DOCUMENT RESUME

ED 134 849 CG 011 006

AUTHOR Lucco, Robert J.; MacDougall, Mary A.
TITLE Person-Environment Transactions in Elementary Counseling and Noncounseling Settings.
PUB DATE [73]
NOTE 27p.; Paper presented at Annual Meeting of the American Educational Research Association (San Francisco, California, 1976)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Counseling; *Educational Environment; Educational Research; Elementary Education; Elementary School Students; *Psychological Needs; *Race; *Sex Differences; Social Psychology; *Socioeconomic Status; Speeches; *Student Needs

ABSTRACT

The purpose of the present study was to explore the nature of person-environment transactions in relation to the elementary school setting. The research employed the theoretical assumptions of Murray (1938) and the instrumentation of Stern (1970). Two principal questions were explored. Do the socio-psychological needs of students differ with respect to sex, race, or socio-economic status? Do educational environments differ with respect to school (counseling vs. non-counseling) and/or grade level? Discriminate analyses revealed that student needs did differ significantly with respect to sex, race and SES; and that school environments vary with regard to counseling and grade level. (Author)

PERSON-ENVIRONMENT TRANSACTIONS IN ELEMENTARY COUNSELING AND NON-COUNSELING SETTINGS

The purpose of the present study was to explore the nature of person-environment transactions in relation to the elementary school setting. The research employed the theoretical assumptions of Murray (1938) and the instrumentation of Stern (1970).

Two principal questions were explored. Do the socio-psychological needs of students differ with respect to sex, race, or socio-economic status? Do educational environments differ with respect to school (counseling vs. non-counseling) and/or grade level?

Discriminate analyses revealed that student needs did differ significantly with respect to sex, race and SES; and that school environments vary with regard to counseling and grade level.

Robert J. Lucco
Virginia Beach City Public Schools
Mary Ann MacDougall
University of Virginia

TABLE OF CONTENTS

PERSON-ENVIRONMENT TRANSACTIONS IN ELEMENTARY COUNSELING AND NON-COUNSELING SETTINGS

THE BACKGROUND

Backman and Secord (1968) offer us a socio-psychological interpretation of the nature of our educational institutions. According to their observations:

> The school may be viewed as a miniature society, having its own culture or climate, which in turn is made up of a variety of identifiable subcultures that affect the behavior and performance of the student in various ways [p. 48].

They suggest that school climate or institutional environment is comprised of two major sources of influence, the structural or nomothetic, and the substructural or idiographic. Along the structural dimension variation in climate stems from the organizational properties of the institution, and involves a particular system of role requirements and expectations. These institutional expectations are relatively fixed and enduring elements within the organizational structure, and are supported in part through tradition, administrative policies, and individuals occupying key positions within the institutional hierarchy.

The second source of variation in climate stems from the substructural character of the institution. This dimension is a function of the occupant's individual and/or shared perception of the environment. Because schools serve children from given areas, the composition of the student body can be expected to differ with respect to race, social class, and other characteristics related to group values, beliefs, and ideals. Thus, the school environment is perceived and interpreted differentially by varying populations of students.

Additionally, it is important to remember that each child who enters the school environment also possesses his own unique set of need-dispositions which distinguish him as an individual. These socio-psychological needs are similarly derived, in part, through one's primary group affiliations.

It is the complex nature of these person-environment transactions within educational settings which provides the focus for this research effort. The study rests on the assumption that effective counseling efforts are predicated upon the definition of person-environment interactions.

Lewin (1951) has defined behavior as a function of the relationship between the person (i.e., his "psychological environment" or the goals and values which exist for him as a group member), B = F(P,E). According to Lewin (1951):

> In this equation the person (P) and his environment (E) have to be viewed as variables which are mutually dependent upon each other. In other words, to understand or to predict behavior, the person and his environment have to be considered as one constellation of interdependent factors [pp. 239-240] .

It is the combination of these individual components and perceived group components which comprise the person's "psychological field." The disposition of which, at any given time, determines behavior.

This predominately psychological interpretation of the interaction between person and environment is also witnessed in the work of Henry Murray (1938). For Murray, personality is defined as a more or less enduring organization of need-dispositions which govern one's unique perceptions and reactions to the environment and its expectations. However, Murray (1953) also maintains that:

> A person is an emergent entity <u>of</u> and <u>in</u> a certain physical, social, and cultural milieu. He cannot be properly represented in isolation from his locale, or from the structure of that group of which he is a member, or from his status (role) in the structure of that group [p. 3] .

Based upon these assumptions Murray developed a "need-press" model for behavior. Within this model, behavior is defined as the natural outcome of the interaction between person and environment. Stated simply, an environmental object or person produces a particular press, which serves to facilitate or impede the efforts of an individual to realize a given goal or psychological need. Behavior then, for Murray, would be a function of needs times press.

Recently, Stern (1970) has attempted to operationalize Murray's concepts in an effort to gather empirical support for the theory as it relates to the educational setting. Early in his explorations, Stern (1956) suggested that human behavior could be more effectively explained and predicted by making contextual analyses. He further indicated that the burden of such analyses rests upon the interaction of situational pressures and psychological needs, which tend to remain constant across situations. Stern (1970) proposes that certain environmental situations are more instrumental to the successful attainment of basic need-gratifying relationships than others. He concludes that a relatively congruent person-environment relationship (i.e., one where personal needs stand in a complimentary relationship to environmental press) may produce a sense of satisfaction and fulfillment for the participant(s) of that environment. This is in contrast to a relatively uncomplimentary needs-press relationship which may produce dissonance and stress among the participants(s).

Approaching person-environment relationships from a sociological perspective, Getzels borrowed from Parsons and Shils (1951) the notion of <u>social action</u>. From this basic orientation, Getzels and Thelen (1960) developed a theoretical model of the classroom as a social system. The model suggests that in school classes

personality needs, role-expectations, and classroom climate interact and predict group behavior, including academic achievement. The concept of role is defined as the "nomothetic element defining the behavior expected of the occupant of a given status or position in a given context or setting" [Sperry, 1972, p. 11] .

