A STUDY OF THE INSTITUTIONAL ENVIRONMENT OF NORTHWEST COLLEGE AS PERCEIVED AND DESIRED BY STUDENTS, FACULTY, AND THE BOARD OF DIRECTORS

by

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A dissertation submitted in partial fulfillment

of the requirements for the degree of

DOCTOR OF EDUCATION

UNIVERSITY OF WASHINGTON

1971

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Date June 8, 1971

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Date: May 20, 1971

We have carefully read the dissertation entitled A Study of the Institutional Environment of Northwest College as Perceived and Desired by Students, Faculty, and the Board of Directors submitted by John Wesley Lackey in partial fulfillment of the requirements of the degree of Doctor of Education and recommend its acceptance. In support of this recommendation we present the following joint statement of evaluation to be filed with the dissertation.

The major purposes of this study were twofold: to develop an instrument for measuring the religious characteristic of the college environment and to study the institutional environment of Northwest College, Kirkland, Washington, both as it was perceived and desired by the students, faculty, and the board of directors. The analyses were conducted to see if differences in perceptions and desires existed--if the different groups described the environment similarly and how their desires for the institution were related to what they believed existed.

A religion scale of thirty statements was developed which was then administered to five colleges--two public and three church sponsored--to further determine the validity of the items. This scale was then added to College and University Environment Scales (CUES) developed by C. Robert Pace.

Two sets of responses--one for measurement of perceived environment measurements and one for measurement of desired environment measurements--were then sought from the students, faculty, and college board of directors. Means, standard deviations, mean differences, F ratios, and t values were computed.

The findings revealed that there were differences between the students, faculty, and board of directors in perceptions of the environment. The board of directors indicated higher scale scores on practicality, awareness, scholarship, and religion. Analyses of student sub-group responses indicated some differences based on sex, residence, and college program.

Scale scores on desired environment indicated student, faculty, and board differences. Analyses of student sub-group responses indicated differences based on sex, college residence, attendance at other colleges, college program, and participation in extra-curricular activities.

Analyses of perceived-desired responses revealed higher desired scale scores in the majority of the comparisons.

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Chapter I

INTRODUCTION

Institutions of higher education in the United States present many different facets and may be characterized in many different ways. Some are public supported, others privately and church supported; some for men only, others for women only, while others are coeducational; some large, others small; some multifaceted universities while others offer a limited curriculum for very specialized purposes. Within the diversity of higher education in the United States each college has been encouraged to determine its own objectives and may have, therefore, its own unique image that it wishes to project.

College objectives, policies, and institutional practices have been largely determined by a Board of Directors (Board of Regents, Board of Trustees, etc.) and the faculty or faculty representatives. These policies and practices have usually been initiated and stated by policy formulating groups--groups that are not the primary recipients of the educational process. College publications written by the institution have attempted to describe the college and present the desired image to the prospective student and the public. Publications by the college may, however, represent only what is desired by the institution and its policy making groups, rather than what actually exists. There may be claims of

qualities that are not present; claims of academic excellence when those receiving the education would classify it as mediocrity or claims of a "college family" when there is actually little social interaction and identification. Stern, Stein, and Bloom have indicated that what is said and what is done are not always the same.[1]

One of the most widely distributed and complete publications about a given college is its catalog. Of these publications Walton has written: "Current college catalogs--publications which have been described as about as 'sincere as garden catalogs'--are probably taken too literally."[2] Brochures and other college materials may also manifest some fallibility.

If this be true is there any way of more correctly describing the nature of the college? C. Robert Pace has suggested that colleges could give a more accurate description of their institution if they used some type of testing instrument which would give a measurement of the college environment. He cited the use of such information by Antioch College in the Antioch College Bulletin for 1965-1966 in which they described the college on the basis of upper class student responses to College and University Scales developed by Pace.[3] In this way the college can describe more

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[1]George C. Stern, M. Stein, and B. Bloom. Methods in Personality Assessment. Glencoe, Illinois: Free Press, 1956.

[2]Wesley W. Walton and B. Claude Mathis. "Needed: Better Information About Colleges," The Bulletin of the National Association of Secondary School Principals, LI (September, 1967), 78-92.

[3]C. Robert Pace. "When Students Judge Their College," College Board Review, No. 58 (Winter, 1965-66), 26-28.

specifically its characteristics and also provide prospective students with information based on the perceptions of the students.

But do persons associated with the college view the environment similarly? Can what the students describe be accepted as the impression the college environment makes on all groups? Do the faculty members who direct the educational activity of the college view the environment similarly? What views do the members of the Board of Directors--those with final authority and determiners of institutional policy--have of the various environmental factors? Could it be that each group views the institution differently and if they were asked "What is the institution like?" would each answer differently? The study of Ivey, Miller, and Goldstein[1] and the study of Brown[2] indicate that this may occur.

Of additional significance is the matter of institutional satisfaction which may be indicated by a comparison of the perception of the environment and the desired environment. If there is a significant difference between the description of the existing environment and that which is desired, might one conclude that situations may develop which may lead to student and faculty mobility and/or pressure for major changes at the institution?

How much congruity is there between the formulator of major policies, the Board of Directors, and the ultimate recipient of the

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[1]Allen E. Ivey, C. Dean Miller, and Arnold D. Goldstein. "Differential Perceptions of College Environment: Student Personnel Staff and Students," Personnel and Guidance Journal, XLVI (September, 1967), pp. 17-21.

[2]Warren Shelburne Brown. "A Study of Campus Environment: A Comparative Study of the Campus Environment by Several Groups Affecting a Religiously Oriented Liberal Arts College." Unpublished Doctoral Dissertation, University of Southern California, June, 1969.

effects of the policies, the student? The Board of Directors has the legal responsibility for the gov rnance of the institution and attempts for formulate policies which will result in the greatest and most efficient attainment of those goals, but has the institution actually been successful in implementing a program which will result in maximum attainment of these stated goals? Do the students perceive the institution as the Board of Directors desire it? If so, one may reasonably conclude that an effective program is being conducted. If not, there may be cause for institutional concern.

And what of the faculty who are in day-to-day contact with students and yet involved in the formulation of specific policies to implement and fulfill institutional objectives? Do those who actually carry out the primary functions of the college have a clear perception of what environment they have and what they hope to promote?

If more information were available about how different groups perceive the college environment and what they desire, one might better assess not only a satisfaction factor but also a dissatisfaction factor. He might further, by various comparisons, come to know more about how well institutional objectives are actually realized in the functioning of the institution. Pervin saw great value in the inclusion of students, faculty, and administration in the analysis of a college.[1]

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[1]Lawrence A. Pervin. "The College As A Social System: Student Perceptions of Students, Faculty, and Administration," Journal of Educational Research, LXI (February, 1968), 281-284.

Religion and The College

Religion has been a significant factor in the rise and development of the American college.

> The role of organized Christianity was important in the founding of eight of the nine pre-Revolutionary colleges. Only the College of Philadelphia was not at first specifically under church control, and it soon came under the dominance of the Anglicans. In addition, the purpose of training students for the Christian ministry is specified in all the colonial college charters with the single exception, again, of the College of Philadelphia.[1]

The earliest code of Harvard stated that "Everyone shall consider the mayne end of his life and studyes, to know God and Jesus Christ, which is Eternall life." The code continued with other regulations regarding the need for prayer, seeking of wisdom, the conduct in church, the necessity to read the scriptures and the general conduct of the student which was in no way to be profane.[2] In 1701 it was stated that Yale was to be a place "wherein youth may be instructed in the arts and sciences, who through the blessings of Almighty God, may be fitted for public employment, both in church and civil State."[3]

The private, church related colleges have been important factors in the development of higher education in the United States. Most of these colleges have placed a high value on religion as part of the campus culture. Religion, as viewed by these colleges, is

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[1] John S. Brubacher and Willis Rudy. Higher Education in Transition. New York: Harper and Brothers Publishers, 1958, p. 8.

[2] Statues of Harvard.

[3] Brubacher and Rudy, op. cit., p. 8.

not a supplement to education, but a part of it. "If education involves the whole man, it is obvious that any educational system is incomplete that attempts to ignore his spiritual development. The pursuit of truth can never be successful if it excludes the search for spiritual truth."[1]

This is particularly true in the "Christian" college. Whether the college is sponsored by a denomination or exists as an independent college, its commitment to emphasize religion and the spiritual development of its students is of the utmost importance. These colleges usually seek through activities under their supervision and sponsorship--and sometimes through regulations regarding activities not under the direct supervision of the college--to promote a religious development of the student. It is not a single effort by only one part of the institution, but an attempt through every possible avenue to make the religious experience of the student more meaningful and expressive since "both the nature of the college age student and the character of the college atmosphere are conducive to changes in belief."[2]

As an educational institution the Christian college is subject not only to the conventional educational criteria, but also to additional criteria. Gaebelein indicated six criteria by which a Christian institution should be judged:

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[1]R. S. K. Seeley. The Function of the University. Toronto: Oxford University Press, 1948, p. 46.

[2]Hans H. Toch and Robert T. Anderson. "Secularization in College: An Exploratory Study," Religious Education, LIX (November-December, 1964), p. 490.

1. A Christian educational institution must be built upon a thoroughgoing Christian philosophy of education.

2. It must have a faculty thoroughly committed to its distinctive philosophy.

3. The entire curriculum must be Christ centered.

4. It must have a student body that will actively support its philosophy and aims.

5. It must recognize the two aspects of Christian education--the required and the voluntary.

6. It must actually do the truth through applying the Christian ethic in all its relationships.[1]

and Bernard Ramm stated that a university is Christian only as it is Christian throughout.[2]

A significant contribution to the environment of any campus, whether church-related or not, is made by the faculty. Novak stated that "the greatest contribution to the religious life of the university could come from teachers and scholars--formally religious or not--who could lead the student to the profound human experiences lying below the surface of the academic curriculum."[3] Aubrey indicated that "the task of the university is the transmission, criticism and advancement of culture. . . . For good or ills, morals and religion have been an integral part of culture; and therefore merit systematic study"[4] and further stated that "where they are

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[1]Frank E. Gaebelein. Christian Education in a Democracy. New York: Oxford University Press, 1951, p. 43.

[2]Bernard Ramm. The Christian College in the Twentieth Century. Grand Rapids: William B. Eerdmans Publishing Company, 1963.

[3]Michael Novak. "God in the Colleges," Harper's Magazine, CCIII (October, 1961), p. 176.

[4]Edwin E. Aubrey. Humanistic Teaching and the Place of Ethical and Religious Values in Higher Education. Philadelphia: University of Pennsylvania Press, 1959, p. 86.

implicit or incidental, the point of the teacher becomes important, for he can either bring out the connections or pass over them."[1]

> From the temper of the course the student can sense whether or not Christianity is essence, whether or not the teacher accepts the faith that life is more than meat, man is more than animal, God is more than man. That atmosphere of the classroom either supports such propositions or calls them in doubt, or even dismisses them.[2]

Because of their belief in the importance of the faculty member in promoting and advocating value systems, many colleges--and especially Christian colleges--evaluate the teacher on more than just academic qualifications.

Another factor affecting the environment of the college is the curriculum. Control of the curriculum is manifested both in the nature of the offerings of the institution and the courses that are required of its students. Maritain states that one of the specific requirements for Christian education is a relevant curriculum and inquired "Is a curriculum in the humanities fitted to the education of a Christian if it is only or mainly occupied with the Graeco-Roman tradition and pagan or merely secular authors?"[3]

Cuninggim, commenting on the same kind of concern, indicated that "the problems of curriculum in the Christian college are one problem, namely, how to give tangible expression to the Christian philosophy of education which the college has consciously adopted.

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[1] Ibid., p. 89.

[2] Merrimon Cuninggim in John Paul von Grueningen (ed.) Toward a Christian Philosophy of Higher Education. Philadelphia: The Westminster Press, 1957, p. 118.

[3] Jacques Maritain in Edmund Fuller (ed.) The Christian Idea of Education. New Haven: Yale University Press, 1957, p. 177.

For to be a Christian college is to have adopted a Christian philosophy of education. No other definition of a Christian college makes any sense."[1]

It would appear that this desire to give expression to a Christian philosophy has been evidenced not only by offering courses in religion, but in offering other ethical and value-oriented courses and in the manner and emphases used in teaching courses not directly religious in nature. Religious emphases and viewpoints may be stressed in the various academic disciplines. In a study of various college campuses Eddy indicated that "our observations led us to believe that the manner in which religion is approached in the curriculum does reflect to some degree the entire religious tone of the college."[2]

There are, according to Ruth Eckert, certain fundamental propositions in the election of materials and methods of instruction that assist in promoting the objectives of the Christian college.

> 1. The dignity and worth of each individual are stressed, and responsibility is accepted for promoting his fullest development, intellectually, socially, and spiritually.
>
> 2. The search for truth and the quests of Christian idealism can thrive only when searchers are free to inquire, to discuss, to compare, and to make their own choices. Only where searchers are free will freedom be generally cherished and protected.

