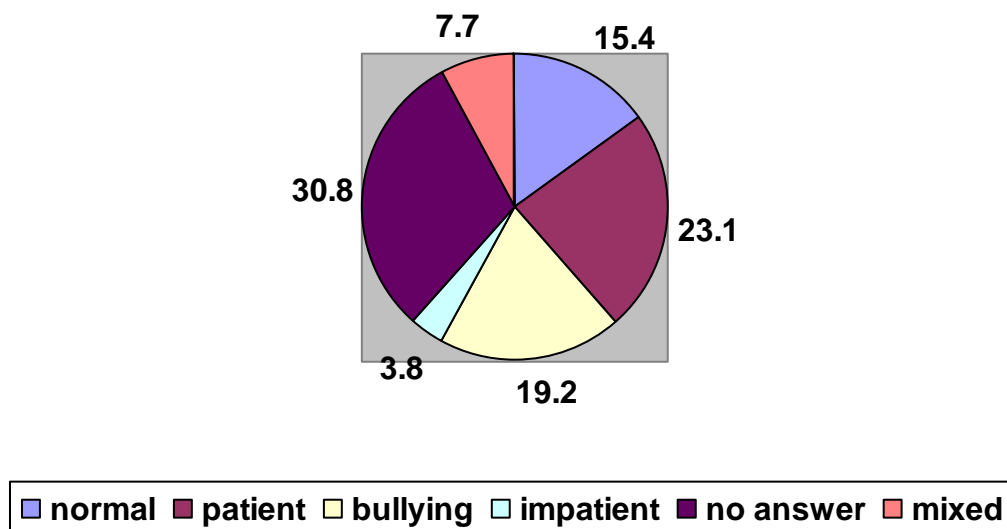
Figure 8 shows that most of the children (73%) reported they got some kind of remarks about stuttering from other people. 19% of the children reported no remarks from others and about 8% did not answer.

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



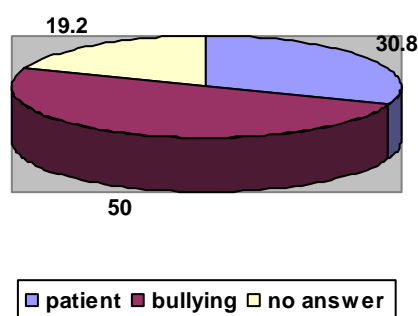
Almost 60% of the children reported normal and patient references to stuttering from their family. Another 8% reported interested and helping references. 8% reported bullying or impatience from family members. About 31% of the children did not answer that question.

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



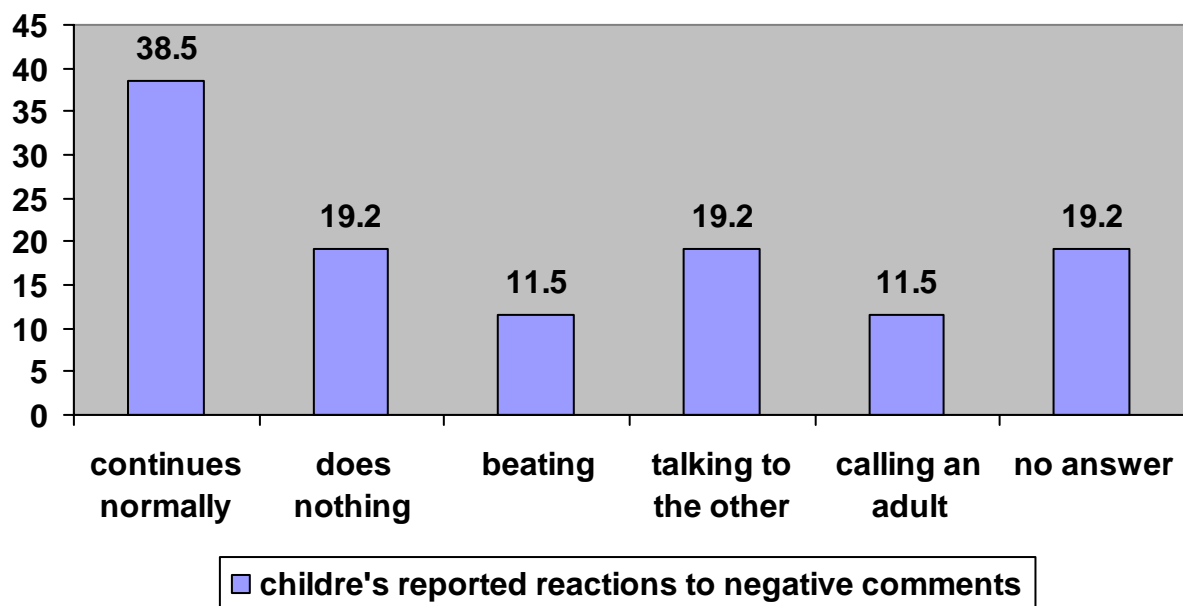
Almost 31% of the children did not answer this question. About 39% reported normal and patient references to their stuttering, 23% reported bullying and impatience, and 7.7% reported mixed references (sometimes nervous or bullying, sometimes normal or interested). This means that more than 30% reported 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 Wilcoxon test.