Getzels (1972) argues that behavior within a particular social system is a result of the interplay between the nomothetic and idiographic dimensions of that system. In other words, behavior equals needs times role-expectations. A representation of this basic model is reproduced in Figure 1, modifications enclosed in parenthesis.

Getzel presents the social system as consisting of two classes of phenomena, the publicly mandatory and the privately necessary, which he depicts in the above model as conceptually independent and phenomenally interactive. He describes these components in the following terms.

> There are on the one hand institutions with certain roles and expectations that will fulfil the goals of the system. There are on the other hand individuals with certain personalities and need-dispositions inhabiting the system, whose interactions comprise social behavior [Getzels, 1972, p. 25] .

Getzels (1972) maintains that a potential for conflict exists between any of the various components of the system, thus differentially effecting social behavior, self-concept and academic performance. For example, he suggests that a state of incongruency may arise between cultural values and institutional expectations. In the classroom situation the "criteria of worth" is drawn into question. The inconsistency in definition subjects both pupil and teacher to conflict resulting in variant forms of social behavior

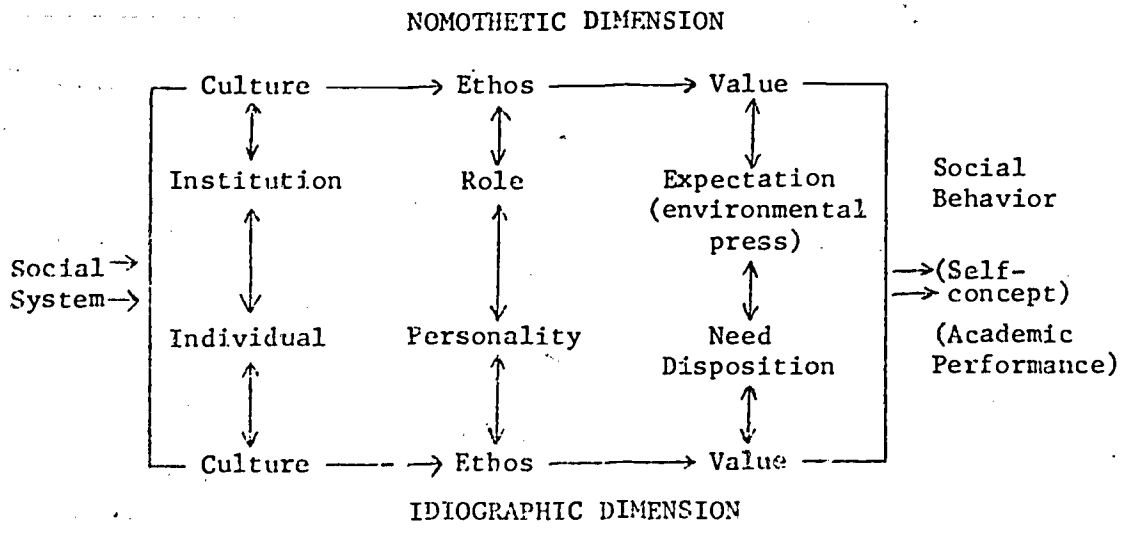

Figure 1: Getzels' Model of a Social System
[Getzels, 1972, p. 24]

THE PROBLEM

If counselors with predominantly "middle class" orientations are to deal effectively within a multi-cultural educational environment, it is essential that they attempt to understand the influence which socio-cultural and institutional values exert upon aspiration, personality and motivation. The closer the educator comes to understanding the relationship between the nomothetic and idiographic dimensions of the school environment, the better able he will be to affect meaningful changes in the areas of curriculum modification, counseling, and classroom management. Once the sociological and psychological referents of behavior have been determined, the curriculum specialist and/or elementary counselor will be in a position to interpret his or her function in relation to the student population served.

Consequently, it then behooves the educator to attempt a better understanding of the relationship between personal needs and environmental press. We need to know how our educational institutions differentially effect the self-concept and academic performance of its inhabitants. In order to provide a firm basis for the modification of institutional environments, the counselor must concern himself with research involving questions related to person-environment transactions. Educators can hardly expect to create viable programs of instruction for populations of culturally different children when our present educational setting may do little more than confuse and confound many of its inhabitants.

It is a well known fact that educational institutions differ with respect to their organizational characteristics, their cultural and social structures, their objectives, and the attributes of their student bodies. Yet, researchers have failed to agree upon a satisfactory procedure for the investigation of such environmental variables, as they relate to personality development and/or academic performance. A review of the literature pertaining to variables which may account for differences in self-concept and academic achievement, among culturally different students, suggests that several factors relating to person-environment transactions play a significant role (Gill & Spilka, 1962; Sarthory, 1968; Schwartz, 1969; Alman, 1967; Firma, 1970). A substantial amount of empirical evidence supports the claim that educational programs have not been responsive to the needs of individuals who deviate significantly from the middle-class standard for whom the curriculum was designed (Natalicio & Natalicio, 1969).

Based upon such evidence several objective measures of environmental press have been developed (Pace & Stern, 1957; Walberg & Anderson, 1968 (a); Sinclair, 1969; Stern, 1970; Steele, House, & Kerins, 1971). A great deal of research has been generated as a result of this instrumentation, in an attempt to further operationalize the basic models of Stern and Getzels (Anderson, 1970; Anderson, 1971; Bauer, 1969; Kasper, Munger, & Myers, 1965; Ryans, 1960; Walberg, 1968; Walberg, 1969; (a)). These studies have in general identified various components of the school and/or classroom environment which may account for its variation, such factors include student sex, teacher personality, course content and grade level. In addition, both structural and affective aspects of the school environment have

been related to academic performance. Thus, we have good reason to believe that individuals and environments do interact producing differential effects upon the inhabitants of our social institutions.

