Self Concept of the Cleft Lip and or Palate Child

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This investigation examined the relationship of the *self-concept* of *children* with *cleft lip and/or palate* to the self-concept of *noncleft children.* Thirty-four cleft lip and/or palate children between the ages of 11 and 13 were individually matched with thirty-four noncleft school children. Each child was given the *Piers-Harris Children's Self Concept Scale.* Children with clefts, regardless of sex, reported a significantly greater dissatisfaction with *physical appearance.* A significant interaction effect between sex and presence or absence of cleft was found on three cluster scores with cleft girls reporting greater unhappiness and dissatisfaction, less success in school, and more anxiety.

Self concept, or the way an individual perceives himself, has the function of directing or influencing the way he behaves (Kinch, 1968). It has been demonstrated, for example, that self concept measured at the kindergarten level is more predictive of reading achievement two years later than are intelligence test scores obtained at the same time (Wattenberg and Clifford, 1964).

Previous research on the self concept of the cleft child is sparse. Clifford (1967, 1968, 1969), in work comparing cleft and asthmatic children, found self-esteem to be "almost uniformly high." Star and Heiserman (1977), on the other hand, after identifying cleft groups with high and low acceptance of their disabilities, found that the group with high acceptance of disability reported significantly higher self-esteem.

Other researchers, while not studying self-esteem directly, have pointed to characteristics of the cleft child including caution about establishing new relationships (Spriestersbach, 1973), inhibition of impulses (Richman, 1976), shyness (Gluck, et al., 1965), poor school achievement (Richman, 1976), and a preference for solitary activities (Spriestersbach, 1973). These are all indicators of a child who feels less competent than his peers.

Based on these data, it is reasonable to hypothesize that the self-esteem of children affected with clefts may vary from the normal population. While previous investigations have failed to demonstrate psychopathological findings within the cleft group, it was anticipated that this investigation would contribute to the growing body of literature describing variants of "normal" behavior in children with clefts (Richman, 1976).

Purpose

The purpose of this investigation was to compare the self concepts of children with cleft lip and /or palate with the self concepts of noncleft children. The research questions addressed were: (1) Are there differences in the reported self concepts of children affected with different types of clefts of the lip and/or palate? (2) Do cleft children report a more negative self concept than noncleft children when the two groups have been matched by sex, race, age, grade, socioeconomic status, and marital status of parents? (3) When cleft and noncleft children with similar, matched characteristics are compared, will there be differences in self reports of intellectual and school status, behavior, physical attributes and appearance, popularity, anxiety, and happiness and satisfaction?

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Procedure

SUBJECTS. The subjects were 68 boys and girls between the ages of 11 and 14 who were attending regular classes in grades six through eight. The cleft group consisted of 17 girls and 17 boys. Of the 34 children, 4 had clefts of the lip only, 9 had clefts of the palate only, and 21 had clefts of the lip and palate. This sample was heterogeneous with regard to speech, hearing and physical appearance.

The noncleft group included 34 students who were chosen from a pool of 410 students attending four different schools. The children from two of the schools were known to this examiner, and this facilitated more accurate matching of subjects.

EXPERIMENTAL MATCHING PROCEDURE. Each cleft child was individually matched with a control subject on the basis of sex, race, age, grade, socioeconomic status, and marital status of parents. The index for matching on socioeconomic status was the *U.S. Bureau of Census Report* (1962). Marital state was matched by two-parent home, one-parent home, or natural parent and step parent (Table 1). Unfortunately, information on the intellectual ability of the children was not available.

INSTRUMENT. The instrument used to measure self concept was the *Piers-Harris Children's Self Concept Scale* (1969). This wide-range scale consists of 80 declarative sentences to which the child responds "yes" or "no." In addition to a global score for self concept the scale provides six cluster scores which were derived through factor analysis. Piers-Harris (1969) report significant, but low, correlations between four of the six cluster scores and teacher ratings in the same area (Anxiety and Appearance showed no correlation) and report substantial correlations (.43 and .50) between cluster scores from the Intellectual and School Status factor and the WISC Full Scale and Verbal Scale ($p < .01$).

