



SELF-UNDERSTANDING AND LINGUISTIC DISORDERS IN CHILDHOOD

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INTRODUCTION

Clinical case histories and studies as well as empirical work lend support to the view that persistent linguistic disorders do not occur in isolation to other problems in affective, cognitive and social development. The psychosociological implications ascribed to linguistic disorders range from psychopathological disorders to problems related to social interaction (Hazel and Shumaker, 1988; Prizant and et al, 1990, 1993). As the linguistic system develops it functions to organise, understand and represent experiences. It is within this framework of social communication where learning of the me and others takes place which will eventually leads to self-understanding, since both language and self-understanding are influenced by the gestural, emotional and verbal reactions of the others. Thus, the dialogue with others serves to establish the ongoing recognition of the self by others.

Linguistic and self-understanding development are part of the horizontal and hierarchical system of behaviour. In recent years, studies of young children with

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linguistic disorders have revealed the expected association between self-understanding and linguistic development. Brandell and Wirhanowicz (1985) have reported self-understanding developmental delays in pre-school children with linguistic disorders and speech defects. Furthermore, Wylie (1990) has stressed the importance of the verbal environment in the development of self-understanding in a study of children aged 25 to 39 months.

The purpose of this exploratory study is to examine the relationship between linguistic disorders and self-understanding development in order to provide a theoretical framework for the practical application of treatment in terms of prevention and intervention. Therefore, the responses of children with and without linguistic disorders were compared using Damon and Hurt's (1988) multi-dimensional and hierarchical self-understanding model that integrates the objective and subjective dimensions of self-understanding. Our working hypothesis was that children with linguistic disorders would exhibit lower levels of development in the different objective components and subjective processes of self-understanding.

METHOD

Subjects

The sample consisted of 50 primary school children, 35 boys and 15 girls between the ages of 6 to 8 years old and care was taken not to select subjects with general intellectual deficiencies. The sample was divided into two groups: children with psycho-linguistic processing disorders (group 1; n= 25); without psycho-linguistic disorders (group 2; n= 25). The subjects were assigned to one of the two groups according to their Psycho-linguistic Age as determined by the Illinois Test of Psycho-linguistic Abilities (ITPA). Subjects with a psycho-linguistic age below their chronological age were assigned to the psycho-linguistic disorders group.

MATERIALS

The mental ages were determined using Peabody's Picture Vocabulary Test (Dunn & Dunn,1981) since it is not only easy and quick to administer and correct, but most importantly, no verbal response is required which makes this test particularly suitable for subjects with linguistic disorders.

The Illinois Test of Psycholinguistic Abilities (Kirk, McCarthy and Kirk, 1968) was used to evaluate cognitive and linguistic functions involved in communication and provides an analysis of the inter and intra-individual differences.

Damon and Hart's (1988) self-understanding interview, which is based on the Piagetan clinical interview procedure, was administered to all the children in order to determine the organising principles of self-understanding. The test uses seven core items, four to explore aspects of the objective 'me' and three to explore the subjective 'I'.

PROCEDURES

Once our application for permission to interview had been accepted by the school authorities, both administrative and teaching staff were informed about the nature and purpose of the study in order to encourage co-operation between staff and researchers as well as instructing staff about the test procedures.

With reference to contextual factors, the location and time of day were taken into account since they could influence the results. The interview rooms were isolated from any noise or interruption and the time and the tests were conducted during the first school period. Care was taken to ensure that the interview did not coincide with any activity that the children consider especially gratifying such as their playtime. At all times, factors that might influence the child's mental or physical state were taken into account e.g. fatigue, hunger, tiredness, etc.

As previously stated, The Peabody's Picture Vocabulary Test (Dunn & Dunn, 1981) was used to assess which subjects exhibited normal intellectual functioning. Thereafter, (ITPA) Illinois Test of Psycho-linguistic Abilities (Kirk, McCarthy

and Kirk, 1968) was administered in order to classify the subjects who had obtained a higher than average score in the Peabody Test into one of the two groups: group 1 or 2, according to the absence or presence of linguistic disorders (the results are shown in Table 1). Thereafter, Damon and Hart's interview was used to evaluate developmental self-understanding.