The research described herein concerns itself with the exploration of person-environment transactions within the educational context. Employing the theoretical assumptions of Murray (1938) and the empirical generalizations of Stern (1970) the research focused on two principal questions:

1. Do the sociopsychological needs of students differ with respect to sex, race, or socio-economic status?

2. Do educational climates differ in relation to schools (counseling vs. non-counseling) and/or grade level?

THE LITERATURE

Kasper, et al. (1965) attempted to identify differences in students perceptions of the educational environment in schools with guidance programs, as opposed to those without guidance programs. The High School Characteristics Index (Pace & Stern, 1958) was administered to 826 eleventh and twelfth grade students attending ten different North Dakota high schools. An analysis of the data revealed that students in the guidance schools scored significantly higher on seven of the thirty scales (adaptability, aggression, counteraction dominance, scientism, change, and secuality). The authors interpret the results of the study as suggesting that students in schools with guidance programs tend to perceive the environment as being comprised of dominant and aggressive individuals and groups which seek to restrict the freedom of others. Thus, they perceive their teachers as encouraging individual initiative and assertiveness. In contrast, the authors suggest that non-guidance schools are characterized by group centered activity and conformity to authority.

Bauer (1969), with a population of 484 eleventh and twelfth grade students and the faculty of a Kansas high school, set out to test the proposition that different types of students perceive the high school environment in significantly different ways. The High School Characteristics Index was administered to the entire sample. Upon analysis of his data Bauer found?

1. Males and females perceived the environment differently, as did juniors and seniors.

2. Male and female teachers did not perceive the environment differently.

3. Male students perceived the environment differently from teachers, as did female students.

Based upon prior group research and certain implicit assumptions concerning typical patterns of classroom interaction, Anderson (1970) explored the relationship between classroom properties and school achievement. Measures of classroom climate included the interpersonal relationships among students, between

students and teachers, and between students and both subject studied and method of instruction. Anderson reports the results as suggesting that characteristics of student groups do effect school performance, and that differences in these effects exist for students differing in ability and sex. Classroom characteristics were found to effect learning, and effect it differently depending on student characteristics. The study suggested that future research focus on student subgroups within the classroom, and use as intervening variables student age, personality, and socio-economic status.

Walberg and Anderson (1968(a)) in one of a series of studies (Harvard Project Physics) employing Getzels and Thelen's (1960) theoretical model of the class as a social system, attempted to assess the effect of "structural" and "affective" classroom environmental factors upon learning and personality development. The authors define these factors in the following terms:

> The structural dimension applies to shared, group-sanctioned classroom behavior, while the 'affective' dimension pertains to idiosyncratic personal dispositions to act in a given way to satisfy individual personality needs [p. 414].

Walberg and Anderson hypothesized that, "individual perceptions of 18 structural and affective aspects of classroom climate predict a cognitive, affective and behavior learning measures adjusted for initial differences" [p. 418]. A test battery of cognitive, affective, and behavioral criterion measures including the Physics Achievement Test, and Semantic Differential for Science Students, and the Pupil Activity Inventory were administered to a sample of 2100 high school juniors and seniors in 76 classes throughout the country. An analysis of the results suggested that, "different perceptions of classroom climates are associated with different kinds of cognitive growth--achievement and science understanding" [p. 417]. In addition, students with differing perceptions of the classroom environment were also measured as exhibiting differences in growth along the affective dimensions of the study. In other investigations undertaken by the Harvard Project Physics study group, teacher's personality and student characteristics were demonstrated to influence classroom climate, while classroom climate predicted academic success (Walberg, 1969(b); Walberg, Welch, & Rothman, 1968, Walberg & Anderson, 1968(b)).

Due to some apparent inconsistency in reporting results relating school environment to student need-structures (Walsh, 1973), we have focused our research on two differing types of schools, those with elementary guidance programs and those without guidance programs, in an effort to probe climate differences.

The literature suggests that counselors must be concerned with the question of whether environmental pressures serve a facilitating role with respect to the gratification of student needs.

THE METHOD

It should be noted that due to the cross-sectional nature of the pre- design the study was limited to a single time perspective, and did not allow for

the manipulation of research variables or experimental groups. Hence, any generalizations concerning causality must be closely guarded against.

Sampling

The total sample population was comprised of approximately 195 male and female fourth and fifth grade students. The sample was drawn from two separate elementary schools, one of which had an elementary counseling program in operation for a three year period, the other had no stated counseling program. The entire fourth and fifth grade population from each school participated in the study. A breakdown of demographic variables is provided in Table 1.

A total of 103 students were drawn from the counseling school and 92 from the non-counseling school. The population breakdown indicated that both schools had similar numbers of each sex, race, and SES category. The counseling school had the greater number of fourth grade students, while the non-counseling school had the greater concentration of fifth grade students.

TABLE 1
POPULATION CHARACTERISTICS

	Counseling School	Non-Counseling School	Totals
	103	92	195
Fourth Grade	66	39	105
Fifth Grade	37	53	90
Male	51	42	93
Female	52	50	102
Black	74	64	138
White	29	28	57
Middle SES	46	36	82
Low SES	57	56	113

Instrumentation

The Stern Activities Index (AI) is historically related to the Interest Index which was developed by Stern, Stein, and Bloom (1956) in an attempt to operationalize Murray's (1938) dual concept of needs-press. The Activities Index is a self-administered questionnaire requiring about 30 minutes to complete. It is comprised of 300 items, 10 items per each of 30 need scales. The subjects respond by indicating "like or dislike" for each item. The greater the scale score, the more intense the need. Parallel forms are available in several foreign languages, and a short form (Form 1173) has been developed.

