

DOCUMENT RESUME

ED 041 314

CG 005 648

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TITLE Environmental Press in the Secondary School: A Measure of Teacher and Student Perceptions.
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PUB DATE [67]
NOTE 11p.

EDRS PRICE EDRS Price MF-\$0.25 HC-\$0.65
DESCRIPTORS Attitudes, Behavior, *Educational Environment, *Environment, *Secondary Schools, *Student Attitudes, Student Behavior, Students, *Teacher Attitudes, Teacher Behavior

ABSTRACT

The purposes of this study were to measure secondary school environments in order to: (1) determine if these environments as perceived by students and teachers differed along selected variables; and (2) to determine if teacher perceptions in selected schools differed from student perceptions. School environment was measured by the Perceived Environment Profile. This study was conducted in six secondary schools in Massachusetts and New Hampshire. Analysis of variance yielded significant (.05) school to school differences and significant teacher-student perception discrepancies at certain schools. (Author)

ED041314

ENVIRONMENTAL PRESS IN THE
SECONDARY SCHOOL: A MEASURE OF
TEACHER AND STUDENT PERCEPTIONS

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The influential role of environment on behavior is well known. The individual as a reacting organism, is a product of its past environment, while the immediate environment dictates current behavior and indirectly influences later behavior as well (Anastasi, 1958).

If the school environment does play a predictable role in the development of student behavior, it is important to measure this environment as accurately as possible.

Academic environments, as expressed by formal school objectives, are statements of intent which hopefully find expression in various curricular practices, services, and other school-related activities. These school objectives or statements of intent define the intended institutional press of the school, and indicate the directions in which the school proposes to influence the behavior of its students (Pace and Stern, 1958). Such academic environments are only intended environments unless they are so perceived by most or all members of the school community.

The purposes of the present study were to measure secondary school environments with a view to empirically establishing whether or not secondary school environments as perceived by students and teachers differed along selected variables, and to determine if teacher perceptions in selected schools differed from student perceptions. Few studies if any to date have been concerned with systematically identifying student and teacher perceptions of environmental features across several secondary schools.

Environment as used in this study refers to the cumulative

rules, practices, activities, facilities and other features of a school which form an impression on its students and teachers.

The two hypothesis which order this study in null form are:

1) Differences do not exist in the perceived educational environment of secondary schools when measures along selected variables, and 2) Teacher perceptions of educational environments do not differ from student perceptions.

The Perceived Environment Profile, based on Pace's (1967) College and University Environment Scales, was developed for this investigation. The scale was administered to the teachers and junior class students of six high schools located in Massachusetts and New Hampshire.

The PEP is a 55 item scale which contains statements about high school. It includes five sub-scales which are labeled Practicality, Community, Awareness, Propriety and Scholarship. Students are asked to respond as to whether each statement is generally true or generally false about their school. A sample statement from the Practicality scale reads as follows: "In many classes students sit in any seat they choose." This statement was answered as true by 90-100% of the students in one school, but only 0-9% of the students of another school agreed that this same statement was true about their school.

The existence of school to school differences in academic environments was measured in the form of response variance on individual statements of a given variable, by overall response variance for a given sub-scale, and by response variance across all sub-scales.

Table 1 reports student data on individual response variance for the Awareness Scale. A criterion used by Pace (Final Report, 1967) to select the most discriminating items for the revised form of the CUES was that the item should describe neither too rare nor too common a characteristic of college environments. Thus it was determined that the average percent agreeing with the keyed response across the sample should be at least 10 percent and not higher than 90 percent. A second criterion was that there should be reasonable variance in the items and that the sigma for each item should be at least 10. All PEP items met the first criterion and 50 of the 55 met the second.

Table 1 about here

Individual scale scores for both students and teachers were submitted to an analysis of variance in order to determine sub-scale variability across all schools. School to school differences on all five sub-scales were significant beyond the .05 level of confidence. Table 2 presents data for the Community scale.

Table 2 about here

A graphic representation of the raw scores differences among sample schools on the Scholarship scale may be found in Figure 1. The profile traces interschool and intraschool differences for both

teachers with the respective means and sigmas

Figure 1 about here

variance across all sub-scales for two selected schools and in Figure 2. Raw scores for each sub-scale were converted to percentile equivalents and graphically represented.

Figure 2 about here

and hypothesis in null form stated that teacher and student scores in some schools did indeed differ in 28 out of 30 schools. Significance of these differences was tested via analysis of variance. Results indicated teacher-student differences in Intellectual, Community, and Awareness scales were significant beyond the .05 level. Subsequent analysis revealed, however, the presence of interaction effects did indicate that significant teacher-student differences in Scholarship did not exist in all schools, they did exist in one or more schools in each of the two schools. Table 3 presents some data from the Awareness scale.

Table 3 about here

The findings in the present study give adequate evidence to reject the null hypotheses.

The results of this study clearly suggest that a great deal of diversity exists in the educational environments among secondary schools and that this environment is measureable. The study also suggests that teacher-student discrepancies in perceptions of the same environment also exist, and these are similarly measureable.

