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ABSTRACT

The purpose of the study was to engage college supervisors in analysis of the verbal interaction they employed in conferences with student teachers. Subjects in the study were 14 pairs of college supervisors-elementary student teachers in the Dept. of Elementary Education at a state college in New York during the spring semester of 1971. An experimental design was employed with the experimental group (n = 7 pairs): a) receiving training in analysis of verbal interaction, b) analyzing their own verbal interaction and, c) considering the results of the analysis of their verbal behavior. The control group (n = 7 pairs) did not received systematic training, did not engage in analysis of their verbal behavior, and did not have the opportunity to consider results of analysis. Data were secured by means of audio-taped conferences analyzed using the Blumberg Interaction Analysis System and a 47-item questionnaire constructed by the researchers and given to student teachers in the experimental and control groups after each of four sequential conferences. Results indicated the student teacher's perceptions were consistent in three areas: human relations, verbal process, and substance. Lower ratings were given to statements involving student output in problem solving, pursuing ways of collecting data pertinent to teacher behavior, being asked thought provoking questions, and being allowed time to think, discover and explore ideas. An extensive bibliography is included. (Author/MJM)

# ANALYSIS OF VERBAL INTERACTION IN SUPERVISORY CONFERENCES WITH STUDENT TEACHERS

by

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The purpose of the study was to engage college supervisors in analysis of the verbal interaction they employed in the student teacher-supervisor conference. Specifically, do student teacher supervisors who engage in the systematic analysis of their verbal behavior when conferring with their student teachers modify their verbal behavior in subsequent conferences to an extent and in ways different from supervisors who do not engage in systematic analysis of their verbal behavior during confe.ences?

An experimental design was employed with the experimental group: (1) receiving training in analysis of verbal interaction, (2) analyzing their own verbal interaction, and (3) considering the results of the analysis of their verbal behavior. The control group did not receive systematic training, did not engage in analysis of their verbal behavior, and of course, did not have the opportunity to consider results of analysis.

Subjects in the study were fourteen college supervisors and fourteen student teachers during the 1971 spring semester of student teaching. Both supervisors and student teachers were in the Department of Elementary Education at a State College in New York. Students were pursuing their student teaching experience for elementary teaching certification in grades K-6.

Data consisted of audio-taped conferences: fourteen pre-treatment tapes (seven from the experimental group and seven from the control group) and fourteen post-treatment tapes (seven from the experimental group and seven from the control group). The tapes were analyzed for verbal interaction using the Arthur Blumberg Interaction Analysis System. The System provides data in a total of fifteen categories: ten for supervisor behavior, four for student teacher behavior, and one for silence or confusion. The central hypothesis of the study was to be tested in relation to thirteen identified variables. These thirteen variables represented a modification of the Blumberg System by elimination of particular categories and a combining of others.

## Findings

Those college supervisors who were trained in analysis of verbal interaction, analyzed their own verbal interaction, and considered the results of analysis, differed significantly from those college supervisors who were not trained, did not engage in the analysis of verbal behavior, and did not have the opportunity to consider results of analysis, in the following supervisor verbal behaviors:

1. They used more acceptance, clarification, or building on and developing the ideas suggested by student teachers.
2. They gave less information.
3. They used less extended talk on the information--giving and asking--level.