The 30 scales of the Activities Index were factor analyzed using a principal components equamax solution developed by Saunders (1969). A sample of 1,076 students (557 male and 519 female) from 23 colleges who had responded to both the Activities Index and the College Characteristics Index (an environmental inventory) were used in the analysis. Two factor analyses were run; first with the 30 AI scales alone and second, with both AI and CCI scales combined. The 12 factors extracted were approximately equivalent for both analyses (see Table 2).

TABLE 2

FIRST-ORDER FACTORS EXTRACTED FROM STERN'S ACTIVITIES INDEX

Factor	Contributing Scales
Self-Assertion	Ego Achievement, Dominance, Exhibitionism, Fantasied Achievement
Audacity-Timidity	Risk-taking, Fantasied Achievement, Aggression, Science
Intellectual Interests	Reflectiveness, Humanities-Social Sciences, Understanding, Science
Motivation	Achievement, Counteraction, Understanding, Energy
Applied Interests	Practicalness, Science, Order
Orderliness	Conjunctivity, Sameness, Order, Deliberation
Submissiveness	Adaptability, Abasement, Nurturance, Deference
Closeness	Supplication, Sexuality, Nurturance, Deference
Sensuousness	Sensuality, Narcissism, Sexuality
Friendliness	Affiliation, Play
Expressiveness-Constraint	Emotionality, Impulsiveness, Exhibitionism, Sexuality
Egoism, Diffidence	Narcissism, Fantasied Achievement, Projectivity

(Stern, 1970)

Stern (1970) reports high scale reliability as estimated by Kuder-Richardson formulas 20 and 21 for two different samples. Kuder-Richardson reliabilities computed for the original norm group of 1,076 students (discussed above) ranged from .51 to .88. High internal consistency was reported for each scale, indicating scale homogeneity.

A number of studies using a variety of empirical approaches have been conducted to estimate both concurrent and predictive validity. These studies are reported in some detail by Stern (1970). Among the more noteworthy, the Activities Index, has been demonstrated to represent the same basic factor structure as two other personality inventories, the Interpersonal Behavior Inventory and the Interpersonal Checklist (Lorr & McNair, 1965; Lorr & McNair, 1963; Stern, 1970). In two separate factor analytic studies of the AI and the CCI, Saunders (1969) and Stricker (1967) found that these two instruments were independent of each other. Some concurrent validity studies have identified differences between various vocational groups (Funkenstein, 1960; Wolarsky, King, & Funkenstein, 1964).

In studies exploring predictive validity, AI scores were related to various external criteria. Some of these studies have reported a relationship between AI scores, and academic achievement and obtained grade-point average (Crist, 1960; Stern, 1954, Stein, & Bloom, 1956; Stone & Foster, 1964; Webb, 1967).

The Elementary and Secondary School Environment Index (ESI) is the short form of the High School Characteristics Index (HSCI) developed by Stern (1970). The HSCI was developed to measure environmental press in settings other than colleges and universities. The basic assumption underlying the HSCI, as with all of Stern's environmental indices, is that the environment can be appropriately defined in terms of the press inferred from the aggregated behavioral perceptions of its inhabitants (Walsh, 1973; Stern, 1970).

The HSCI is a measure of 30 kinds of press which parallel the need scales of the Activities Index. The long form (Form 960) contains 300 items about the environment grouped into 30 scales of 10 items each. The subject responds to each item as "true or false." The index is a self-administered questionnaire requiring about 20 minutes to complete. The intensity of the environmental factor is reflected in the total scale or factor score.

The factor structure of the HSCI has been explored using the equamax procedure. Seven factors have been extracted from the 30 scales (see Table 3).

TABLE 3

FIRST-ORDER FACTORS EXTRACTED FROM STERN'S HSCI

Intellectual Climate	Humanities-Social Sciences, Fantasied Achievement, Reflectiveness, Ego Achievement, Science,

TABLE 3 - Continued

Expressiveness	Change, Emotionality, Energy, Sensuality, Understanding, Supplication
Group Life	Play, Affiliation, Exhibitionism, Emotionality, Nurturance
Personal Dignity	Assurance, Objectivity, Defensiveness, Blame Avoidance, Tolerance, Supplication
Achievement Standards	Achievement, Conjunctivity, Narcissism, Energy, Understanding, Counteraction, Order
Orderliness	Deference, Deliberation, Order, Harm Avoidance
Practicalness	Practicalness, Sex, Dominance, Science

(Stern, 1970)

Scale reliabilities have been estimated for the HSCI using the Kuder-Richardson formula 20. Reliabilities ranged from .50 to .78 based on a sample of 739 students from nine high schools (Stern, 1970).

Validity data on the HSCI is somewhat limited. However, there is evidence that similar factor structures underlie all three of Stern's environmental indices, the HSCI, CCI, and Organizational Climate Index (Stern, 1970, Walsh, 1973). Some studies have used the HSCI scales to differentiate among high school environments (Walker, 1965; Stern, 1962).

Design

Subjects were administered a test battery comprised of the Stern Activities Index (SAI), and the Elementary and Secondary School Environment Index (ESI). Additional information concerning demographic variables was collected through the use of teacher questionnaires. Students were identified in terms of sex, race, and socioeconomic status.

Discriminate analysis was used to identify differences in socio-psychological needs and educational environment with respect to pupil characteristics and educational variables. The level of statistical significance was set at .05. Stepwise multiple regression was used to identify the most significant predictor variables, $p < .10$ (Nie, et al., 1975).

Hypotheses

1. H_0: There is no significant differences in socio-phychological needs among students grouped according to sex, race, or SES.

2. H_0: There is no significant differences in perceived educational environment among students grouped according to school (counseling vs. non-counseling), and grade level.

The above hypotheses were explored through the use of stepwise discriminant analysis procedures. Data were conceptualized in terms of a regression model:

$$y' = a_1x_1 + a_2x_2 + ... + a_ix_i + C$$

where y' represents a dichotomous or binary criterion variable; x_i represents continuous predictor or independent variables; a_i the weighting coefficients of the regression analysis; and C, the constant for the equation.