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[1]Cuninggim, op. cit.

[2]Edward D. Eddy. The College Influence on Student Character. Washington, D. C.: American Council on Education, 1959, p. 121.

3. The primacy of faith is acknowledged, and the fact recognized that man must accept and live by values that can never be wholly validated experimentally.

4. The right and duty of private judgment are emphasized, with each individual held accountable primarily to God for the qualify of his decisions.

5. The realization of God's purpose is sought not only in individual lives or in the Church but in the whole society of men.

6. God, as revealed in Christ, is regarded as the ultimate ground of faith and hope, and therefore as the true end of the educational process.[1]

The concept of being a Christian college affects the total presentation and program of the college, not just the academic presentation. Trueblood listed four marks of a Christian college: penetration of the total life by the central convictions, wholeness, passion, and brotherhood.[2]

While the strongest emphasis on religion as a facet of the college environment is probably in the "Christian" colleges, it is not totally limited to those institutions. Religious emphases in various degrees may exist on other campuses, even those of publicly supported institutions.

Other activities that are evaluated as helping to give some religious emphasis to the campus are: Religious Emphasis Weeks or other types of special services, the provision for some courses in religion to be taught, the existence of student religious organizations on the campus, the provisions by the college for religious expressions, provision for personal contact with a college chaplain

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[1]Ruth E. Eckert in von Grueningen, op. cit., pp. 122-130.

[2]Elton D. Trueblood in von Grueningen, op. cit., pp. 163-166.

or other religious oriented officer, the involvement of the student in religious activities, and the participation of the faculty in religious activities and a manifestation on their part of some interest in religion.

Purposes of the Study

In the recent development of environmental measurements little attempt appears to have been made to measure the religious factor as part of the environment. To omit this measurement of the college environment would for many colleges mean a failure to include what they believe to be a most significant factor. Their success as a college may be decided not only on the basis of providing an institution in which academic and social development is realized, but also in how effective the institution is in providing for the spiritual and religious development of its students.

It was desirable, therefore, to include in the study a measurement of religion as a cultural component of campus environment. This would help make it possible to give a more complete picture of the various environmental factors. The method should be compatible and comparable to methods used in measuring other facets of the institutional environment.

The purposes of this study were twofold: to develop an instrument for measuring the religious aspect of the college environment and to investigate and analyze the institutional environment of a specific church related college, Northwest College, as it was both perceived and desired by the major "groups" associated with the college--the students, faculty, and the Board of Directors.

Comparisons were made between the perceived and desired environment as expressed by each of these groups. It was anticipated that by such a study it would be possible more accurately to describe the College, to identify correlative factors related to perception and desires, and to determine to some extent the satisfaction with the College and the effectiveness of the College in reaching its desired objectives and goals.

The objectives of the study led to the development of the following research questions:

1. How do the students, faculty, and Board of Directors perceive the institutional environment of Northwest College and are there significant differences in their responses?

2. What ideal type of institutional environment do the students, faculty, and Board of Directors desire and are there significant differences in their responses?

3. Are there significant differences between the responses for the perceived and desired environment as reported by the students, faculty, and Board of Directors?

4. Are there between-group differences in the responses of the students, faculty, and Board of Directors for measurements of the perceived and desired environment?

In order to answer these questions and to accomplish the objectives of the research the following hypotheses were proposed:

1. There are no significant differences in the perception of the institutional environment as reported by the students, faculty, and Board of Directors.

2. There are no significant differences in the perception of the institutional environment as reported by selected subgroups of students.

3. There are no significant differences in the desired institutional environment as reported by the students, faculty, and Board of Directors.

4. There are no significant differences in the desired institutional environment as reported by selected subgroups of students.

5. There will be no significant differences between the perceived environment and the desired environment as expressed by the students.

6. There will be no significant differences between the perceived environment and the desired environment as expressed by selected subgroups of students.

7. There will be no significant differences between the perceived environment and the desired environment as expressed by the faculty.

8. There will be no significant differences between the perceived environment and the desired environment as expressed by the Board of Directors.

9. There will be no significant differences between the desired institutional environment as expressed by one group (students, faculty, Board of Directors) and the perception of the existing environment as reported by another group.

Limitations

Some limitations were applicable to the present study. Because of the nature of the research design, it was possible to show only related factors rather than proof of the influence of certain factors. There were too many uncontrolled variables to permit definitive statements about the causes.

General comparisons with other institutions are possible by using results provided by other research studies using CUES. However, no comparisons with similar institutions are possible due to the lack of comparable institutional environmental research.

The measurement of the institutional environment did not include the entire student body, but only those in attendance at

the required daily chapel service or who responded to a personal follow up solicitation for a response. Pace points out that it is not necessary to have a large number of reporters in order to obtain a reasonably stable picture of the institutional environment.[1]

Some limitations on the validity of the religious factor may apply, since it was introduced as a new factor. It has not received the test, in other words, to which CUES itself has been put--a test based on data from 48 separate institutions.

Definitions of Terms Used

The following definitions of terms were employed in this study:

"Institutional environment" -- any characteristic of the college that constitutes a potential stimulus for the student as measured by the College and University Environment Scales (CUES).

"Perceived environment" -- the ideas and conceptions that the respondents have about the institutional environment as indicated by responses to items of a supplemented form of the College and University Environment Scales.

"Desired environment" -- the characteristic of the institutional environment that the respondent would like to see present as indicated by responses to items of a supplemented form of the College and University Environment Scales.

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[1] C. Robert Pace. Preliminary Technical Manual: College and University Environment Scales. Princeton: Educational Testing Service, 1963, p. 61.

"Sub-group" -- that portion of the students that had a common characteristic. The classifications used in the study were based on sex, college residence, attendance at another college, academic program, and participation in extra-curricular activities.

"Students" -- included those persons enrolled at the college as students and not employed on a full-time basis by the college.

"Faculty" -- included those holding teaching or administrative positions and having a vote in determining school policies.

"Board of Directors" -- the legal governing body of the college. Although the President of the College is a member of the Board of Directors he was included with the faculty because of his being on campus and a participant in campus meetings.

Chapter II

REVIEW OF RELATED RESEARCH

Introduction

Colleges take pride in their fine physical facilities, qualified and honored faculty, extensive library holdings, relevant and innovative curricular approaches, and any other assumed benefits to classroom instruction as indicators of the nature of the institution. They stress the potential contributions these make to the education of students, but they might also stress the impact of the out-of-class activities on students. Eddy wrote:

> An all too common conception of a college education is that it includes only the narrowly defined academic process involving just the teacher and the student. Many college graduates agree, however, that their education took place as much outside the classroom as within its narrow walls, and was as much a result of all that surrounded them as of the formal lecture or seminar. Some refer to this larger, encompassing classroom as "the climate of the campus." We call it the environment.[1]

McConnell and Heist proposed that there are manifold determinants of institutional climate or atmosphere--financial resources, community relations, cultural context, educational demands, social sanctions, the faculty, the alumni, the administrative staff, the governing board, and many more. "In addition, most of us would

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[1]Edward D. Eddy. The College Influence on Student Character. Washington, D. C.: American Council on Education, 1959, p. 132.

agree, I am sure, that the characteristics of the students who attend an institution profoundly affect its character."[1]

Significance of the Environment

President Glenn Leggett, speaking at a meeting of Governing Boards of universities and colleges, emphasized the significance of influencing factors at the college when he stated:

> We all know that the education students receive from such colleges as Grinnell is not made up of courses and professors alone. It also includes the environment students create and the interplay of students and faculty. It is this close interaction that makes the small college unique. And it is the educational effectiveness of this interplay that will determine whether or not the small residential college survives.[2]

The climate, character, or personality--by whatever name it is called--is of great significance and, according to Duryea, makes itself felt in five general ways: it delimits the area within which administrators can exert effective leadership, it determines in general the kinds of decisions which can be made, it will affect the manner in which decisions are made, its understanding makes possible a more accurate prediction of the consequences of decisions, and it strongly influences the personnel sought and attracted.[3]

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[1] T. R. McConnell and Paul Heist. "Do Students Make the College?" College and University, XXXIV (Summer, 1959), p. 442.

[2] Glenn Leggett. "Can Small Colleges Match City Giants?" speech made at a meeting of the Governing Boards of Universities and Colleges.

[3] E. D. Duryea. "Institutional Personality: Some Reflections on Its Implications for Administrators," Education Record, XLII (October, 1961), pp. 333, 334.

Divergent views have been promoted regarding the significance of the college experience in changing student values. Jacob, in his well publicized work, indicated that there is little evidence to substantiate a belief that college experiences make a significant difference.[1] Goodstein accepted the fact that changes may occur, but doubted that college had much influence on college students, believing that basically the college enhances previously held beliefs. He did state, however, that "it would seem to me that the small liberal arts college might be able to do something--and if they can not do this job nobody can."[2]

Others have believed that changes occur in the student during the four years, although it may be difficult to prove undeniably that the college is the cause of such changes. Lehmann and Ikenberry wrote:

> It would appear then, that higher education has some effect on critical thinking ability, attitudes, and values of college students. Whether formal education results in an actual behavioral change or whether these changes may be attributable to the general college environment, age (maturational) or cultural changes is a matter of conjecture.[3]

Miller reported in her study:

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[1]P. E. Jacob. Changing Values in College: An Exploratory Study of the Impact of College Teaching. New York: Harper and Brother, 1957.

[2]Leonard D. Goodstein. "The Forces That Shape Student Values" in Contemporary Values and The Responsibility of The College. Iowa City: State University of Iowa, 1962.

[3]Irvin J. Lehmann and Stanley O. Ikenberry. Critical Thinking, Attitudes and Values in Higher Education. East Lansing: Michigan State University, 1959.

> We have shown that measurable personality changes do occur throughout the college experience. We cannot, as yet, separate those changes due to the college from those due to development and maturity in general or from those due to outside influences. But we do believe some of the changes come from the college experience.[1]

Plant was more definite in his belief of the influence of the college and concluded on the basis of his studies that

> there is substantial evidence to support the contention that there are measurable personality changes associated with increments of higher education. There are more results reported which indicate significant change than no significant change, although with respect to the authoritarianism and ethnocentrism variables there is an important question about generality of findings in light of conflicting results.[2]

Thistlethwaite believed that the college environment was an important determinant of the student's motivation to seek advanced training and that the student cultures and faculty press which stimulate achievement in the natural sciences appear to be different from those which stimulate achievement in the arts, humanities, and social sciences.[3] He further indicated that the desire to attend graduate school is strengthened by (1) achievement of good rapport with faculty during the senior year, (2) experiencing pressure from peers for advanced study, (3) by talking with faculty, students, and parents about graduate study, and (4) winning recognition.[4]

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[1]Eleanor O. Miller. "Nonacademic Changes in College Students," Education Record, XL (April, 1959), p. 122.

[2]W. T. Plant. Personality Changes Associated With A College Education. San Jose: San Jose State College, 1962, p. 12.

[3]Donald L. Thistlethwaite. "College Press and Student Achievement," Journal of Educational Psychology, L (October, 1959), p. 190.

[4]Donald L. Thistlethwaite.

Although he recognized that such factors as size of the student body, per cent of males in student body, and the orientation of the student body adversely affect Ph. D. aspirations[1] Astin did not completely agree with Thistlethwaite's proposals and believed that too much value has been placed upon what the institution does without considering the input of the college.[2]

Pace may have well summarized it when he stated that

> to the extent that a college environment is an unrelated assortment of policies and practices and events and features, its influences upon the student is probably small. To the extent that a college environment is a culture, in the anthropologists sense of that word, its influence on the student is probably large.[3]

If changes do occur in college and if they are in any way related to the college experiences, what factors or influences produce these changes?

In agreement with Eddy[4] and Leggett[5], many believe that the total campus association produces any possible influence:

> In interviews with sophomores and juniors it is evident that the informal, non-academic experiences such as friends, persons dated, "bull sessions," and so forth have a greater impact upon personality development than

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[1] A. W. Astin. "Differential College Effects on the Motivation of Talented Students to Obtain the Ph. D." Journal of Educational Psychology, LIV (February, 1963), p. 63-71.

[2] A. W. Astin. "A Re-examination of College Productivity," Journal of Educational Psychology, LII (June, 1961, p. 173.

[3] C. Robert Pace. "Diversity of College Environments," National Association of Women Deans and Counselors Journal, XXV (October, 1961) p. 26.

[4] Eddy, op. cit.

[5] Leggett, op. cit.