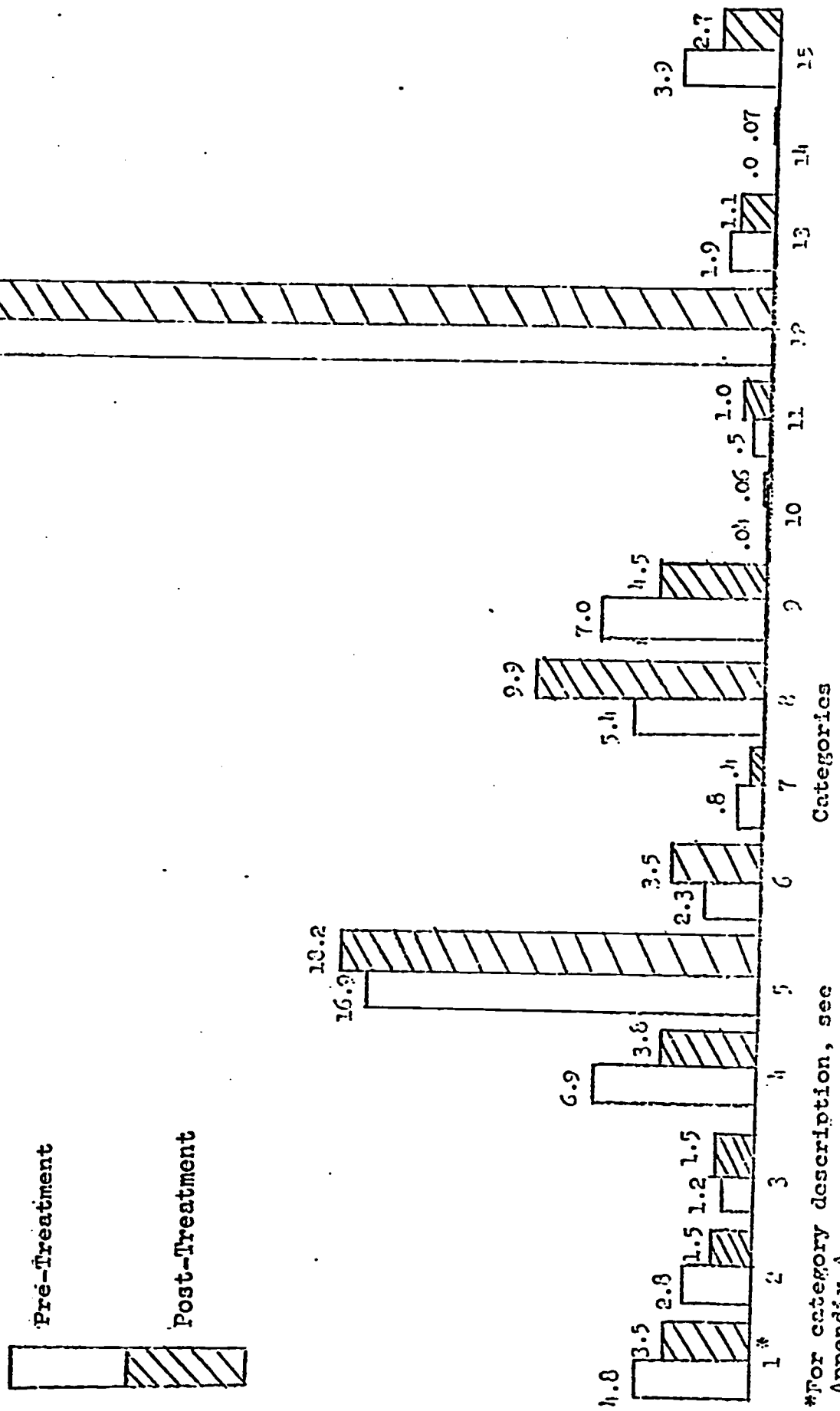
4. They became more indirect in supervisory style. Verbal behavior by the college supervisor with a concentration in the asking for opinions, information, suggestions, as well as accepting, praising, and using a student teacher's ideas during a supervisory conference.
5. They asked for more opinions that influenced the supervisee to describe, analyze, hypothesize, or evaluate something that had occurred, was occurring, or may occur in the classroom or in the interaction taking place. (Significant at the .10 level.)

Supplementary data was secured by means of a forty-seven item questionnaire constructed by the researcher and given to student teachers in the experimental and control groups after each of four sequential conferences. The purpose of the questionnaire was to gain insights into the student teachers' perceptions of the human relations qualities displayed by the college supervisors, the verbal processes employed, and the substance of the conferences (content and procedure). Specifically, if college supervisors in the experimental group modified their verbal behavior due to training in interaction analysis, were student teachers aware of this process and did it change their perception of the human relations employed by the college supervisor? Questionnaire data were used to give impetus to, reflect, or clarify findings pertinent to the major hypothesis and no attempt was made to correlate the findings.

The data obtained indicated the student teacher's perceptions were rather consistent in the three major divisions: human relations, verbal process, substance. Human relations qualities of the college supervisors, as perceived by student teachers, were highly positive and remained constant throughout the semester. There was a slight increase in the experimental verbal process scores, especially those questions pertaining to involvement in problem solving, but, in general, student teachers continued to give lower ratings to statements involving their output in problem solving, pursuing ways of collecting data pertinent to their teaching behavior, being asked thought provoking questions, and being allowed time to think, discover, and explore ideas. Findings in interaction analysis would confirm the perceptions of student teachers.