Figure 11: References to stuttering children reported to get from school friends



At school, 50% of the children reported being bullied or to 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



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

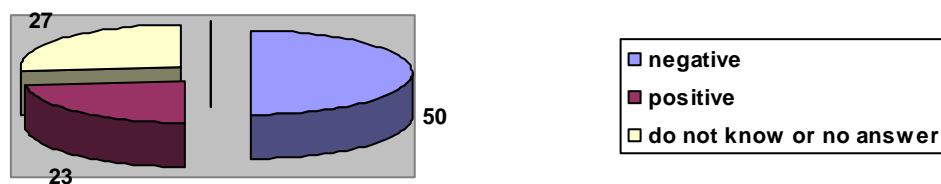
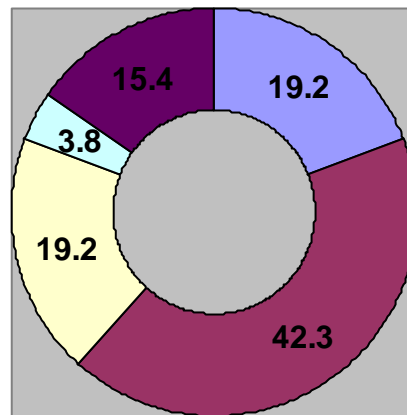


Figure 13 shows that half of the children reported negative reactions to their stuttering. 23% of the children reported positive reactions and 27% of them did not know or did not answer at all.

Figure 14: Reactions children reported they would prefer



■ normal ■ patient ■ helping ■ encouraging ■ no answer

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

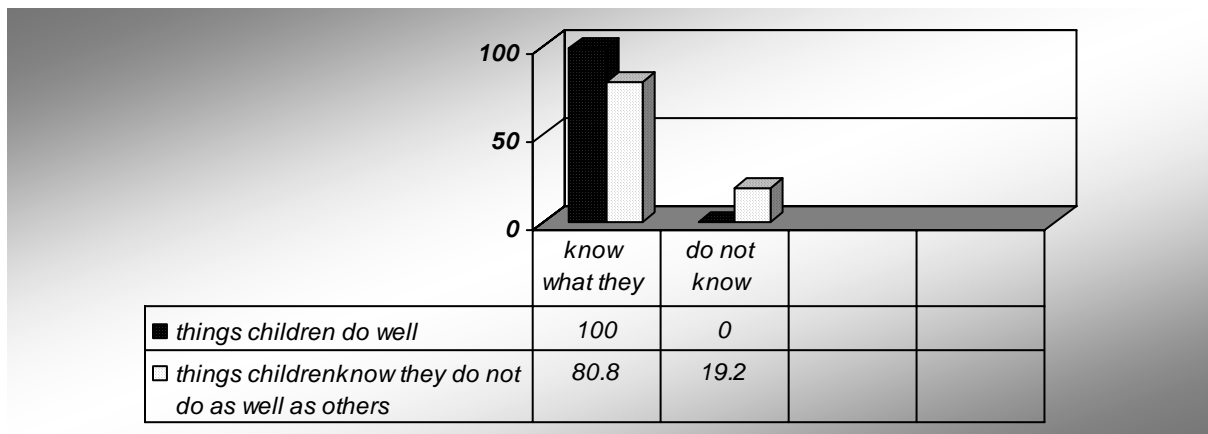


Figure 15 shows that 100% of the children reported they know about something they do well. Only 80.8% reported they know about something they do not do as well as others (football; mathematics; history; being popular etc.). 19.2% couldn't think of anything they do not do well.