> do the formal, academic expressions such as courses and instructors. Moreover, it is only after the students entered their major that any evidence of the impact of formal academic experiences appeared.[1]

Tyler also indicated that student attitudes, activities, interaction and social systems are a powerful factor in education,[2] and Becker found a major effect of student culture was to give students an alternative view to that offered by the faculty as to how they should act in medical school.[3]

Freedman stated:

> We believe that a distinguishable student culture exists . . . The student body as an entity may be thought to possess characteristic qualities of personality, ways of interacting socially, types of values and beliefs, and the like which are passed on from one "generation" of students to another and which like any culture provide a basic context in which individual learning takes place. We contend, in fact, that this culture is the prime educational force at work in the College, for, as we shall see, assimilation into the student society is the foremost concern of most new students. Suffice it to say now that in our opinion the scholastic and academic aims and processes of the college are in a large measure transmitted to incoming students or mediated for them by the predominant student culture.[4]

Methods of Measuring The Environment

If, then, the total environment of the college may be of

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[1]Irvin J. Lehmann. "Changes from Freshman to Senior Years," Journal of Educational Psychology, LIV (December, 1963), 305-315.

[2]Ralph W. Tyler. "The Impact of Students on Schools and Colleges," pp. 403-410 in Kaoru Yamamoto (ed.). The College Student and His Culture: An Analysis. Boston: Houghton Miflin Company, 1968.

[3]Howard S. Becker. "Student Culture" in Terry F. Lunsford (ed.) Study of Campus Cultures. Boulder, Colorado.

[4]Mervin B. Freedman. "The Passage Through College," Journal of Social Issues, XII, No. 4 (1956), p. 14.

influence on the students, how may an evaluation be made of the nature of that environment?

Pace indicated the following methods of studying and classifying colleges: directories and statistical reports, information in accrediting reports, case studies, management surveys, alumni studies, sociological studies, and psychological approaches.[1] These methods may be divided into four major approaches: an analytical approach emphasizing measurable quantitative factors such as size, location, endowment, size of faculty, holdings in the library, success of alumni, etc., a descriptive approach in which observers attempt to give a description on the basis of their observations and experience, a sociological approach in which the institution is described on the basis of the existence of subgroups and human interation, and the psychological approach where an emphasis is placed on a phenomenological seeking for responses from various persons associated with the college.

Accreditation reports, government reports, and brief descriptive listings in such books as the College Blue Book depend heavily on factual reports to describe and evaluate a college. Based on a belief suggested by Linton that a major portion of environmental forces is transmitted through other people, Astin and Holland stated that

> we can infer from this that the character of a social environment is dependent on the nature of its members. Moreover, the dominant features of an environment are dependent upon the typical characteristics of its members.

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[1] C. Robert Pace. "Methods of Describing College Cultures," Teachers College Record, LXIII (January, 1962), 267-277.

> If, then we know the character of the people in a group, we should know that group creates.[1]

Working on this basis Astin developed the Environmental Assessment Technique (EAT) based on eight attributes of the student body. These were: size of student body, intelligence level of students and six factors related to the personal orientation of the students--realistic, intellectual, social, conventional, enterprising, and artistic.[2] In another study Astin sampled 335 institutions and concluded that six dimensions in which institutions differed were affluence, size, private vs public, masculinity, realistic, and homogeneity[3] and in another study of the distribution of wealth among colleges he indicated that wealth refers to the quality of its faculty, the quality of its student body, and its financial resources, especially scholarship and research funds.[4]

As a result of additional studies, Creager and Astin stated that

> Considerable interest has developed recently in assessing and describing the college environment. This interest stems from the assumption that the kinds of changes that take place in the student between his matriculation and his

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[1] A. W. Astin and J. L. Holland. "The Environmental Assessment Technique: A Way to Measure College Environments," Journal of Educational Psychology, LII (December, 1961), p. 308.

[2] A. W. Astin. "Further Validation of the Environmental Assessment Technique," Journal of Educational Psychology, LIV (August, 1963), p. 219, 220.

[3] A. W. Astin. "An Emperical Characterization of Higher Educational Institutions," Journal of Educational Psychology, LIII (October, 1962), p. 224-235.

[4] A. W. Astin and J. L. Holland. "The Distribution of Wealth in Higher Education," College and University, XXXVII (Winter, 1962), p. 113.

> graduation often depend on the type of environment to which he is exposed. Because these changes may involve the student's behavior, knowledge, attitudes and aspirations, people responsible for educational policy and vocational guidance need comprehensive, meaningful, and non-redundant comparative information about the environments of different colleges. Similarly, those involved in educational research find such information essential in relating educational outcomes to the characteristics of the student's educational environment.[1]

An amplification of the Environmental Assessment Technique was developed which listed six major factors with a total of seventy classifications which could be used to describe a college.[2]

I	Administrative	
	A. Institution type	1-7
	B. Mode of support	8-11
	C. Location	12-17
II	Environmental Assessment Technique	
	A. Orientations	18-23
	B. Descriptions	24-27
III	Freshman Input Factors	28-33
IV	College Environment Factors	
	A. Peer-interpersonal	34-38
	B. Other peer	39-48
	C. Classroom	49-55
	D. Other	56-57
	E. Severity of Administrative Policy	58-61
V	Image Factors	62-69
VI	Ph. D. -- B.A. Origins	70

The last factor, the production factor of Ph. D. candidates, has also been used by Knapp and Goodrich,[3] Knapp and

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[1]John A. Creager and A. W. Astin. "Alternative Methods of Describing Characteristics of Colleges and Universities," Educational and Psychological Measurement, XXVIII (Autumn, 1968), p. 719.

[2]Ibid.

[3]R. H. Knapp and H. B. Goodrich. Origins of American Scientists. Chicago: University of Chicago Press, 1952.

Greenbaum,[1] and Astin and Holland[2] as a basis of classifying and evaluating institutions in the United States.

The assessment of institutional scholarship has also been made by different writers on the basis of the number of Fullbright Scholars, Woodrow Wilson Fellows, Danforth grants and other similar programs.

Riesman and Jencks indicated another approach in their description of the institutional environment of San Francisco State College.[3] Their comments and evaluations were based primarily on their own observations of the character of the institution. The accuracy of their interpretation was questioned by Dumke, a former president of San Francisco State College, who claimed that the college was viewed in the light of the authors' expectations of an Ivy college rather than what it was, that they looked at only one department, education, and that their inferences were without data.[4]

The descriptive technique has been used by others as evidenced by David Boroff in Campus, U.S.A.[5] Similar approaches are evident in many publications and descriptions of current campuses and institutions.

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[1]R. H. Knapp and J. J. Greenbaum. The Younger American Scholar: His Collegiate Origins. Chicago: University of Chicago Press, 1953.

[2]Astin and Holland, op. cit.

[3]David Riesman and Christopher Jencks. "A Case Study in Vignette: San Francisco State College," Teachers College Record, LXIII (January, 1962), p. 233-257.

[4]Glenn S. Dumke. "The Response from San Francisco State College," Teachers College Record, LXIII (January 1962), p. 258-266.

[5]David Boroff. Campus U.S.A. New York: Harper, 1961.

Martin Trow has emphasized the student subculture in describing an institution and believed that the student subcultures themselves should have relevance for administrative or faculty action.

> The importance of these subcultures is that they comprise a major part of a student's college environment . . . We cannot fully understand a college and its influence on different kinds of students without taking these subcultures into account.[1]

It was his belief that the administration should attempt to strengthen interaction and development of subcultures through manipulation of organization and facilities.[2] The four subcultures he identified and described were: (1) collegiate--pursue football, fun, parties, (2) academic--serious-minded students, seek knowledge, (3) vocational--centered on the student placement office, and (4) non-conformist--related to off-campus activities and in pursuing an identity.[3]

Pace accepted the existence of subcultures on a campus and attempted to study their possible effect on the campus of UCLA.[4] Butler indicated in his study that the subcultures described by Trow did exist on the campus at East Texas State University.[5]

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[1]Martin A. Trow. "Administrative Implications of Analysis of Campus Cultures," in Lunsford, Terry F. The Study of Campus Cultures. Boulder: Western Interstate Commission for Higher Education, 1963, p. 105.

[2]Martin A. Trow. "Student Cultures and Administrative Action." A paper read at Southwest Institute on Institutional Research, July 19-22, 1961 (mimeographed), p. 16.

[3]Ibid., pp. 12-14.

[4]C. Robert Pace. The Influence of Academic and Student Sub-Cultures in College and University Environments. Los Angeles: University of California, 1964.

[5]Robert Dale Butler. "An Investigation of the Perceived Environment Between and Among the Existing Subcultures on a University Campus," unpublished doctoral dissertation, Commerce: East Texas State University, 1968.

Murray suggested the concepts of needs and press which became the foundation of the development of the various psychological studies of college environment. He described "press" in the following manner:

> In crudely formulating an episode it is dynamically pertinent and convenient to classify the S.S. (stimulus situation) according to the kind of effect--facilitating or obstructing--it is exerting or could exert upon the organism. Such a tendency or "potency" in the environment may be called a press . . . It can be said that a press is a temporal gestalt of stimuli which usually appears in the guise of a threat of harm or promise to benefit to the organism.

A "need" was defined as

> a construct (a convenient fiction or hypothetical concept) which stands for a force (the psysico-chemical nature of which is unknown) in the brain region, a force which organizes perception, appreciation, intellection, conation and action in such a way as to transform in a certain direction an existing, unsatisfying action.[1]

Subsequent study by Stern, Stein, and Bloom elaborated on the need-press concept by applying it to assessment studies and showing that the prediction of performance was improved as one defined the psychological demands (press) of the situation in which the performance was to occur.[2]

Stern continued the study in this area and with the assistance of C. Robert Pace developed the Activities Index (AI) to measure individual psychological needs (needs) and the College Characteristics Index (CCI) to measure institutional environment

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[1]H. A. Murray. Explorations in Personality. New York: Oxford University Press, 1938, pp. 40, 41, 123, 124.

[2]George C. Stern, M. Stein, and B. Bloom. Methods in Personality Assessment. Glencoe, Illinois: Free Press, 1956.

(press).[1] The College Characteristics Index "was developed to measure thirty kinds of press, analogous to the needs scales of the Activities Index, but restricted to the description of activities, policies, procedures, attitudes, and impressions that may characterize various types of undergraduate settings."[2] Ten items were used for each of the scales.

Following the use of the CCI at several institutions Stern indicated that the studies suggested the following points.

> Descriptions of college environments based solely on press profiles appear to be recognized and confirmed by academic participants and observers.
>
> Students from the same institution have press scale scores which are uncorrelated with their corresponding needs scale scores, the coefficients all falling between -.01 and +.06. The student's description of the school is apparently not a function of the description he provides of himself.
>
> The press profile obtained from small, highly-selected samples of National Merit Scholars and Finalists are highly consistent with those obtained from larger, more representative cross sections of students at the same institutions.
>
> The press profiles obtained from student responses are highly consistent with those obtained from faculty and administration at the same institutions.
>
> There is as much agreement in responses to subjective or impressionistic press items as there is to items more readily verifiable.
>
> Freshmen in the same college with different high school backgrounds (public school, private preparatory, and parochial) describe their respective high school press in ways which differ significantly from one another.

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[1] C. Robert Pace and G. C. Stern. "An Approach to the Measurement of Psychological Characteristics of College Environments," Journal of Educational Psychology, IL (October, 1958), p. 269-277.

[2] George C. Sterm. "Environments for Learning," in Nevitt Sanford The American College. New York: John Wiley and Sons, 1962, pp. 705-707.

Students describe their own institutions in terms of press scale scores that are significantly more alike than are the corresponding scale means among different institutions.

Students enrolled in different programs in a complex institution describe the press of the institution in significantly different ways.[1]

Stern has indicated some of his results by graphs which illustrate the differences which may occur in the perception of the environment.[2] These charts are reproduced on the following page.

In an attempt to identify features of effective learning environment related to the production of Ph. D.'s at Vanderbilt University, Thistlethwaite modified the CCI and developed the Inventory of College Characteristics having 180 items measuring 18 scales. Six were found to correlate with changes in aspirations for advanced degrees.[3]

For a study at the University of Illinois Nunnaly adapted the Inventory of College Characteristics by dividing the 180 items into ninety items for faculty and ninety for students. In order to provide a wider range of responses he used a seven step scale rather than a yes-no answer method.[4]

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[1] Ibid., pp. 710, 712, 713, 714, 715.

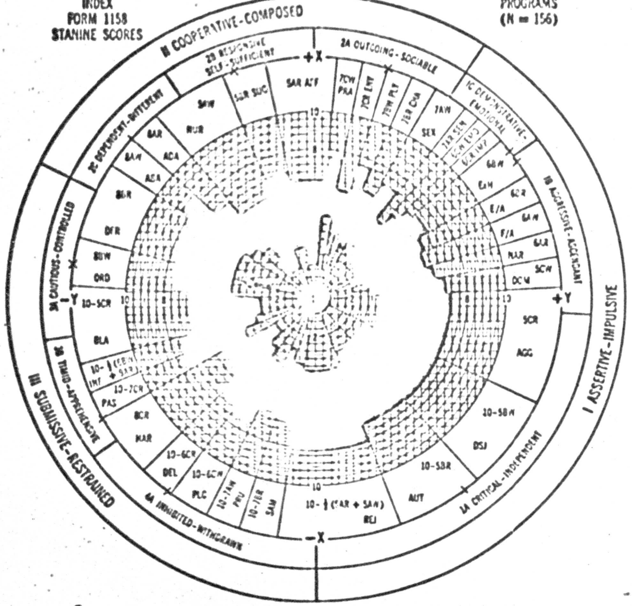
[2] Ibid., pp. 714, 715.