FIGURE 1

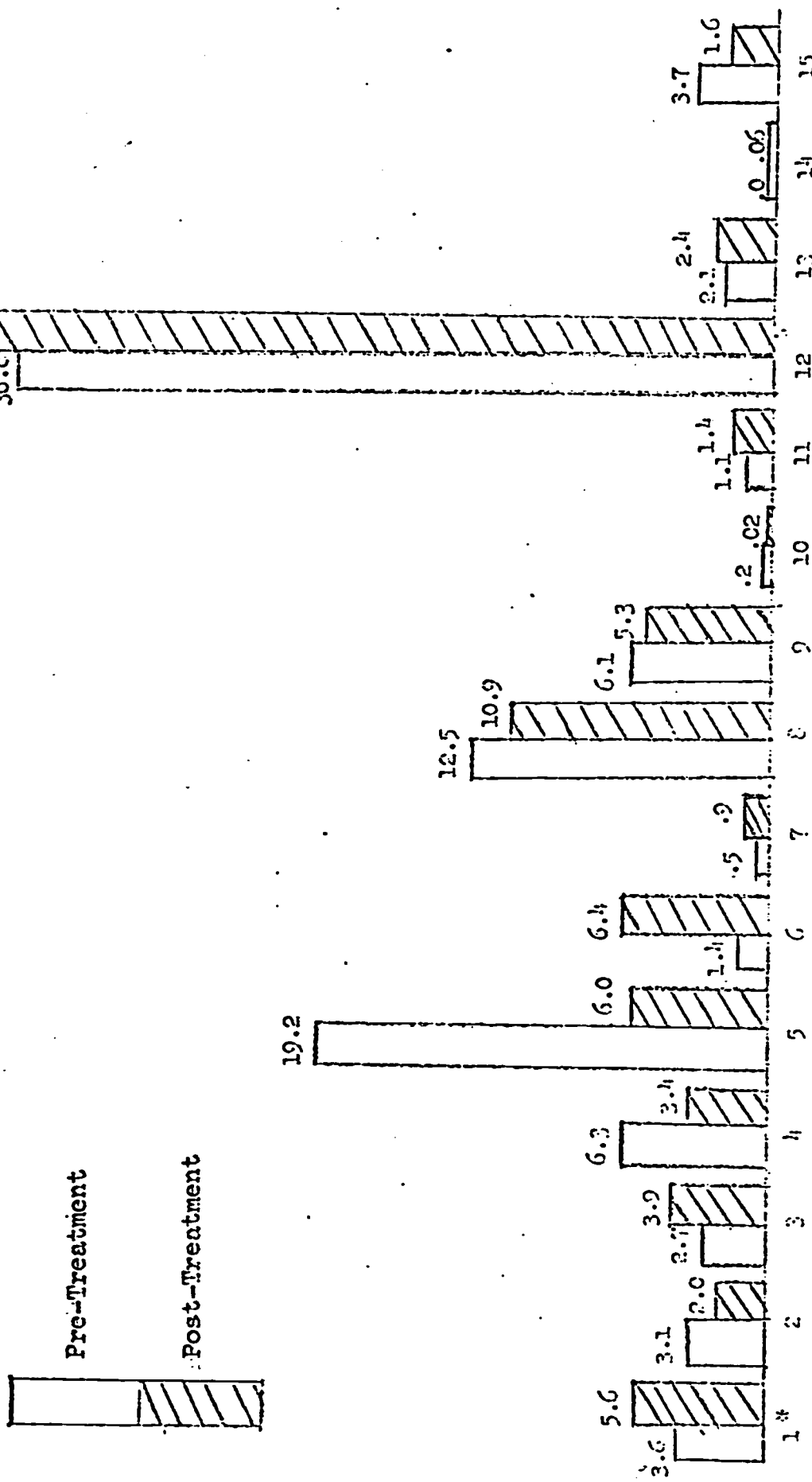
A COMPARISON OF THE PRE-TREATMENT AND POST-TREATMENT MEAN PERCENTAGE SCORES OF VERBAL BEHAVIOR FOR THE CONTROL GROUP IN FIFTEEN CATEGORIES OF THE BLUMBERG SYSTEM




