

Speech and Socio-Vocational Aspects of Individuals with Cleft Palate

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As part of the research program in the area of cleft palate in the Department of Otolaryngology and Maxillofacial Surgery, University Hospitals, a follow-up study was conducted involving 39 individuals with a cleft of the lip and/or palate, born in 1946-47 and subsequently admitted to this hospital. The purpose of recalling these individuals was to evaluate a) facial growth and dentition, b) adequacy of surgical procedures, c) speech skills, and d) social adequacy and general adjustment. In this manner it was hoped that more information would be gained about the effectiveness of habilitative procedures and results. Reported in the present paper is a portion of the results of these evaluations, specifically: speech, esthetic appearance, and social adequacy and general adjustment. Table 1 presents the type of cleft and type of management for all subjects.

Procedure

SPEECH. Speech evaluations for each subject consisted of the following: a) the 43-item Iowa Pressure Articulation Test (1), b) a 100-item articulation test composed of the IPAT plus 57 additional items from the Templin-Darley Tests of Articulation (6), c) a sentence articulation test of the 43 pressure items, using the sentences in the Templin-Darley manual, d) a sample of spontaneous connected speech rated by the examiner and by a panel of five trained judges for articulation defectiveness and nasality, and e) oral manometer ratios with and without bleed. Subjects were also questioned about their own evaluation of their speech proficiency.

APPEARANCE. Esthetic appearance was evaluated from a full-face black and white photograph of each subject. The examiner and five other judges rated appearance on a seven-point equal-appearing intervals scale with a rating of 1 representing normal cosmetic appearance

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TABLE 1. Type of cleft and type of management for all subjects.

<i>lip only</i>		<i>lip, palate</i>		<i>palate only</i>		<i>total</i>
M	F	M	F	M	F	
4	4	17	6	4	4	39
total	8	23		8		39
		M	F	M	F	
obturation		3	2	1	1	7
surgery without flap		7	1	3	2	13
surgery with flap		7	3	0	1	11

and a rating of 7 representing very poor appearance. Subjects were also questioned as to their feelings about the results of cosmetic surgery.

SOCIAL ADEQUACY AND GENERAL ADJUSTMENT. In order to evaluate subjects' social adequacy and general adjustment, a comprehensive case history was devised using questions selected from a larger battery constructed by Spriestersbach and Powers (3). Subjects were questioned about their family background and relationships, their educational experience, their social experiences, their vocational plans, their knowledge of matters pertaining specifically to cleft palate, and their attitudes toward their speech and appearance. Their responses were evaluated from the standpoint of what one would reasonably expect from the normal population, as defined from considerable clinical experience.

Results and Discussion

SPEECH. Table 2 presents mean scores for the total group and for various subgroups as classified by type of cleft and by sex for each of the speech measures previously mentioned. The distribution of answers to speech-related questions from the interview is included in the Appendix.

As would be anticipated, the best scores on the speech measures were achieved by the cleft lip only group. These subjects made minimal errors on the articulation measures, were rated normal or near normal in both articulation and nasality, and achieved the highest manometer ratios. The cleft lip and palate group made the poorest scores on the speech measures, while the scores of the cleft palate only subjects fell midway between those of the other two groups. Manometer ratios indicate that, on the average, the subjects achieved at least marginal velopharyngeal closure (2). In all three groups, the male subjects show poorer performance than the female subjects on all of the speech tasks and the speech ratings.

As a group, the subjects in this study did not exhibit severe speech problems, although only a few of the subjects with cleft of the palate (either with or without cleft lip) had entirely normal articulation and

TABLE 2. Mean scores of articulation, nasality, esthetic appearance and manometer ratios for the total group of subjects and subgroups.