The Perceived Environment Profile has demonstrated its potential value and its use as a valid instrument to measure environmental press.

TABLE 1
DISTRIBUTION OF SCHOOL RESPONSES IN KEYED DIRECTION FOR AWARENESS SCALE
STUDENT DATA

| Item No. | Number of Schools in Percent. Range | | | | | | | | | | X | Sigma |
|----------|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|----|-------|
| | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-100 | | |
| 3 | 3 | | 1 | 1 | | 1 | | | | | 22 | 21 |
| 8 | 2 | | | | 1 | 1 | | 1 | | 1 | 52 | 39 |
| 13 | | 1 | | 1 | | 1 | 3 | | | | 56 | 24 |
| 18 | | | | | 1 | 1 | 3 | | | 1 | 73 | 13 |
| 23 | | | | | | 3 | 1 | | | 1 | 67 | 19 |
| 28 | | | | 2 | 2 | | 1 | 1 | | 1 | 60 | 16 |
| 33 | | | | | 2 | 2 | 2 | | | | 65 | 9 |
| 38 | | | | | 1 | 1 | 1 | 1 | 2 | | 68 | 16 |
| 43 | 1 | | | 1 | | 1 | | | 1 | | 45 | 28 |
| 48 | 2 | 1 | 1 | 1 | | | | | | | 25 | 21 |
| 53 | | | 2 | 3 | | | | | | | 35 | 17 |

N = 6



TABLE 2

ANALYSIS OF VARIANCE FOR COMMUNITY SCORES
OF TEACHERS AND STUDENTS FROM SIX SCHOOLS
ADJUSTED FOR DISPROPORTIONALITY

| Source | df | SS | MS | F |
|------------------------------------|-----|---------|--------|-----------|
| Schools | 5 | 229.48 | 45.90 | 15.14*** |
| Students- Teachers | 1 | 303.59 | 303.59 | 100.13*** |
| Schools x Students- Teachers | 5 | 35.58 | 7.11 | 2.35** |
| Error | 814 | 2468.15 | 3.03 | |

***p < .001
**p < .05

TABLE 3

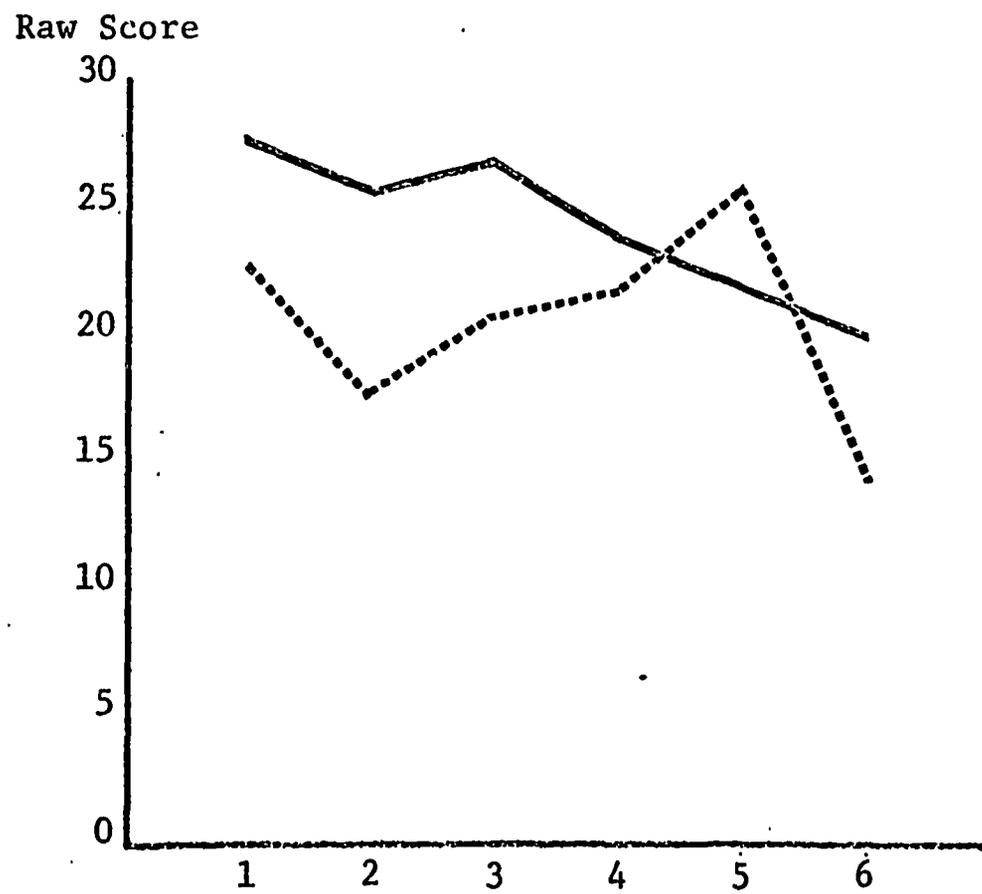
ANALYSIS OF VARIANCE FOR AWARENESS SCORES
OF TEACHERS AND STUDENTS FROM SIX SCHOOLS
ADJUSTED FOR DISPROPORTIONALITY

| Source | df | SS | MS | F |
|------------------------------------|-----|---------|-------|---------|
| Schools | 5 | 111.05 | 22.21 | 8.46*** |
| Students- Teachers | 1 | 26.08 | 26.08 | 9.93*** |
| Schools x Students- Teachers | 5 | 52.19 | 10.44 | 3.98** |
| Error | 814 | 2136.36 | 2.62 | |

