

VISUAL SELF-CONFRONTATION AND THE SELF-CONCEPT OF THE EXCEPTIONAL CHILD¹

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SUMMARY

This pilot study explored methods and effects of extending a child's self-awareness. Eighty children from an exceptional education center were given visual self-confrontation experiences for seven months via photography, mirrors, films and video tape playbacks. A comparison of pre-post test results showed an improvement in recognition of self and other self-concept related variables.

INTRODUCTION

It has been theorized for decades by those sensitive to the dynamics of children's behavior that a definite relationship exists between a child's academic performance and his constellation of opinions, beliefs and attitudes about himself. Until about 10 years ago, however, this theory was not subjected to extensive scientific scrutiny. These opinions, beliefs and attitudes comprise what many researchers call a "self-concept." Studies with school children in recent years have provided overwhelming support for this theory (Fink, 1962; Combs, 1964; Brookover, Thomas, and Paterson, 1964).

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One facet of the self-concept is "body-image." Beginning with the assumption that a poorly perceived body image is related to behavioral and emotional disorders (Witkin, Dyk, Faterston, Goodenough, and Karp, 1962; Geertsma and Reivich, 1965), it was the purpose of the present study to use various media capable of permitting self-confrontation, particularly the video tape recorder, to develop more realistic and favorable self-concepts in a group of exceptional children. There are ample precedents in the literature for the use of self-confrontation media as a therapeutic tool in a variety of settings. Phillip and Peixotto (1959) used the audio tape recorder with delinquents; Orbach (1966) used mirrors with college students; Cornelison and Arsenian (1960) and Miller (1962), still photographs with psychiatric patients; and Nielsen (1964) used motion pictures with college students. In addition, the technique of using self-confrontation media has been applied in contemporary settings by virtually all "schools" of behavior change from analytic (Garner, 1960) to behavioral (Bernal, Duryee, Pruitt, and Burns, 1968) and existential (Stoller, 1968).

Many of the applications mentioned above lacked at least one important factor, however, that of immediate and objective feedback of the subject's behavior. The use of video tape permits this. Video taped self-confrontation is a fairly recent development dating back only about 10 years. The video-recorder has been employed for self-confrontation successfully in many areas, however, As a teaching tool, it has demonstrated its usefulness in typing (McCreary, 1968), sports (DeBacy, 1969), nursing (Nuckolls, 1966), medicine (Torkelson and Romano, 1967), psychiatry (Berger, 1970; Geertsma and Mackie, 1969), counseling (Walz and Johnston, 1963), and teacher training (Salomon, and McDonald, 1970). It has also been found to be both therapeutically facilitating and motivating in the counseling of families (Alger and Hogan, 1967 and 1969), juvenile delinquents (Pascal, Cottrell, and Baugh, 1967), and alcoholics (Cornelison, 1966; Geertsma and Mackie, 1969). Goldfield and Levy (1968) have reported similar success while using it with psychodrama.

The greatest concentration of research into its effect and applicability has apparently been focused on the treatment of the mentally ill (Danet, 1968; Geertsma and Mackie, 1969; and Berger, 1970). With few exceptions, studies in this area have clearly indicated the significant potential of the video tape recorder as a therapeutic tool in psychotherapy (Kagan, Krathwohl, and Miller, 1963; Moore, Chernel, and West, 1965; Geertsma and Reivich, 1965; Boyd and Sisney, 1967; Rogers, 1968; Robinson, 1968; Mermelstein, 1968; Berger, Sherman, Spalding, and Westlake, 1968; Gasswint, 1968; and Hogan and Alger, 1969). With so much supporting evidence for the video tape self-confrontation experience, one can hardly help but wonder as to the nature of the phenomenon responsible for the apparent therapeutic benefit. It may be as Hogan and Alger have stated:

Contrary to what might be thought, people seem generally pleased to learn how they appear to others;

and secondly, *

The desire to change is experienced by the person as coming from within himself as a result of his own observations and conclusions rather than being imposed upon him by some outside authority.

(Hogan and Alger, 1969, p. 163)

Unfortunately, little attention has been given to the effects of self-confrontation via video tape on the elementary school age child, and more specifically, the exceptional child. Some encouraging findings, however have been reported by Altenhein and Maybury (1963) using the video tape recorder with the intellectually gifted child. Their results indicated an enthusiastic reaction to the self-confrontation experience and a desire by the children to improve their own behavior.

