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ABSTRACT

The purpose of this study was to determine patterns of similar ties and differences in perception of the college environment of four groups of undergraduate students classified as to degree of creative ability. Three questions were asked: (1) do perceptions of the actual or real campus environment differ for the group with the higher (HM) as opposed to the group with the lower (LM) semantic creativity scores; for the group with the higher (HF) as opposed to the lower (LF) figural creativity scores? (2) do HM versus LM or HF versus LF differ in their perceptions of the desirable campus environment? and (3) if these groups do differ, what is the extent and direction of these differences on each scale of the perceptual measure? 60 volunteers from the cooperating allied health school completed the specified series of perceptual scales. By means of their scores on six of Guilford's divergent thinking tests subjects were classified as one of the 30 highest or 30 lowest in semantic creative ability and again in figural creative ability. The perceptual measure used was Pace's College and University Environment Scales. The findings indicated that the high and low creativity groups did not differ in their perceptions of the desirable campus environment. (AF)



ACTUAL AND DECIFABLE CAMPUS ENVIRONMENT AS PERCEIVED BY ALLIED HEALTH STUDENTS CLASSIFIED INTO FOUR CREATIVE ABILITY GROUPS*

Julia Van Deucen Fox, O.T.R., Ph.D.

For more than a decade there has been an upsurge in research and writing on both creativity and the college environment. Recently, Michael (1968) integrated ideas from these two areas of investigation and suggested directions for research.

The problem addressed by the writer was that of describing patterns of similarities and differences in perception of the college environment by four groups of undergraduate students classified as to degree of creative ability. It was necessary for all the subjects to share essentially the same campus environment. A university school of health related professions was selected because of the professional affiliation of the investigator. Needless-to-say, the essence of the problem is not limited to perception of the allied health student's environment but is one which merits attack with subjects from many different kinds of homogeneous settings.

Two assumptions basic to the significance of the study were that it is desirable to foster the creative thinking of college students and that a measure of student perceptions of their campus environment can provide information relevant to such fostering.

Guilford has long been instrumental in providing the rationale for enhancement of creative thinking and recently Guilford and Tenopyr (1968) have discussed it in the context of the college student. Creative thinking is considered an important component of, if not synonymous with, problem solving ability. It is thus desirable that the college graduate function as creatively as possible -- not in the sense of being able to produce a great painting or poem -- but in the sense of being a person of creative ideas who can exhibit creative leadership and innovative behavior.

Hutchins has succinctly stated the rationale for research using perceptual measures.

. . . it is perhaps most critical that we endeavor to describe what the environment appears to be through the eyes of the student. If, indeed, the entire teachinglearning enterprise is one designed to bring about change in the behavior of the student as a result of his experience, then it is incumbent upon us to determine, not how we view this experience, but instead, how the student views this experience (1964, p. 272).

^{*} Paper based on author's Ph.D. dissertation data, University of Southern California, February, 1971.



Twenty questions were posed in the writer's original study toward description of the perceptual patterns of the creative vs. the less creative students. Only those questions for which results were promising are reported here.

The Questions

- 1. Do perceptions of the actual or real campus environment differ for the group with the higher (HM) as opposed to the group with the lower (LM) semantic creativity scores; for the group with the higher (HF) as opposed to the lower (LF) figural creativity scores?
- 2. Do HM vs. LM or HF vs. LF differ in their perceptions of the desirable campus environment?
- 3. If these groups do differ what is the extent and direction of these differences on each scale of the perceptual measure?

Procedure

Although a number of different procedures were used in the original study only those which led to promising results are reported here.

The subjects were 60 volunteers from the cooperating allied health school who completed the specified series of perceptual scales. By means of their scores on divergent thinking tests subjects were classified as one of the 30 highest or 30 lowest in semantic creative ability and again in figural creative ability. Six of Guilford's divergent thinking tests (Guilford, 1967) were used to measure creative thinking. The three tests with figural content were Decorations, Making Objects, and Match Problems; the three tests with semantic content were Alternate Uses, Possible Jobs and Consequences. Scoring was done by a paid, trained person associated with the Sheridan Psychological Services.

The perceptual measure used by the writer was Pace's <u>College and University</u> <u>Environment Scales</u> (Pace, 1969), an extensively researched instrument commonly called <u>CUES</u>.