THE ANALYSIS AND RESULTS

Needs vs. Student Characteristics

There is no significant difference in psychological needs between male and female elementary school students.

This hypothesis was rejected at the .01 level of significance with an F statistic of 5.9443. Male and female students do vary significantly with respect to socio-psychological needs. Further exploration using stepwise multiple regression techniques revealed six independent variables as being the most significant discriminators in the regression equation (see Table 4). Four of the six predictors, audacity-timidity, closeness, intellectual interest, and motivation were entered into the regression equation at a significance level of .01 or greater. Two of the six predictors, submissiveness and applied interests, were entered at a significance level greater than .05.

TABLE 4

REGRESSION ANALYSIS SUMMARY TABLE FOR MALE vs. FEMALE STUDENTS

Variable	Degrees of Freedom	F Statistic	Probability Level
Closeness	193	12.6619	.000
Audacity-Timidity	192	15.7736	.000

TABLE 4 - Continued

Variable	Degrees of Freedom	F Statistic	Probability Level
Intellectual Interests	191	10.1736	.002
Submissiveness	190	4.6517	.032
Motivation	189	6.0620	.015
Applied Interests	188	4.0210	.046

The means and standard deviations for male and female students on these five need factors are reported in Table 5.

The girls posted higher mean scores on the closeness and submissiveness factors, while boys held higher mean scores on the audacity-timidity, intellectual interests, applied interests, and motivation factors.

In general, girls appeared to display a greater need to exercise control with respect to social conformity and other-directedness. These impulses tend to translate into acts of humility such as admitting when one has erred, or helpfulness such as giving comfort to others. In addition, the female student appeared to possess a stronger need for emotional support and warmth, which may characterize close family relationships.

Boys, on the other hand, tended to possess a need for personal aggressiveness; to exercise skill in the face of competition. Male students also displayed a keener interest in intellectual activities and activities relating to the business world than their female counterparts. The fact that these findings reveal little in the way of surprises may indicate the effect of culturally patterned responses. The means and standard deviations for the other less significant need factors are also furnished in Table 5 on the following page.

There is no significant difference in socio-psychological needs between black and white elementary school students.

The null hypothesis was rejected at the .05 level of significance with an F statistic of 1.9618. Black and white students do vary significantly with regard to socio-psychological needs. A stepwise multiple regression revealed two need factors as contributing the most to the discriminating power of the equation. The factor closeness was entered into the regression equation at a significance beyond the .01 level, and the factor intellectual interests was entered at a level beyond .05. (see Table 6).

TABLE 5

MEANS AND STANDARD DEVIATIONS FOR MALE AND FEMALE STUDENTS ON TWELVE NEED FACTORS

Factor	Male		Female	
	Mean	Standard Deviation	Mean	Standard Deviation
Self-assertion	6.55	2.12	6.55	1.95
Audacity-Timidity	7.19	2.12	6.24	2.02
Intellectual Interests	6.91	2.71	6.88	2.48
Motivation	6.58	2.53	6.30	2.09
Applied Interests	7.90	2.08	7.56	1.98
Orderliness	6.50	2.18	6.94	1.71
Submissiveness	7.17	2.31	8.13	1.55
Closeness	6.84	2.20	7.84	1.73
Sensuousness	6.73	2.46	7.78	2.00
Friendliness	7.26	1.84	7.42	1.61
Expressiveness-Constraint	5.43	2.47	6.44	2.34
Egoism-Diffidence	7.71	2.10	8.08	1.85

TABLE 6

REGRESSION ANALYSIS SUMMARY TABLE FOR BLACK vs. WHITE STUDENTS

Variable	Degrees of Freedom	F Statistic	Probability Level
Closeness	193	7.9903	.005
Intellectual Interests	191	5.1855	.024

The means and standard deviations for black and white students on these two need factors are presented in Table 7.

Black students possessed high mean scores on both the intellectual interests and closeness need factors.

Generally, black students appeared to have a stronger need for warmth and emotional supportiveness than their white classmates. The need scales with the highest loadings on this factor are based on item involving closeness of family structure, sharing of one's personal problems and willingness to give comfort to others. In addition, the black student tends to manifest a stronger need to become involved in intellectual activities than his white counterpart. This need often manifests itself in an active curiosity for nature phenomena or unusual events. Inquiry is commonly approached with intensity, even though it may have no practical application (Stern, 1970). Means and standard deviations on the other ten less significant need factors are also provided in Table 7.

TABLE 7

MEANS AND STANDARD DEVIATIONS FOR BLACK AND WHITE STUDENTS ON TWELVE NEED FACTORS

Factor	Black		White	
	Mean	Standard Deviation	Mean	Standard Deviation
Self-assertion	6.65	2.01	6.32	2.05
Audacity-Timidity	6.61	2.16	6.90	2.01
Intellectual Interests	7.02	2.47	6.60	2.87
Motivation	6.49	2.15	6.32	2.66
Applied Interests	7.75	2.02	7.67	2.08
Orderliness	6.88	1.83	6.37	2.21
Submissiveness	7.74	1.83	7.51	2.36
Closeness	7.62	1.90	6.74	2.19
Sensuousness	7.56	2.20	6.60	2.37
Friendliness	7.36	1.65	7.30	1.90
Expressiveness-Constraint	6.27	2.36	5.21	2.52
Egoism-Diffidence	8.04	1.85	7.58	2.23

There is no significant difference in socio-psychological needs between middle and low SES elementary school children.

The null hypothesis was rejected at the .05 level of significance with an F statistic of 1.8119. Middle and low SES groups did vary with respect to sociopsychological needs. Three variables can be identified as contributing most significantly to the discriminating power of the equation. Stepwise regression analysis indicated that the factor, expressiveness-constraint, was entered into the equation beyond the .01 level of significance, and that the factors orderliness and audacity-timidity, were entered at the .10 level (see Table 8).