The Department of Exceptional Education at Florida Atlantic University incorporates a Demonstration, Research and Training Center for exceptional children. A developmental area of prime consideration has been the children's visual self-image. As a child's failure to form a clear visual self-image may result in his inability to perceive himself as an object, a criterion for postponement of reward and abstract thinking (McLuhan, 1966), it was the purpose of this study to explore methods and effects of augmenting the child's visual self-confrontation experience via the implementation of selected visual media on specific growth variables.

Four methods were employed to assist the children in articulating their body-image and two instruments were examined for their sensitivity to this variable. Relative to the period of increased visual self-confrontation experienced by the children in this study, the following questions were asked:

1. Would the children's ability to visually recognize themselves improve?
2. Would the children appear more satisfied with their visual image?
3. Would the children evaluate themselves more favorably?
4. Would others judge them to be better adjusted in their feelings, both regarding themselves and other children?

METHOD

Eighty children from Florida Atlantic University's Exceptional Child Center participated in this study over a period of seven months. All received the same basic treatment, but due to differences in programs and attendance demands, treatment concentration differed. This clearly created for this study three distinct groups. The first group included eight pre-adolescents with specific learning disabilities (S. L. D.), e. g. an emotional block toward reading. They attended the Center five days a week from 8:00 A. M. until 2:30 P. M. The second group involved 58 children of above average intelligence (gifted). They attended the Center one day a week, using the program only as a supplement to their regular school experience. The last group was composed of 14 adolescents considered to be potential junior high school drop-outs. These children, classified as educable mentally retarded, attended public school for half a day and the Center the other half (Table 1).

Beginning in October 1970 and extending through April 1971, provisions were made for the installation of two full length mirrors for each of three classrooms; two large bulletin boards per classroom for displaying photographs of the children; the distribution to each child of two large photographs of himself; and a self-confrontation experience for every child via video tape each month for seven months. A minimal amount of filming on location was conducted to complement the studio video tape experience.

TABLE 1
Description of Participants

Group	N		Age		I. Q.	
	Male	Female	\bar{X}	Sd	\bar{X}	Sd
<u>SLD</u>	5	3	116.6	18.0	107.8	22.3
<u>GIFTED</u>						
Monday	6	4	109.3	2.7	145.8	7.9
Tuesday	2	9	121.4	3.4	140.1	6.5
Wednesday	5	8	123.5	4.8	145.1	10.0
Thursday	8	5	133.0	5.1	141.8	6.8
Friday	4	7	133.0	5.1	141.8	6.8
<u>EMR</u>						
Morning	8	-	172.5	8.9	N. A.	N. A.
Afternoon	6	-	174.0	10.0	N. A.	N. A.

FIGURE 1
Self Recognition Test: Sort

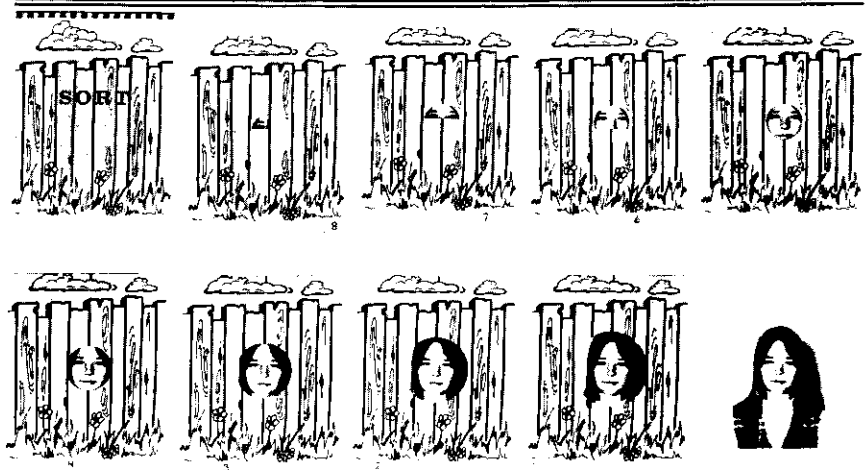
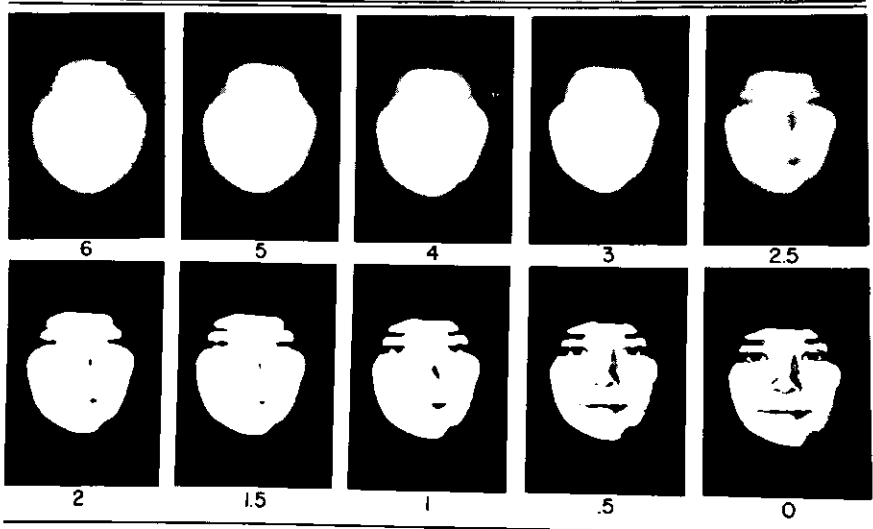


