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ABSTRACT

Achievement in most academic areas depends on reading. This study examines the relationship between play therapy and reading. Twenty-four first graders from two North Louisiana schools, who were repeating first grade and who had scored lowest on the Gates MacGinitie Reading Test (GMRT) and the Stanford Reading Achievement Test the previous year, participated in this study. Researchers divided the children into an experimental group and a control group. Those in the former cluster received one 30-minute individual play therapy session each week for 10 weeks. The play therapist followed the Principles of Child-Centered Play Therapy and tracked the children's play, reflected their feelings, and set limits if necessary. The GMRT, the Piers-Harris Children's Self-Concept Scale, and the Intellectual Achievement Responsibility (IAR) questionnaire were administered to all children one week prior to the play therapy sessions and one week after the sessions' conclusion. Results indicated that children who received play therapy scored significantly higher on the self-concept inventory than children in the control group. However, children who received play therapy did not achieve notably higher mean scores on the IAR (locus of control) and the GMRT. Likewise, play therapy did not appear to increase students' measured reading ability. Contains 31 references. (RJM)

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PLAY THERAPY WITH LOW ACHIEVERS IN READING

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PLAY THERAPY WITH LOW ACHIEVERS IN READING

Reading is usually the one subject upon which achievement in all other academic areas depends. Most researchers agree that emotional problems often contribute to children's struggle with reading and their failure to read. Research findings indicate that poor reading ability is closely related to a child's feelings of personal worth. In many cases, traditional methods of teaching reading, and schooling in general, contribute to the development of feelings of inadequacy and a negative view of self.

According to Werner and Strother (1986) "Some children ... perceive that their self worth is directly related to their early performance, usually in reading" (p. 538). Black (1974); found that the mean self-concept of 4th grade retarded readers on the Piers-Harris Children's Self-Concept Scale was significantly lower than the mean self-concept of the normal readers.

Because of the significant part reading plays in the role of education and the priority placed upon it in our schools, reading takes on added meaning as a developmental task; failure to master this task may have a negative impact on a child's self esteem (Gentile & McMillan, 1987; Sebeson, 1970; Smith & Dechant, 1961). The study of reading, more than any other area in school, engenders emotional reactions in both students and their parents. According to Gentile and McMillan (1987) and Strother and Barlow (1985), emotional factors need to be considered as potential deterrents or enhancers of the reading process.

Many reading problems stem from emotional immaturity brought about by unmet needs such as acceptance, validation, and security. This emotional immaturity and unmet needs may result in children feeling helpless and unable to measure up academically and socially (Dreikers, 1954; Strother and Barlow, 1985). If these emotional needs of disadvantaged learners are not met, they will probably be unprepared to learn to read and may not benefit from instruction.

Simple remediation in academic areas is not enough to overcome children's negative self-concepts academically, particularly in reading.

Findings and observations reported in the literature confirm the need to provide a therapeutic medium in elementary schools for children to alleviate these negative reactions and feelings of worthlessness. Play Therapy is a therapeutic approach which offers great promise for children who are low achievers and so often have poor self concepts and experience difficulty expressing themselves through an exclusive verbal medium. Play is the most natural thing children do, and as a medium of self-expression allows children to explore their world in the safety of an environment they can control. This variable is especially significant for children who are low achievers because they often feel helpless and that they have no control over events in their school day.

One of the primary objectives of play therapy is to help children develop a sense of personal significance and adequacy. Young children do not usually possess the necessary verbal skills to fully express problems directly even when they feel free to do so (Carlton & More, 1966). Instead of using abstract words, they use play as a natural means of communication. According to Landreth (1982, p.200) "Play is to the child what verbalization is to the adult."

Emotional growth in a play therapy relationship parallels the normal emotional development in the early year of life in a family relationship (Moustakas, 1955). By exploring and expressing feelings and attitudes through the medium of play, the child gains a sense of inner relaxation, insight, and a sense of personal adequacy and worth. Guerney (1983) suggests that the opportunity in play therapy to fantasize, to practice behavior, and to experience successes not possible in real life seems to promote more nature adaptive behavior and seems to assist in cognitive development.