[3] Donald L. Thistlethwaite. Effects of College on Student Aspirations. Nashville: Vanderbilt University, 1965.

[4] Jim C. Nunnally, Donald L. Thisthethwaite, and Sharon Wolfe. "Factored Scales for Measuring Characteristics of College Environments," Educational and Psychological Measurement, XXIII (1963), 239-248.

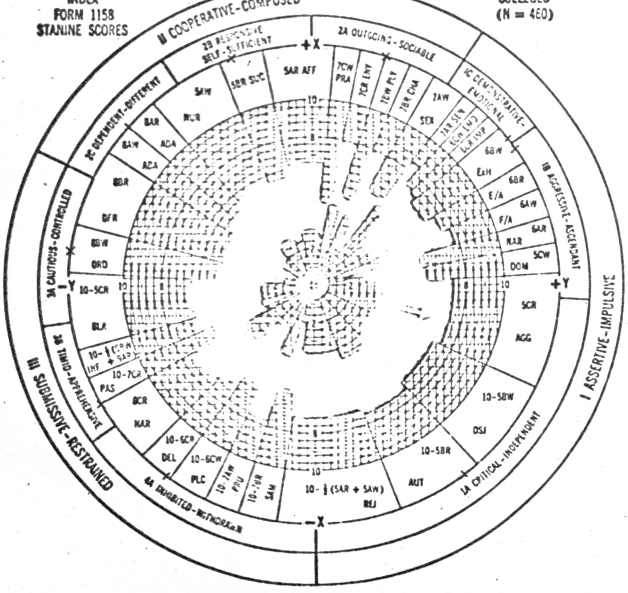
COLLEGE CHARACTERISTICS INDEX
FORM 1158
STANINE SCORES

3 BUSINESS ADMINISTRATION PROGRAMS
(N = 156)



COLLEGE CHARACTERISTICS INDEX
FORM 1158
STANINE SCORES

7 LIBERAL ARTS COLLEGES
(N = 460)



Also from the CCI Pace developed a College Characteristics Analysis (CCA) consisting of 210 questions answered on a yes-no basis in order to measure effects of the various subcultures on the campus.[1]

Subsequent to his pioneer work with Stern at Syracuse in developing the CCI, Pace began to pursue an approach somewhat less individually oriented and more institutionally oriented because he doubted that the psychological needs--as measured by the Activities Index--were directly related to environmental press. "Consequently, the writer's studies of college environments have all been concerned with describing environments in their own right. The basic interest has simply been to identify the major dimensions along which environments differed from one another."[2]

As a result of his institution-oriented approach Pace developed a 150 item instrument, College and University Environment Scales, which measured the institution on the basis of five scales: practicality, community, awareness, propriety, and scholarship.[3] He found that colleges could be identified and described on the basis of CUES. It was also noted that there were some correlations between scores on CUES and some institutional features and characteristics.

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[1]C. Robert Pace. The Influence of Academic and Student Subcultures in College and University Environments. Los Angeles: University of California, 1964.

[2]Ibid., p. 6.

[3]C. Robert Pace. Preliminary Technical Manual: College and University Environment Scales. Princeton: Educational Testing Service, 1963.

It may be seen from the correlations . . . that the practicality score has significantly negative relationships with a number of input and output variables which may be described as academic or scholarly in character. It is negatively related to the median SAT-V score of admitted freshmen and to all four of the output variables which involve a continuation of academic enrollment beyond graduation. (The Productivity Indexes--for Natural Sciences, and for Arts, Humanities, and Social Sciences--were developed by the National Merit Scholarship Corporation and reflect an institution's productivity of subsequent Ph. D.'s when the talent imput of the institutions are roughly equated.) The practicality score is further associated negatively with several environmental variables with similar nonscholastic implications: size of library, proportion of Ph. D.'s on the faculty, and proportion of seniors majoring in liberal arts subjects. Other environmental variables suggestive of status, supervision, and procedures, are positively correlated with the practicality score: number of fraternities and soroties and number of ROTC units.

The extent to which the campus is a congenial cohesive community is clearly related to its size and to the size of the town or city in which the campus is located. It is also related to a small faculty-student ratio, a fact which presumably makes faculty and students more accessible to one another. The presence of a large number of graduate students who are earning a fourth or more of their expenses are both negatively correlated with the community score. Both of these circumstances would, of course, tend to remove students from full involvement in the general life of the campus. The fact that denominational schools are rather typically smaller than state universities probably accounts, in part for the significant positive correlation between the community score and the percentage of board members from the controlling denomination. It is also probable, however, that the religious activities on the campus contribute to a sense of cohesion, loyalty, and friendliness.

The awareness dimension is positively correlated with all of the intellectual output variables and with the input variable of high scores on the SAT-V. Among the internal or environmental characteristics related to high scores on awareness are: low faculty-student ratio, low percentage of students earning one-fourth or more of their expenses, large number of library volumes in relation to the enrollment, high percentage of Ph.D.'s on the faculty, and high percentage of seniors majoring in liberal arts subjects. Also, awareness is negatively related to fraternities and sororities and to required chapel.

> Propriety is correlated with the percentage of females in the student body and with the absence of fraternities and sororities and ROTC units. It is also correlated with low proportions of females going to graduate school.
>
> The scholarship dimension is positively correlated with the input variable of high SAT-V scores and with the output variables of institutional productivity in the natural sciences and of the proportion of women who go to graduate school. Within the campus environment, high scholarship scores are associated with small faculty-student ratios and with the two indicators of library resources and quality. Scholarship scores are negatively related to the number of fraternities and sororities.[1]

A description of CUES is included in Chapter Three, since this was the basic instrument used in the present study.

In addition to the CCI developed by Stern and Pace and CUES developed by Pace, other instruments using somewhat similar methods have been used.

Under the sponsorship of the Central States College and University Cooperative Research Program, a College Environment Study (CES) was developed which consists of 150 attitudinal items designed to describe six college environmental aspects: academic, physical, cultural, communications, community relationships, and moral-ethical environments. Twenty-five items were related to each scale. The CES was scored on a five point scale.[2]

Pervin described the development of a semantic differential technique with fifty-two scales with which he desired to explore the question of individual-environment interaction and to assess

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[1] Ibid., pp. 63, 65.

[2] Dwain F. Petersen. "Item Sampling of Institutional Environments," A paper present at the National Association of Institutional Research. May 7, 1969, mimeographed.

the sources of conflict or strain within the college environment. He believed the analysis of the college as a social system would come full circle if a Transactional Analysis of Personality and Environment (TAPE) were filled out by students, faculty, and administration at the same college.[1]

Undoubtedly new instruments, techniques, and approaches will continue to be developed to evaluate more accurately the institutional climate and provide more accurate and more complete descriptions of the college campus.

Factors Influencing the Evaluation of Environment

Except for a study by Yonge at the University of California, Davis, in which he concluded there was some correlation between the psychological nature of a person as measured by the Omnibus Personality Inventory and the responses to CUES,[2] there seems to be little evidence of individual personality needs influencing perception of the environment. The results of studies by Mcfee,[3] Saunders,[4]

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[1]Lawrence A. Pervin. "The College As A Social System: Student Perceptions of Students, Faculty, and Administration," Journal of Educational Research, LXI (February, 1968), 281-284.

[2]George D. Yonge. "Personality Correlates of the College and University Environment Scales," Educational and Psychological Measurement, XXVIII (Spring, 1968), 115-123.

[3]Anne McFee. "The Relation of Students' Needs to Their Perceptions of a College Environment," Journal of Educational Psychology, LII (February, 1961), 25-29.

[4]David R. Saunders. A Factor Analytic Study of the AI and the CCI. Princeton: Educational Testing Service, 1962.

Pace,[1] and Becker[2] have all indicated a low correlation between needs and the responses on the perception of the environment (press).

In an investigation of possible relationships to other factors, McPeek found that female students' descriptions placed more emphasis on friendliness, personal, poetic, and political meaning; whereas male students didn't feel these features to be important. Male students desired a greater emphasis on procedures, personal status, and practical benefits.[3] Cole's study indicated women had a greater dissatisfaction with the social life, less future-oriented than the men, less critical of their courses, and more concerned with personal appearance.[4] Reeves found that female students perceived the community aspect--as measured by CUES and in relationship to a reference group of fifty successful seniors--more

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[1]C. Robert Pace. The Influence of Academic and Student Subcultures in College and University Environments. Los Angeles: University of California, 1964.

[2]Samuel L. Becker, Leonard D. Goodstein, and Arthur Mittman. "Relationships Between the Minnesota Multiphasic Personality Inventory and the College Characteristics Inventory," The Journal of College Student Personnel, VI (June, 1965), 219-223.

[3]Beth L. McPeek. "The University as Perceived By Its Subcultures: An Experimental Study," Journal of the National Association of Women Deans and Counsellors, XXX(Spring, 1967), 129-132.

[4]D. Cole and Beverly Fields. "Student Perceptions of Various Campus Climates," Personnel Guidance Journal, XXXIX (February, 1961), 509-510.

accurately than men.[1] Butler indicated that within the vocational subculture male and female differed in their perception of the community press and in the non-conformist subculture a difference in the perception of practicality, awareness, and scholarship.[2] Dean's study did not indicate any clear differences.[3]

Barton stated that grades generally show no relationship to environmental press nor to satisfaction with university life.[4] In Dean's study of what students expected, the brighter students preferred and expected less of practicality and more of scholarship and awareness than did the less bright.[5] Reeves found those perceiving practicality press most accurately had a higher ACT mean.[6]

McPeek found differences based upon the academic major. Awareness was perceived higher in music and science, propriety higher in science and social science with business and undecided

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[1]Teddy Glen Reeves. "The Relationship Between Accuracy of Perception of Environment and Achievement, Attrition, Satisfaction With Environment, and Sex of First-semester Freshmen," unpublished doctoral dissertation, Commerce: East Texas State University, 1968.

[2]Butler, op. cit.

[3]Gary Stephen Dean. "High School Seniors' Preferences and Expectations for College Environment in Relationship to High School Scholastic Achievement and Intellectual Ability and as a Predictor of College Success and Satisfaction," unpublished doctoral dissertation, University of California, Los Angeles, 1966.

[4]Robert Herrscher Barton. "Patterns of Attainment and The Environmental Press of UCLA Student Groups," unpublished doctoral dissertation, Los Angeles: University of California, Los Angeles, 1967.

[5]Dean, op. cit.

[6]Reeves, op. cit.

lowest, and scholarship highest in science and music. In the measure of desired environment science wanted an environment high in practicality, awareness, propriety, and scholarship. Music desired it higher in community while humanities desired it lower on practicality, business low on community and awareness and undecided low in scholarship and propriety.[1] Based on the major field of study, Butler's study indicated that the propriety press is perceived differently by groups of the non-conformist subculture.[2]

Relative to differences between students, faculty, and administration, McPeek found the perceptions and preconceptions of the students, faculty, and administration regarding the environment to be strikingly similar.[3] Pace indicated that there is little difference in faculty and student answers.[4]

A study by Brown including students, faculty, and trustees revealed a significant difference between students and faculty on three scales--practicality, community, and scholarship--and significant differences between students and trustees on four scales--practicality, community, awareness, and scholarship. Brown found the greatest difference from students' perceptions to be those held by the trustees.[5]

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[1]McPeek, op. cit.

[2]Butler, op. cit.

[3]McPeek, op. cit.

[4]C. Robert Pace and G. C. Stern. "An Approach to the Measurement of Psychological Characteristics of College Environments," Journal of Educational Psychology, IL (October, 1958), 269-277.

[5]Warren Shelburne Brown. "A Study of Campus Environment: A Comparative Study of the Perception of the Campus Environment by the Several Groups Affecting a Religiously Oriented Liberal Arts College," unpublished doctoral dissertation, Los Angeles: University of Southern California, 1969.

Ivey indicated that there is little in the literature relative to student-staff comparisons and reported that their study showed differences in perceptions by head residents and personnel workers as compared to students.[1]

The literature indicates that institutions do have a potential for affecting students and that the institutions may be described differently. In addition to using statistical information to describe a college, attention has been given to developing instruments which describe the institution on the basis of perceptions of various groups. Such perceptions appear to be unrelated to individual psychological needs, but may be related to other personal factors, interests, and the individual's relationship to the college.

It would appear that attention should be given to describing other facets of the environment and further investigation be made of the desires for institutional environment as well as perceptions of the environment by different groups associated with the college.