Piers-Harris (1969) also report split-half reliability coefficients of .90 and .87 and a test-retest reliability coefficient of .77. These correlations indicate good internal consistency and adequate temporal stability. Content validity was established during the original item selection and evidence for concurrent validity is provided by the authors in the manual (Piers-Harris, 1969, p. 7).

The Piers-Harris was chosen as the instrument best suited to measure self concept at this age level because it provides a global score and cluster scores which have been derived through factor analysis; reliability and validity are sufficient for research purposes, and it was singled out by Wylie (1974) as the self concept measure most deserving of use in future research.

TABLE 1. Characteristics of the cleft and control groups.

variable	*cleft group*	*control group*
Number	34	34
Sex		
males	17	17
females	17	17
Age (mean yr.)	12.38	12.38
Race		
White	31	31
Black	1	1
Latino	2	2
Grade	6.91	6.91
Socioeconomic status (mean level)	63.11	62.70
Parent's marital status		
Two parent home (natural)	25	25
Two parent home (natural and step)	3	3
One parent home	6	6

Results

No significant differences were found among cleft groups. Therefore, these children were pooled for statistical analyses. Table 2 gives the means and standard deviations for the two groups. The design employed in each of the nine analyses was a Two-Way Analysis of Variance for Equal Cells (Kim et al., 1975).

No differences were found between control and experimental groups on the global self concept scores. Significant differences were found, however, on three of the six cluster scores. Tables 3, 4, and 5 present the results of the statistical analyses showing significance.

Cleft children reported significantly less global happiness and satisfaction than noncleft children (Table 3).

A significant interaction effect was found for three of the cluster scores: anxiety, intellectual and school status, happiness and satisfaction (Tables 3, 4, and 5). Plotting the interactions as seen in Figures 1, 2, and 3

TABLE 2. Means and Standard Deviations of self concept and cluster scores*.

variable	*cleft group*		*control group*	
	mean	*(S.D.)*	*mean*	*(S.D.)*
Self Concept				
Males	58.23	9.80	57.82	7.53
Females	51.23	19.85	63.00	11.10
Total	54.74	15.82	60.41	9.70
Behavior				
Males	15.00	3.61	15.05	2.56
Females	13.88	3.90	15.88	2.39
Total	14.44	3.74	15.47	2.47
School Status				
Males	13.29	2.36	12.35	3.74
Females	10.88	4.34	14.18	3.47
Total	12.09	3.65	13.26	3.67
Anxiety				
Males	8.29	2.49	7.82	2.48
Females	6.41	3.88	8.53	3.52
Total	7.35	3.36	8.38	2.10
Popularity				
Males	7.83	3.78	8.29	2.28
Females	6.82	4.19	9.35	2.74
Total	7.35	3.36	8.38	2.10
Happiness and Satisfaction				
Males	7.65	1.69	7.71	1.10
Females	6.11	2.76	8.35	1.06
Total	6.88	2.38	8.03	1.11
Physical Attributes and				
Appearance	6.82	2.74	7.82	2.48
Males	6.82	3.88	8.53	3.52
Females	6.82	3.31	8.18	3.02
Total				
Physical Attributes	2.65	1.50	2.35	1.32
Males	3.06	2.28	2.24	2.08
Females	2.86	1.90	2.29	1.71
Total				
Physical Appearance	2.59	1.84	1.04	1.60
Males	2.35	1.93	1.24	1.64
Females	2.47	1.86	1.59	1.63
Total				

* Higher scores indicate a more positive rating except for physical appearance and physical attributes when they are considered separately. In the latter two cases a higher score is a more negative rating.

showed males, regardless of treatment condition, to report equivalent scores. Cleft girls, on the other hand, had scores which were significantly lower than noncleft grils.

There were no significant differences for the cluster scores measuring behavior, popularity, and physical attributes and appearance. Since the latter finding was unexpected, it was decided that it would be worthwhile to investigate the content of the individual items which made up the scale. This investigation revealed that two distinct types of statements were employed in this score. Therefore, it was decided that this cluster should be divided into two subscores: one characterized by items reflecting attitudes toward physical attributes, the other characterized by items reflecting attitudes toward physical appearance (Table 6).