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

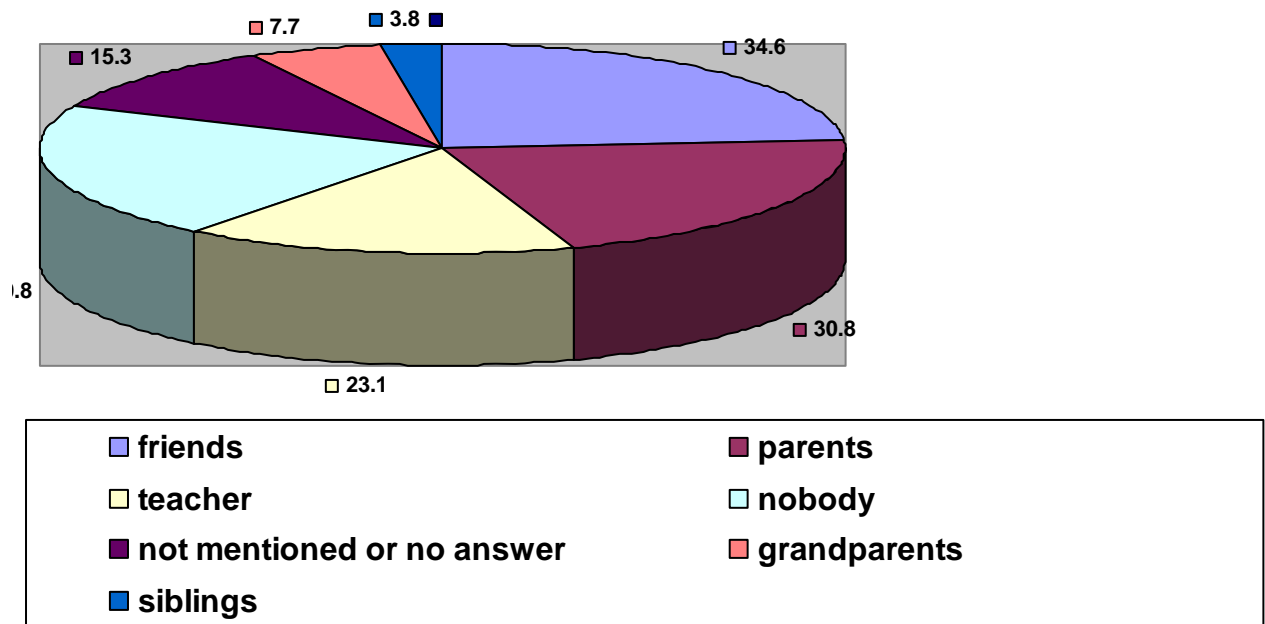


Figure 16 shows that when children were asked who tells them things they do well, 34.6% of them reported friends, 30.8% reported parents, 23.1% reported teachers, 7.7% of the children reported grandparents, 3.8% reported siblings, 30.8% reported nobody tells them what they do well and 15.3% gave no answer. 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

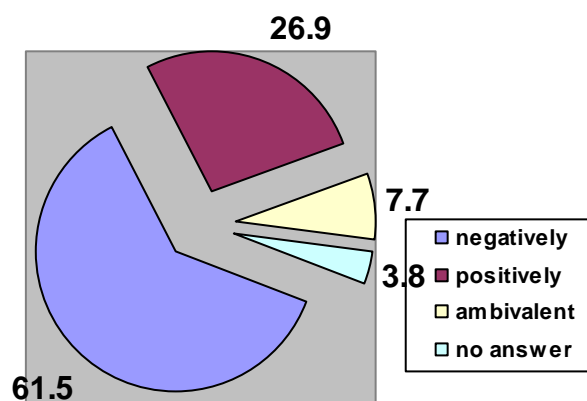


Figure 17 shows that 61.5% of children reported negative attitude towards their stuttering and wanted to eliminate it. 26.9% of children reacted positively and said they liked their stutter or wanted to keep it. 7.7% were ambivalent and 3.8% did not answer.

In a chi square test there was no significant relationship between the parents' 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' 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 χ^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. ($\chi^2 = 6.4$; $P < .01$)

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

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

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 ($\chi^2 = 4.62$; $P < .03$)

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

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

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.