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[1]Allen E. Ivey, C. Dean Miller, and Arnold D. Goldstein. "Differential Perceptions of College Environment: Student Personnel Staff and Students," Personnel and Guidance Journal, XLVI (September, 1967), 17-21.

CHAPTER III

METHODS AND PROCEDURES

Brief History of Northwest College

The study was related to Northwest College of the Assemblies of God located in Kirkland, Washington. One of nine institutions of higher education offering a college level academic program sponsored and controlled by a district, a regional, or national organization of the Assemblies of God, it has the approval of the Department of Education of the Denomination.

Northwest Bible Institute opened its doors to receive students on October 1, 1934 in the facilities of Hollywood Temple in the Hollywood (now Roosevelt) district of Seattle, Washington. Like all Assembly of God institutions preceding it and those to follow until 1953, it was established primarily for the purpose of providing training for those who wished to enter some type of Christian ministry. The originally-stated purposes and objectives of the Assemblies of God included education as an objective of the fellowship.

A previous attempt at promoting an Assemblies of God Bible School was made by Rev. A. Earl Lees of Centralia in 1932, when a school was opened in an old boarding house in Centralia with sixteen students. This effort did not meet with success, however, and failed to operate after the first year.

At the annual meeting of the Northwest District held in Everett, Washington in June, 1933, it was

> Resolved: that the Northwest District establish a District Bible School; and be it further
>
> Resolved: that details concerning said Bible School, such as location, equipment, faculties and policies of administration be placed in the hands of the District Officiary.[1]

In December of 1933 Rev. Henry H. Ness assumed the pastorate of Hollywood Temple and after having considered that the facilities of the church should be used for more than one day a week, he approached the Northwest District for approval to begin a Bible School. He assured the district that the school would be no financial liability to the district. Approval was given and the new school was begun under the leadership of Rev. H. H. Ness, who continued as pastor of Hollywood Temple, in addition to being the president of the school, and Rev. C. C. Beatty who had come to the school as Dean.

The program of the new school was typical for schools of such a nature in those days. Teachers were people who were available, especially pastors; and the curriculum consisted primarily of Bible courses and other courses such as English, speech, homiletics, and music, that would facilitate the spreading of the gospel. Student life centered around religious activities and "gospel teams," and an emphasis was placed on every student being a

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[1] Minutes of the Fifteenth Annual Meeting of the Northwest District Council of the Assemblies of God, 1933, p. 9.

Christian worker.

Rev. C. E. Butterfield, pastor of Bethel Temple in Everett and later to be president, indicated in 1935 that:

> There are two definite aims and purposes in the policy of Northwest Bible Institute, namely, to develop spirituality and practicability in the individual lives of the students. Perhaps the most important is the spiritual development and relationship to God. But not to be overlooked, and that which we esteem to be very important, is the development of the student in his practical relationship to man.[1]

The school received public acceptance and the enrollment grew from 48 in the first year to 240 in 1938 and on to a high of 345 in the post war year of 1948.

The years immediately following World War II were years of change. The program which had largely been conducted on a simple unitary Bible school approach, began to be modified to meet more conventional educational practices. Teachers with greater academic background were secured, concern was expressed about the negotiability of credits with other institutions, efforts were made to adapt to the new approach Bible institutes were adopting, and overtures were made toward accreditation with the newly founded Accrediting Association of Bible Institutes and Bible Colleges (AABIBC). An indication of the changes was the change of the name to Northwest Bible College in June, 1949.

On January 13, 1949, President Ness was appointed chairman of the State Board of Prison Terms and Paroles and immediately

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[1] C. E. Butterfield. "Our Purpose" Students' Magazine, November, 1935, p. 5. cited from Mary Maxine Williams. A History of Northwest College Of The Assemblies of God 1934-1966, Unpublished Master's Thesis, University of Washington, 1966, pp. 24-25.

surrendered his duties at the college to Rev. C. E. Butterfield, who provided temporary leadership at the school, as well as continuing to pastor in Everett, until a replacement could be found. After much consideration, Rev. Butterfield was elected and accepted the position of president, which he filled until 1966.

Under the leadership of President Butterfield, the institution continued to make changes. Not only was the name changed, but emphasis was given toward the development of the library, the departmentalization of the curriculum, and the changing of control from the Northwest District alone to a broader jurisdiction. Continued progress was made toward accreditation, and in October, 1952, the institution was accredited by the Accrediting Association of Bible Institutes and Bible Colleges.

In 1955 a Junior College program was instituted

1. to help students not sure of what to do
2. to help students get established[1]

which was accomplished essentially by placing the general education program in the first two years and attempted with a minimum of expense to provide the first two years of general education for those who were not necessarily interested in following the four-year program in preparation for Christian ministry. The initial program remained essentially unchanged until 1961, when a greater distinction was made between the Bible College and Junior College programs, and various curricula in the Junior College were identified and promoted.

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[1]Williams, op. cit., p. 104.

An effort was made to keep the name of the College consistent with the objectives being pursued. In 1956 the name was changed to Northwest Bible College and Junior College, and in 1962, the name was changed again, this time to Northwest College of the Assemblies of God, but more commonly referred to as Northwest College.

Some concern was indicated by the constituency about dropping the word "Bible" out of the name of the school for the first time since its beginning. An effort was made by the College to assure its supporters and friends that Bible was still being taught and that the historical emphases of the College had not been discarded. They were now simply being supplemented to the extent that the former name was not the most accurate name available.

The State of Washington announced in 1955 that a new freeway would be constructed through Seattle and that the property occupied by the college at that time would be acquired. After much searching a site was found in Houghton (now Kirkland) east of Lake Washington. Twenty-three acres of a wartime housing project were granted by the United States Government, and an additional twelve acres adjoining were purchased. Land was cleared, an existing building was extensively remodeled, and four new buildings were constructed and ready for the opening of school in September, 1959. A women's dormitory was constructed in 1960, to be followed in subsequent years by a president's home, men's residence, dining hall, gymnasium, chapel, and additional residences.

Following the enrollment surge after World War II, the enrollment decreased to approximately 200-225. Concurrent with the development of the new campus, the development and identification of new curricula, and an intensive student recruitment program, there was an increase in enrollment from 220 in 1962 to 320 in 1964 and 440 in 1965.

The College continued to develop the breadth of its program and to encourage non-ministerial students as well as ministerial students to attend. Emphasis was placed on raising the academic level of the offerings, and approaches were made to the Northwest Association of Secondary Schools and Colleges for purposes of seeking regional accreditation.[1]

Research Design

The study was an ex post facto cross sectional descriptive field study similar in techniques to institutional environmental studies previously conducted by Stern, Pace, Thistlethwaite, and Trow. As such, it was not truly an experimental study with control and experimental groups. The comparisons made between groups and subgroups are of a nature described by Campbell and Stanley as static group comparisons.[2] Comparisons of perceived and

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[1]A more complete account of the history of Northwest College is presented in Williams, op. cit. The author is indebted to that work for some of the information presented in the brief account that is presented.

[2]Donald T. Campbell and Julian C. Stanley. "Experimental and Quasi-Experimental Designs for Research on Teaching," in Gage, N. L. (ed.). Handbook of Research on Teaching. Chicago: Rand McNally and Company, 1963, p. 182.

desired environment measurements are similar in nature to pre-test, post-test research designs.

Instruments Used

CUES

Two types of instruments were used in gathering data for the study: a supplemented form of the College and University Environment Scales, and personal data questionnaires which were developed for this study.

The basic instrument was the College and University Environment Scales developed by C. Robert Pace.

> CUES consists of 150 statements about college life--features and facilities of the campus, rules and regulations, faculty, curricula, instruction and examinations, student life, extra-curricular organizations, and other aspects of the institutional environment which help to define the atmosphere or intellectual-social-cultural climate of the college as students see it. Students who take the test are asked to say whether each statement is generally TRUE or FALSE with reference to their college: TRUE when they think the statement is generally characteristic of the college, is a condition which exists, an event which occurs or might occur, is the way most people feel or act; and FALSE when they think the statement is generally not characteristic of the college. The test is, therefore, a device for obtaining a description of the college from the students themselves, who presumably know what the environment is like because they live in it and are a part of it. What the students are aware of, and agree with some unanimity of impression to be generally true, defines the prevailing campus atmosphere as students perceive it.[1]

The 150 statements of CUES were developed so that thirty statements are related to each of five scales or major aspects of the environment. These scales are practicality, community,

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[1]Pace, Preliminary Technical Manual, op. cit., p. 2.

awareness, propriety, and scholarship. Pace describes each scale as follows:

> Scale 1. Practicality. This combination of items suggests a practical, instrumental emphasis in the college environment. Procedures, personal status, and practical benefits are important. Status is gained by knowing the right people, being in the right groups, and doing what is expected. Order and supervision are characteristic of the administration and of the classwork. Good fun, school spirit, and student leadership in campus social activities are evident.
>
> The atmosphere described by this scale appears to have an interesting mixture of entrepreneurial and bureaucratic features. Organization, system, procedures, and supervision are characteristic of many large enterprises, both public and private, industrial, military, and governmental, but they are not limited to large agencies. Such hierarchies as exist, however, may be interpersonal as well as organizational, so that it is not only useful to understand and operate within the system but also to attain status within it by means of personal associations and political or entrepreneurial activities.
>
> There are, of course, many practical lessons to be learned from living in an environment that has these characteristics and opportunities. Certainly such characteristics are encountered widely in the larger society.
>
> Scale 2. Community. The combination of items in this scale describes a friendly, cohesive, group-oriented campus. The environment is supportive and sympathetic. There is a feeling of group welfare and group loyalty which encompasses the college as a whole. The campus is a community. It has a congenial atmosphere.
>
> The small college in a small town immediately comes to mind as a prototype--with friendly and helping relationships among the students and between the students and the faculty. Some large universities, however, manage to have a strong sense of community; and some small colleges have an atmosphere that is better characterized by privacy, personal atonomy, and cool detachment than by a strong sense of togetherness. On the whole, however, bigness tends to beget diffusiveness rather than cohesion; it also tends to beget impersonality but not necessarily unfriendliness.

If the organizational counterpart of "practicality" was the bureaucracy, perhaps the counterpart to "community" is the family.

Scale 3. Awareness. The items in this scale seem to reflect a concern and emphasis upon three sorts of meaning--personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggest the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, etc., suggest the search for poetic meaning. A concern about events around the world, the welfare of mankind, and the present and future condition of man suggest the search for political meaning and idealistic commitment. What seems to be evident in this sort of environment is a stress on awareness, an awareness of self, of society, and of esthetic stimuli.

Perhaps in another sense, these features of a college atmosphere can be seen as a push toward expansion and enrichment--of personality, of societal horizons, and of expressiveness.

Scale 4. Propriety. The items in this scale suggest an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. On the negative side, one can describe propriety as the absence of demonstrative, assertive, rebellious, risk-taking, inconsiderate, convention-flouting behavior.

In any event, that atmosphere on some campuses is more mannerly, considerate, and proper than it is on others.

Scale 5. Scholarship. The items in this scale describe an academic scholarly environment. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, an interest in ideas as ideas, knowledge for its own sake, and intellectual discipline--all these are characteristic of the environment.[1]

Within CUES the thirty statements for each scale are divided into two groups of fifteen and separated by measurements of other

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[1] Ibid., pp. 24, 25.

factors. The items in CUES are ordered in such a way that each sequence of fiteen items belongs to one of the five scales as follows:[1]

Items	1-15 -- Scale 1	Practicality
Items	16-30 -- Scale 5	Scholarship
Items	31-45 -- Scale 2	Community
Items	46-60 -- Scale 3	Awareness
Items	61-75 -- Scale 4	Propriety
Items	76-90 -- Scale 1	Practicality
Items	91-105-- Scale 5	Scholarship
Items	106-120-- Scale 2	Community
Items	121-135-- Scale 3	Awareness
Items	136-150-- Scale 4	Propriety

The development of CUES was based on earlier work done by Pace and George Stern of Syracuse University in developing the College Characteristic Index (CCI). Their initial work had used the earlier proposals of Murray regarding individual needs and environmental press. From the catalogue of personality needs listed by Murray, Stern had developed a list of thirty needs and those needs were used as the framework for writing the thirty environmental press scales for the CCI--ten items for each scale--making a total of 300 items.[2]

Pace believed that there are two ways of viewing the collection of 300 items in the CCI. One is a psychological approach in

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[1] Ibid., p. 38.

[2] Ibid., p. 6.

which the responses of individuals are the primary concern; the other is an educational-sociological approach in which the characteristics of institutions are the primary concern. He chose to devote his attention to the second approach and, therefore, to make some revisions of the CCI with the desire to describe institutional characteristics rather than to emphasize the meeting of individual personality needs by the environment.[1]

This desire to provide institutional descriptions resulted in the restructuring of the statements, reducing their number, and identifying different factors about the environment. A detailed presentation of the methods used in the reduction of the statements from 300 to 150 and the resulting identification of the five different environmental factors through a factor analysis is given in the Preliminary Technical Manual, pages 8-23.