*For category description, see Appendix A

FIGURE 2

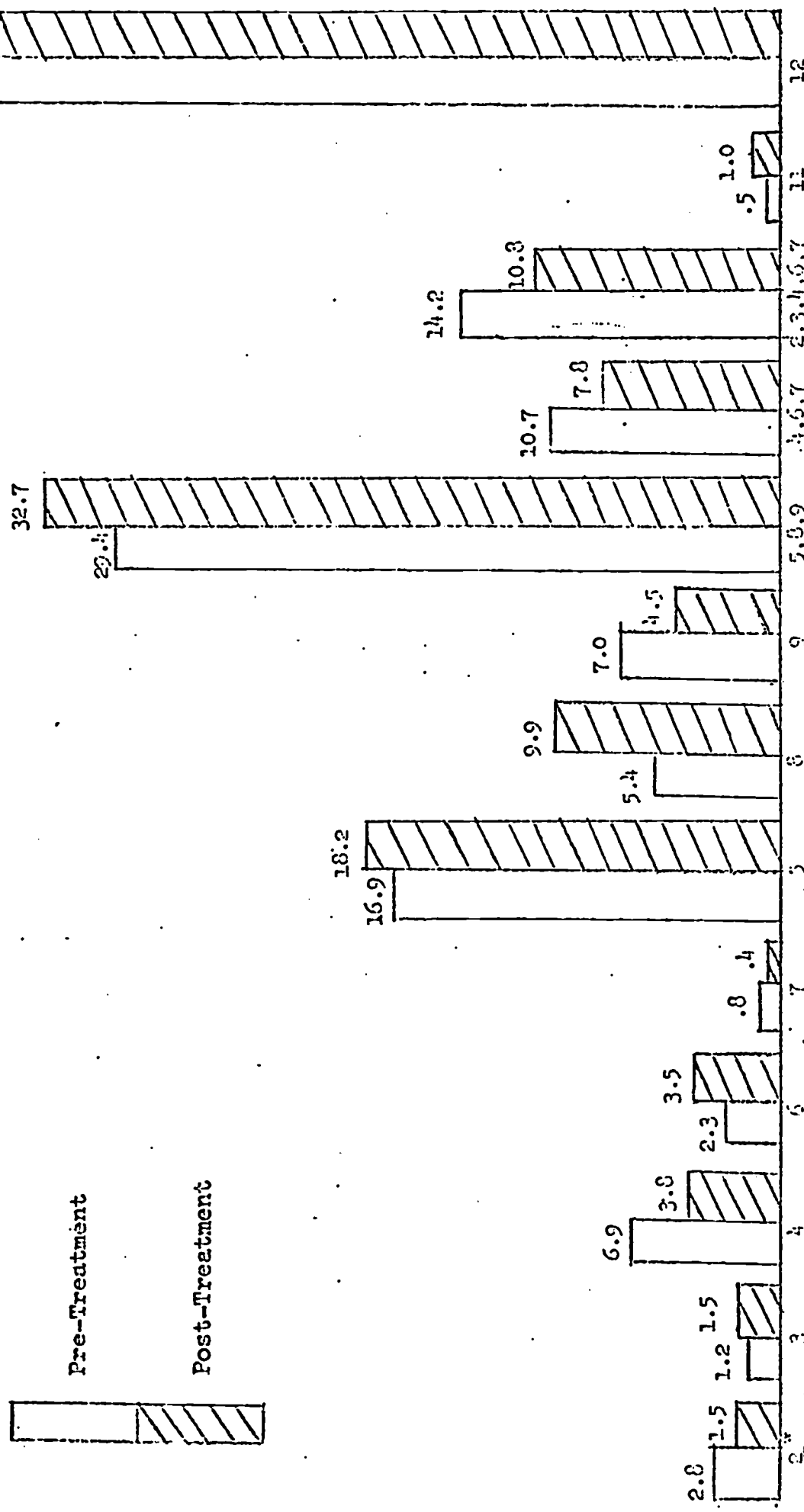
A COMPARISON OF THE PRE-TREATMENT AND POST-TREATMENT MEAN PERCENTAGE SCORES OF VERBAL BEHAVIOR FOR THE EXPERIMENTAL GROUP IN FIFTEEN CATEGORIES OF THE BLOMBERG SYSTEM