Play therapy in a school setting has been found to be particularly helpful in promoting children's emotional adjustment. Griffiths (1971) found that participants in play therapy exhibit higher self-concept scores than do those who do not participate, concluding that play therapy has a positive effect on the self-concept of children who are low achievers in reading.

If the investigators cited in this review are correct, exposing a child to a positive environment provided by play therapy should increase the child's capacity to learn, resulting in an improved self-concept and motivation to read.

The purpose of this study was to answer the following questions: What is the effect of play therapy on low achievement in reading, on self-concept, and on locus of control? Do children who receive play therapy in a school setting perform differently in reading from children who do not receive play therapy? Do children in a school setting who receive play therapy demonstrate higher levels of internal control? Can a child's concept of self be altered by play therapy experiences in a school setting?

Method

A total of 24 first grade students from two North Louisiana schools were involved in this study, two of whom moved. Subjects selected for the study were a cross section students who were repeating first grade and who had scored lowest on the Gates MacGinitie Reading Test and the Stanford Reading Achievement Test given by their teachers the previous school year. The selection procedure led to the identification of nine children in School A (later designated as the experimental group) and ten subjects in School B (later designated as the control group) who were believed to be most deficient in reading skills and most in need of help in reading. The 24 students represented a cross section of socioeconomic and cultural environments.

Subjects' age, sex, race, grade retention status, and reading test scores are listed in

Tables 1 and 2.

Table 1

Age, Sex, Race, Grade Retention, and Reading Test Scores for the Experimental Group

Code#	Age	Sex	Race	No. Yrs. Retained	Reading Score	SRA Score
1	7	M	B	1	50	
2	7	M	B	1	62	
3	7	F	B	1	53	
4	7	F	B	1	*	*
5	7	F	B	1	*	42
6	7	M	W	1	*	*
7	7	F	B	1	54	
8	7	M	B	1	50	
9	8	M	W	1	*	*
10	7	F	B	1	50	
11	7	M	B	1	79	
12	7	F	B	1	58	

* No score available

Table 2

Age, Sex, Race, Grade Retention, and Reading Test Scores for the Experimental Group

Code#	Age	Sex	Race	No. Yrs. Retained	Reading Score	SRA Score
1	7	F	W	1	*	*
2	7	M	W	1	*	20
3	7	M	B	1	73	
4	8	M	B	1	46	
5	8	F	B	1	8	
6	8	M	W	1	*	*
7	7	F	B	2	*	07
8	8	F	W	1	*	32
9	7	M	W	1	*	27
10	7	F	B	1	66	
11	7	F	W	1	62	
12	7	M	B	1	*	03

* No score available

The reading test scores available for some other students were considered to be too high. Therefore, teachers in each school were asked to nominate additional students with poor reading skills for whom there were no reading test scores. Three other children were selected in school A and two other children in school B on the basis of having been retained and identified by the teachers as being most deficient in reading skills and most in need of help in reading. The total number of children selected in each school was twelve.

Intervention

Each child in the experimental group received one thirty-minute individual play therapy session per week for ten weeks. The play therapist had completed a graduate course in play therapy and one year of supervised experience in play therapy as a doctoral intern. An unoccupied kindergarten room equipped with play media suitable for play therapy was used for the treatment. Additional play materials such as guns, knives, monsters, and similar toys which elicit a wide and varied range of emotional expression were used. The children were introduced to the play room as a place they would come each week and they were invited to select any of the toys to play with in many of the ways they would like. The Play Therapist followed the Principles of Child-Centered Play Therapy described by Landreth (1991), tracking the children's play, reflecting their feelings, and setting limits if necessary. Children in the control group received no special attention and were involved only in the regular school day routine.

Instrumentation and Data Collection

The Gates MacGinite Reading Test, the Piers Harris Children's Self-Concept Scale, and the intellectual Achievement Responsibility questionnaire were selected for use in this study. Tests were administered to all children in the study one week prior to the first Play Therapy sessions and one week following the last play therapy sessions.