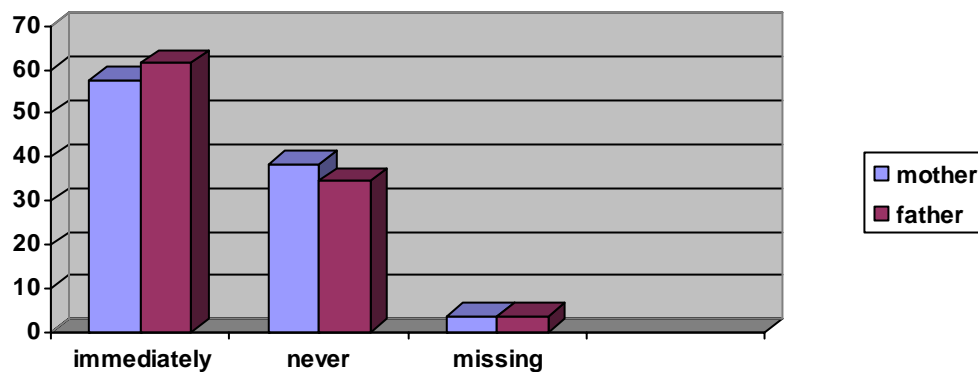
5. Additional Results

5.1 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

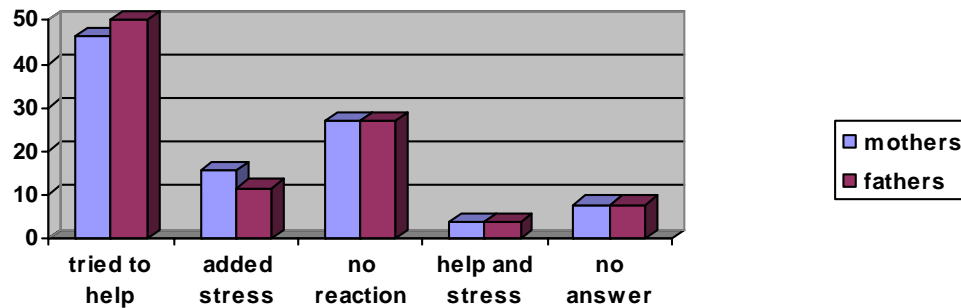


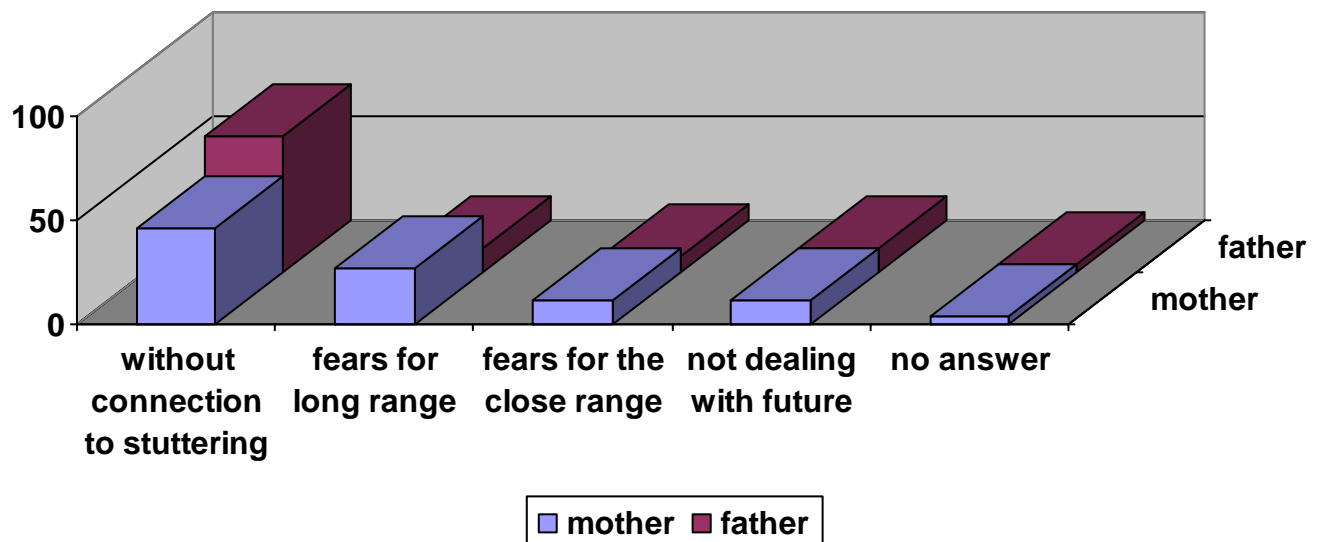
Figure 19 shows that almost half of the families got reactions of willingness to help.

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 parents about future planning ($Z=2.23$; $p<.025$). 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.