

## RELATIONS BETWEEN FAMILY COMMUNICATION AND SELF-CONCEPT

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### ABSTRACT :

The aim of this research was to assess the incidence of family communication in children's self-concept by applying self-concept and family communication questionnaires to a sample of 564 male and female grammar-school students aged between 11 and 16.

Three clusters were obtained in accordance with the different communication levels by applying the K-means group-selection technique, which maximizes both relative and within-cluster variations. The general linear model was applied after designating the questionnaire self-concept factors as dependent variables and the family-communication groups as independent variables. Significant differences were found between the family communication clusters not only in their family and academic environments, but also in their personal and interpersonal matters. However, no significant differences were found in sportsmanship.

### INTRODUCTION

In previous literature many studies have stressed the fact that the family is an important factor to bear in mind when analysing the social adjustment of its members, and their attitudes, values and beliefs about their self-concepts and self-esteem (Parker et al., 1979; Maccoby, 1980; De Man, 1982; Musitu et al., 1988; Felson and Zielinsky, 1989; Lila, 1991). Several authors have defined family as a supporting system based on affection, reasoning and rewards. According to them family is a nucleus which is able to supply its members with feelings of safeness, self-esteem and self-confidence (Weiss, 1974; Caplan and Killilea, 1976; Estarelles, 1987). Kerfoot (1980) and Tyerman et al. (1983) also pointed out the relation between the lack of family support and psychological and behavioural disturbances in children. In accordance with this research line, Musitu et al. (1988) found that the lack of family support brings about a deterioration of the child's personal pride, self-image and self-

esteem.

Therefore, numerous researches have focussed on the analysis of the family environment to assess its influence on the child's self-concept. Many authors on the subject agree that the self-concept construct has a multidimensional character in which three relatively independent components are found. This multidimensional nature accounts for the different self-concepts displayed by one person in his/her different performance fields, such as family, society, scholarship, the academic field and sportsmanship (McIntire and Drummond, 1976; Harter 1982; Byrne and Shavelson, 1988; Marsh and Gouvernet, 1989; Soto, 1989; Lila, 1991). The data concludes that the parent's helpful and effective education is necessary for the children to achieve a positive self-concept (Bayer, 1986). According to Gutiérrez (1989) this education should also be supportive and non-restrictive. Furthermore, parents should show approval and give confidence to their children (Omizo and Omizo, 1987) as well as encourage the active problem-solving behaviour (Sigel, 1986). Nelson (1984) found that self-concept and family satisfaction were positively related to a family atmosphere with a high level of cohesion, clear communication, expressivity, active creative orientation and with low levels of conflict and control. This author also suggested that a conflictive family atmosphere related to low levels of self-esteem, tolerance of peers, adjustment and scholar achievement in children. Cooper et al (1983) conclude that family cohesion, which is measured through the child's perception, has a decisive influence on the development of the child self-concept; When children perceive some sort of conflict between them and their parents, or between their parents, a lower self-concept can be expected (Levitin, 1979; Scovern et al., 1980). Likewise, Quinn (1983) pointed out that unsatisfactory family relations coincide with a low level of child self-esteem and this frequently relates to neurotic symptoms.

Over the last few years different family health models have emerged. These models aim to discover the necessary dimensions for the best family interaction. Possible positive dimensions for the family welfare are the family organizing structure -clear and permeable limits for each family member- a cohesive parenting subsystem (Beavers, 1981; Lewis, 1979; Musitu et al, 1988; Hutchinson et al, 1989; Bishop and Ingersoll, 1989) and the presence of clear, permeable, external limits in the family system and in its relations to external systems (Moos, 1974; Beavers, 1981; Musitu et al, 1988). Furthermore, the following dimensions have also been found: a wide variety of affective demonstrations (Lewis, 1978, 1979; Beavers, 1981; Musitu et al, 1988), a democratic performance of behavioural control (Epstein et al., 1978; Musitu et al, 1988) a clear and direct communication between the members of the system (Epstein et al., 1978; Beavers, 1981; Musitu et al, 1988) and the transmission of ethic standards and social values from parents to children (Lewis, 1978; Musitu et al, 1988).