FIGURE 2
Self Recognition Test: Focus



Pre-tests, initiated in September, and completed during October, consisted of two visual-image recognition tests; two self-report instruments; the teacher's estimate of the student's mental health; and ratings by outside observers of the children's reactions to and feelings for their image on video tape. Subjects were post-tested during the eighth month.

Visual Recognition Tests. The purpose here was to determine the extent to which the child had articulated his body-image. Visual recognition being the most obvious manifestation of articulation, instruments were devised to test the child's ability to recognize himself. The two tests, (SORT and FOCUS) had been used successfully in a previous study from which procedures and rationale are available (Gill, 1965, pp. 7 and 39). The recognition instruments required that the children first be photographed. Facing shots taken of each child were subsequently made into larger 5" x 7" prints to be used with the SORT (Figure 1) and into slides, with the FOCUS (Figure 2).

With the Self-Other Recognition Test (SORT) each child, beginning at a high level of difficulty, was asked to identify six full face prints, one of which was his (Figure 1). The range of possible scores was from 0 to 12. For both this test and the FOCUS Test, the initial selection of children to be used as distractors and the order in which the subject's picture was presented within the sequence was determined by random selection. To discourage guessing, however, the subject's picture was not permitted to appear first in the sequence of either test.

The FOCUS test was administered with an automatic carousel slide projector (Kodak's EKTAGRAPHIC 900). In this case the child was asked to recognize a sequence of six slides at a specific level of acuity (Figure 2). Should he appear to recognize himself at a given difficulty level, the procedure was continued to the next lower level for confirmation. To determine levels of difficulty, the projector was positioned six feet from the screen and the image brought into sharp focus. The focus knob on the machine was then rotated 180 degrees out of focus. Beginning with this position and moving toward the position of sharp focus, levels of difficulty were set at each 30 degrees of rotation. Six points were assigned for recognition at the extreme end of difficulty and one point less at each subsequent level. Each stimulus was mechanically set for a five second exposure.

The Self Report. Two scales were felt to be appropriate here, Coopersmith's Self-Esteem Inventory (SEI) and Waetjen's Self-Concept as a Learner (SCAL). An excellent description of each is given by Purkey (1968). The SEI was selected as a test of general mental health and adjustment. The SCAL, on the other hand, appears more specifically related to school-oriented tasks. Its four subscales, i. e. Motivation, Class Membership, Task Orientation, and Problem Solving seemed particularly relevant.

The Teacher's Rating of Students. Some measure of the teacher's opinion of her children's social and personal growth over the period of treatment was necessary, even though their complete awareness of the purpose of the study might hamper objective reporting. The Inferential Belief Scale (INFERBEL) was devised to permit the teacher to make inferences about the children's beliefs concerning: (1) themselves, (2) their relationship with other children, and (3) other children. Bi-polar adjectives, e. g. able vs. unable, were used for rating the children on each dimension (Figure 3).