*For category description, see Appendix A

FIGURE 3

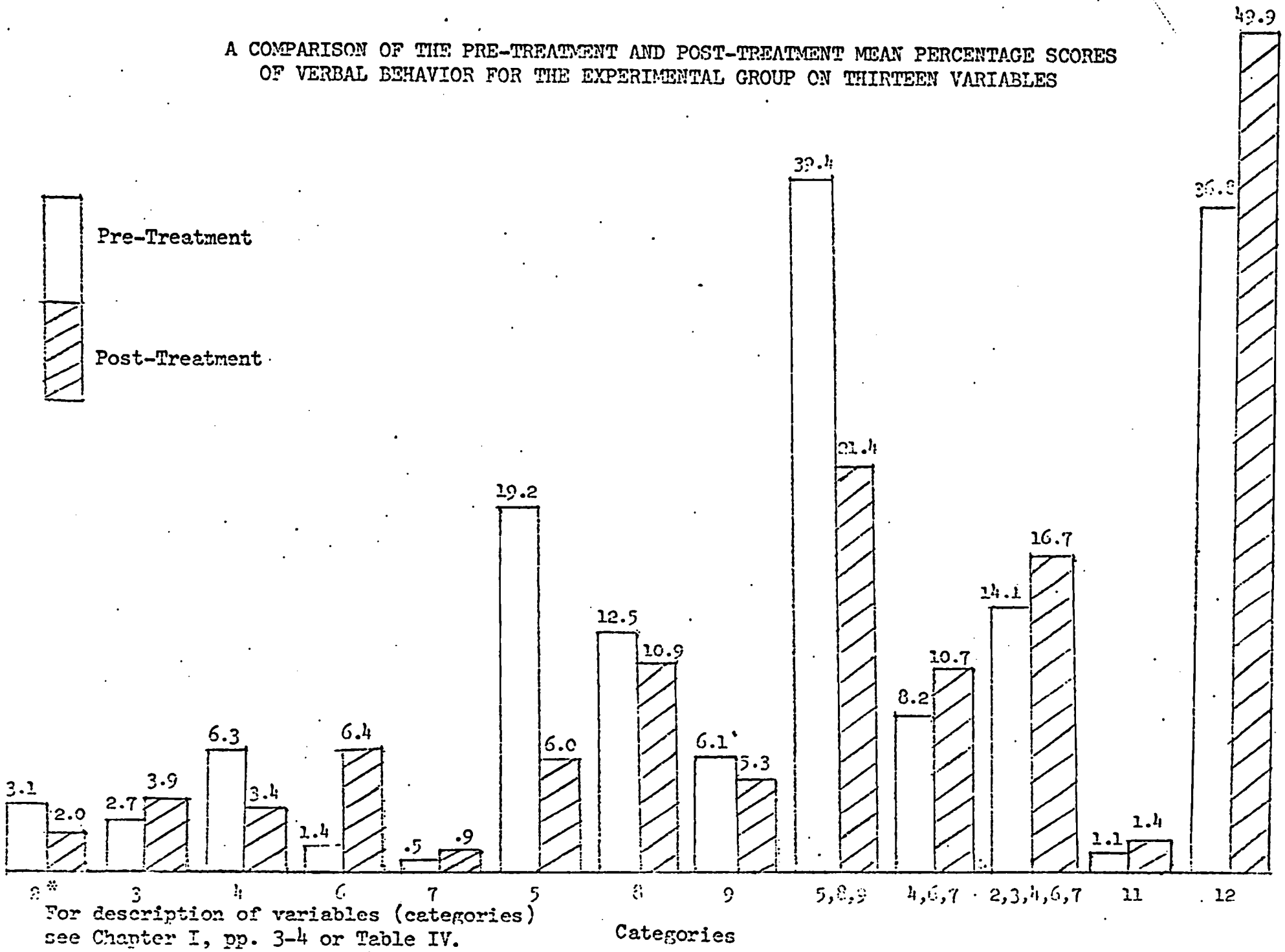
A COMPARISON OF THE PRE-TREATMENT AND POST-TREATMENT MEAN PERCENTAGE SCORES OF VERBAL BEHAVIOR FOR THE CONTROL GROUP ON THIRTEEN VARIABLES




For description of variables (categories) see Chapter I, pp. 3-4 or Table III.

FIGURE 4

A COMPARISON OF THE PRE-TREATMENT AND POST-TREATMENT MEAN PERCENTAGE SCORES OF VERBAL BEHAVIOR FOR THE EXPERIMENTAL GROUP ON THIRTEEN VARIABLES




For description of variables (categories) see Chapter I, pp. 3-4 or Table IV.

TABLE III

A COMPARISON OF THE PRE-TREATMENT AND POST-TREATMENT PERCENTAGES OF VERBAL BEHAVIOR FOR THE CONTROL GROUP ON THIRTEEN VARIABLES (N=7)