The resulting instrument was administered at several institutions by Pace to verify the potential for identifying different types of college environments and the possibility of correlative factors. It was found that college environments did differ and they could be described on the basis of student responses to the statements included in CUES. It has been noted that some correlations existed between scores on CUES and other institutional features.

Religion Scale

Although CUES has had wide acceptance as an environmental measuring instrument, it does not provide for the measurement of a

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[1] Ibid.

characteristic that is of major importance to many colleges, that of the religious environment or character of the college. For some institutions religion may be as important a factor as some of the many other characteristics that have been measured. The adequacy of the college program is measured not only in how the school provides for the "academic" education of its students, but also the extent to which it provides a religious influence and environment.

As a part of this study, an attempt was made to develop a scale which would measure the religious factor of institutional environment, to make the scale comparable to and compatible with CUES, the major instrument that was used, and to select statements (questions) representative of the various sources of such influences. In developing the religious factor scale, four areas of association and possible influence were used: student attitudes and actions, faculty attitudes and actions, college regulations, programs and emphases, and "general" factors which appear to be general characteristics of the institution apart from the singular influence of any one segment of the campus.

The statements were selected on the basis of historical indications of a religious emphasis on a college campus, indications of various religious aspects of a college environment as stated by various writers, factors believed to have a potential for measurement, and the experience of the writer. This is essentially the same method used by Pace in the development of the statements for CUES.

In keeping with the practice of CUES, thirty statements were developed. Ten were related to student attitudes and actions:

Students who regularly attend special religious services are considered odd and are often referred to by such names as "holy Joes."

Only a few students take an active part in religious activities on the campus.

Most students place a high value on a personal religious experience.

Student prayer meetings are conducted and are usually well attended.

Students often discuss religious topics in informal meetings and conversations.

Students often share spiritual problems with one another.

Students often participate in various types of Christian ministry, e.g., Sunday school teaching, gospel teams, etc.

Most students have personal daily devotions.

Little interest is shown by students toward religion-oriented summer activities.

Students pray before each meal.

Five were related to faculty attitudes and actions:

Professors often question the accuracy and integrity of the Bible.

Teachers often counsel and pray with students.

Faculty members often use Biblical stories for illustration in non-Bible courses.

Faculty members are active participants in school religious activities.

Professors attempt to emphasize religious values in their respective courses.

Ten were related to college regulations, programs, and emphases:

Attendance of regular chapel services is required.

Religion is made relevant to contemporary needs.

Little effort is made by the college to stress a Christian influence in determining institutional policies and practices.

Students are encouraged to witness to others about their faith.

There are regularly scheduled religious services, e.g., Religious Emphasis Week.

Attendance at Sunday church services is required.

It is unlikely that classes would be dismissed for special religious activities.

The school sponsors small group meetings to discuss topics related to religion.

Students are encouraged to enter the ministry.

Counseling services are provided for those with spiritual and religious problems.

And five were related to "general" characteristics of the institution:

Classes usually begin or conclude with prayer.

The Bible is frequently used as a basis for determining the moral code.

Personal Christian faith is strengthened by attendance here.

The Bible is seldom interpreted literally.

A religious service with an outstanding church leader as the great speaker would be poorly attended.

Each of these statements was to be answered in the same manner as those in CUES; that is, by indicating whether the statements were generally true or generally false.

On the basis of the manner of selection, the statements were believed to be valid without prior statistical analyses because of "content" validity. However, to further ascertain the

validity of the instrument, it was administered to student samples from five institutions. Two were public supported colleges (Shoreline Community College, Seattle, Washington, and Golden West College, Huntington Beach, California), two were denominationally sponsored liberal arts colleges (Evangel College, Springfield, Missouri, and Southern California College, Costa Mesa, California), and one was a denominationally supported Bible College (North Central Bible College, Minneapolis, Minnesota). The sample from each institution was selected so that those students responding would represent a diversity within the student population and not just a single interest group. The instrument was provided with appropriate instructions and was then administered at each of the colleges. The ungraded responses were then returned to the author for grading and interpretation. On the basis of institutional nature and objectives, it was anticipated that some differences would appear.

For purposes of comparison, the two public institutions were grouped together and the three denominationally supported and controlled colleges were grouped together. The reliability of the difference between proportions was then determined for each of the thirty statements in the religion scale in a manner given by Peatman.[1]

$$\hat{\sigma}(p_1 - p_2) = \sqrt{pq\left(\frac{1}{n_1} + \frac{1}{n_2}\right)} \qquad p = \frac{f_1 + f_2}{n_1 + n_2} \qquad q = 1-p \qquad z = \frac{(p_1 - p_2) - 0}{\hat{\sigma}(p_1 - p_2)}$$

The results of these comparisons are indicated in Table 1. The z ranged from a low of 0.888 for number 1 to a high of 13.566

[1] John G. Peatman, Introduction to Applied Statistics. New York: Harper and Row, 1963, pp. 263-64.

for number 17. There was a significant difference at the .01 level for each of the thirty statements with the exception of number 1.

Thus it was concluded that twenty nine of the thirty statements on the proposed instrument for measuring a religious factor were significant in discriminating between some environmental influences on a public supported campus and on the selected church sponsored campuses. Statement number one was retained, although it was not a discriminating statement, to make the number of statements total 30 in keeping with the practice of Pace in CUES. It was concluded that it would not adversely affect the measurements.

In order to retain as nearly as possible the original nature of CUES for possible comparative use and to conform to the CUES practice of separating the statements into two groups of fifteen statements, one half of the additional statements were placed before the first statement in CUES and fifteen were placed after the conclusion of CUES.

Personal Data

Personal information questionnaires were developed for the students. The form was designed to yield information about the individuals which might be of significance in their description of and/or desires for the college. The following bases for sub-groups identification were used: sex, college residence, attendance at another college, academic programs, and participation in extra-curricular activities.

Respondents were asked to complete the questionnaires at the time of the first measurement. Since names were requested, it was

TABLE 1

RESPONSES TO RELIGIOUS MEASUREMENT INSTRUMENT

Item	Public Supported Institutions N = 80		Church Sponsored Institutions N = 124		z
	N Keyed Direction	% Keyed Direction	N Keyed Direction	% Keyed Direction	
1	74	92.5	118	95.5	.888
2	54	67.5	119	96.0	5.534**
3	4	5.0	120	96.6	13.087**
4	19	24.0	81	65.3	5.788**
5	34	42.5	101	81.5	5.735**
6	27	33.75	111	89.48	8.355**
7	1	1.25	88	71.0	9.789**
8	27	33.8	96	77.4	6.211**
9	1	1.25	34	27.4	4.778**
10	3	3.75	112	90.3	12.146**
11	32	40.0	107	86.2	6.969**
12	10	12.5	74	59.7	6.728**
13	18	22.5	104	83.8	8.784**
14	6	7.5	115	92.7	12.145**
15	30	37.5	116	93.5	8.642**
16	25	31.25	113	91.0	8.929**
17	5	6.25	124	100.0	13.566**
18	6	7.5	109	87.9	11.500**
19	2	2.5	63	50.8	7.196**
20	41	51.3	109	87.9	5.554**

** significant at the .01 level of confidence

TABLE 1--Continued

Item	Public Supported Institutions N = 180		Church Sponsored Institutions N = 124		z
	N Keyed Direction	% Keyed Direction	N Keyed Direction	% Keyed Direction	
21	24	30.0	95	76.5	6.577**
22	8	10.0	72	58.0	6.857**
23	3	3.75	105	84.6	11.313**
24	19	23.5	92	74.2	7.059**
25	13	16.25	57	46.0	4.375**
26	42	52.5	111	89.5	5.959**
27	2	2.5	76	61.3	8.346**
28	5	6.25	112	90.5	11.849**
29	3	3.75	112	90.5	12.175**
30	24	30.0	118	95.0	9.848**

** significant at the .01 level of confidence

possible to verify the information and to secure additional information from student records, if necessary.

Population

Northwest College is a coeducational institution having an approximately equal distribution of male and female students. The number of responses, 112 men and 119 women, is indicative of this distribution. An examination of the age distribution of those responding revealed 13.4% eighteen or younger, 32.3% nineteen years of age, 17.7% twenty years of age, 12.5% twenty-one years of age, 9% twenty-two years of age, and 15.6% twenty-three or older. A majority of the students are residents on the campus and reflect interests in a ministerial oriented program by their enrollment in the Bible College and non-ministerial interests as indicated by their enrollment in the Junior College which makes its direct appeal to those not interested in immediate ministerial training. Other characteristics of the population are indicated by the analyses used in the study.

The faculty included members varying in age from twenty-four to sixty-five, was predominately male--thirteen males and four females, and included those who had been with the institution for only one year to those with seventeen years of service.

The Board of Directors consisted entirely of men. Of the eighteen members, twelve were ministers and six were laymen. They ranged in age from approximately forty to seventy. All were from the Northwest. Most of them had had some post-high school education.

Administration of Instruments

The entire instrument was given to each member of each of the three groups being measured so that as complete a response as possible might be obtained.

The instrument was first administered to the entire student body and faculty at the regular daily chapel period on May 24, 1966. The chapel service was selected as a time for administering the instrument since all students are required to attend chapel.

Since the major objective of the study was to compare the perceived image of the college with the desired image, a second administration of the instrument was necessary to obtain the measurement of the desired institutional characteristics. This measurement was done in a similar method as the first, but with modified instructions to indicate that they were to respond on the basis of their desires, not as they perceived the institution. The second measurement was made seven days after the initial response. Pace indicates that the manner of administering the "test" is not critical due to its nature.[1]

To those students not attending chapel on the days the instrument was administered, the material was sent with a letter informing them of the nature of the study and requesting that they respond.

Complete and usable responses on both measurements were received from 231 students of a possible 354 for a 66% response,

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[1]Pace, Preliminary Technical Manual, op. cit., pp. 61, 62.

and from 16 of 17 faculty members for a 94% response.

The instruments were distributed to the Board of Directors at their semi-annual meeting in June, 1966. Instructions were given orally to the group, and the material needed for making both responses was provided. They were asked to complete the instrument while on campus or return it by mail in the envelope provided. Of the eighteen members of the Board of Directors, excluding the president of the college, responses were secured from seventeen, for a 94% response. The president, as mentioned earlier, was included with the faculty.

Although there was not a 100% response by all groups, as would be desired, the proportion of response was considered sufficient to be a valid measurement of the environment. Pace indicated that it was not necessary to measure a large group to obtain a satisfactory measurement of the environment.[1]

Analysis of Data

After gathering the data to be used in the study, it was processed and analyzed in the following manner.

1. The responses to CUES which were obtained on IBM document 510 were reproduced on a data processing card using an IBM 1230 document reader.
2. Each subject's responses were scored against a key provided by Pace for CUES and the key developed for the religion index.

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[1]Pace, Preliminary Technical Manual, op. cit., pp. 61, 62.

3. Information provided on the personal data questionnaires was key punched into a set of cards and collated with the cards containing CUES responses and scale scores.

4. Appropriate computer analyses programs were written to obtain the mean scale score and standard deviation on each of the six scales for each group and each sub-group.

5. Means, standard deviations, and F values were calculated by use of computer program BMD01V, a program for analysis of variance for one-way design.

6. t values for hypotheses 1, 2, 3, 4, 7, 8 and 9 were calculated from F values provided by computer.

7. Hypotheses 5 and 6 were tested by a comparison of mean scale scores and differences, using the following formula

$$t = \frac{\bar{X}_1 - \bar{X}_2 - 0}{\sqrt{\frac{s^2}{n_1} + \frac{s^2}{n_2}}}$$

CHAPTER IV

RESULTS OF THE STUDY
AND
INTERPRETATION OF THE DATA

Subsequent to administering the instrument, the data were analyzed by appropriate statistical analyses. Means, standard deviations, mean differences, and F or t values were calculated to determine the possible existence of significant differences.

Tests for significant differences were made between students and faculty, faculty and board, and students and board. Analyses were also made of student subgroup responses, and tests were made for differences between respective group responses to the perceived and desired environment.

The results of these analyses are included in the present chapter. Significant differences are indicated where they existed. The minimum level of confidence accepted was the .05 level. Where there were differences at the .01 level, these are so indicated.

Perceived Environment

Between Groups

Inspection of Table 2 reveals that with F values of 9.01, 12.12, 7.48, and 4.13, significant differences existed between student, faculty, and board responses at the .01 level on

TABLE 2

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR STUDENTS, FACULTY, AND BOARD OF DIRECTORS

Scale	Students N = 231		Faculty N = 16		Board N = 17		F
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Practicality	16.28	2.49	16.00	2.03	18.88	2.59	9.01**
Scholarship	14.47	4.86	13.94	4.09	20.29	3.93	12.12**
Community	20.98	3.70	20.25	3.34	22.88	4.20	2.48
Awareness	11.76	3.63	8.49	2.61	13.06	4.87	7.48**
Propriety	22.42	3.58	21.37	3.69	23.29	3.51	1.18
Religion	26.48	2.70	26.62	3.92	28.47	1.97	4.13*

* significant at the .05 level of confidence

** significant at the .01 level of confidence

practicality, scholarship, and awareness and at the .05 level on the religion scale. No significant differences existed on the community and propriety scales.