It was anticipated that isolating the items which referred specifically to appearance might demonstrate differences between the

TABLE 3. Analysis of variance for Happiness and Satisfaction scores.

source of variation	*df*	*mean square*	*F*
Main Effects	2	12.84	4.01
Sex	1	3.31	1.03
Group	1	22.37	6.98***
2-Way Interactions			
Sex × Group	1	20.13	6.28**
Residual	64	3.20	

**p < .02.
***p < .01.

TABLE 4. Analysis of variance for Intellectual and School Status scores.

source of variation	*df*	*mean square*	*F*
Main Effects	2	12.50	0.99
Sex	1	1.47	0.12
Group	1	23.53	1.86
2 Way Interactions			
Sex × Group	1	76.24	6.04**
Residual	64	12.62	

** p < .02.

TABLE 5. Analysis of variance for Anxiety score.

source of variation	*df*	*mean square*	*F*
Main Effects	2	10.25	1.37
Sex	1	2.48	0.33
Group	1	18.02	2.41
2 Way Interaction			
Sex × Group	1	38.25	5.11*
Residual	64	7.48	

* p < .05.

two groups. This expectation was upheld. No differences were found between the groups on the physical attributes subscore. However, a significant main effect by group was found on the physical appearance score (Table 7).

As a group, males and females with clefts, when compared with noncleft children, express greater dissatisfaction with personal appearance.

Discussion

As a group, cleft children report significantly more dissatisfaction with their physical appearance than their noncleft peers. Previous studies utilizing figure drawings have yielded equivocal results when attempting to determine body image through portrayal of disfigurement in drawings (Abel, 1953; Corah and Corah, 1963; Palmer and Adams, 1962). The present investigation gives evidence that, when cleft children are asked to respond directly about their appearance, their dissatisfaction is high.

Both male and female cleft children show equally high dissatisfaction with physical appearance. Carryover to other measures of self concept, however, is far greater for the females than for the males. For example, while there was a group difference on the happiness and

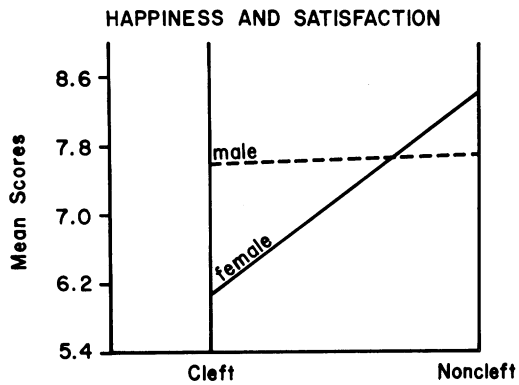

FIGURE 1. Graph demonstrating the interaction effect between sex and presence or absence of cleft on the happiness and satisfaction scale.

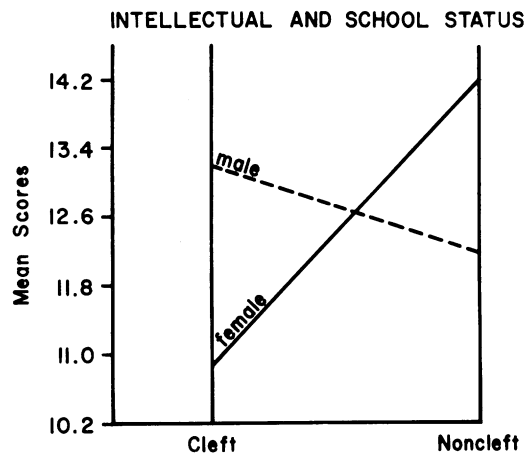

FIGURE 2. Graph demonstrating the interaction effect between sex and presence or absence of cleft on the intellectual and school status score.

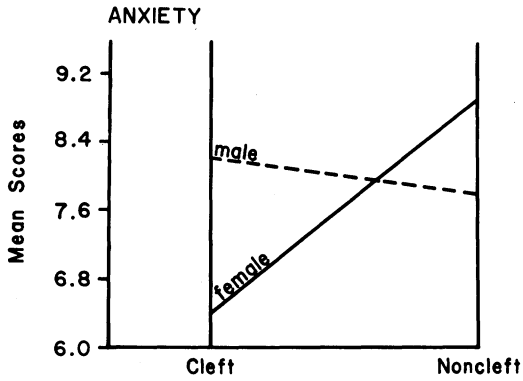

FIGURE 3. Graph demonstrating the interaction effect between sex and presence or absence of cleft on the anxiety scale.