TABLE 8

REGRESSION ANALYSIS SUMMARY TABLE FOR MIDDLE AND LOW SES STUDENTS

Variable	Degrees of Freedom	F Statistic	Probability Level
Expressiveness-Constraint	193	11.0135	.001
Orderliness	192	2.6496	.105
Audacity-Timidity	191	2.6278	.107

Means and standard deviations for middle and low SES students on these three need factors are presented in Table 9.

Low SES students had higher mean scores for the expressiveness-constraint and orderliness factors, while high SES students scored higher on the audacity-timidity factor.

Most noteworthy is the fact that children from low SES backgrounds tend to have a stronger need to express themselves, as reflected in their mean scores on the expressiveness-constraint dimension. According to Stern (1970) this factor stresses "emotional lability" and freedom from self-imposed controls. Spontaneous, impulsive, and uninhibited individuals usually score high on this factor.

Students from middle SES backgrounds appear to manifest a stronger need for personal aggressiveness. The direction implied by a high score on the audacity-timidity factor points to a need to develop skill and aggressiveness in physical activities as well as in interpersonal relationships. Means and standard deviations for the less significant factors are included in Table 9.

TABLE 9

MEANS AND STANDARD DEVIATIONS FOR MIDDLE AND LOW SES STUDENTS ON TWELVE NEED FACTORS

	Middle SES		Low SES	
Factor	Mean	Standard Deviation	Mean	Standard Deviation
Self-assertion	6.34	2.00	6.70	2.04
Audacity-Timidity	6.83	2.16	6.59	2.10
Intellectual Interests	6.79	2.68	6.97	2.53
Motivation	6.45	2.53	6.43	2.15
Applied Interests	7.66	1.95	7.77	2.10
Orderliness	6.45	2.13	6.94	1.80
Submissiveness	7.51	2.24	7.79	1.81
Closeness	6.85	2.22	7.74	1.79
Sensuousness	6.70	2.48	7.70	2.04
Friendliness	7.27	1.74	7.40	1.71
Expressiveness-Constraint	5.29	2.48	6.44	2.32
Egoism-Diffidence	7.68	2.10	8.06	1.87

Environment vs. School Variables

There is no significant difference in perceived educational environment between students from counseling and non-counseling schools.

This hypothesis was rejected beyond the .01 level of significance with an F statistic of 7.5128. Counseling and non-counseling schools do vary significantly with respect to educational environmental factors. Four of the seven environment factors were selected as the best discriminators in the regression equation according to stepwise regression analysis. Intellectual climate, personal dignity, achievement standards, and orderliness were all entered into the equation beyond the .01 level of significance (see Table 10).

TABLE 10

REGRESSION ANALYSIS SUMMARY TABLE FOR
COUNSELING vs. NON-COUNSELING SCHOOLS

Variable	Degrees of Freedom	F Statistic	Probability Level
Intellectual Climate	193	7.3056	.007
Personal Dignity	191	12.8461	.000
Achievement Standards	190	11.1814	.001
Orderliness	189	8.1085	.005

The means and standard deviations for the two schools on each of the seven environmental factors are presented in Table 11.

In relation to the four most significant environment variables, the counseling school posted higher mean scores for the achievement standards and orderliness factors, while the non-counseling school had higher mean scores on the intellectual climate and personal dignity factors.

Basically, students from the counseling school perceived an educational environment which emphasizes hard work, perserverance, and total commitment to institutional purposes. Within the counseling climate concern for organizational structure, procedural orderliness, and respect for authority appear to play a dominant role. The students perceived this environment as one which encourages individuals to express their need for independence.

Students within the non-counseling school perceived a climate which stresses social action, personal effectiveness, and intellectual activities. However, this environment also reflects a lack of guidance as to what is expected of the participant. Students tend to be insensitive to institutional demands and there appears to be no clear cut orientation toward organizational goals. Other factors reveal that students perceive a concern for individuals integrity, however as Stern points out, the implication here is on dependency needs to be supported rather than independence needs to be accepted.

There is no significant difference in perceived educational environment between students from fourth and fifth grades.

TABLE 11

MEANS AND STANDARD DEVIATIONS FOR COUNSELING AND NON-COUNSELING STUDENTS ON SEVEN ENVIRONMENT FACTORS

Factor	Counseling		Non-Counseling	
	Mean	Standard Deviation	Mean	Standard Deviation
Intellectual Climate	4.95	1.99	5.74	2.08
Expressiveness	6.14	7.94	5.55	1.81
Group Life	5.67	8.05	4.78	2.38
Personal Dignity	4.42	7.02	5.07	2.36
Achievement Standards	7.12	7.13	6.30	2.13
Orderliness	7.19	7.81	5.99	1.96
Practicalness	8.78	8.40	6.94	2.34

The above hypothesis was rejected beyond the .01 level of significance with an F statistic of 4.8188. Grades four and five do vary significantly with respect to educational environmental factors. The two most discriminating variables in the regression equation were personal dignity and intellectual climate, both being entered at significance levels beyond .01. The factors expressiveness and group life were entered into the question at the .08 level of significance (see Table 12).

TABLE 12

REGRESSION ANALYSIS SUMMARY TABLE FOR THE FOURTH AND FIFTH GRADES

Variable	Degrees of Freedom	F Statistic	Probability Level
Personal Dignity	193	9.9928	.002
Intellectual Climate	192	10.2786	.002
Expressiveness	191	3.0130	.084
Group Life	190	3.0409	.083

Means and standard deviations are presented in Table 13 for fourth and fifth grade students on each of the seven environmental factors.

Fourth grade students held higher mean scores on each of the four most significant environmental factors personal dignity, intellectual climate, expressiveness, and group life.