<u>SELF</u>									
It seems to me that the subject probably thinks of himself as:									
1. Able	6	5	4	3	2	1	Unable		
2. Enough	6	5	4	3	2	1	Not enough		
3. Trustworthy	6	5	4	3	2	1	Not trustworthy		
4. Worthy	6	5	4	3	2	1	Unworthy		
<u>SELF-OTHER</u>									
It seems to me that the subject probably thinks of himself in his <u>relationship with others</u> as being:									
1. Identified with them	6	5	4	3	2	1	Not identified with them		
2. Wanted by them	6	5	4	3	2	1	Not wanted by them		
3. Needed by them	6	5	4	3	2	1	Not needed by them		
4. Helpful to him (enhancing)	6	5	4	3	2	1	Unhelpful, threatening		
<u>OTHER</u>									
It seems to me that the subject probably views <u>others</u> as being:									
1. Able	6	5	4	3	2	1	Unable		
2. Dependable	6	5	4	3	2	1	Not dependable		
3. Friendly	6	5	4	3	2	1	Unfriendly		
4. Worthy	6	5	4	3	2	1	Unworthy		
5. Internally motivated	6	5	4	3	2	1	Externally motivated		

FIGURE 3. The Inferbel Scale

Video-Tape Self-Confrontation Experience and Evaluation. All groups of children were scheduled for one video tape session per month beginning in October and ending in April. The first, second, fourth and seventh sessions involved both treatment and evaluation. The December, February and March sessions, however, were of a slightly different nature. Since evaluation was not the purpose during these periods, each class was allowed to plan its own production. The outcome ranged from combos, poetry sessions, a trial of Santa Claus and Divorce Court, to what might be termed encounter groups discussing such topics as popularity, jealousy and love. As sessions of this nature generally ran over 40 minutes, the students were scheduled for the playback the following week.

The aforementioned sessions followed a slightly different format to permit evaluation. The programs were generally 20-minute group discussions led by either the teacher or a member of the University faculty. The sessions were held to approximately 20 minutes to allow the children to view themselves immediately afterwards. During the initial taping, the T. V. camera stayed with each child for a 15 to 20 second close-up regardless of group behavior. In this manner the camera panned each child in the group. Following the last child, an orientation shot was permitted and the procedure repeated. This allowed each child to be on camera three times for 15 to 20 seconds each. In this way, not only did the child see himself for that period of time, but by video recording the children in the same order during the replay, their reactions to their video image were on record for future analysis. The result was a composite picture of the children reacting to their own video image with the stimulus image conveniently inset in the top left corner. It was this image of the child reacting to himself that afforded a basis for rater evaluation.

Five female juniors enrolled in the College of Education volunteered as judges for this purpose. Each was asked to view independently all of the composite tapes. The purpose of the study was not revealed to the judges until after all ratings had been completed. The assignment of video tapes was randomized to eliminate any effects due to order. The judges were instructed to record: (1) what they felt to be a child's positive or negative reaction to his video image; and (2) a general impression on a five-point scale of the child's feelings toward himself. Each child was therefore rated by the judges on the frequency of negative and positive behavioral reactions to seeing themselves on video tape and in addition given a general impression rating. A check of rater reliability and agreement proved rather interesting. They were found to be highly consistent over time in their ratings but differed widely with each other in their perceptions of what they felt the children were doing or how they were reacting (F-tests for raters on all three variables were significant beyond the .01 level).

Perception is difficult, if not impossible, to describe in terms of absolutes. The most that one can say about opinions is that they are either in agreement or they are not. If they are not, as in this case, one must assume that the raters were not all perceiving in the same manner. This behavior, rather than perceptual consensus, would appear to be typical.

Perceptual agreement, though perceptually satisfying, may merely represent a consensual bias. Validity would appear to be enhanced by employing the mean perceptual rating of a group that demonstrates such inter-rater variance. As the raters did demonstrate a high degree of reliability, it was felt that the mean ratings of the five judges should be included in the analysis.

The final evaluation session in April differed only in replay. Instead of video taping the children's reactions to a replay of their immediate previous discussion, as was the case in October and January, they were allowed to view once again the January discussion session. Video taping their reactions at this time afforded an interesting comparison of responses given on two different occasions to the same stimulus.