Whereas the correction of the Peabody and the ITPA was undertaken by a single experienced evaluator who strictly followed the procedures outlined in the manual, the coding of the subject's interview responses was carried out by three researchers since the objective was to ensure that the results were not influenced by the observers. In those case were the unanimity between judges was not obtained, the interview responses were eliminated from the sample. Moreover, the interviews were recorded to avoid any interruptions during the interview and to enable the interviewer to check the verbal responses.

Statistical Treatment

The following statistical analysis were carried out:

- Oneway Variance Analysis
- Pearson's Chi-square Analysis

A Variance Analysis was carried out in order to assess the global differences in self-understanding, and the different dimensions, components and processes that compose it. Thereafter, Chi-square Analysis was used to evaluate the differences in the developmental best-level and modal-level score.

RESULTS

The raw scores and scoring percentages for both groups in each of the four self-as-object schemes and the three self-as-subject components are shown in Table 2 and in Figure 1.

As for the raw scores of self-understanding (as can be seen in Table 2) the largest number of self-statements correspond to physical and active characteristics,



though they also describe themselves in psychological and social terms. For the subjective ?I?, subjects from both group 1 and 2 made a higher number of self-statements of distinctness than to other processes of self-understanding. Therefore, linguistic disorders do not appear to give rise to differences in the organisation of distinctness. The first variance analysis confirmed the global differences of self-understanding between groups 1 and 2. Intergroup differences were found in both dimensions of self-understanding; ($F(1,2) = 5,57$; $p < .05$) and ($F(1,2) = 3.2$; $p = .07$), for the objective and subjective dimensions respectively; the latter being slightly significant if we bear in mind the size of the sample. Other variance analysis were undertaken to determine the existence of intergroup differences between the four self-as-object schemes and the three self-as-subject components. Significant differences were observed in the psychological self-scheme ($F(1,2) = 5.09$ $p < .05$) and the continuity component ($F(1,2) = 7.68$; $p < .01$).

Thereafter, variance analysis was applied to the different developmental levels that compose the objective and subjective dimensions of self-understanding. Significant differences were observed in: level 1 of the psychological self-schemes ($F(1,2) = 9.28$; $p < .01$); level 1 and 3 of the agency component ($F(1,2) = 5.68$; $p < .05$ and ($F(1,2) = 4.05$; $p < .05$) respectively; and level 1 of the continuity component ($F(1,2) = 4.62$; $p < .05$).

A second statistical method of analysis was undertaken using the test chi-square for each of the components of the subjective and objective dimensions of self-understanding of the best, and modal level to evaluate intersample differences using the developmental indices. Tables 3 and 4 show the results of the best level of self-understanding for both groups in each of the four self-schemes. Tables 5 and 6 show the results of the modal level of self-understanding for both groups in each of the self-as-subject components.

DISCUSSION

The global results obtained in our study confirm the view of an association between linguistic disorders and delays in self-understanding which have been reported by other authors in studies of pre-school children (Brandell and Wirhanowicz, 1985 and Wyle, 1990). Nevertheless, both the groups exhibit the same organisational tendency for the different dimensions of self-understanding; i.e., bearing in mind that both groups belong to the same age group and school grade, a developmental delay rather than a deviation was observed in children with linguistic disorders. This may be due to the fact that in order for deviations in the development of self concept to take place, a certain degree or threshold of severe linguistic disorders has to be reached which was not the case with our sample. Examination of the different dimensions of self-understanding reveals that the group with linguistic disorders had difficulties with the psychological components of the objective me which is precisely the most dominant component of the group without linguistic disorders. This finding underlines the role of early social relationships for communicative development and the differentiation between the I and others to the extent that it is in these relationships where "the complex transactions that we collectively call SELF" take place (Basch, 1983,p.53). Linguistic discourse is a co-operative activity in which there is an exchange of ideas, emotional and attitudinal states etc. Its relationship with human cognition and thus with the development of self knowledge, as the cognitive base for a stable identity throughout time, is a function of communication. Therefore, linguistic disorders lead to development delays of the psychological me and in a less stable concept of the I throughout time. The latter places children with linguistic disorders potentially at risk of emotional problems which is consistent with the results reported in the literature concerning psychopathologies associated to linguistic and communicative disorders.