	<i>N</i>	<i>43 item</i>	<i>43 item sentences</i>	<i>100 item</i>	<i>artic (exam)</i>	<i>nasality (exam)</i>	<i>artic (judges)</i>	<i>nasality (judges)</i>	<i>esthetic appearance</i>	<i>manometer w/ bleed</i>	<i>manometer w/o bleed</i>
total group	39	35.66	33.15	86.33	2.13	2.13	2.56	2.93	3.92	.85	.87
cleft lip only	8	41.63	41.50	98.00	1.13	1.00	1.54	1.91	3.93	.96	.95
male	4	40.75	40.25	96.50	1.25	1.00	1.55	2.05	4.45	.97	.98
female	4	42.50	42.75	99.50	1.00	1.00	1.53	1.73	3.40	.965	.92
cleft lip-palate	23	32.83	29.44	80.83	2.65	2.70	2.90	3.34	4.62	.78	.83
male	17	30.47	27.06	76.82	2.88	2.82	3.15	3.48	4.52	.75	.80
female	6	39.50	36.17	92.17	2.00	2.33	2.20	2.93	4.90	.87	.91
cleft palate only	8	37.88	35.50	90.50	1.63	1.63	2.46	2.60	1.89	.95	.91
male	4	37.75	34.50	88.50	1.75	1.75	2.75	2.80	2.00	.92	.88
female	4	39.00	36.50	92.50	1.50	1.50	2.07	2.33	1.78	.98	.93
all palatal clefts (lip and palate, palate only)	31	34.13	31.00	83.32	2.39	2.42	2.80	3.17	—	.824	.85
all lip clefts (lip only, lip and palate)	31	—	—	—	—	—	—	—	4.44	—	—

voice quality. Certainly, speaking skills could not be regarded as an asset to these individuals, and in some cases speech was sufficiently deviant to be a hindrance to social and vocational pursuits. When questioned about their attitudes toward their speech, the majority of subjects indicated that they were satisfied or nearly satisfied with the current status of their speech and did not regard it as a major problem. Yet 16 of these individuals reported they still had a speech problem and 25 indicated that they had not participated in activities which required speaking. Ten individuals felt that they might be refused dates because of their speech problem.

APPEARANCE. Scale scores for esthetic appearance (cosmesis) are presented in Table 2, and the distribution of answers to interview questions related to appearance is included in the Appendix. As would be expected, esthetic appearance was rated most defective in the cleft lip and palate group, especially among female subjects, whose mean rating was 1.5 scale points above that of the cleft lip only females. Subjects with clefts of the palate only were rated as normal or near-normal in esthetic appearance.

As a group, during the interviews, subjects tended to express more concern about their appearance than about their speech. Twenty-one subjects reported that, to varying degrees, they were bothered by the way they looked, and six of the subjects indicated that appearance was their biggest problem at the time of interview.

SOCIAL ADEQUACY AND GENERAL ADJUSTMENT. The specific questions

and the distributions of answers which are felt to deal with social adequacy and general adjustment are presented in the Appendix. The purpose of the following discussion is to present what are considered to be the salient points derived from each group of questions.

Family. This group of individuals did not appear grossly different from what might be expected from normals in their family relationships; however, in most families one might expect more teasing than the 39% reported by this group. Spriestersbach and Powers (3) reported that 64% of their control subjects indicated teasing at home; while the cleft group reported a much lower incidence. It is possible that parents of these cleft children may directly or indirectly tend to protect them in the home environment because of their concern or their own guilt feelings. Subjects did not report more disobedience than their siblings, nor from these interviews was the impression gained that these subjects demonstrated hostility toward their parents or tended to blame them for the cleft condition.

School History. The information obtained regarding academic achievement, future education, and participation in school activities did not appear, at least on the surface, to differ markedly from expectations from the normal; however, the dropout rate appeared greater than average for Iowa (4), and the per cent of subjects planning a college education was 8% lower than the state average (5). Although it is difficult to interpret participation in school activities, these individuals were generally from small schools where most students are probably active participants. From the subjects' replies, it was the interviewer's impression that they did not appear very active (the subjects often found it difficult to name specific activities that they were involved in) and were seldom leaders in their peer group (only 5 subjects had ever been an officer in a school activity group). Nine subjects had not participated in any activity and the majority fell below the reported state average of high school graduates of 2.46 extra-curricular activities (5).

Vocational Planning. Vocational ratings are presented in Table 3. Although 20 subjects reported that they had discussed their vocational plans with a school counselor, vocational counseling appeared to involve primarily the selection of high school courses, and none of the subjects had taken vocational tests or received vocational guidance. Ten of the subjects had not yet discussed their future vocation with anyone. It was the examiner's impression that many of the subjects were unrealistic about their future vocations. For example, one girl hoped to be a concert singer, although she had a cleft of the palate, obturated, with good but somewhat faulty voice quality and articulation. Another boy was uncertain as to whether to be a doctor or a coach, yet an IQ estimate placed him in the borderline of intellectual functioning. Another girl was employed as a dishwasher in a small town restaurant, although she tested in the bright-normal range of intelligence. Although some of the individ-

TABLE 3. Vocational ratings for 39 cleft subjects as determined by the Index of Status Characteristics (7). Ratings were made on planned vocation, expected vocation, choice vocation, and present employment.