ANALYSIS OF DATA

Data analysis progressed in an order relevant to the purpose of the study. Comparisons between all sub-groups (e. g. Gifted Monday vs. Gifted Tuesday) using pre-test data were first computed for each dependent variable to determine the extent of homogeneity and justification for combining these smaller groups for further study. This analysis did not indicate a need for maintaining the five separate groups of gifted children. However, collapsing all of the groups was not felt to be in the best interest of this study as there were some differences noted between exceptionalities (Gifted, EMR and SLD) and each of these three groups differed both in their description and their exposure to treatment. Consequently, tests for significant differences between pre and post-data were then computed by exceptionality classification (Gifted, EMR and SLD) to investigate the extent of change:

1. In the children's ability to identify their visual image, i. e. SORT and FOCUS tests;
2. In the children's reactions to their visual image, i. e. positive and negative reactions to video self-confrontation;
3. In the opinions of others about the children, i. e. INFERBEL and general ratings by judges of the children's self-confrontation experience.

RESULTS

Many of the children apparently experienced less difficulty on the self-recognition tests after the treatment than before (Table 2). As the duration of the treatment was seven months, there was some doubt as to whether to attribute the positive change to normal development or the augmented visual self exposure experience. It was decided that the Gifted children might be helpful in exploring this problem due to their apparent relative homogeneity on practically every factor except sex and age. Using this group, correlations between age and the two self recognition tests were practically zero. Development during this period, therefore, does not appear to be the significant factor of change.

One might also suspect that the visual self-recognition pre-tests may have had some residual learning effect. Unfortunately, the single greatest limitation of this study is the absence of a suitable control group to deal with this problem. However, the extended time period of more than seven months between pre and post-testing and the separate randomization of the order of presenting the stimulus photographs on each occasion make it unlikely that the gain should be attributed to pre-test experience.

TABLE 2
Comparison of Pre and Post Visual Recognition By Exceptionality

Group	Variable	N	\bar{X}	S	\bar{X}	S	t-ratio
SLD	SORT	8	6.3	2.0	7.6	.7	2.8*
	FOCUS	8	3.5	1.7	4.1	1.7	-
GIFTED	SORT	58	7.0	1.4	7.7	.7	4.1***
	FOCUS	58	2.4	1.7	3.8	1.7	5.1***
EMR	SORT	14	7.8	.4	7.9	.4	-
	FOCUS	14	3.2	1.6	4.0	1.7	-

* .05 level of significance
 ** .01 level of significance
 *** .001 level of significance

A second question asked by this study had to do with the children's behavioral reactions to seeing themselves on video tape. Five judges observed and recorded their interpretations of the subject's behavior according to whether it appeared to be a positive or negative reaction. The results of comparing the pre, mid and post-data revealed few significant changes (Table 3). Both the SLD and the Gifted did exhibit, however, fewer negative responses during one succeeding self-confrontation experience. The Gifted in one comparison also responded more favorably to their second self-confrontation experience. A significant difference in the number of negative reactions between the pre and mid evaluation for the EMR group should be noted. The direction of this difference for this particular group could conceivably be interpreted as either therapeutic or pathological, depending upon one's theoretical frame of reference.

TABLE 3
Comparison of Pre, Mid and Post Reactions to the Video Self
Confrontation Experience By Exceptionality

Group	Variable	N	\bar{X}_1	S ₁	\bar{X}_2	S ₂	t-ratio
<u>SLD</u>	POSITIVE REACTION:						
	Pre-Mid	8	3.9	1.2	3.3	.7	-
	Mid-Post	8	3.3	.7	3.6	.6	-
	Pre-Post	8	3.9	1.2	3.6	.6	-
	NEGATIVE REACTION:						
	Pre-Mid	8	2.0	1.0	1.7	1.1	-
Mid-Post	8	1.7	1.1	1.0	.7	-	
Pre-Post	8	2.0	1.0	1.0	.7	4.0**	
<u>GIFTED</u>	POSITIVE REACTION:						
	Pre-Mid	50	3.0	.9	3.3	.7	2.7**
	Mid-Post	46	3.4	.7	3.1	.7	-
	Pre-Post	49	3.1	.9	3.1	.8	-
	NEGATIVE REACTION:						
	Pre-Mid	50	1.4	.9	1.5	1.2	-
Mid-Post	46	1.5	1.1	1.2	.8	2.6*	
Pre-Post	49	1.4	.9	1.2	.8	-	
<u>EMR</u>	POSITIVE REACTION:						
	Pre-Mid	13	3.4	.9	3.3	1.0	-
	Mid-Post	10	3.4	1.1	3.7	.9	-
	Pre-Post	11	3.1	.9	3.6	.5	-
	NEGATIVE REACTION:						
	Pre-Mid	13	1.0	.8	1.7	.9	2.7*
Mid-Post	10	1.8	1.0	1.2	.3	-	
Pre-Post	11	1.1	.8	1.2	.3	-	