Code numbers were assigned to subjects in both groups. Color coding was used to eliminate any confusion in separation of data for both groups. The color coded numbers were placed on each consent form and test, and a master list was composed for future reference. On all further forms, numbers rather than names were used. The Gates MacGinite Reading Test, published by Teachers College Press, Columbia University, New York, is a multiple-item paper-pencil test of vocabulary and reading comprehension which measures the reading achievement of students in grades one through twelve. The Basic R (Grade One) also measures letter recognition and letter sounds (MacGinite, 1978). The Basic R was chosen because of its recommended use in first grade.

The norms for the Gates MacGinite Reading Test were established through the administration of the tests to a nationwide sample of approximately 65,000 students in grade one. Reliability, or the degree of consistency of the results of the test was measured and the alternate form reliability coefficient for Primary A, vocabulary, was .93. The alternate form reliability coefficient for Primary A, comprehension, was .93 and for Basic R, .88 (MacGinite, 1978). Concurrent validity was established by the correlation between performance on the Gates MacGinite Reading Test and the Metropolitan Achievement Test on Levels D and E. The correlations were between .79 and .92 with those higher being for total test scores (MacGinite, 1978).

The Piers-Harris Children's Self-Concept Scale was developed especially for work with children and adolescents. It is an 80 item self-report questionnaire designed to assess how children and adolescents feel about themselves. It can be administered either individually or in groups. Children are asked to indicate whether each statement applies to them by giving a yes or no response. All cluster scales are scored in the direction of positive self-concept; so a high

score indicates a high level of assessed self-concept with in that specific dimension.

This scale correlates positively with the Lipsitt Self-Concept Scale (.68) and negatively with anxiety and similar measure (-.48 to -.69) Piers (1984) calculated internal consistency on a normative sample of 297 sixth and tenth grades. The reliability estimates for the total score, using the KR-20 formula, ranged from .88 to .93. The Piers-Harris appears to be a highly reliable instrument and the reliability figures compare favorably with other measures used to assess personality traits in children (Piers, 1984).

The Intellectual Achievement Responsibility questionnaire is designed to measure beliefs of reinforcement of responsibility as either external or internal. The IAR was developed within the context of a larger research program designed to investigate children's achievement development. It assesses children's beliefs exclusively about responsibility in intellectual-academic achievement situations.

The consistency of children's IAR responses over time is moderately high. Of the original 923 elementary and high school students drawn from five different schools, 47 children in grades three, four, and five were given the test a second time after a two month interval. For these younger children the test-retest correlations were .69 for I+, and .74 for I-. these correlations were all significant at the .001 level.

The IAR scores were correlated with two measures of academic achievement in the original samples. For the younger children, these measures were the Iowa Tests of Basic Skills and their report-card grade averages. Total I scores correlated positively and significantly with almost all achievement test measures and with report card grades for grades three, four, and five (Crandall, et al., 1965).

Data Analysis

A "pretest-posttest control group design" as recommended by Campbell and Stanley (1973) was used because of its control of pretreatment differences. An analysis of covariance design was used to test the significance of the difference between the experimental group and the control group on the adjusted posttest means. The analysis of covariance was used because (a) it is a powerful statistical test sensitive to differences among groups; and (b) it adjusts for initial group differences (Huck, Cormier, & Bounds, 1974). The analysis of covariance takes into account the correlation between the dependent variable and one or more covariates. In each analysis of covariance, the pretest score was the covariate. All research hypotheses were tested for significance at the .05 level of confidence.

Summary of Results

In summary, the hypothesis that children who received play therapy would achieve significantly higher mean scores on the Piers-Harris Children's Self-Concept Inventory than would children in a control group was supported.

Table 1

Means and Standard Deviations on the Piers-Harris Children's Self-Concept Inventory

Group	Means			Standard Deviations	
	Pre-test	Post-test	Adjusted	Pre-test	Post-test
Exp.	48.27	64.09	63.66	10.72	8.46
Control	47.09	56.79	56.79	10.77	12.51

Table 2

Analysis of Covariance Data for the Comparison of Mean Scores on the Piers-Harris Children's Self-Concept Inventory

Source of Variation	Sum of Squares	DF	Mean Square	F	Sign. of F
Group	258.32	1	258.32	4.58	.0435
Within Cells	1049.34	19	55.23		

The hypotheses that children who received play therapy would achieve significantly higher mean scores on the Intellectual Achievement Responsibility (locus of control) and the Gates-MacGinite Reading Test than would children in a control group were not supported. An examination of individual locus of control scores revealed that the scores of seven students in the experimental group increased on internal locus of control, and one remained the same. The scores of five students in the control group increased on internal locus on control, and the scores of six students decreased.