	<i>planned vocation</i>	<i>work 10 years from now</i>	<i>preferred vocation if free to choose</i>	<i>present employ- ment</i>
Level 1 (Professions, owner of large business, executive).....	1	3	4	—
Level 2 (High school teacher, accountant, realtor, office manager).....	12	9	12	—
Level 3 (Grade school teacher, small business- man, secretary, small contractor)....	5	3	6	—
Level 4 (Typist, construction foreman, police captain, small land owner, plumber, electrician).....	6	10	6	2
Level 5 (Clerk, telephone lineman, tenant on farm, telephone operator).....	5	3	1	8
Level 6 (Semi-skilled factory worker, janitor, taxi driver, waitress, watchman, cook).....	3	2	2	9
Level 7 (Laborer, unskilled miner or mill hand, domestic servant, migrant worker, unemployed).....	1	0	0	6
Undecided.....	6	9	8	—

uals appeared to have the initiative and drive to reach their vocational goals, others, perhaps equally as bright, appeared to have accepted whatever was available and had little drive for improvement. It is of interest to note that the second highest wage earner had been a special education student. Many subjects were uncertain about their capabilities and showed a definite need for counseling.

Social. When these 18- and 19-year-old subjects were asked whether the presence of a cleft had influenced their social relations with people, twenty-four reported that the cleft had made no difference, and twelve subjects reported that the cleft was a handicap in varying degrees in their social relationships. However, twenty-three individuals reported that they had not belonged to a social organization and nine additional individuals indicated that although they belonged to an organization they were not active. Seven of the individuals reported that they preferred to do things with one other individual instead of with a group, and four individuals reported that they had no social activity. The majority

of subjects also indicated that they did not enjoy entering new situations and meeting people. It is also of interest to note that ten subjects reported that they brought friends to their home only once or twice a year.

A realistic impression of these individuals regarding social activity would appear to be that they are observers rather than active participants. When social participation was required, for example in dating, these individuals were less active and appeared less certain of themselves and their ability to function in a social situation than one would expect of normals. For example, 15 individuals stated that they had never dated or only dated once or twice a year, while 22 indicated that they had difficulty or had, in their opinion, been refused dates because of their cleft condition.

Cleft History. During the interviews it also became apparent that although most of these subjects had been under active medical treatment for many years, they were startlingly ill-informed about matters related to cleft palate, such as causes, incidence, and hereditary factors. For example, 22 subjects reported that they had never been told the cause of the cleft. None of the subjects felt that he would probably have a child with a cleft of the palate. Certainly the social and vocational adjustment of these individuals would be facilitated by counseling about the nature and causes of these problems. Teenagers who are considering marriage should be aware of the hereditary factors involved. It appeared that the cleft condition had not been thoroughly discussed with these subjects, either by medical personnel or at home.

Discussion

Since many of these young adults had had management of the cleft and perhaps speech therapy a number of years ago, inferences from these findings about current cleft palate patients who receive management must be made with great care. We hope that care has improved; however, based on the sample obtained, we feel that this sample is probably representative of the 1946-47 cleft palate population. Therefore it appears important for each of us to consider what areas of habilitation should be improved in our current treatment programs.

Summary

The purpose of this study was to evaluate the speech proficiency, esthetic appearance, social adequacy and general adjustment of 39 individuals born with a cleft in either 1946 or 1947. As a group, these subjects did not exhibit severe speech problems, yet in comparison to the goals of present habilitative measures both the speech and cosmetic appearance of the group were often poor. Although in this type of study it is impossible to evaluate objectively the effects of speech and appearance on the personality and earning power of the individual, it appears that

having had a cleft palate does influence the social behavior and selection of employment by these individuals. The results reported here indicate that the cleft palate team needs to be concerned not only with management and care, but also needs to be aware that young adults with a cleft of the lip and/or palate may need careful vocational counseling. The young cleft palate adults also may need more information about the incidence and etiology of clefts, particularly when they reach the age where they are ready to consider marriage and having children. Members of the team should ask themselves, *Does our team provide the rehabilitative services and counseling needed by the young adult individual with a cleft?*

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Appendix. Interview Data. Ns Vary.