TABLE 6. Items included in physical appearance and attributes score.

appearance	*attributes*
I am good looking	I am a leader in games and sports
I have a pleasant face	My classmates in school think
My looks bother me	I have good ideas
I have nice hair	I am strong
I have a good figure	I am an important member of my class
I have pretty eyes	I have lots of pep
	I am popular with boys

TABLE 7. Analysis of variance for Physical Appearance score.

source of variation	*df*	*mean square*	*F*
Main Effects	2	8.50	2.75
Sex	1	3.76	1.22
Group	1	13.24	4.28*
2-Way Interactions			
Sex × Group	1	0.94	0.30
Residual	64	3.09	

* $p < .05$.

satisfaction scores, a closer look at individual means shows that cleft girls contribute more to the lower score than cleft boys. The pattern presented, therefore, is one of cleft girls reporting significantly more anxiety, less success in school, and more unhappiness and dissatisfaction with the way they are than their female peers. Interestingly, 70% of the mothers and 86% of the fathers in Spriesterbach's (1973) study felt that boys would have an easier time growing up with a cleft than girls.

These results are provocative. Is it easier for a male with physical disfigurement to find affirming experiences in other areas thus minimizing the negative effects of the cleft? Are females more frequently judged on the basis of appearance than males with subsequent carryover into the females' evaluation of self?

Some evidence is available which indicates that the young adolescent experiences a disturbance in self image between the ages of 11 and 14 (Simmons and Rosenberg, 1973; Piers-Harris, 1964). While sex differences were not noted in these studies, perhaps females with real physical disabilities experience greater loss of esteem during this time when physical appearance takes on added importance.

An unexpected result of this investigation was the lack of significant findings on the popularity measure. It was assumed, based on previous reports (MacGregor, 1953; Spriestersbach, 1973), that cleft children would see themselves as less socially adept than their noncleft peers. The lack of significant findings may indicate that this group of cleft children did not experience difficulty in peer relationships. It may also be that the adolescent status of the subjects colored the results. Peer acceptance is a primary issue for the adolescent. Therefore, uncertainty in this area may have lowered the scores equally for both groups. In order to tap this factor more accurately, it may be necessary to use a Likert-type scale rather than a simple "yes", "no" response so that degree of dissatisfaction with social relationships and negative responses from peers can be determined.

Further discussion of the Intellectual and School status scores is warranted. Studies which have investigated intellectual status or achievement of the cleft child are limited. Ruess (1968), however, summarizing data from six studies in Britain, Canada, Scotland, and the United States, concludes that there is some evidence to support the contention that cleft children have a mean I.Q. which varies between 2 and 6 points below the statistical population mean of 100. In addition, Richman (1976) gave evidence that, even when matched for I.Q., cleft children demonstrated significantly lower achievement scores than

matched controls. In none of these groups, however, was a significant sex difference noted. When sex is mentioned at all, it is usually the girls, whether cleft or control, who display slightly higher scores. What is provoking about the present investigation, therefore, is the fact that, while there is evidence to support lowered school achievement for both male and female clefts, it is only the females' self concept scores which reflect a difference. This finding is inconsistent with currently available data and points to a more academically adept group of boys, a defensive reaction in their responses, or more sensitivity on the part of the girls to school failure.

The results of this investigation indicate a need to study in greater depth the developing self concept of the cleft child. An attempt should be made to identify those factors which are influential early in the child's life thus enabling us to develop programs which facilitate prevention as well as habilitation.

Summary

Thirty-four cleft lip and/or palate children were individually matched with thirty-four noncleft school children on the basis of sex, age, grade, race, socioeconomic status, and marital status of parents. All children completed *The Piers-Harris Self Concept Scale.* Cleft children reported significantly greater dissatisfaction with physical appearance. Cleft girls also reported significantly more anxiety, less success in school, and greater unhappiness and dissatisfaction. It was suggested that girls may be more affected by the stigma of a physical disability because of the importance of physical attractiveness in our society.

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