| Variables Category | Mean Difference# | S. D. | t* Value | Level of Significance+ |
|---|---|---|---|---|
| Praise 2 | 1.32 | 1.62 | 2.16 | $p < .10$ |
| Uses Teacher's Ideas 3 | -0.31 | 1.74 | -0.47 | |
| Asks for Information 4 | 3.12 | 2.88 | 2.87 | .05 |
| Asks for Opinions 6 | 1.24 | 3.25 | 1.01 | |
| Asks for Suggestions 7 | .47 | .57 | 2.21 | $p < .10$ |
| Gives Information 5 | -1.28 | 8.93 | -0.38 | |
| Gives Opinions 8 | -4.50 | 10.96 | -1.09 | |
| Gives Suggestions 9 | 2.53 | 2.62 | 2.55 | .05 |
| Direct Supervisory Influence Non-Problem Solving Sum of 5, 8, 9 | -3.25 | 12.09 | -0.71 | |
| Indirect Supervisory Influence Sum of 2, 3, 4, 6, 7 | 3.37 | 3.61 | 2.47 | .05 |
| Problem-Solving Sum of 4, 6, 7 | 2.36 | 2.73 | 2.28 | $p < .10$ |
| Student Teacher Asks 11 | -0.48 | 0.99 | -1.29 | |
| Student Teacher Gives 12 | -1.90 | 9.60 | - .52 | |

* t Value for two correlated samples: hypothesis that a mean difference = 0.

\+ 6 df on a two tailed test at .05 level of significance.

\# Negative numbers indicate an increase in the post-treatment data. Positive numbers indicate a decrease in the post-treatment data.

TABLE IV

A COMPARISON OF THE PRE-TREATMENT AND POST-TREATMENT PERCENTAGES OF VERBAL BEHAVIOR FOR THE EXPERIMENTAL GROUP ON THIRTEEN VARIABLES (N=7)

| Variables Category | Mean Difference# | S. D. | t* Value | Level of Significance+ |
|---|---|---|---|---|
| Praise 2 | 1.17 | 1.44 | 2.15 | $p < .10$ |
| Uses Teacher's Ideas 3 | -1.27 | 1.85 | -1.83 | |
| Asks for Information 4 | 2.71 | 3.66 | 2.10 | $p < .10$ |
| Asks for Opinions 6 | -5.05 | 3.05 | -4.39 | .05 |
| Asks for Suggestions 7 | -0.38 | 0.74 | -1.36 | |
| Gives Information 5 | 13.26 | 9.50 | 3.69 | .05 |
| Gives Opinions 8 | 1.68 | 11.85 | 0.38 | |
| Gives Suggestions 9 | 0.89 | 7.43 | 0.32 | |
| Direct Supervisory Influence Non-Problem Solving Sum of 5, 8, 9 | 18.06 | 17.25 | 2.77 | .05 |
| Indirect Supervisory Influence Sum of 2,3,4,6,7 | -2.63 | 2.94 | -2.37 | $p < .10$ |
| Problem Solving Sum of 4,6,7 | -2.52 | 1.90 | -3.52 | .05 |
| Student Teacher Asks 11 | 0.37 | 1.34 | -0.73 | |
| Student Teacher Gives 12 | 13.10 | 15.07 | -2.30 | $p < .10$ |