SPEECH

When subjects were questioned about their speech they responded as follows:
 do you feel you still have a speech problem?

no, not really	21
yes, a little	9
only one sound	1
yes	7
have you ever had a speech problem?	
not that I'm aware of	11
yes, but it has been more severe	25
other	2
how much speech therapy did you have?	
none	17
1 summer at U. of I. or less	6
1 to 2 years in public school	9
2 to 4 years in public school	3
more than 4 years	3
did speech therapy help you?	
yes, a lot	8
yes, some	5

I don't know	7
no	1
how did you like your speech therapy program?	
I never attended a therapy class	17
I was enthusiastic	5
it was all right	10
I was very uninterested	6
what is the most outstanding aspect of your speech problem now?	
none	21
talking too fast	1
one or two sounds are poor	6
nasality	3
general—several sounds are poor	6
other	1
are you satisfied with your speech now?	
very happy, better than I had hoped	23
not as good as I had hoped	5
no better than it was to begin with	3
other	7
have your close friends reacted to your speech?	
they don't seem to see any difference	31
they asked about it	4
it really bothers them	2
other	1
activities specifically involving speaking, such as school plays, subjects gave the following replies:	
frequent participation	6
occasional participation (once or twice)	8
opportunity offered, but no participation	20
would have participated, but no opportunity	3
would not have participated; no opportunity	2
how frequently do you talk on the telephone?	
at least once a day	11
once or twice a week	12
once or twice a month	5
only when I have to	8
other	3
how often do you worry about what outsiders think about your speech?	
never think about it	21
not speech that worries me	3
once in a while	9
all the time	5
have you ever been afraid that girls (boys) would refuse to date you because of your speech	
no	28
never think about it	1
yes, sometimes	10

FAMILY

Family socio-economic status was determined by use of the Index of Status Characteristics (?) for each subject. This index is computed by determining the father's occupation, source of income, education, and type of family dwelling. Subjects fell into the following socio-economic classifications:

upper	2
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upper-middle	4
lower-middle	15
upper-lower	14
lower	4

To evaluate family relationships and discipline practices subjects were asked the following:

do you think of your family as a close family?	
very close	12
average	13
each goes own way	13
other	1
how well do you enjoy being at home with your folks?	
rather be at home	11
average	9
rather be on own	17
other	2
are you teased at home (now or as a child)?	
not at all	26
sometimes	7
very often	5
other	1
if you are teased, what are you teased about?	
other things, not related to cleft	10
having cleft	2
do you feel that as a child your parents were more lenient with your brothers and sisters?	
more lenient	7
about the same	26
less lenient	5
other	1
did you disobey your parents more than your brothers and sisters did?	
obeyed more	7
about the same	23
obeyed less	7
other	2

SCHOOL

Subjects were questioned about their academic achievement, their plans for future education, and their participation in school activities.

how well do (or did) you like school?	
liked it "very much"	15
liked it "fairly well"	7
liked it "as well as the average student"	7
did not like school	10
subjects evaluated their work in school as follows:	
excellent	2
better than average	10
average	18
fair to poor	9
are you currently in school?	
yes, in college	8
yes, in high school	10
yes, in trade school	3

no, completed high school and do not intend to continue	12
no, completed special education	1
no, dropped out of school	5
do you plan to continue your education?	
yes, college plus professional	2
yes, college (four years)	8
yes, college (two years)	5
yes, trade school	3
no	14
uncertain	7
subjects reported their participation in school activities as follows:	
participation in 3 or more activities	17
participation in 1 or 2 activities	12
opportunity offered, but no participation	7
no opportunity offered, would not have participated anyway	2
other	1
participation in school-related activities, such as Scouts, 4-H, etc., was reported as follows:	
frequent participation	5
occasional participation	9
no participation	25

VOCATIONAL PLANS

Subjects were asked about their present employment, what kind of employment they expected to have ten years from time of interview, and what kind of work they would choose if they could do anything they wished. These responses were ranked on the Index of Status Characteristics and were distributed among the levels of the Index as presented in Table 3.