* .05 level of significance

** .01 level of significance

The third question investigated in this study dealt with changes in the children's attitudes toward themselves in general and more specifically as students. The scales employed for this purpose were the Self-Esteem Index (SEI) and the four sub-scales of the Self-Concept as a Learner (SCAL): Motivation (M.), Task Orientation (T.O.), Problem Solving (P.S.), and Class Membership (C.M.). Significant changes in one or more of the self-reports occurred with each of the three groups (Table 4). Both the EMR and SLD groups reported themselves as more accepted and involved with their classmates. A shift from class membership, however, was the case with the Gifted. They also expressed a lower opinion of themselves as problem solvers, whereas, the SLD group improved in this area. As previously mentioned, an intelligent interpretation of the direction of change with these children must be viewed in light of the original position and nature of the group considered.

TABLE 4
Comparison of Pre and Post Self Attitude By Exceptionality

Group	Variable	N	\bar{X}_1	S ₁	\bar{X}_2	S ₂	t-ratio
<u>SLD</u> SCAL:							
	M.	8	44.5	3.2	46.3	7.6	-
	T.O.	8	52.3	6.0	53.8	7.4	-
	P.S.	8	40.8	4.0	44.4	4.1	3.2*
	C.M.	8	39.0	4.7	42.0	6.7	2.4*
	S.E.I.	8	17.8	4.6	17.9	4.6	-
<u>GIFTED</u> SCAL:							
	M.	56	48.6	4.6	48.4	5.0	-
	T.O.	56	53.0	6.4	51.3	6.1	-
	P.S.	56	50.1	5.6	48.4	5.3	2.4*
	C.M.	56	45.6	5.1	44.1	5.9	2.2*
	S.E.I.	57	17.2	4.7	16.8	5.2	-
<u>EMR</u> SCAL:							
	M.	14	43.3	4.8	41.6	4.3	-
	T.O.	14	40.9	4.0	43.7	5.1	-
	P.S.	14	35.4	6.7	37.7	5.3	-
	C.M.	14	36.0	5.6	40.0	5.2	3.2**
	S.E.I.	14	14.7	4.0	14.5	3.1	-

* .05 level of significance

** .01 level of significance

The final question explored by the investigators dealt with the opinions of observers of the children at prescribed periods during the treatment. With the exception of the EMR group, the children's teachers were asked to make inferences about their children's beliefs concerning themselves (INFERBEL). Five judges also rated each child as to their opinion of the child's general impression of his video taped image. The results of the pre-post comparisons revealed all significant changes in observer's opinions to be in a positive direction and to have occurred with the SLD and Gifted only (Table 5).

TABLE 5
Comparison of Pre, Mid and Post Observer by Exceptionality

Group	Variable	N	\bar{X}_1	S ₁	\bar{X}_2	S ₂	t-ratio	
<u>SLD</u>	INFERBEL:							
	Self	8	2.9	1.1	3.7	1.1	3.6**	
	Self-Others	8	3.8	1.4	3.8	.8	-	
	Others	8	4.3	1.3	4.2	.6	-	
	VIDEO-RATERS:							
	Pre-Mid	8	3.6	.7	3.3	.4	-	
	Mid-Post	8	3.3	.4	3.9	.7	3.3*	
	Pre-Post	8	3.6	.7	3.9	.7	2.3*	
	<u>GIFTED</u>	INFERBEL:						
		Self	57	4.7	.8	5.3	.7	4.6***
Self-Others		57	4.6	1.0	4.6	1.0	-	
Others		57	4.3	.8	4.8	.8	5.2***	
VIDEO-RATERS:								
Pre-Mid		50	3.4	.7	3.6	.7	2.1	
Mid-Post		46	3.6	.7	3.7	.7	-	
Pre-Post		49	3.5	.6	3.7	.7	-	
<u>EMR</u>		VIDEO-RATERS:						
		Pre-Mid	13	3.7	.6	3.4	.8	-
	Mid-Post	10	3.4	.9	3.7	.5	-	
	Pre-Post	11	3.5	1.0	3.5	.9	-	

