

The Effect of Teacher-Offered Conditions of Empathy,  
Positive Regard, and Congruence Upon Student  
Achievement

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There is extensive evidence to suggest that all interpersonal learning or relearning processes share the same core of conditions offered by the "more knowing" person to the "less knowing" person. In particular, the conditions of empathy, positive regard, and genuineness have been related to constructive client change or gain in guidance, counseling, and therapy by Aspy (1967), Carkhuff (1966), Rogers (1962), and Truax and Carkhuff (1967). Indirect evidence has been presented for the effect of these conditions both in child-rearing by Carkhuff and Truax (1966) and in teaching by Bowers and Soar (1962), Christenson (1960), Combs and Soper (1963), Cronbach (1963), Garrison, Kingston and McDonald (1964), Ryans (1961), Tatum (1965), Thelen (1961), Melton (1965), Morgan (1960), and Willis (1961). Unfortunately, none of the studies of the effectiveness of teaching have systematically explored the relationship of the conditions of empathy, positive regard, and genuineness to teaching effectiveness. It is the purpose of this study, then, to (a) assess the levels of these facilitative conditions that teachers are communicating, and (b) determine the differential effects of these conditions upon the cognitive growth of students as assessed by achievement tests.

### Methodology

Teachers. Six third grade teachers tape recorded their interaction with reading groups during one week in March and one week in May of the same academic year. The recordings were done as randomly as possible to account for such influences as time of day and day of week.

Subjects. The subjects were selected from the teachers' classes and included (a) the five boys with the highest IQ's, (b) the five boys with the lowest IQ's, (c) the five girls with the highest IQ's, and (d) the five girls with the lowest IQ's. Thus, twenty students were selected from each teacher's class. The differences between the mean IQ's for each of the low groups were non-significant, and the same was true for the high groups. That is, all the high IQ groups and all the low IQ groups were statistically equated since their differences were non-significant. Of course, there were

significant differences between the high and low groups. The selection process controlled for sex and IQ.

The students were administered five subtests of the Stanford Achievement Test during September and again during May of the same academic year. The differences between the subjects' scores were used as the measure of the students' academic gain. The subtests were (a) Word Meaning, (b) Paragraph Meaning, (c) Spelling, (d) Word Study Skills, and (e) Language, all of which relate to verbal quantities. This seemed appropriate since the teachers were recording their reading groups which are verbal situations.

Ratings. The teachers had recorded two hours of classroom interaction, and eight four-minute segments were selected randomly from each teacher's performance. These segments were assigned numbers randomly, so the raters identified them only by their numbers.

Three trained raters, experienced at evaluating recordings of counseling and psychotherapy, assessed the levels of empathy, positive regard, and congruence provided by the teachers on each of the segments. Each rater evaluated the segments independently. The ratings for each teacher were summed and a composite or mean rating for each teacher was obtained.

The rating scales were designed to allow trained but otherwise naive raters to evaluate the levels of (a) empathy, (b) positive regard, and (c) congruence provided by a therapist (Truax and Carkhuff, 1967). The raters formulate their opinions by listening to randomly selected samples from psychotherapeutic interviews.

Accurate Empathy (AE) is assessed according to a 9-point scale with a rating of 1 representing the lowest levels of empathy and 9 the highest. At Stage 1 the therapist seems completely unaware of even the most conspicuous of the client's feelings. His responses are not appropriate to the mood and content of the client's statement and there is no determinable quality of empathy. At Stage 3, the therapist often responds accurately to the client's more exposed feelings. He also displays concern for the deeper, more hidden feelings, which he seems to sense must be present though he doesn't understand their nature. At Stage 5, the therapist accurately responds to all of the client's more readily discernible feelings. He shows awareness of many of the feelings and experiences which are not so evident, too; but in these he tends to be somewhat inaccurate in his understanding. At Stage 7, the therapist shows awareness of the precise

intensity of the underlying emotions. However, his responses move only slightly beyond the area of the client's own awareness, so that feelings may be present which are not recognized by the client or therapist. At State 9, the therapist unerringly responds to the client's full range of feelings in their exact intensity. He expands the client's hint into a full-blown but tentative elaboration of feeling or experience with unerring sensitivity and accuracy.