Table 3

Means and Standard Deviations on the Intellectual Achievement Responsibility Questionnaire

Group	Means			Standard Deviations	
	Pre-test	Post-test	Adjusted	Pre-test	Post-test
Exp.	18.36	20.18	20.12	2.84	2.93
Control	18.00	17.55	17.60	5.55	5.73

Table 4

Analysis of Covariance Data for the Comparison of Mean Scores on the Intellectual Achievement Responsibility Questionnaire

Source of Variation	Sum of Squares	DF	Mean Square	F	Sign. of F
Group	34.84	1	34.84	1.77	0.1991
Within Cells	373.97	19	19.68		

Table 5

Individual Subject Scores on the Intellectual Achievement Responsibility Questionnaire

<u>Experimental</u>			<u>+ = Increase</u>
<u>Subjects:</u>	<u>Pre</u>	<u>Post</u>	<u>- = Decrease</u>
1.	15	21	+
2.	22	20	-
3.	22	22	+
4.	15	18	+
5.	17	19	+
6.	15	21	+
7.	19	23	+
8.	18	16	-
*9.			
10.	20	24	+
11.	17	15	-
12.	22	23	+
<u>Control</u>			<u>+ = Increase</u>
<u>Subjects:</u>	<u>Pre</u>	<u>Post</u>	<u>- = Decrease</u>
1.	26	20	-
2.	15	16	+
3.	12	13	-
4.	13	26	+
5.	12	17	+
*6.			
7.	20	28	+
8.	24	20	-
9.	27	18	-
10.	14	10	-
11.	18	14	-
12.	17	11	-

* Moved Away

Table 6

Means and Standard Deviations on the Gates MacGinite Reading Test

Group	Means			Standard Deviations	
	Pre-test	Post-test	Adjusted	Pre-test	Post-test
Exp.	75.45	89.09	88.72	13.47	7.42
Control	72.09	87.63	88.00	18.45	9.42

Table 7

Analysis of Covariance Data for the Comparison of Mean Scores on the Gates MacGinite Reading Test

Source of Variation	Sum of Squares	DF	Mean Square	F	Sign. of F
Group	2.84	1	2.84	.05	.8339
Within Cells	1192.26	19	62.75		

Table 8

Individual Subject Scores on the Gates MacGinite Reading Test

<u>Experimental</u>			<u>+ = Increase</u>
<u>Subjects:</u>	<u>Pre</u>	<u>Post</u>	<u>- = Decrease</u>
1.	50	90	+
2.	85	97	+
3.	84	93	+
4.	58	73	+
5.	69	82	+
6.	92	98	+
7.	62	92	+
8.	82	93	+
*9.			
10.	82	82	
11.	84	88	+
12.	82	92	+
<u>Control</u>			<u>+ = Increase</u>
<u>Subjects:</u>	<u>Pre</u>	<u>Post</u>	<u>- = Decrease</u>
1.	69	82	+
2.	90	84	-
3.	100	13	
4.	69	26	+
5.	58	17	+
*6.			
7.	46	79	+
8.	79	92	+
9.	92	96	+
10.	42	98	+
11.	79	88	+
12.	69	96	+

* Moved Away

Discussion

The results of this study supports the finding of Carlton and Moore (1966) and Griffiths (1971), who found that participants in Play therapy exhibit higher self-concept score than do those who do not participate in play therapy. They concluded that play therapy in a school setting has a positive effect on the self-concepts of children who are low achievers in reading.

Studies support the conclusion that children with learning difficulties have lower perceptions of internal control than do well adjusted or gifted children (Nowicki & Strickland, 1973), and that these children have lower expectations for future achievement in subjects such as reading (Bryan & Pearl, 1979). However, it has been observed that teachers play a significant roles in encouraging these children to achieve an internal orientation toward their academic endeavors by telling them they can do anything they want if they keep working (Crandall, et al, 1965). This fact may account for the relatively high pre-test mean internal scores for the experimental and control groups in this present study.