***p < .001
**p < .01

FIGURE 1

Raw Score Profile for Scholarship Scale
Across Schools
(Students and Teachers)



Students

Mean = 20.7

S.D. = 4

N = 6

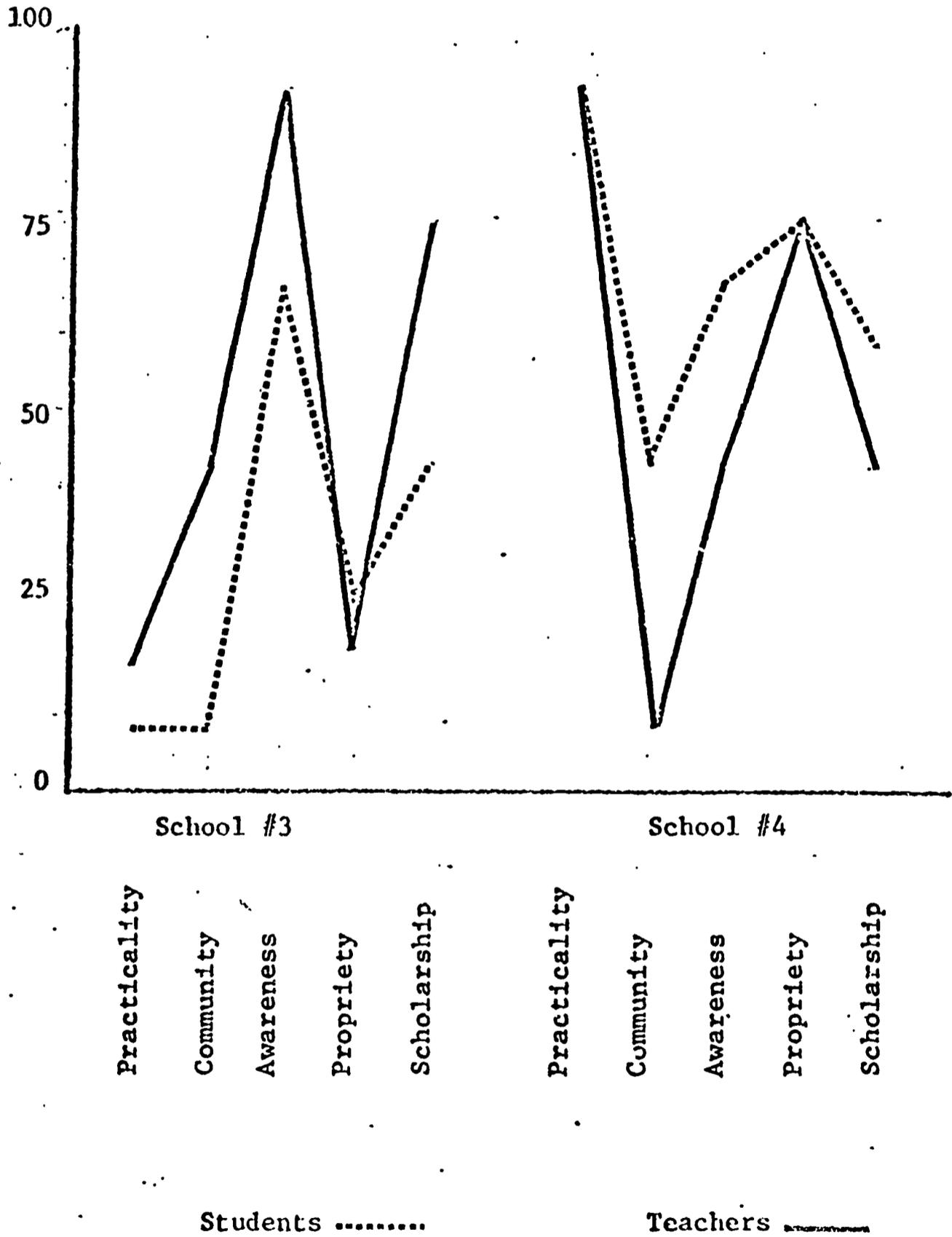
Teachers ———

Mean = 24.5

S.D. = 2.8

N = 6

FIGURE 2
PEP School Profiles
(Students and Teachers)



REFERENCES

, A. Heredity, environment and the question, "how."
Biological Review, 1958, 65, 197-208.

R. CUES, a prospectus. Princeton, Educational Testing
Service, 1967.

R. Analysis of a national sample of college environments,
1 Report. Washington, D. C.: USOE, Bureau of Research,

R. and Stern, G. An approach to the measurement of psy-
chological characteristics of college environments. Journal
Educational Psychology, 1958, 49, 269-277.