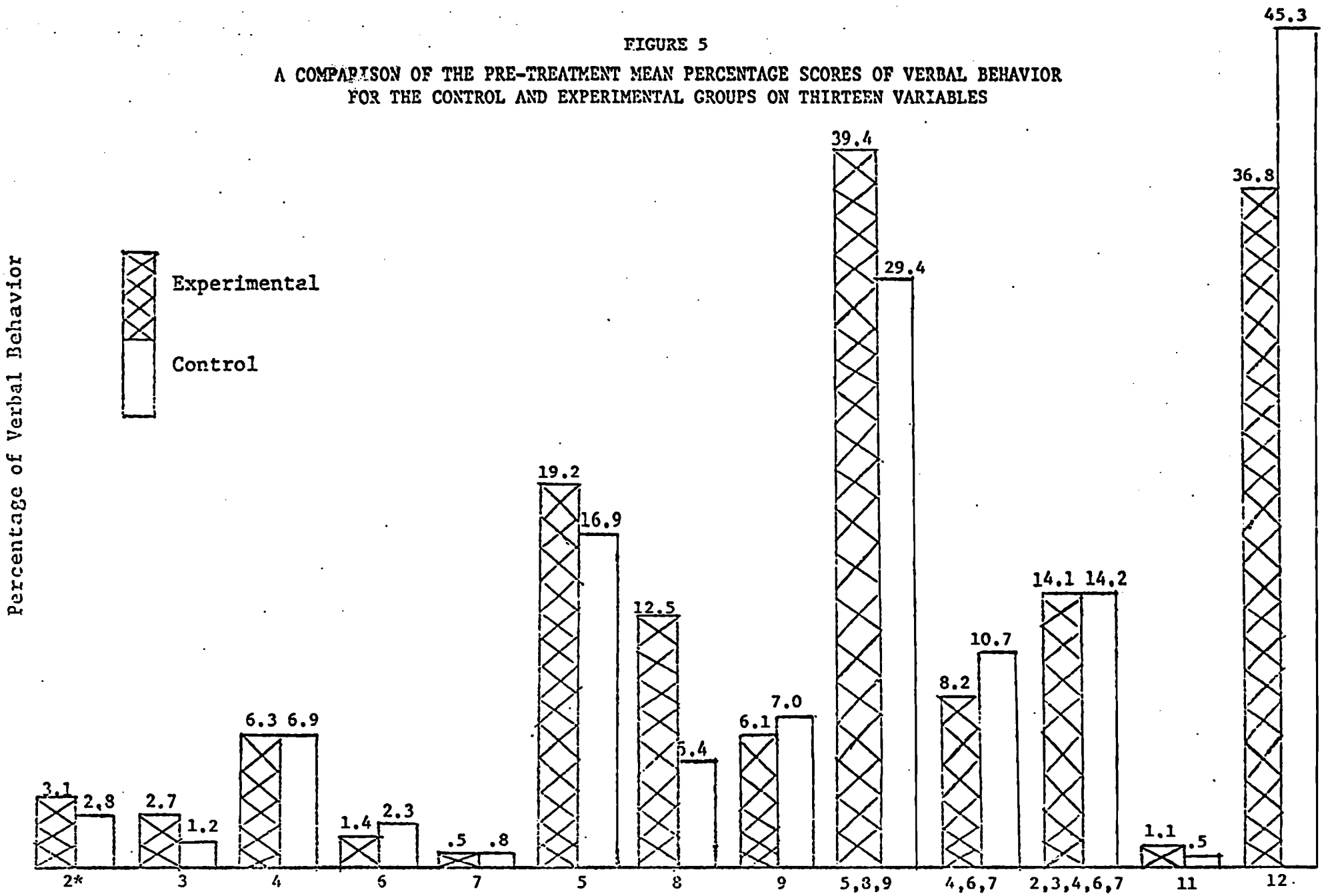
* t Value for two correlated samples: hypothesis that a mean difference = 0.

\+ 6 df on a two tailed test at .05 level of significance.

\# Negative numbers indicate an increase in the post-treatment data. Positive numbers indicate a decrease in the post-treatment data.

FIGURE 5

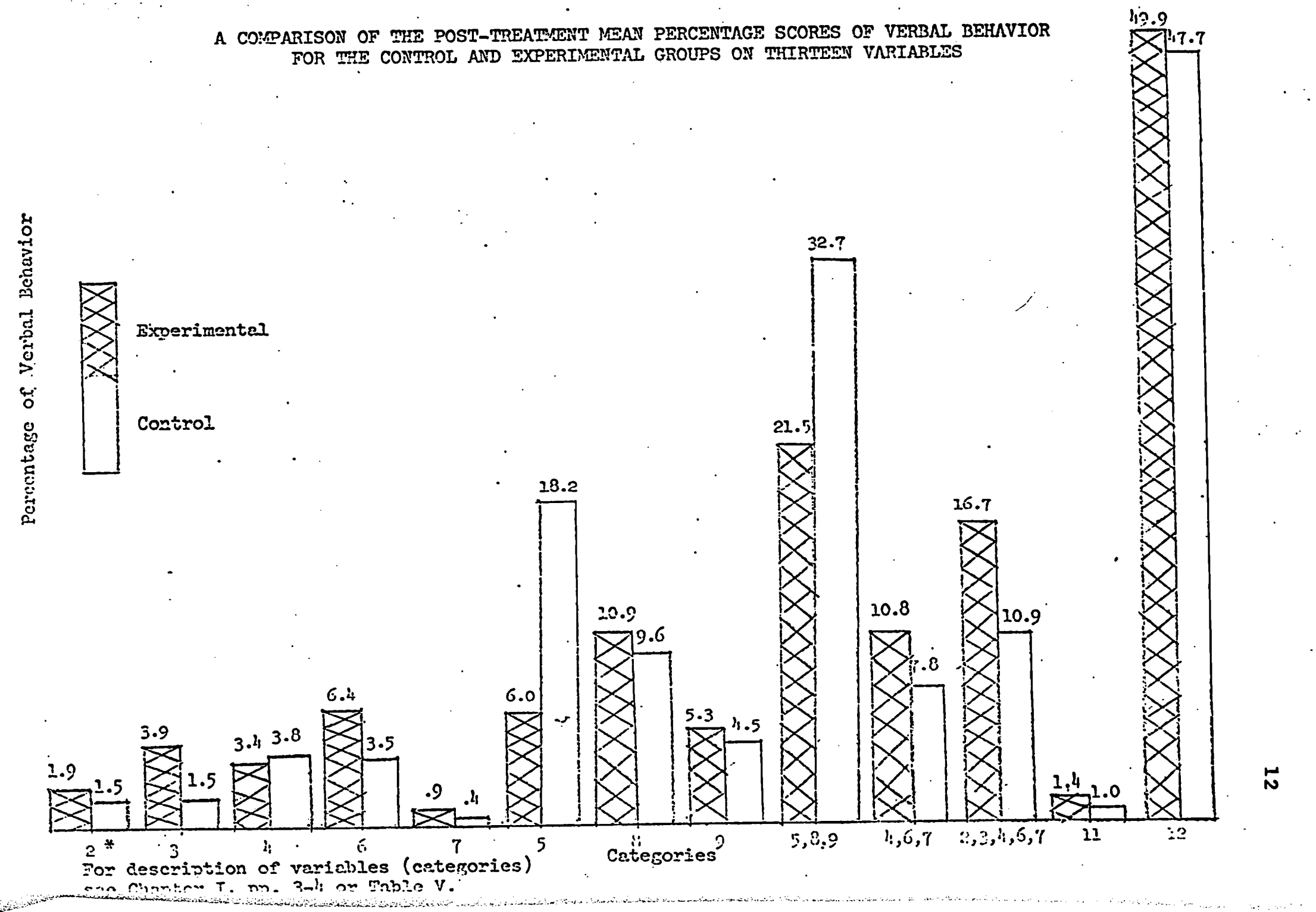
A COMPARISON OF THE PRE-TREATMENT MEAN PERCENTAGE SCORES OF VERBAL BEHAVIOR FOR THE CONTROL AND EXPERIMENTAL GROUPS ON THIRTEEN VARIABLES