were vocational plans ever discussed with you and if so by whom?	
yes, school counselor	20
yes, parent, teacher, adult, friend	9
no	10
are you satisfied with your present employment and does it utilize and suit your abilities?	
yes	3
average (but not satisfied)	15
no	4
what is your income at the present time and what kind of a job do you have?	
salary, full time job	
50-75 \$ a week	15
75-100 \$ a week	3
above 100 \$ a week	1
part-time job	3
summer job	6
none	10
other	1

SOCIAL HISTORY

Individuals were questioned about their social activities, their relationships with other people, their evaluations of their own personalities, and their plans for marriage and a family.

what organizations do you belong to?	
belong to three or more, am quite active	3
belong to one organization, am active	4

belong to one organization, am not active	9
didn't care to belong	23
have you ever held an office in an organization?	
yes	5
no	34
when subjects were asked to describe their general participation in social activities they responded as follows:	
take an active part in social group activities	2
active part in social group activities occasionally	1
informal group activities, e.g. attending ball game	11
infrequent, but some participation	7
activities with one other person or by self	14
no activity	4
who is your closest friend and how old is he (she)?	
same sex, same age	26
same sex younger	5
opposite sex older	3
opposite sex same age	3
opposite sex younger	2
do you like to join in new situations—meet new people?	
do join in and enjoy it	15
do join in but don't enjoy it	2
don't care to join in	16
want to join in but never have a chance	5
other	1
how often do you bring friends to your home?	
daily or on weekends and vacations	6
once or twice a week	14
once or twice a month	9
once or twice a year	10
how frequently do you take part in spare time activities—movies, dancing, playing cards, music participation, sports participation, sports enjoyment, pleasure trips, parties?	
every day	2
on weekends	8
once or twice a week	22
once or twice a month	4
once or twice a year	3
when subjects were asked what they would change if they could change two things about themselves, their answers were categorized as follows:	
both changes related to the cleft	6
one change related to the cleft, one to another characteristic	19
neither change related to cleft	14
when subjects were asked if they felt they had more problems than other teenagers, they responded as follows:	
no more problems than peers	14
no problems at all	13
sometimes have more problems	5
definitely have more problems	5
does it seem to you that others find it easier to do things than you do?	
not at all	19
sometimes—average	7
a little more than average	2

yes	9
other	2
do you worry about what others think of you?	
no, I don't let it worry me	9
yes, I worry some	25
yes, I worry all the time	5
if you could change two things about yourself what would you change?	
cleft and speech, cleft and scar, scar and speech	6
physical (other than cleft) and one cleft aspect	14
noncleft related, physical-emotional	1
other, one certain cleft	5
other	13
do you feel you have any personality or adjustment problems?	
no more than others	14
not at all	13
sometimes	5
yes, definitely	5
other, professional help	2
as you see it, what do you feel your main problem is at the present time?	
physical health	2
social adequacy	4
appearance	6
speech proficiency	1
school-vocational	10
finances	7
no main problem	4
other	4

MARRIAGE

When subjects were questioned about their plans for dating, marriage, and future children, they responded as follows:

are you married:	
yes	2
engaged to be married	2
no	35
do you plan to get married?	
married or plan to marry	27
I don't plan to marry	8
other	4
how frequently do you date?	
once or twice a week	10
once or twice a month	14
once or twice a year	9
never dated	6
do you think it is difficult to get dates?	
very easy	4
is no harder than usual	15
is somewhat harder than usual	7
it is very difficult	11
other	7
if so, why?	
speech	1
having cleft	3

appearance	3
other	7
have you ever been afraid that boys (girls) would refuse to date you because of your cleft?	
no	17
yes, or have been refused	22
do you feel that people who have clefts should go ahead and have children if they want them?	
yes, no reason not to	28
yes, might have cleft	1
uncertain about having children	7
do you feel that you might have a child with a cleft?	
no, children would be normal	22
some chance of a child with a cleft	5
no idea about the chances of having a child with a cleft	12

CLEFT HISTORY

Subjects were asked about the history of clefts in their family, their reactions to other individuals with clefts, and individuals' reactions to them. They were asked about their habilitative measures and existing problems which were important to them. Thirty-eight subjects were interviewed for the cleft history, as one subject was mentally retarded and had no knowledge of his cleft history.

have any members of your family had clefts?

no	30
parent	3
sibling	2
other	3

When questioned about their reactions to other individuals with clefts, subjects responded as follows:

have you been acquainted with a person who has a cleft?