The Unconditional Positive Regard (UPR) Scale is a 5-point scale attempting to define stages along a continuum of the therapist's levels of functioning. At Stage 1, the therapist may be telling the patient what would be best for him, or may be in other ways actively either approving or disapproving of his behavior. At Stage 2, the therapist responds mechanically to the client and thus indicates little positive regard. At Stage 4, the therapist clearly communicates a very deep interest and concern for the welfare of the patient. At Stage 5, the therapist communicates unconditional positive regard without restriction. At this stage the patient is free to be himself even if it means that he is regressing, being defensive, or even disliking or rejecting the therapist himself. The only channeling by the therapist may be the demand that the patient communicate personally relevant material.

The scale for Congruence (C) is a 5-point scale attempting to specify stages along a continuum of therapist genuineness or self-congruence. At Stage 1, the therapist is clearly defensive in the interaction and there is explicit evidence of a very considerable discrepancy between his experiencing and his current verbalization. At Stage 2, the therapist responds appropriately but in a professional, rather than in a personal manner. At Stage 4, there is neither implicit nor explicit evidence of defensiveness or the presence of a facade. At Stage 5, the therapist is freely and deeply himself in the relationship. There is openness to experiences and feelings by the therapist without traces of defensiveness or retreat into professionalism.

## Results

The mean rating for each of the six teachers on each of the three conditions is summarized in Table 1. The composite ratings indicate the same rank ordering for each teacher for each of the three characteristics. Therefore, it was possible to compare one analysis of variance for all of

TABLE 1

Mean Ratings for Accurate Empathy (AE), Unconditional Positive Regard (UPR), and Congruence (C) for Teachers

Teacher	AE	UPR	C
1	4.7	3.9	4.0
2	3.9	3.8	3.8
3	3.5	3.7	3.8
4	3.0	3.0	3.0
5	2.9	2.9	3.0
6	2.3	2.1	2.6

the conditions. The term "facilitating conditions" was implemented in the discussion of the analysis of data and includes empathy, unconditional positive regard, and congruence in its meaning.

Since teachers 1, 2 and 3 received higher ratings than teachers 4, 5 and 6 for each of the characteristics, the following categories were used in the analysis of the data: high condition teachers (1, 2 and 3), and low condition teachers (4, 5 and 6).

The achievement test results are summarized in Tables 2 through 7.

As can be observed, in Paragraph Meaning, Language, Word Meaning, and Word Study Skills the average amount gained by the students of the high level functioning teachers was substantially more than the students of those teachers offering low levels of conditions, while on Spelling the differences are negative but minimal. Overall, on the total gain, the students of the high level teachers demonstrated greater gain than those of low level teachers. An analysis of variance for each of the subtests yielded the results summarized in Table 8.

TABLE 2

Mean Score for Paragraph Meaning for Each Group

Teacher	Male		Female		Average by Teachers	Level of Conditions
	High IQ	Low IQ	High IQ	Low IQ		
1	1.68	.66	.76	.40	.88	High
2	1.22	.32	1.44	1.32	1.08	High
3	1.12	.44	1.44	1.00	1.00	High
4	1.10	.74	.80	.68	.83	Low
5	.58	.22	.40	.28	.37	Low
6	1.02	.74	.76	.64	.79	Low
Average for IQ Groups	1.12	.52	.93	.72	Average for Entire Group	0.82

Note: The test norms indicate that the gain by the average third grade student is 1.0 years.

TABLE 3

Mean Score for Language for Each Group

Teacher	Male		Female		Average by Teachers	Level of Conditions
	High IQ	Low IQ	High IQ	Low IQ		
1	2.04	.78	1.16	.44	1.11	High
2	2.30	.90	2.88	1.78	1.97	High
3	1.70	1.24	1.26	1.12	1.33	High
4	.70	.58	1.18	.92	.85	Low
5	1.04	.42	.84	.18	.62	Low
6	.00	.40	1.36	.74	.62	Low
Average for IQ Groups	1.30	.72	1.45	.86	Average for Entire Group	1.08

Note: The test norms indicate that the gain by the average third grade student is 1.0 years.

TABLE 4

## Mean Score for Word Meaning for Each Group

Teacher	Male		Female		Average by Teachers	Level of Conditions
	High IQ	Low IQ	High IQ	Low IQ		
1	1.44	.98	.76	.82	1.00	High
2	1.44	.82	.86	1.32	1.11	High
3	1.30	.56	.66	.60	.79	High
4	1.28	.30	.90	.70	.80	Low
5	1.28	.20	.76	.72	.74	Low
6	.62	.70	1.06	.60	.75	Low
Average for IQ Groups	1.23	.60	.83	.79	Average for Entire Group	.86

Note: The test norms indicate that the gain by the average third grade student is 1.0 years.