*For description of variables (categories) see Chapter I, pp. 3-4

FIGURE 6

A COMPARISON OF THE POST-TREATMENT MEAN PERCENTAGE SCORES OF VERBAL BEHAVIOR FOR THE CONTROL AND EXPERIMENTAL GROUPS ON THIRTEEN VARIABLES




For description of variables (categories) see Chapter I, pp. 3-4 or Table V.

TABLE V

A COMPARISON OF THE POST-TREATMENT PERCENTAGES OF VERBAL BEHAVIOR FOR THE CONTROL AND EXPERIMENTAL GROUPS ON THIRTEEN VARIABLES

| Variables Category | Control $\bar{X}$ | (N=7) S. D. | Experimental $\bar{X}$ | (N=7) S. D. | t* | Level of Significance+ |
|---|---|---|---|---|---|---|
| Praise 2 | 1.54 | 1.12 | 1.98 | 1.58 | 0.61 | |
| Uses Teacher's Ideas 3 | 1.54 | 1.15 | 3.95 | 2.00 | -2.76 | .05 |
| Asks for Information 4 | 3.87 | 3.22 | 3.44 | 1.91 | 0.30 | |
| Asks for Opinions 6 | 3.57 | 2.62 | 6.45 | 3.24 | -1.83 | $p < .10$ |
| Asks for Suggestions 7 | 0.37 | 0.99 | 0.90 | 1.70 | -0.96 | |
| Gives Information 5 | 18.27 | 9.17 | 6.00 | 3.13 | 3.35 | .05 |
| Gives Opinions 8 | 9.95 | 11.64 | 10.91 | 5.79 | -0.19 | |
| Gives Suggestions 9 | 4.48 | 5.26 | 5.28 | 5.11 | -0.29 | |
| Direct Supervisory Influence Non-Problem Solving Sum of 5,8,9 | 32.71 | 15.96 | 21.53 | 12.15 | 1.48 | |
| Indirect Supervisory Influence Sum of 2,3,4, 6,7 | 10.91 | 4.50 | 16.73 | 4.08 | -2.54 | .05 |
| Problem Solving Sum of 4,6,7 | 7.81 | 3.59 | 10.80 | 4.51 | -1.37 | |
| Student Teacher Asks 11 | 1.02 | 0.93 | 1.47 | 1.65 | -0.63 | |
| Student Teacher Gives 12 | 47.70 | 14.16 | 49.92 | 14.79 | -0.29 | |

* t Value for two independent samples: hypothesis that $u_1 = u_2$

+ 12 df on a two tailed test at .05 level of significance.

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