In general, it appears as though the fourth grade student perceives the school environment as fun-loving, friendly and actively outgoing. This environment provides an atmosphere where intellectual activities, social action, and personal effectiveness are encouraged. Fourth grade students appear to perceive a greater concern for aesthetic awareness and emotional participation within the school environment than their fellow fifth grade schoolmates.

TABLE 13

MEANS AND STANDARD DEVIATIONS FOR
FOURTH AND FIFTH GRADE STUDENTS

	Grade 4		Grade 5	
Factor	Mean	Standard Deviation	Mean	Standard Deviation
Intellectual Climate	5.72	2.10	4.86	1.93
Expressiveness	6.67	7.82	4.92	1.67
Group Life	6.38	7.92	3.93	1.98
Personal Dignity	5.82	6.79	3.44	2.33
Achievement Standards	7.79	6.89	5.50	2.22
Orderliness	7.56	7.68	5.53	1.90
Practicalness	8.28	8.44	7.48	2.19

DISCUSSION

The results presented in this study lend support to both the theoretical assumptions of Murray and Lewin, and the empirical work of Stern. First, elementary school students were found to differ significantly with regard to psychological needs when grouped on the basis of socio-cultural background variables. Second, school environment was found to vary significantly with respect to educational variables, including counseling and grade level.

Our findings further provide general support for Getzel's (1972) model of a social system (see figure 1). There does indeed appear to be two classes of variables or structural dimensions which interact to predict educational output and social adjustment.

The results of the present investigation carry implications for program modification and development in the areas of curricula, teacher training, and counseling.

An essential component of most any curriculum design or instructional plan is the assessment of student needs. Identifying students' interests, aspirations, attitudes, and home and family backgrounds are but a few of the variables which may be considered in making such an assessment. Indeed, our findings would tend to indicate that students do differ with respect to needs and interests. Yet to what extent do these various needs and interests find their way into the teacher's daily lesson plan? Again, we must return to the question of values in order to answer. One's cultural background appears to be a major factor with respect to personality development, therefore, the student should come to know it, recognize it, and understand his relationship to it.

If we contemplate the entire pattern of communications which typify classroom interaction, we are in essence reflecting upon middle-class organizational values. For instance, the insistence that one must be recognized prior to reciting, the emphasis placed upon regimentation and orderliness, and the dedication to efficiency and authority are all earmarks of <u>good</u> organizational management which teachers must confront when planning their day's activities. However as previously noted, these values may hold little or no meaning for the student, not because of his tender age; but because his cultural referent may function under a different value standard. Curriculum conceived under such value constraints cannot be responsive to individual needs and talents.

Riessman (1962) has suggested that due to this pattern of schooling many of the strengths of the culturally different child are overlooked. Among these strengths, he names:

> ...cooperativeness and mutual aid that mark the extended family; the avoidance of strain accompanying competitiveness and individualism; the equalitarianism, in informality and humor; ...the enjoyment of music, games, sports and cards; the ability to express anger; the freedom from being wordbound; an externally oriented rather than an introspective outlook; a spatial rather than temporal perspective;... [p. 48].

If educators continue to ask questions concerning efficiency in relation to curriculum development, they may very well overlook the question of effectiveness. In order to construct a curriculum which is responsive to the needs of each child the educator must focus his attention on pupil strengths, even if that requires a modification of classroom organization and management, and a revision of instructional methods.

In the area of teacher education, recommendations point to the development of programs which will produce flexible, open, and accepting teachers. The teacher must be able to accept students on the student's terms and not view language or cultural differences as deficiencies. Programs of teacher education need to foster a greater awareness of societal functions, and the role which culture plays in relation to human growth and development. Perhaps then teachers could learn to use a student's background as a learning tool rather than treat it as a handicap. The teacher must learn to guard against the requirements of organizational efficiency in the school, for unless great care if taken the child's sense of personal identity could easily be lost in the press of institutiona life. If the all-inclusive goal of education is to help people understand the meaning of their lives, as Friendenberg (1965) has suggested, then teacher must recognize and accept the fact that there must be differences in standards for various children.

In conjunction with more relevant curricula and more effective teaching techniques, improved counseling services could afford the culturally different child new educational opportunities. Elementary counseling is a relatively new endeavor; however, the research literature reflects its healthy growth and development. Alman (1967) suggests that elementary counseling can be used to stimulate academic performance among economically disadvantaged students. Grotberg (1965) concluded that special guidance programs have demonstrated positive results in helping the "disadvantaged child." Although the purpose of the present study was not to establish direct relationships between counseling and self-concept, it was noted that the highest percentage of students with high self-perceptions were from counseling schools. In addition school environmental factors were found to differ between counseling and non-counseling schools. It thus appears evident that elementary counseling could provide a tool for adjusting students behavior on the bases of need-press relationships.

Stern (1970) has suggested the relevance of his Activities and Environmental Indices to the counseling process. He has identified several models which could be used by the counselor in the diagnostic process. For example, the counselor could focus on differences between the client's need pattern and the need pattern of the total group within a given environment. These discrepancies may help identify differences between the student and his peers.

In summary, it appears that person-environment transactions can play a significant role in securing more equitable learning opportunities. The identification and modification of need-press relationships can serve to close the gap between the school and the home, thus creating more effective and meaning educational programs. Schools must strive to become prototypes of the cultures or subcultures they serve; for if there is an advantage in schooling it is that the child can, under the watchful eye of the educator, survive his failures.

REFERENCES

Alman, E. The child of the American poor. In M. Cowles (Ed.), Perspective on the education of disadvantaged children. New York: World Publishing, 1967.

Anderson, G. J. Effects of classroom social climate on individual learning. American Educational Research Journal, 1970, 7, 135-152.

Anderson, G. J. Effects of course content and teacher sex on the social climate of learning. American Educational Research Journal, 1971, 8, 649-663.

Backman, C. W. and Secord, P. F. A social psychological view of education. New York: Harcourt, Brace and World, Inc., 1968.