Therefore, this theoretical context allows us to assess the importance that a clear and direct family communication has on the family welfare. Furthermore, the communication between parents and adolescents relates to other psychological variables, such as self-esteem (Matteson, 1974; Musitu et al, 1988; Small, 1988) the adolescent's scholar adjustment (Sporakowski y Eubanks, 1976; Román, 1985) and the adolescent's scholar achievement (Christopher, 1967; Gutiérrez, 1989). Likewise, many other authors have found a connection between an anomalous means of communication and behavioural and emotional problems of the child (Liem, 1980; Felson et al. 1989).

After assuming the importance of family communication in the

interactions between parent and child, this study aimed to assess the influence of family communication on the child's self-concept from the child's own perspective. The specific objective of this study was to analyze the scores from each group in the family communication variable in order to assess the incidence of this variable on the self-concept scale factors.

This study initially assumed the following hypothesis: there is some sort of connection between the child's perception of satisfactory/unsatisfactory parent-child interchange levels and a positive/negative self-concept.

## **METHODOLOGY**

### **SAMPLE**

The sample consisted of 56 male and female Primary-school students aged between 11 and 16, who were attending their courses in eight state schools on the outskirts of Valencia (Spain).

The percentages according to their sex were 46.8% male students and 53.2% female students.

The variable 'number of brothers and sisters' ranged between 'only child' to as many as twelve brothers and sisters. The highest percentages were obtained by the subjects with two (26.8% of the sample) or three (31.2% of the sample) brothers and sisters. The lowest percentages were found in the extremes, that is, in 'only child' and 'eight, nine, eleven and twelve brothers and sisters' categories.

The sample was aged between 11 and 16, and 58.3% of the sample were 12 and 13 years old who were in their sixth and seventh year of Primary School. Furthermore, 67.4% of the sample were also in the same scholar years. 17.7% of the sample were eleven years old and 16.8% were fourteen. The percentages for subjects aged 15 and 16 were very low -6.7% aged fifteen and 0.4% aged sixteen-. The subjects who were attending the highest Primary School years in this study were between 11 and 14. Under a half of the sample (48.6%) had not repeated any of their yearly courses, but the other half presented scholar deficiency: 32.6% had repeated one year; 14.7% two years; 3.2% three years and 0.9% four or five years. Therefore, the highest repetition percentage is displayed by the one-year and two-year groups.

### **INSTRUMENT**

In order to assess the incidence of family communication on the child self-concept, the questionnaire C.F. 88 (Musitu et al., 1988) and the self-concept Scale E.A.A. (Musitu et al., 1988; Musitu et al., 1991) were applied.

The structure of the former questionnaire consisted of twelve topics and one open item, five interchange levels which were defined from the interaction levels by Berlo, two-way communication between father/child and mother/child, and four communication directions (child-mother/mother-child; child-father/father-child). The measuring structure for the four communication directions was equivalent.

The evaluating procedure was as follows: the twelve questionnaire topics were put forward consecutively. Then, the subject chose the level in accordance to his/her personal conditions, firstly in the child-mother direction -specifically expressed as "me towards my mother"-, and secondly in the child-father direction -specifically expressed as "me towards my father"-. Once the answers were recorded in terms of these two directions, then we proceeded with the other two directions: "my mother towards me" and "my father towards me".

In order to measure the subjects' self-concept, the Scale E.A.A. by Musitu et al. (1988) was applied. Taking into account the multidimensional nature of the self-concept, the structure of this questionnaire consisted of the following eight independent factors: family interaction, emotional lability, peers interaction, academic achievement, sportsmanship, physical self, scholar adjustment and social self.