On each of the six scales the Board of Directors responded with the highest mean scale score, and with the exception of the religion scale, the faculty had the lowest mean score on each scale.

Further analyses were made of the practicality, scholarship, awareness, and religion scales--those scales where the F ratio revealed significant differences. These analyses are included in Tables 3, 4, and 5.

Students -- faculty. -- Inspection of the data for student and faculty measurements included in Table 3 reveals that there was a significant difference in the perception only on the awareness scale. The students' responses were significantly higher with a mean scale difference of 3.32. On all other scales there were no significant differences.

Faculty -- board. -- The data for faculty and board measurements are included in Table 4. These data reveal that the Board of Directors perceived the practicality, scholarship, and awareness aspects of the environment significantly higher than the faculty. The responses for religion were not significantly different.

Students -- board. -- Included in Table 5 are the data for student and board responses. These data reveal that significant differences in perception of the environment existed at the .01 level between the students and board for practicality, scholarship,

TABLE 3

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR STUDENTS AND FACULTY

Scale	Students N = 231		Faculty N = 16		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.28	2.49	16.00	2.03	.28	.52
Scholarship	14.47	4.86	13.94	4.09	.53	.43
Awareness	11.76	3.63	8.44	2.61	3.32	4.78**
Religion	26.48	2.70	26.63	3.98	.15	.14

** significant at the .01 level of confidence

TABLE 4

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR FACULTY AND BOARD OF DIRECTORS

Scale	Faculty N = 16		Board N = 17		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.00	2.03	18.88	2.59	2.88	11.30**
Scholarship	13.94	4.09	20.29	3.93	6.35	4.22**
Awareness	8.44	2.61	13.06	4.87	4.62	3.42**
Religion	26.63	3.98	28.47	1.97	1.84	1.68

** significant at the .01 level of confidence

TABLE 5

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR STUDENTS AND BOARD OF DIRECTORS

Scale	Students N = 231		Board N = 16		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.28	2.49	18.88	2.59	2.59	6.18**
Scholarship	14.47	4.86	20.29	3.93	5.82	5.80**
Awareness	11.76	3.63	13.06	4.87	1.30	.89
Religion	26.48	2.70	28.47	1.97	1.99	7.64**

** significant at the .01 level of confidence

and religion with respective mean differences on three scales (practicality, scholarship, and religion) the analyses reveal the fewest number of differences between students and faculty and an equal number of differences between the students and board and between the faculty and board, and fewer differences between the faculty and students than between the faculty and the Board of Directors.

Between student sub-groups

At the time of the initial administering of the instrument, personal questionnaires were provided which made it possible to group students on the basis of sex, college residence, attendance at other colleges, college program, and their participation in extra-curricular activities. The means and standard deviations for the responses regarding the perceived environment are presented in Tables 7 through 10.

Sex. -- Means and standard deviations of the responses of male and female students are included in Table 6. With t values of 4.56, 4.25, and 4.07 respectively, there were significant differences in the perception of the community, propriety, and religion characteristics of the environment. In each instance of significant differences, the women had a higher mean scale score. The mean scale scores for practicality, scholarship, and awareness were not significantly different.

College residence. -- Mean scale scores and standard deviations for the responses of the dormitory and non-dormitory students are given in Table 7. There were significant differences at

TABLE 6

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR MALE AND FEMALE STUDENTS

Scale	Male N = 112		Female N = 119		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.33	2.44	16.23	2.55	.10	.31
Scholarship	14.34	5.42	14.59	4.28	.25	.39
Community	19.88	3.75	22.02	3.36	2.14	4.56**
Awareness	11.75	3.73	11.76	3.55	0.01	.00
Propriety	21.43	3.89	23.36	2.99	1.93	4.25**
Religion	25.76	2.89	27.16	2.32	1.40	4.07**

** significant at the .01 level of confidence

TABLE 7

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR DORMITORY AND NON-DORMITORY STUDENTS

Scale	Dorm N = 142		Non-dorm N = 89		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.58	2.48	15.30	2.46	.78	2.33*
Scholarship	14.32	4.90	14.71	4.81	.39	.59
Community	20.75	4.03	21.35	3.09	.60	1.19
Awareness	11.74	3.89	11.79	3.21	.05	.09
Propriety	21.99	3.77	23.12	3.16	1.13	2.37*
Religion	26.29	2.79	26.79	2.54	.50	1.36

* significant at the .05 level of confidence

** significant at the .01 level of confidence

the .05 level on the practicality and propriety scales. Dormitory students had a higher scale score on propriety. There was no significant difference in the perception of scholarship, community, awareness, and religion.

Attendance at other colleges. -- A review of the responses from those who previously attended another college and from the native students, as given in Table 8, reveals no significant differences in the way the environment was described.

College program. -- Included in Table 9 are the mean scale scores, standard deviations, mean differences, and t values for the responses of Junior College and Bible College students. There was a significant difference for practicality at the .05 level and for scholarship at the .01 level of confidence. On each of these scales the Bible College students had higher mean scores. There was no significant difference on any of the other scales.

Participation in extra-curricular activities. -- Review of the data contained in Table 10 reveals no significant differences in the mean scores for any of the scales. The maximum mean scale difference was .89 and the responses indicate a great similarity in the perception of the environment based on the student's participation or non-participation in extra-curricular activities.

Desired Environment

In order to ascertain the desires for the environment and to provide a basis for comparison between the perceived and desired

TABLE 8

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR TRANSFER AND NATIVE STUDENTS

Scale	Transfer N = 149		Native N = 184		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.12	2.19	16.32	2.57	.20	.49
Scholarship	14.12	5.22	14.56	4.77	.44	.56
Community	20.63	4.14	21.08	3.58	.45	.75
Awareness	11.63	4.23	11.79	3.47	.16	.27
Propriety	22.47	3.37	22.41	3.65	.06	.09
Religion	25.86	3.38	26.65	2.47	.79	1.83

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 9

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR JUNIOR COLLEGE AND BIBLE COLLEGE STUDENTS

Scale	Junior College N = 100		Bible College N = 131		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	15.89	2.67	16.57	2.32	.68	2.08*
Scholarship	12.93	4.49	15.64	4.81	2.71	4.36**
Community	20.98	3.71	20.98	3.71	.00	.00
Awareness	11.24	3.50	12.15	3.70	.91	1.90
Propriety	22.43	3.53	22.42	3.64	.01	.00
Religion	26.67	2.68	26.34	2.72	.33	.88

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 10

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR PARTICIPANTS AND NON-PARTICIPANTS IN EXTRA-CURRICULAR ACTIVITIES

Scale	Participants N = 84		Non-participants N = 147		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.36	2.62	16.23	2.43	.13	.37
Scholarship	14.83	4.61	14.26	5.00	.57	.86
Community	21.55	3.49	20.66	3.79	.89	1.76
Awareness	11.55	3.21	11.88	3.86	.33	.67
Propriety	22.08	3.81	22.62	3.45	.54	1.09
Religion	26.63	2.28	26.39	2.92	.24	.64

* significant at the .05 level of confidence

** significant at the .01 level of confidence

environments, the instrument was administered a second time. Respondents were asked to reply on the basis of what they would like the college to be. The means and standard deviations for the measurements of the desired environment are presented in Tables 11 through 19.

Between Groups

Inspection of the data contained in Table 11 reveals that the responses of the students, faculty, and Board of Directors reflect significant differences at the .01 level for practicality, scholarship, community, and propriety. No significant differences existed on the awareness and religion scales.

On all scales except awareness the Board of Directors responded with the highest score. For awareness the faculty had the highest score.

Further analyses were made of the practicality, scholarship, community, and propriety scales--those scales where the F ratio revealed significant differences. These anslyses are included in Tables 12, 13, and 14.

Students -- faculty. -- Inspection of the data for student-faculty measurements included in Table 12 reveals there were significant differences for the desired environment on the scholarship, community, and propriety scales. In each instance the faculty had a higher score. No significant differences were expressed for practicality.

Faculty -- board. -- The data for faculty-board measurements are included in Table 13. These data reveal that the desires of

TABLE 11

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR STUDENTS, FACULTY, AND BOARD OF DIRECTORS

Scale	Students N = 231		Faculty N = 16		Board N = 17		F
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Practicality	17.21	2.61	17.69	2.09	19.53	2.67	6.47**
Scholarship	23.04	4.36	25.87	3.16	25.88	1.76	6.64**
Community	23.24	3.05	25.00	1.41	25.24	2.44	5.86**
Awareness	21.67	5.70	23.19	3.45	22.35	3.22	.66
Propriety	23.90	3.15	25.69	2.24	25.94	1.98	5.77**
Religion	28.16	2.34	28.19	2.07	29.41	1.06	2.43

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 12

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR STUDENTS AND FACULTY

Scale	Students N = 231		Faculty N = 16		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.21	2.61	17.69	2.09	.48	1.49
Scholarship	23.04	4.36	25.87	3.16	2.83	4.02**
Community	23.24	3.05	25.00	1.41	1.76	10.64**
Propriety	23.90	3.15	25.69	2.24	1.79	5.04**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 13

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR FACULTY AND BOARD OF DIRECTORS

Scale	Faculty N = 16		Board N = 17		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.69	2.09	19.53	2.67	1.84	2.66*
Scholarship	25.87	3.16	25.88	1.76	.01	.01
Community	25.00	1.41	25.24	2.44	.24	.50
Propriety	25.69	2.24	25.94	1.98	.25	.47

* significant at the .05 level of confidence

the faculty and the board as expressed by the scores on the desired environment measurement were significantly different on practicality, with the board responding with the higher score. There was no significant difference on the responses for each of the other scales.

Students -- board. -- Included in Table 14 are the data for student-board responses. These data reveal that the board had significantly higher mean scale scores for all four scales--practicality, scholarship, community, and propriety.

With student-faculty differences on three scales (scholarship, community and propriety), faculty-board differences on one scale (practicality), and student-board differences on four scales (practicality, scholarship, community, and propriety), the analyses reveal the fewest number of differences between faculty and board and the greatest number of differences between students and board and fewer differences between faculty and board than between faculty and students.

Between student sub-groups

Analyses of student responses were also made on the bases of sex, college residence, attendance at other colleges, college program, and their participation in extra-curricular activities. The means and standard deviations for the responses regarding the desired environment are presented in Tables 15 through 19.

Sex. -- The mean scale responses and standard deviations for men and women are included in Table 15. The t values for practicality, community, propriety, and religion indicate significant

TABLE 14

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR STUDENTS AND BOARD OF DIRECTORS

Scale	Students N = 231		Board N = 16		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.21	2.61	19.53	2.67	2.32	5.17**
Scholarship	23.04	4.36	25.88	1.76	2.84	10.80**
Community	23.24	3.05	25.24	2.44	2.00	5.10**
Propriety	23.90	3.15	25.94	1.98	2.04	7.46**

** Significant at the .01 level of confidence

TABLE 15

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR MALE AND FEMALE STUDENTS

Scale	Male N = 112		Female N = 119		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.62	2.85	17.76	2.25	1.14	3.41**
Scholarship	22.92	4.73	23.15	4.00	.23	.40
Community	22.42	3.27	24.02	2.63	1.60	4.11**
Awareness	21.72	5.81	21.62	5.62	.10	.13
Propriety	23.31	3.49	24.45	2.70	1.14	2.77**
Religion	27.68	2.72	28.61	1.82	.93	3.08**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

differences in the desires for the environment on these scales. In each instance the women had a mean scale score higher than the men. The mean differences for scholarship and awareness were statistically insignificant.

College residence. -- Inspection of the data included in Table 16 reveals that there was a significant difference at the .05 level for practicality and at the .01 level for scholarship and propriety. Dormitory students had higher mean scale scores for practicality and non-dormitory students had higher mean scale scores for scholarship and propriety. No significant differences were expressed for community and awareness.

Attendance at other colleges. -- Means and standard deviations for responses from transfer and native students are included in Table 17. Inspection of these data reveals that native students had significantly higher mean scale scores for practicality and community. There were no significant differences on any of the other scales. It is interesting to note that the mean scale scores for awareness were the same for each sub-group.

College program. -- Table 18 includes the mean scale scores and standard deviations for the desired environment as expressed by Junior College and Bible College students. These student subgroups had statistically significantly different responses at the .05 level for practicality, awareness and propriety. The Junior College students responded with higher mean scale scores on practicality and awareness while Bible College students had higher mean scores for propriety.