TABLE 5

## Mean Score for Word Study Skills for Each Group

Teacher	Male		Female		Average by Teachers	Levels of Conditions
	High IQ	Low IQ	High IQ	Low IQ		
1	1.78	1.74	1.94	.74	1.55	High
2	2.00	.08	2.24	2.44	1.69	High
3	.16	.82	.98	.18	.46	High
4	.88	1.02	.78	.76	.86	Low
5	1.36	.80	.44	.12	.62	Low
6	1.50	.08	.72	.96	.82	Low
Average for IQ Groups	1.23	.76	1.18	.83	Average for Entire Group	1.00

Note: The test norms indicate that the gain by the average third grade student is 1.0 years.

TABLE 6

## Mean Score for Spelling for Each Group

Teacher	Male		Female		Average by Teachers	Levels of Conditions
	High IQ	Low IQ	High IQ	Low IQ		
1	1.00	.92	1.08	.50	.87	High
2	1.42	.18	1.22	1.68	1.12	High
3	.52	1.30	.78	.74	.83	High
4	.94	1.14	1.80	1.26	1.28	Low
5	1.38	.66	1.24	.58	.96	Low
6	.92	.88	1.22	1.22	1.06	Low
Average for IQ Groups	1.03	.84	1.22	.99	Average for Entire Group	1.02

Note: The test norms indicate that the gain by the average third grade student is 1.0 years.

TABLE 7

## Mean Score for Total for Each Group

Teacher	Male		Female		Average by Teachers	Levels of Conditions
	High IQ	Low IQ	High IQ	Low IQ		
1	8.54	5.22	5.76	2.96	5.62	High
2	8.38	2.50	8.64	8.54	7.01	High
3	4.48	4.34	5.20	3.50	4.38	High
4	4.50	3.78	5.46	4.32	4.51	Low
5	5.94	2.74	3.68	1.68	3.51	Low
6	3.96	2.88	5.12	4.16	4.03	Low
Average for IQ Groups	5.96	2.57	5.64	4.19	Average for Entire Group	4.84

Note: The test norms indicate that the total gain for five subtests by the average third grade student is 5.0 years.

TABLE 8

## A Summary of the Statistical Significance of the Sources of Variance

Source	Total Gain	Paragraph Meaning	Language	Mean- ing	Word Study Skills	Word Spelling
1. IQ	.01	.01	.01	.01	.01	N.S.
2. Level of facilitating conditions	.01	.01	.001	.05	.01	N.S.
3. Sex	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
4. IQ and facilitating conditions	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
5. IQ and sex	N.S.	N.S.	N.S.	.01	N.S.	N.S.
6. Facilitating conditions and sex	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
7. IQ, Facilitating conditions and sex	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
8. Teachers within levels of facilitating conditions	.01	N.S.	N.S.	N.S.	.01	N.S.
9. Teachers and sex within levels of facilitating conditions	.01	N.S.	N.S.	N.S.	N.S.	N.S.
10. Teachers and IQ within levels of facilitating conditions	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
11. Teachers, sex and IQ within levels of facilitating conditions	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.

N.S. = Non Significant.



## Summary and Conclusions

The levels of empathy, unconditional positive regard, and congruence provided by teachers in their actual classroom procedure related positively to the cognitive growth of their students. This positive relationship was found for four subtests of the Stanford Achievement Test and the total gain. These relationships were statistically significant at or above the .05 level of confidence. For the Spelling subtest the teacher conditions were related negatively to the test score gains, but the relationship was not statistically significant at the .05 level of confidence.

This study supports the general hypothesis that there is a positive relationship between the levels of teacher-offered empathy, unconditional positive regard, and congruence and the cognitive growth of the students. It extends the generalization of the effect of the core conditions to all instances of interpersonal learning processes. In particular, it points up the need for assessing teachers on other than intellectual indices. However, while assessments were made independent of teacher knowledge ability, it is also quite possible that those offering the highest levels of conditions were most knowledgeable, and future studies should incorporate such necessary controls. In addition, there are further questions which must be asked. Are, for example, the levels of facilitative conditions offered by the teacher more critical during the early grammar school years than in later phases of education? In any event, this project can serve as a model for further research into the effectiveness of teaching, and if replicated, the results of this study have potentially profound implications for teaching and teacher-training programs.

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