The assignment process of the 42 items to the eight factors was carried out taking into account that a high score in family interaction, interaction with peers, academic achievement, physical self and scholar adjustment corresponds to a low level of positive self-perception in these factors. On the other hand, a high score in emotional lability, sportsmanship and social self factors corresponds to a high level of emotional lability and positive self-perception in sportsmanship and social self.

## RESULTS

In order to assess the influence of the family communication on the child self-concept, a clustering of the subjects was made by applying the K-means cluster technique. This clustering was based on the subjects answers to the family communication scale and it followed the criterion of maximum similarity in answers with members of the same group and the maximum difference in response with members of other groups.

Three groups arrived from this analysis, as shown in Table 1. These groups respectively consisted of 40.2 %, 41.3 % and 18.4 % of the sample. A variance analysis was applied afterwards, which assessed the existence of significant differences within these groups in the four communication directions.

From the final results (shown in Table 1), a significant difference of a  $p < 0.001$  can be traced in the four communication directions, and it yields the maximum difference between the three groups. Likewise, from the averages in Table 1 it can be inferred that cluster 1 includes those subjects who perceived the lowest interaction levels in all four communication directions. The subjects in cluster 2 perceived the next lowest interaction levels, while the subjects in cluster 3 perceived the highest levels.

These data allows us to infer that the family communication perceptions of subjects in clusters 1 and 3 are inverse in proportion: it is satisfactory in cluster 3 and unsatisfactory in cluster 1.

Table 1

After analysing these data a variance analysis was applied (shown in Table 2) in order to weigh its results with the work hypothesis. Then the clusters were assigned as independent variable and the eight self-

concept factors were assigned as dependent variables. Table 2 shows significant differences between the three clusters in all their self-concept factors except for the sportsmanship factor. There are significant differences of  $p < 0.001$  in the following factors: family interaction, peers interaction, academic achievement and scholar adjustment. Likewise, there are also significant differences among the groups in emotional lability ( $p = 0.003$ ), physical self ( $p = 0.012$ ) and social self ( $p = 0.013$ ). In order to analyse these differences, Tukey test was applied.

#### Table 2

The results shown in Table 2 and 3 yield significantly higher averages for group 1 than for group 3 for an  $\alpha = 0.001$  in the family interaction, emotional lability, peers interaction, academic achievement and scholar adjustment factors and for an  $\alpha = 0.05$  in physical self factor. However, no significant differences in averages have been found between these two groups in relation to the social self. Cluster 1 presents higher averages than cluster 2 for an  $\alpha = 0.05$  in the same factors. Moreover, with regards to cluster 2, the social self has been taken into account, and the emotional lability factor has been left out because it did not present significant differences in averages. Likewise, the averages in group 2 are significantly higher than the ones in group 3 for an  $\alpha = 0.05$  in the family interaction and emotional lability factors. Therefore, group 2 presents lower levels of family welfare and emotional control than group 3.

#### Table 3

Taking into account the assignation process of items in family interaction, peers interaction, academic achievement, physical self and scholar adjustment (the higher the score, the lower the level of positive self-perception), the above data yielded significantly more satisfactory self-perceptions in cluster 3 (for an  $\alpha = 0.001$ ) than those in cluster 2 (for an  $\alpha = 0.05$ ) in the various performance fields. Moreover, the self-perceptions in cluster 2 yielded significantly higher satisfaction levels in the family and emotional fields than in cluster 3. Therefore, bearing in mind that the perception of family communication in cluster 1 was the lowest and the one in cluster 3 the highest, it can be concluded that not only do these clusters represent the extremes in the underlying continua, but also that there exists a positive relation between the family communication variable and the self-concept factors - except from sportsmanship and social self. Therefore, it can be said that the higher the level of communication, the higher the level of self-concept.

Taking into account the last data, a discriminant analysis was applied in order to assess the significant differences between the two extremes in the self-concept factors. The results from this analysis along with the averages of the two groups are shown in Table 4.