Bauer, G. R. A study of the environment of a high school, using the need-press construct of H. A. Murray and the instrumentation of George Stern. An unpublished Ed.D. dissertation. University of Kansas, 1969.

Crist, R. L. A study of the discrimination effectiveness of the Stern Activities Index with achievement groups in Purdue's freshment engineering program. Dissertation Abstracts, 1960

Firma, T. P. Effects of social reinforcement on self-esteem of Mexican-American children. ERIC, 1970, 5, 92.

Friedenberg, E. Coming of age in America: Growth and acquiescense. New York: Random House, 1965,

Funkenstein, D. H. Unpublished manuscript, Harvard Medical School, 1969. In G. G. Stern, People in Context. New York: Wiley, 1970.

Getzels, J. W. Conflict and role behavior in the educational setting. In L. Sperry (Ed.) Learning performance and individual differences: Essays and readings. Glenview: Ill.: Scott, Foresman, 1972.

Getzels. J. W. and Thelen, H. A. The classroom as a unique social system. In N. B. Henry (Ed.) National society for the study of education yearbook. Chicago: University of Chicago Press, 1960.

Gill, L. and Spilka, B. Some non-intellectual correlates of academic achievement among Mexican-American secondary school students. Journal of Educational Psychology, 1962.

Grotberg, E. H. Learning disabilities and remediation in disadvantaged children. Review of Educational Research, 1965, 413.

Kasper, E. C., Munger, P. F., and Myers, R. A. Student perceptions of the environment in guidance and non-guidance schools. Personnel and Guidance Journal, March, 1965, 674-677.

Lewin, K. Field theory in social science: selected theoretical papers. D. Cartwright (Ed.) New York: Harper & Row, 1951.

Lorr, M. and McNair, D. M. An interpersonal behavior circle. Journal of Abnormal and Social Psychology, 1963, 67, 68-75.

Lorr, M. and McNair, D. M. Expansion of the interpersonal behavior circle. Journal of Personality and Social Psychology, 1965, 2, 823-830.

Murray, Henry A. and Kluckhohn, C. Outline of a conception of personality. In C. Kluckhohn, H. A. Murray, and D. Schneider (Eds.) Personality in nature, society, and culture. New York: Knopf, 1953.

Natalicio, L. F. S. and Natalicio, D. S. The educational problems of atypical student groups: The native speaker of Spanish. Urban Education, 1969, 4, 261-271.

Nie, N. et al. Statistical package for the social sciences. 1st Ed. New York: McGraw-Hill, 1975.

Pace, C. R. and Stern, G. G. College characteristics index (Form 357). Syracuse University Psychological Research Center, 1957.

Parsons, T. and Shils, E. A. (Eds.). Toward a general theory of action. Cambridge, Mass.: Harvard University Press, 1951.

Riessman, F. The culturally deprived child, New York: Harper and Row, 1962.

Ryans, D. G. Characteristics of teachers: Their description, comparison, and appraisal. Wisconsin: George Banta Co., 1960.

Sarthory, J. A. The effects of ability grouping multicultural school situation. Dissertation Abstracts, 1968, 29, 451-A

Saunders, D. R. A factor analytic study of the AI and the CCI. Multivariate Behavioral Research, 1969, 4, 329-346.

Schwartz, A. J. Comparative values and achievement of Mexican-American and Anglo pupils. ERIC, 1969, 4, 85.

Seiber, S. and Wilder, D. Teaching styles: Parental preferences and professional role definitions. Sociology of Education, 1967, 40, 302-315.

Sinclair, R. L. Measurement of educational press in elementary school environments. Paper presented at the meeting of the American Educational Research Association, Los Angeles, 1969.

Sperry, L. Learning performance and individual differences: Essays and readings. Glenview, Ill.: Scott, Foresman and Co., 1972.

Steele, J. M., House, E. R., and Kerins, T. An instrument for assessing instructional climate through low-inference student judgments. American Educational Research Journal, 1971, 8, 447-466.

Stern, G. G. Assessing theological student personality structure. Journal of Pastoral Care, 1954, 18, 76-83.

Stern, G. G. Environment for learning. In N. Sanford (Ed.). The American college. New York: Wiley, 1962.

Stern, G. G. People in context. New York: Wiley, 1970.

Stern, G. G., Stein, M. K. and Bloom, B. S. Methods in personality assessment. Glencoe, Ill.: The Free Press, 1956.

Stone, L. A. and Foster, J. M. Academic achievement as a function of psychological needs. Personnel and Guidance Journal, 1964, 43, 52-56.

Stricker, G. Interrelationships of Activities Index and College Characteristics Index Scores. Journal of Counseling Psychology, 1967, 14, 368-370.

Walberg, H. J. and Anderson, G. J. Classroom climate and individual learning. Journal of Educational Psychology, 1968, 59, 414-419. (a)

Walberg, H. J. and Anderson, G. J. The achievement-creativity dimension and classroom climate. Journal of Creative Behavior, 1968. (b)

Walberg, H. J. Structural and affective aspects of classroom climate. Psychology in the Schools, 1968, 5, 247-253.

Walberg, H. J. Teacher personality and classroom climate. Psychology in the Schools, 1969, 5, 163-169 (a)

Walberg, H. J. Social environment as a mediator of classroom learning. Journal of Educational Psychology, 1969, 60, 443-448. (b)

Walberg, H. J., Welch, W. W. and Rothman, D. Teacher heterosexuality and student learning. Psychology in the Schools, 1968.

Walsh, W. B. Theories of person-environment interaction: Implications for the college student. Iowa City, Iowa: The American College Testing Program, 1973.

Webb, S. C. The relations of college grades and personal qualities considered within two frames of reference. Multivariate Behavioral Research Monograph, 1967, No. 67-2.

Wolarsky, E. R., King, S. H. and Funkenstein, D. H. Speciality choice and personality among medical students. Mimeographed. Harvard Medical School, 1964.