* .05 level of significance
 ** .01 level of significance
 *** .001 level of significance

DISCUSSION

This investigation can hardly be conceived of as anything more than a pilot study. Its purpose was simply to explore a number of techniques for detecting change in the visual self-image as well as methods that could possibly affect such a change. A number of school related variables were also observed. The absence of a control group is obviously a serious limitation. Consequently, conclusions regarding the effects of the treatment can hardly be considered conclusive.

Despite this limitation, there were a number of findings worth mentioning. All groups except the EMR's showed significant improvement in their ability at recognizing themselves on at least one or more of the self-recognition tests; and the findings also clearly support the video self-confrontation experience as being relatively safe. Even insignificant shifts in post-test results were generally in a therapeutic direction.

Of the three groups, the EMR children appeared to have the poorest self-concepts. On more than one occasion, self-photographs given to these youngsters were found marred or defaced. It is rather surprising that the SEI and SCAL pre-test differences between these children and the other two groups were not larger. Unfortunately, these children failed to demonstrate a positive change on any criterion measure. Some changes, possibly due to the treatment, were noticed, however, by various staff employees. Shortly after the treatment was initiated, it was reported that the boys in the EMR group were taking greater pride in their personal appearance. Their clothes were neater, cleaner and more fashionable. Quite frequently a boy was found studying himself or combing his hair in front of one of the many full length mirrors employed in the investigation. It is suggested that, in comparing their progress, some consideration should be given to the fact that the problems experienced by these youngsters are probably more severe and well established than with the other children, and thus perhaps more resistant to change.

That there was so much evidence of positive change with the SLD group was encouraging, for not only had it been particularly desirable that such a change occur with this group of children, but it was also this group that had received the greatest intensity of treatment. Such findings lead one to suspect that the degree and accuracy with which an individual differentiates his body may be enhanced by self-confrontation experiences with selected media; and furthermore, that these positive changes in the visual self-image may affect positive alterations in other dimensions of the self-concept.

The largest group of children, the Gifted, was the only group to improve significantly on both self-recognition tests. This led the investigators to look for similar gains on the SEI and SCAL scales. Significant shifts did occur in their attitudes about themselves, but not in the direction expected, i. e. numerical gains. With second thoughts about their pre-post results, a conference with their teacher confirmed the investigators' suspicions. Apparently this was the first time many of these children had ever experienced being grouped with and exposed to others of such similar intellectual abilities, an experience that quite likely had a leveling or normalizing effect on some of their beliefs about themselves, and particularly in relation to others. It would seem reasonable to assume, therefore, that while the treatment permitted and encouraged reality testing, it also enhanced and reinforced the shifts made by the children in their attitudes about themselves as students; and furthermore, though these new attitudes were less favorable, they were probably more realistic and thus an improvement.

In conclusion, methods of detecting change in the visual self-image could be improved upon. Although both the SORT and the FOCUS tests were effective, both dealt only with the face. This leaves some question as to the developmental differentiation of the rest of the body. Of these two instruments, the SORT was by far the easiest to administer. Further investigation should probably capitalize on the advantages of the SORT as a technique and explore possibilities of expanding its capabilities.

Of the three methods employed to aid the children in differentiating their visual image, the video-tape self-confrontation experience certainly was the most exciting and appeared to offer the greatest promise for future investigations of this nature. The specific effect of the immediate playback of candid group interaction, though questionable, leaves little doubt as to the significance of its impact.

Being able to see one's self as others see you is basically a learning experience in testing the reality of one's own existence. Children generally appear motivated toward accepting growth producing experiences. The children in this study overwhelmingly listed the video tape, self-confrontation experience as the "best" part of the entire program.³ The importance of this area for investigation is all too clear. Considering the theoretical argument, the supporting evidence from both the literature and this investigation, and the children's apparent attraction to the self-confrontation experience, it appears that a significant developmental variable has been overlooked in our attempt at helping youngsters grow.

³ From a 1970 Palm Beach County School System survey of student opinions.

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