The same results as in the previous analysis were obtained for a  $p < 0.001$ : there are significant differences for a  $p = 0.029$  between the two groups in family interaction, emotional lability, peers interaction, scholar achievement and adjustment and physical self, but no significant differences were found in social self. The averages from cluster 1 are significantly higher in these factors than the ones from cluster 3, as

shown in Table 4. This difference in averages is mainly traced in the family interaction factor and there is a 13-point difference between the groups, which accounts for a very unsatisfactory perception of the family atmosphere by the subjects in group 1.

#### Table 4

There is also a 5-point difference in average in the peers interaction; a 4-point difference in emotional lability and scholar adjustment; a 3-point difference in academic achievement and, finally, a 1-point difference in physical self.

#### Table 5

The last step of the analysis was to apply the discriminant function in order to assess the capability of the responses to correctly predict the assigned cluster. Taking into account that at random the prediction percentage can be 50 % correct, 63 % of the responses from cluster 1 and 69 .23 % of the responses from cluster 3 were correctly predicted. Therefore, the prediction ability for group 1 is 13% correct and 19% correct for group 3, these being regarded as moderate prediction abilities. The results allow us to infer that the prediction value for a correct assignation of the responses will be higher for positive self-perceptions (cluster 3) than for negative ones (cluster 1) and, as a result, there is a higher level of differentiation in the positive responses than in the negative ones.

## DISCUSSION

Taking the results into account, this study concludes that significant differences exist in the child self-concept according to the level of parent-child interchange. In order to assess this hypothesis, three clusters of subjects were determined from their responses to the family communication scale. These groups presented high, moderate and low interchange levels and afterwards the middle group was disregarded.

This study conveys significant differences within the various self-concept factors (except from sportsmanship and social self) according to the parent-child interaction levels and bearing in mind the multidimensional nature of the self-concept. It was confirmed that the cluster with the highest family communication conveyed a significantly more positive self-perception than the rest. Moreover, the cluster with the lowest family communication conveyed a significantly more negative self-concept than the rest. The consequences of these differences are in accordance with the results from numerous researches (Majoribanks, 1979; Nelson, 1984; Musitu et al. 1985; Gutiérrez, 1989). Moreover, the perception of a satisfactory family atmosphere with a clear and direct communication between the members positively influences the child self-concept. As far as our data are concerned, this relation was confirmed in family interaction, emotional lability, peers interaction, academic achievement, physical self and scholar adjustment. These results confirm that family communication does not only affect the child's perception of satisfaction within the family atmosphere, but also the various competence

and welfare aspects of the child (emotional control, peers acceptance, academic achievement, scholar adjustment). The literature on the subject confirms the relation between an unsatisfactory perception of competence and welfare dimensions with behavioural and emotional problems in children (Tyerman et al., 1983; Musitu and Gutierrez, 1984; Estarelles, 1987). This result points out the potential effect of family communication on self-concept development and its indirect effect on the various adjusting dimensions in an individual's life.

To summarize, the hypothesis of the work has been fully confirmed: the satisfactory/unsatisfactory perception of the parent-child interchange levels is greatly related to a positive/negative self-concept.

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Table 1

Averages of the three clusters in both ways and directions, frequencies, percentages and results from the variance analysis between the three groups in the cluster analysis

| <i>Averages</i>  |                     |                     |                     |                     |              |             |
|------------------|---------------------|---------------------|---------------------|---------------------|--------------|-------------|
|                  | <i>Child-Mother</i> | <i>Child-Father</i> | <i>Mother-Child</i> | <i>Father-Child</i> | <i>Freq.</i> | <i>Pct.</i> |
| <i>CLUSTER 1</i> | 25.229              | 22.295              | 23.555              | 22.595              | 227          | 40.2        |
| <i>CLUSTER 2</i> | 35.618              | 32.249              | 34.644              | 32.966              | 233          | 41.3        |
| <i>CLUSTER 3</i> | 44.923              | 44.481              | 46.712              | 46.913              | 104          | 18.4        |
| <i>ANOVA</i>     |                     |                     |                     |                     |              |             |
| <i>F</i>         | 383.710             | 416.724             | 557.997             | 479.359             |              |             |
| <i>p</i>         | <0.001              | <0.001              | <0.001              | <0.001              |              |             |