in family	8
classmate	3
friend in neighborhood	6
while at hospital	1
no acquaintance	20

how much did his or her appearance bother you?

none	17
just overlooked it	1
bothered some	8
really bothered me	2
other	10

In an effort to gain more information about subjects' knowledge of cleft lip and palate they were asked the following questions:

what have you been told about the cause of your cleft?

just born that way	9
heredity	3
never told by anyone	22
other	4

do you agree with the information given you about the cleft?

yes, it was explained well	8
haven't thought too much about it	6
no, it didn't make much sense	2
other, no explanation given	22

what do you think caused the cleft?

just happened	7
heredity	6
other, I don't know	25
who told you what you presently know about clefts?	
professional person	1
mother and/or father	14
teacher	2
other, no one	21
how helpful was this talk?	
very helpful	3
didn't really understand	2
feelings haven't changed	3
other, no discussion	30
were you teased about your cleft?	
no	21
once in a while	4
yes	13
if so, how did you feel about it?	
never teased	21
overlooked it	7
didn't feel very good	2
felt very bad and cried	8
have you ever had any hearing problems?	
no	25
I don't think so	2
yes, some in the past	6
yes, now	5
audiometric examinations on day of interview indicated: (average pure tone, 500, 1000, 2000 Hz, ASA Standards)	
normal auditory acuity	30
loss of 15 dB or greater in one ear	6
loss of 30 dB or greater in one ear	2
When patients were asked how many operations they had had for their lip repair, including cosmetic surgery and palatal repair, most subjects were unable to answer correctly. Therefore, each patient's hospital record was examined and the totals are as follows:	
lip surgery including cosmetic revisions:	
* no surgery indicated, palatal cleft	8
one surgical procedure	12
two surgical procedures	3
three surgical procedures	5
four surgical procedures	7
five surgical procedures	2
more than five procedures	2
palatal surgery including secondary procedures:	
no surgery indicated, lip cleft	8
one surgical procedure	9
two surgical procedures	7
three surgical procedures	6
four surgical procedures	3
palate closed by obturation	5

When subjects were asked to evaluate surgical procedures and general care, they responded as follows:

in general, how do you feel about the results of surgery?

very happy, better than I had hoped	21
not as good as I had hoped	6
no better than it was to begin with	2
still not like others	2
others	7
is the total effect of the repairs as good as you had hoped?	
very happy, better than I had hoped	16
not as good as I had hoped	11
no better than it was to begin with	2
still not like others	1
other	8
if available, would you have more surgery done?	
don't feel any is needed	5
depends on what they would do	5
yes, definitely	17
other	11
what are the most frequent questions asked about your cleft?	
why do I have a scar	7
what happened	11
no questions	16
other	4
how do you answer these questions?	
born that way	8
just happened	1
"anamnestic response"	2
I don't know	5
other	6
have you had much dental work done?	
never wore braces and/or anterior prosthesis, and had many cavities	7
never wore braces and/or anterior prosthesis, had good teeth	10
yes, wore braces and/or anterior prosthesis, had average teeth	11
never wore braces and/or anterior prosthesis, had average teeth	10
do you feel the hospitals have done everything that they can do?	
they did better than I expected	26
they did all they could	5
they could have done more	2
other	5
do you feel that your parents have done everything they could do for your cleft condition?	
did all they could	32
could have done more	4
other	3
are you shy around adults?	
not at all	11
about average	10
shy at times	13
very shy	5
do you think having a cleft handicaps you in doing things with other people?	
not at all (no difference)	24
only with some people	7
definitely makes it harder	5
helps—makes it easier	1
other	2

who helped you the most in adjusting to teenage problems?	
parents (one or both)	12
sibling, same sex	3
sibling, opposite sex	1
friends	16
on my own	3
other	3
how good are you in sports compared to other people your own age?	
superior	2
above average	13
average	16
below average	7
other	1
who do you think would have an easier time growing up, if he or she has a cleft?	
makes no difference	6
male	22
female	5
I don't know	6
A number of questions were asked relating to the subjects' evaluations of themselves and their personalities. When asked: What personality traits made them most dissatisfied with themselves, subjects replied:	
not dissatisfied	3
temper	12
shyness or moodiness	5
cleft condition	4
other factors	15