As can be seen from self descriptions, the different development levels observed between the groups provides further evidence of the deficit in self understanding development of the psychological component exhibited by the group with



linguistic disorders. They make fewer linguistic references to categorical identification of self descriptions of psychological characteristics. This finding highlights that, though the self description of the psychological me (that normally takes place in children between the ages of 6-8 - the age range of our subjects) was present in the linguistic disorders group, it was not as dominant as the components of the physical and objective me. A lower level of continuity of self-understanding development of the subjective I was observed in the linguistic disorders group as compared to the other group. Their comprehension of the I is embedded in observable physical and behavioural characteristics. Moreover, the group with linguistic disorders exhibit problems in their conception of the existence, control and construction of the I and a lack of confidence in their agentive skills and little control over what happens to them. At level 1 what determines the sense of personal control and efficiency seems to be assigned to external forces or factors implying that they have no control over their environment. This attributional style as well as linguistic disorders is often associated to alienation, depression and low academic achievement. Level 3 implies social relationships, the constraints in the interaction with others observed in the linguistic disorders group appears to lead to delays in the development of the I. Furthermore, the conceptual changes in the understanding of the control over the I which was observed in the group without linguistic disorders were not found in the group with linguistic disorders which agrees with the results reported by Damon and Hart (1988).

Analysis of the scores at the modal level did not reveal any significant differences between the groups in the way they conceived of themselves in each age cohort in terms of physical, social, active, agentive and continuity components. The deficit in terms of the psychological component of self-esteem observed at the modal level in children with linguistic disorders seems to indicate, once again, the temporary break between physical and mental conceptions.

Similar results were obtained for both groups regarding the best level of self-understanding, the only exception being the process of continuity in which the linguistic disorder group showed lower achievement levels. Linguistic disorders are a handicap to the development of the linguistic system in turn the emergence of the I-others distinction which is a product of linguistic interaction in different social settings.

The findings of this study support the hypothesis that linguistic disorders are associated to a psychological process of constructing the I and the continuity of the I through time. Though the sample of children is small, at a later age significant differences may appear in terms of delays in the development of other components of self-understanding which are related to their identity, feelings and thoughts, emotional ties as well as social and communicative skills. This seems to be significant, particularly, if we bear in mind the propositional and communicative function of language and lends support to the view that the different components of self-understanding serve different functions which underlines the suitability of Damon and Hart's multi-component model for the analysis and interpretation of evolutionary problems in different areas. Our findings are in agreement with the increasing number of studies that associate linguistic disorders with psychological and behavioural disorders.

In conclusion, the findings of this study support the view that linguistic disorders in infancy are associated to delays in self-understanding development. However, given the complexity of both linguist and self-understanding development, further studies are required in order to clarify the relationship between types of linguistic disorders and delays and/or deviations in self-understanding development.

ABSTRACT

This study examined differences in self-understanding of primary school children with or without linguistic disorders. Children were administered the Damon and Hart's self-understanding interview (1988). Results indicated that language

disordered children showed delays in self-understanding. Besides of the psychological objective of me and the continuity "I" components were associated with linguistic disorders. Results are discussed in terms of the significance of early social relationship.

RÉSUMÉ

Dans ce travail nous avons examiné les différences dans la connaissance de soi même d'enfants de l'école primaire sur la comparaison d'échantillons d'élèves avec troubles du langage et sans troubles du langage. Pour l'évaluation du concept d'un propre nous avons utilisé le Damon et Hart's self-understanding interview (1988). Les résultats indiquent que les enfants avec troubles du langage present retards dans quelques aspects objectif et subjectif de la connaissance de soi même. Les conclusions s'insèrent en termes de la signification des premières relations sociaux.

RIASSUNTO

Questo studio esamina le differenze nel self-understanding di scolari delle primarie con o senza disturbi linguistici. Ai bambini è stata applicata la intervista di self-understanding di Damon e Hart (1988). I risultati indicano che i bambini con disturbi di linguaggio presentano ritardi nella comprensione del s' proprio. Per di più le componenti psicologico oggettive del "me" e il di continuità dell' "Io" si associano con i disordini del linguaggio. I risultati sono discussi in termini della importanza del rapporto sociale iniziale.