Table 2

Variance analysis, differences between the averages of the cluster groups and Tukey test

| <i>VARIABLE</i>      | <i>ANOVA</i> |          | <i>Averages</i> |              |              | <i>Tukey</i>     |                   |
|----------------------|--------------|----------|-----------------|--------------|--------------|------------------|-------------------|
|                      | <i>F</i>     | <i>p</i> | <i>Cl. 1</i>    | <i>Cl. 2</i> | <i>Cl. 3</i> | <i>0.050 (*)</i> | <i>0.001 (**)</i> |
| Family Interaction   | 24.870       | <0.001   | 12.890          | 11.57        | 10.644       | 0.695            | 1.063             |
| Emotional Lability   | 5.972        | 0.003    | 10.269          | 10.060       | 9.490        | 0.461            | 0.704             |
| Peers Interaction    | 10.079       | <0.001   | 7.581           | 7.017        | 6.952        | 0.368            | 0.562             |
| Academic Achievement | 9.286        | <0.001   | 14.608          | 13.824       | 13.404       | 0.629            | 0.962             |
| Sportsmanship        | 0.961        | 0.383    | —               | —            | —            | —                | —                 |
| Physical Self        | 4.476        | 0.012    | 11.110          | 10.515       | 10.490       | 0.567            | 0.868             |
| Scholar Adjustment   | 7.697        | 0.001    | 5.881           | 5.511        | 5.346        | 0.314            | 0.480             |
| Social Self          | 4.346        | 0.013    | 5.934           | 6.240        | 6.058        | 0.270            | 0.414             |

Table 3

Differences among clusters

| VARIABLES            | GROUP     | Cluster 2 | Cluster 3 |
|----------------------|-----------|-----------|-----------|
| Family Interaction   | Cluster 1 | 1.319**   | 2.246**   |
|                      | Cluster 2 |           | 0.927*    |
| Emotional Lability   | Cluster 1 | 0.209     | 0.779**   |
|                      | Cluster 2 |           | 0.570*    |
| Peers Interaction    | Cluster 1 | 0.564**   | 0.629**   |
|                      | Cluster 2 |           | 0.065     |
| Academic Achievement | Cluster 1 | 0.784**   | 1.204**   |
|                      | Cluster 2 |           | 0.420     |
| Physical Self        | Cluster 1 | 0.595*    | 0.620*    |
|                      | Cluster 2 |           | 0.025     |
| Scholar Adjustment   | Cluster 1 | 0.370*    | 0.535**   |
|                      | Cluster 2 |           | 0.165     |
| Social Self          | Cluster 1 | -0.306*   | -0.124    |
|                      | Cluster 2 |           | 0.182     |

Table 4

Results from the Discriminant analysis between cluster 1 and 3

| VARIABLE             | Correlation | F      | P      | Cluster 1 | Cluster 3 |
|----------------------|-------------|--------|--------|-----------|-----------|
| Family Interaction   | 0.828       | 39.788 | <0.001 | 21.000    | 8.000     |
| Emotional Lability   | 0.452       | 11.860 | <0.001 | 11.000    | 7.000     |
| Peers Interaction    | 0.450       | 11.743 | <0.001 | 12.000    | 7.000     |
| Academic Achievement | 0.510       | 15.099 | <0.001 | 18.000    | 15.000    |
| Physical Self        | 0.289       | 4.829  | 0.029  | 10.000    | 9.000     |
| Scholar Adjustment   | 0.476       | 13.130 | <0.001 | 8.000     | 4.000     |
| Social Self          | -           | 0.869  | 0.352  | -         | -         |