Giving students an opportunity to be with a supportive adult in a setting conducive to freedom of emotional expression did not increase their measured reading ability. This finding runs counter to studies by Axline (1963), Bills (1950), and Carlton and Moore (1966), and to the assumptions of many classroom teachers. Perhaps ten weeks was not long enough to see significant changes occur in reading achievement. A longer pre- to post-testing time period might yield a more accurate measure of improvement in reading as measured by standardized reading test.

Behavioral Observations

Although standardized test results indicated limited behavioral change, observational analysis by the play therapist confirmed substantial behavioral change. Initially, the behaviors of the low achieving children in this study indicated feelings of incompetence and anxiety. On closer contact with the children in the experimental group, the counselor observed that they acted with low self-confidence and appeared to have poor self-concepts. In academic areas, particularly reading, they were experiencing great difficulty. Teachers confirmed these observations.

At the beginning of play therapy, several children were unable to make choices about what to play with in the allotted time and never completed a particular activity. Near the end of the treatment period the same children were observed choosing an activity more quickly, to finish if before moving on to something else or, if distracted, would come back to the initial activity and complete it. These play behaviors appear to the counselor to, indicate an increase in attention span and an ability to focus more readily.

One child, at the beginning of play therapy, would never speak unless spoken to, and then she answered in only brief one- or two-word responses. By midpoint in the treatment period, she had begun to initiate the conversation or ask the play therapist questions. Her sentences became more complex and more clearly spoken. She also began to act with greater self-confidence.

One child who had a twin sister and was described by her teachers as withdrawn and having low self-confidence appeared to have no interest in any of the activities offered in the playroom. At first, her lack of interest was attributed to boredom, but as time passed and communication improved, it became apparent that she had always allowed her twin to make decisions for her, limiting her not only socially but academically as well. It could be assumed that in the future she may make similar independent choices and gain self-confidence in academic areas, particularly in reading.

Another child who was reported to be very fearful both at home and at school evidenced fearfulness in his play. He acted out exactly the same sequence of events during each session. He was reported to have been suffering from nightmares, and his teacher said he had difficulty concentrating in the classroom. the repetitive themes in his plays seemed to offer some security for him because his nightmares lessened as the play therapy progressed. With time, perhaps,

his concentration in the classroom may improve.

The child who was perhaps the most aggressive and emotionally disturbed of all the children in this study had no concept of limits and boundary setting. His behavior, both in the classroom and in beginning play therapy sessions, could be describes as "out of bounds." Rather than being unable or unwilling to talk as some children are, he did not know when to stop talking. During play therapy sessions, his play centered around hostile and aggressive activities such as war or criminal acts. As play therapy progressed, there was a lessening of aggression along with intermitting moments of silence or more appropriately timed speech patterns. Evidence of the kinds of improvement described here became more apparent as play therapy progressed.

Implication for School Counselors

It is important to remember that these improvements described above are prerequisites to learning to read more effectively. Participation in play therapy did have a positive effect on the children's self-concepts as measured by the Piers-Harris Children's Self-Concept Scale. Therefore, even though numerical data did not indicate that play therapy had a positive effect on reading, anecdotal evidence suggests that behaviors which may facilitate improvement of reading ability over a period of time were changing.

An eagerness to be with a supportive adult whose attention was devoted solely to them was evidenced in communication with the children. At any chance meeting outside the play therapy room, these children always asked, "Do I get to come today?" or "I want to come again this week." The disturbed, aggressive child would get very upset when told it was not his day to attend play therapy.

Elementary school counselors are encouraged to consider play therapy as a medium for helping children learn to respect and appreciate themselves, to assume responsibility for self, to learn self-control, to learn that their feelings are acceptable, to learn to responsibly control their feelings, to learn to be creative and resourceful in confronting problems and to learn to make choices and to be responsible for their choices. Investigators need to consider play therapy as an adjunct to the total education process. The end result may be a freer child, one who develops innate abilities more fully, and ultimately, becomes a better learner and reader.

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