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	GROUP 1		GROUP 2	
AGES	M	Range	M	Range
C.A.	87.2	73-102	87.7	73-102
M.A	101.2	83-121	97.7	77-102
PLA.	87.6	72-120	65.5	48-78

Table 1. Description of the sample according to chronological age, average age from Peabody and psycholinguistic age from ITPA

	OBJECTIVE “ME”				SUBJECTIVE “I”		
GROUP	Physical	Active	Psycholo	Social	Distinctne	Agency	Continuit
S			g.		ss		y
1	193	129	83	28	47	41	23
2	162	103	47	20	43	35	12

Table 2. Raw scores of self-understanding



	PHYSICAL					SOCIAL					PSYCHOLOG.					ACTIVE				
G.	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0
1	8	13	2	1	1	8	2	3	2	10	8	7	1	6	3	11	3	2	5	4
2	6	11	6	1	1	6	1	0	2	16	6	8	2	2	7	10	5	4	4	2

Table 3. Best level in objective components

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G.	AGENCY					CONTINUITY					DISTINCTNES				
	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0
1	16	3	2	1	3	14	4	1	0	6	7	15	0	1	2
2	14	1	4	2	4	9	1	1	0	14	16	4	1	1	3

Table 4. Best level in subjective process



G.	PHYSICAL				SOCIAL				PSYCHOLOG.				ACTIVE			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	23	1	0	0	11	2	2	0	19	5	0	3	20	1	1	1
2	24	2	0	0	9	2	0	1	9	8	2	0	22	2	1	0

Table 5. Modal level in objective schemes

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G.	AGENCY				CONTINUITY				DISTINCTNESS			
	1	2	3	4	1	2	3	4	1	2	3	4
1	20	2	2	1	16	4	1	0	17	11	0	0
2	14	2	6	2	9	1	1	0	8	1	1	0

Table 6. Modal level in subjective process.

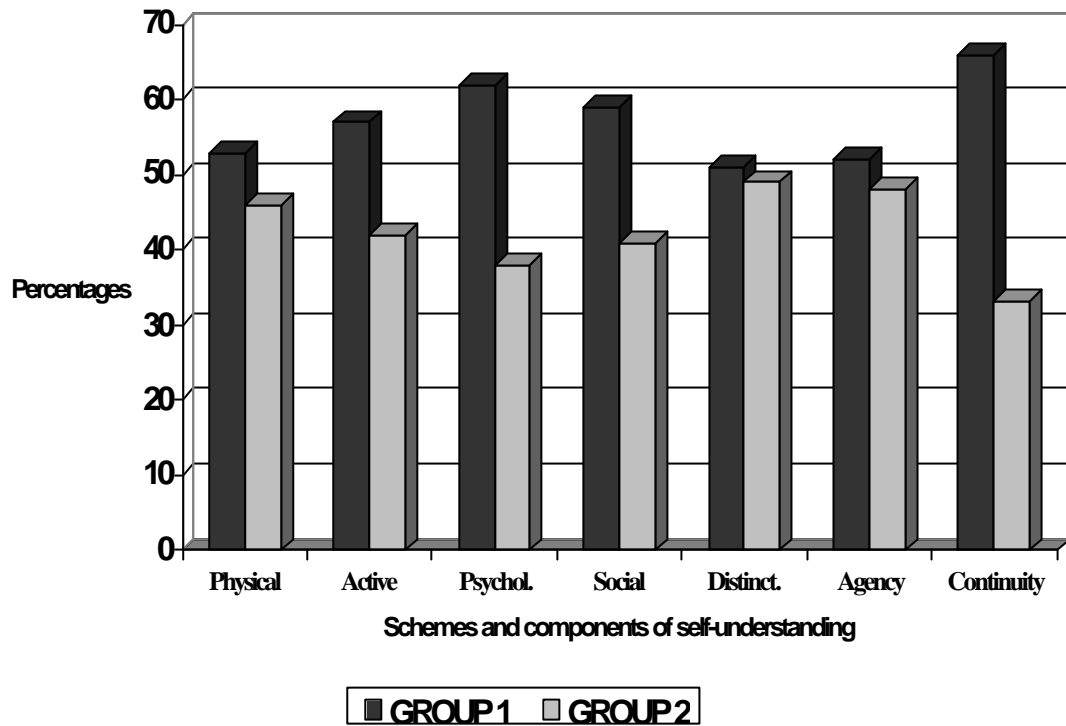


Figure 1. Scoring percentages for both groups in each of the schemes and the components