Note: Wilks' Lambda = 0.850; F=9.519; gl = 6,324; p<0.01; Square-CHI=52.926; gl=6;p<0.01; Canonical Correlation=0.387

Table 5

Predictions from the discriminant analysis

|       |           | Predicted |           | TOTAL  |
|-------|-----------|-----------|-----------|--------|
|       |           | Cluster 1 | Cluster 3 |        |
| Group | Cluster 1 | 63.00     | 37.00     | 100.00 |
|       | Cluster 3 | 30.77     | 69.23     | 100.00 |
| TOTAL |           | 52.87     | 47.13     | 100.00 |

Table 1

Averages of the three clusters in both ways and directions, frequencies, percentages and results from the variance analysis between the three groups in the cluster analysis

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| <i>p</i>         | <0.001              | <0.001              | <0.001              | <0.001              |              |             |

Table 2

Variance analysis, differences between the averages of the cluster groups and Tukey test

| <i>VARIABLE</i>      | <i>ANOVA</i> |          | <i>Averages</i> |              |              | <i>Tukey</i>     |                   |
|----------------------|--------------|----------|-----------------|--------------|--------------|------------------|-------------------|
|                      | <i>F</i>     | <i>p</i> | <i>Cl. 1</i>    | <i>Cl. 2</i> | <i>Cl. 3</i> | <i>0.050 (*)</i> | <i>0.001 (**)</i> |
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Table 3

Differences among clusters

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|                    | <i>Cluster 2</i> |                  | 0.927*           |

|                      |           |         |         |
|----------------------|-----------|---------|---------|
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|                      | Cluster 2 |         | 0.570*  |
| Peers Interaction    | Cluster 1 | 0.564** | 0.629** |
|                      | Cluster 2 |         | 0.065   |
| Academic Achievement | Cluster 1 | 0.784** | 1.204** |
|                      | Cluster 2 |         | 0.420   |
| Physical Self        | Cluster 1 | 0.595*  | 0.620*  |
|                      | Cluster 2 |         | 0.025   |
| Scholar Adjustment   | Cluster 1 | 0.370*  | 0.535** |
|                      | Cluster 2 |         | 0.165   |
| Social Self          | Cluster 1 | -0.306* | -0.124  |
|                      | Cluster 2 |         | 0.182   |

Table 4

Results from the Discriminant analysis between cluster 1 and 3

| VARIABLE             | Correlation | F      | P      | Cluster 1 | Cluster 3 |
|----------------------|-------------|--------|--------|-----------|-----------|
| Family Interaction   | 0.828       | 39.788 | <0.001 | 21.000    | 8.000     |
| Emotional Lability   | 0.452       | 11.860 | <0.001 | 11.000    | 7.000     |
| Peers Interaction    | 0.450       | 11.743 | <0.001 | 12.000    | 7.000     |
| Academic Achievement | 0.510       | 15.099 | <0.001 | 18.000    | 15.000    |
| Physical Self        | 0.289       | 4.829  | 0.029  | 10.000    | 9.000     |
| Scholar Adjustment   | 0.476       | 13.130 | <0.001 | 8.000     | 4.000     |
| Social Self          | -           | 0.869  | 0.352  | -         | -         |

Nota.-Wilks' Lambda = 0.850; F=9.519; gl = 6,324; p<0.01; Square-CHI=52.926; gl=6;p<0.01; Canonical Correlation=0.387

Table 5

Predictions from the discriminant analysis

| Group     | Predicted |           | TOTAL  |
|-----------|-----------|-----------|--------|
|           | Cluster 1 | Cluster 3 |        |
| Cluster 1 | 63.00     | 37.00     | 100.00 |
| Cluster 3 | 30.77     | 69.23     | 100.00 |
| TOTAL     | 52.87     | 47.13     | 100.00 |