CUES was administered to the subjects twice, once under the manual's directions to describe the real environment and once under directions to describe the ideal campus environment. CUES has been designed to measure group consensus, that is, it is essentially an instrument for polling opinion. The score for each scale is obtained by adding the number of items answered in the keyed direction by 66% of the subjects, subtracting the number of items answered in the keyed direction by 33% or fewer subjects and adding an appropriate constant to eliminate possible negative scores. Thus, one gains a score which indicates the degree of group consensus on each scale. Scoring was done by computer at Educational Testing Service, Princeton.

CUES consists of five original scales, <u>Practicality</u>, <u>Community</u>, <u>Awareness</u>, <u>Propriety</u> and <u>Scholarship</u> plus two subscales, <u>Campus</u> <u>Morale</u> and <u>Quality of</u> <u>Teaching and Faculty-student Relationships</u>. Pace (1969) has reported from the data of test-retest comparisons of <u>CUES</u> scores that if samples are comparable scale scores will usually not differ more than three points. In the



writer's study any scale score difference between the high and low creativity groups which exceeded three points was thus considered a meaningful difference.

Analysis of Findings

Surprisingly, the high and low creativity groups did not differ in their perceptions of the desirable campus environment. Meaningful differences were observed between creativity groups in their perception of the actual or existing campus environment. See the table below for scale scores.

CUES SCORES REPRESENTING PERCEPTIONS OF THE ACTUAL CAMPUS ENVIRONMENT

Scale	Figural High	Groups Low	Semantic High	Group: Low
Practicality	13	15	14	13
Scholarship	27	28	28	29
Community	18	23*	21	21
Awareness	10	15*	10	14*
Propriety	32	33	31	32
lorale	22	27*	27	25
eaching	16	17	17	18

^{*} Scale score differences exceed three points.

Those allied health students who scored highest on the figural creativity tests perceived their campus environment as less high in community, awareness and morale than did those students scoring lowest on these tests. Those subjects in the high semantic creativity group perceived less environmental awareness than did their less semantically creative peers. It is important to note that when perceptual differences did occur the high creative subjects consistently perceived less of the above dimensions in the same environment than the low group perceived. For pictorial (rather than scientific) purposes an analogy might be that the hungry man perceives a medium size steak as smaller than the same size steak is perceived by a satiated man.

Discussion

Although the data of this exploratory study are obviously too limited to encourage definitive application of the findings to a school setting, directions for practical application seem appropriate in view of the positive result, particularly if future research should reinforce these findings. There are two principal directions for practical application of the findings -- selection and environmental manipulation. The focus of the writer's study was upon better understanding of creative students toward potential manipulation of their environment of learning. The results of the study suggest that stimuli should be employed in higher education such that creative students perceive campus



awareness, community and morale at the same level as do their less creative ters.

The writer's data in no way lead directly to ways of providing appropriate stimuli for creative students but Pace's definitions (Pace, 1969) of those scales where differences occured can illustrate the possibilities. The Community Scale score indicates the degree of perceived togetherness and group spirit on the campus. For example, an item contributing to this score and perceived differently by high and low creatives was "This school has a reputation for being friendly."

The Awareness Scale score reflects emphasis upon perceived personal, poetic and political meaning with telerance for nonconformity. A sample item perceived differently by creativity groups was "Controversial speakers stir a lot of student discussions."

The Morale Subscale reflects perception of combined intellectual, free and group oriented dimensions of the campus environment. An item from the subscale is "Most faculty not interested in students personal problems."

Many suggestions for creativity stimulation can be derived from these scale definitions but the limited data of the writer's study indicate the need for more investigation rather than the immediate application of the findings even in the original research setting.

Further, it must be stressed that since the various student environments differ considerably application of the author's findings to other settings can not be recommended -- that the general significance of this study lies rather in its having demonstrated a feasible way of gaining insight into the highly creative student in one's own particular academic environment.

References

Guilford, J. P. The nature of human intelligence. New York: McGraw-Hill, 1967.

Guilford, J. P., & Tenopyr, M. Implications of the structure-of-intellect model for high school and college students. In W. B. Michael (Ed.), Teaching for creative endeavor. Blocmington: Indiana University Press, 1968.

Hutchins, E. The AAMC longitudinal study: Implications for medical education. Journal of Medical Education, 1964, 39, 265-277.

Michael, W. B. The college and university. In W. B. Michael (Ed.), <u>Teaching</u> for creative endeavor. Bloomington: Indiana University Press, 1968.

Pace, C. R. CUES: College and University Environment Scales. Princeton, N.J.: Educational Testing Service, 1969.