TABLE 16

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR DORMITORY AND NON-DORMITORY STUDENTS

Scale	Dorm N = 142		Non-Dorm N = 89		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.55	2.35	16.66	2.92	.89	2.54*
Scholarship	22.39	4.62	24.07	3.72	1.68	2.88**
Community	23.15	2.95	23.39	3.24	.24	.59
Awareness	21.54	5.72	21.89	5.69	.35	.45
Propriety	23.44	3.30	24.63	2.76	1.19	2.84**
Religion	27.96	2.49	28.46	2.07	.50	1.57

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 17

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR TRANSFER AND NATIVE STUDENTS

Scale	Transfer N = 49		Native N = 182		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.33	3.04	17.45	2.44	1.12	2.69*
Scholarship	23.29	5.27	22.97	4.10	.32	.44
Community	22.41	3.31	23.47	2.96	1.06	2.17*
Awareness	21.67	6.73	21.67	5.41	.00	.00
Propriety	23.43	3.72	24.02	2.98	.59	1.17
Religion	27.82	2.91	28.25	2.17	.43	1.17

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 18

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR JUNIOR COLLEGE AND BIBLE COLLEGE STUDENTS

Scale	Junior College N = 100		Bible College N = 131		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.68	2.48	16.85	2.66	.83	2.42*
Scholarship	22.97	4.72	23.09	4.09	.12	.21
Community	23.51	3.11	23.04	3.02	.47	1.16
Awareness	22.52	5.48	21.02	5.80	1.50	1.99*
Propriety	23.35	3.01	24.31	3.21	.96	2.32*
Religion	28.05	2.52	28.24	2.21	.19	.60

* significant at the .05 level of confidence

** significant at the .01 level of confidence

Participation in extra-curricular activities. -- In Table 19 the measurements related to desired environments by subgroups selected on the basis of participation in extra-curricular activities are given. The data reveal that for the religion scale there was a significantly higher difference between those who participated as compared with those who did not participate in extra-curricular activities. No significant differences existed for any of the other scales.

Perceived-Desired Environment

Analyses of possible differences in the perception and the desires for the environment were made as part of the study. It was anticipated that such analyses would reveal possible differences between what the various groups thought of the College and what they desired the College to be. These analyses are included in Tables 20 through 38.

Students

Examination of the analyses included in Table 20 reveals that for each of the six scales included in the instrument there was a significant difference at the .01 level. Based on t values, the order of differences were awareness, scholarship, religion, community, propriety, and practicality--the greatest difference being for awareness. For each scale the desired environment scale score was higher.

Male students. -- The mean scale scores and standard deviations for the responses of the male students are included in

TABLE 19

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR PARTICIPANTS AND NON-PARTICIPANTS IN EXTRA-CURRICULAR ACTIVITIES

Scale	Participants N = 84		Non-participants N = 147		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.51	2.29	17.03	2.77	.48	1.34
Scholarship	23.19	4.23	22.95	4.49	.24	.40
Community	23.57	2.96	23.05	3.11	.52	1.24
Awareness	22.12	5.57	21.47	5.78	.55	.71
Propriety	24.06	2.86	23.80	3.31	.26	.59
Religion	28.56	1.79	27.93	2.59	.63	1.99*

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 20

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY THE STUDENTS

Scale	Perceived N = 231		Desired N = 231		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.28	2.49	17.21	2.61	.93	3.93**
Scholarship	14.47	4.86	23.04	4.36	8.57	19.93**
Community	20.98	3.70	23.24	3.06	2.26	7.19**
Awareness	11.76	3.63	21.67	5.70	9.91	22.28**
Propriety	22.42	3.58	23.90	3.15	1.48	4.68**
Religion	26.48	2.70	28.16	2.34	1.68	7.23**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

Table 21. They reveal significant differences in the perceived and desired environments for five of the six measurements--scholarship, community, awareness, propriety, and religion. In each instance the desired scale scores were higher than the perceived scores. Only for practicality was there no significant difference.

Female students. -- The data for the responses of the female students are given in Table 22. These data reveal that women students had desires for the environment which differed significantly from that which they perceived on each of the six scales. The greatest t value was for awareness, followed by scholarship, religion, community, practicality, and propriety.

Dormitory students. -- Measurements for the responses of the dormitory students are included in Table 23. The data reveal that dormitory students desired a greater quality of each measured environmental factor than they perceived to exist. The t values ranged from the greatest for awareness to scholarship, religion, propriety, practicality, and community.

Non-dormitory students. -- Examination of the data included in Table 24 reveals that there was a significant difference between the perceived and desired mean scale scores on each of the six scales. The level of significance was at the .05 level for practicality and at the .01 level for scholarship, community, awareness, propriety, and religion. In each instance the desired scale score was higher than the perceived scale score.

Transfer students. -- The data for the responses of the

TABLE 21

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY MALE STUDENTS

Scale	Perceived N = 112		Desired N = 112		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.33	2.44	16.62	2.85	.29	.80
Scholarship	14.34	5.42	22.92	4.73	8.58	12.63**
Community	19.88	3.75	22.42	3.27	2.54	5.41**
Awareness	11.75	3.73	21.72	5.81	9.97	15.23**
Propriety	21.43	3.89	23.31	3.49	1.88	3.32**
Religion	25.76	2.89	27.68	2.72	1.92	5.13**

* Significant at the .05 level of confidence

** Significant at the .01 level of confidence

TABLE 22

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY FEMALE STUDENTS

Scale	Perceived N = 119		Desired N = 119		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.23	2.55	17.76	2.25	1.53	4.93**
Scholarship	14.59	4.28	23.15	4.00	8.56	15.97**
Community	22.02	3.36	24.02	2.63	2.00	5.17**
Awareness	11.76	3.56	21.62	5.62	9.86	16.16**
Propriety	23.36	2.99	24.45	2.70	1.09	2.93**
Religion	27.16	2.32	28.61	1.82	1.45	5.35**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 23

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY DORMITORY STUDENTS

Scale	Perceived N = 142		Desired N = 142		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.58	2.48	17.55	2.35	.97	3.37**
Scholarship	14.32	4.90	22.39	4.62	8.07	14.19**
Community	20.75	4.03	23.15	2.95	2.40	2.79**
Awareness	11.74	3.89	21.54	5.72	9.80	16.83**
Propriety	21.99	3.77	23.44	3.30	1.45	3.45**
Religion	26.29	2.79	27.96	2.49	1.67	5.32**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 24

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY NON-DORMITORY STUDENTS

Scale	Perceived N = 89		Desired N = 89		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	15.80	2.46	16.66	2.92	.86	2.13*
Scholarship	14.71	4.80	24.07	3.72	9.36	14.53**
Community	21.35	3.09	23.39	3.24	2.04	4.31**
Awareness	11.79	3.21	21.89	5.69	10.10	14.47**
Propriety	23.12	3.16	24.63	2.76	1.51	3.38**
Religion	26.79	2.54	28.46	2.07	1.67	4.82**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

transfer students are included in Table 25. An examination of these data reveals that there were significant differences at the .05 level for community and at the .01 level for the scholarship, awareness, and religion scales. In each instance the desired environment scale score was higher than the perceived scale score. For practicality and propriety there were no significant differences.

Native students. -- Inspection of the data for the responses of the native students as included in Table 26, reveals that for each of the six scales the desired environment scores are significantly higher than the responses for the perceived environment. The greatest t value was for awareness, followed by scholarship, community, religion, propriety, and practicality.

Junior College students. -- The mean scale scores and the analyses data for the responses of those enrolled in Junior College programs are given in Table 27. A review of these data reveals a significant difference at the .05 level for propriety and at the .01 level for practicality, scholarship, community, awareness, and religion. For all scales the desired environmental characteristics scale scores were higher than the perceived scale scores.

Bible College students. -- A review of the data which is included in Table 28 shows a significant difference between the responses for the environment as it existed and the responses for the desired environment for five of the scales. Those were scholarship, community, awareness, propriety, and religion. The most significant difference was for awareness followed by

TABLE 25

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY TRANSFER STUDENTS

Scale	Perceived N = 49		Desired N = 59		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.12	2.19	16.33	3.04	0.21	.38
Scholarship	14.12	5.22	23.29	5.27	9.17	8.65**
Community	20.63	4.14	22.41	3.31	1.78	2.34*
Awareness	11.63	4.23	21.67	6.79	10.04	8.92**
Propriety	22.47	3.37	23.43	3.72	.96	1.36
Religion	25.86	3.38	27.82	2.91	1.96	3.03**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 26

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY NATIVE STUDENTS

Scale	Perceived N = 182		Desired N = 182		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.32	2.57	17.45	2.44	1.13	4.28**
Scholarship	14.56	4.79	22.97	4.10	8.41	18.05**
Community	21.08	3.58	23.47	2.96	2.39	6.95**
Awareness	11.79	3.47	21.67	5.41	9.88	20.76**
Propriety	22.41	3.65	24.02	2.98	1.61	4.62**
Religion	26.65	2.47	28.25	2.17	1.60	5.58**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 27

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY JUNIOR COLLEGE STUDENTS

Scale	Perceived N = 100		Desired N = 100		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	15.89	2.67	17.68	2.48	1.79	4.92**
Scholarship	12.93	4.49	22.97	4.72	10.04	15.42**
Community	20.98	3.71	23.51	3.11	2.53	5.22**
Awareness	11.24	3.50	22.52	5.48	11.28	17.35**
Propriety	22.43	3.53	23.35	3.01	.92	1.98*
Religion	26.66	2.68	28.05	2.52	1.39	3.77**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 28

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY BIBLE COLLEGE STUDENTS

Scale	Perceived N = 131		Desired N = 131		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.57	2.32	16.85	2.66	.28	.89
Scholarship	15.64	4.82	23.09	4.09	7.45	13.52**
Community	20.98	3.71	23.04	3.02	2.06	4.91**
Awareness	12.15	3.70	21.02	5.80	8.87	14.78**
Propriety	22.42	3.64	24.31	3.21	1.89	4.46**
Religion	26.34	2.72	28.24	2.21	1.90	6.19**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

scholarship, religion, community, and propriety. The scale scores for practicality did not reveal any significant difference for that scale.

Participants in extra-curricular activities. -- Included in Table 29 are the mean scale responses for those participating in extra-curricular activities and the data for the analyses. Inspection of these data reveals that for each of the six scales there was a significant difference between the perception of the environment and the desires for the environment. The greatest difference existed for awareness, followed in order by scholarship, religion, community, propriety, and practicality.

Non-participants in extra-curricular activities. -- The data for the responses of those not participating in extra-curricular activities is given in Table 30. These data indicate a significant difference for a higher quality of the environment on each measured scale from that which they perceived to exist. The greatest difference was for scholarship, followed by community, awareness, religion, propriety, and practicality.

Faculty

The means and standard deviations for the responses of the faculty to perceived and desired environmental measurements are included in Table 31. Observation of these data reveals that there was a significant difference at the .05 level for practicality and at the .01 level for scholarship, community, awareness, and propriety. In each instance the desired environmental score was higher than the perceived measurement score. For religion

TABLE 29

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY PARTICIPANTS IN EXTRA-CURRICULAR ACTIVITIES

Scale	Perceived N = 84		Desired N = 84		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.36	2.62	17.51	2.29	1.15	3.04**
Scholarship	14.83	4.61	23.19	4.23	8.26	12.20**
Community	21.55	3.49	23.57	2.96	2.02	4.05**
Awareness	11.55	3.21	22.02	5.57	10.47	14.92**
Propriety	22.08	3.81	24.06	2.86	2.86	3.83**
Religion	26.63	2.28	28.56	1.79	1.93	6.19**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 30

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY NON-PARTICIPANTS IN EXTRA-CURRICULAR ACTIVITIES

Scale	Perceived N = 147		Desired N = 147		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.23	2.43	17.03	2.77	.80	2.64**
Scholarship	14.26	5.00	22.95	4.45	8.69	15.71**
Community	20.66	3.79	23.05	3.11	2.39	11.24**
Awareness	11.88	3.86	21.70	5.78	9.59	6.47**
Propriety	22.62	3.45	23.80	3.31	1.18	3.01**
Religion	26.39	2.92	27.93	2.59	1.54	4.76**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 31

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY THE FACULTY

Scale	Perceived N = 16		Desired N = 16		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.00	2.03	17.79	2.09	1.69	2.32*
Scholarship	13.94	4.09	25.87	3.16	11.93	9.24**
Community	20.25	3.34	25.00	1.41	4.75	5.24**
Awareness	8.44	2.61	23.19	3.45	14.75	13.64**
Propriety	21.37	3.69	25.69	2.24	4.32	4.00**
Religion	26.63	3.98	28.19	2.07	1.56	1.39

* significant at the .05 level of confidence

** significant at the .01 level of confidence

there was no significant difference.

Board of Directors

Results of the responses from the Board of Directors are given in Table 32. It is noted that there was a significant difference for propriety at the .05 level and for scholarship and awareness at the .01 level of confidence. For each of these scales the mean scale score was higher for the desired environment measurement than for the perceived environment measurement. There was no significant difference for practicality, community, and religion.

Of the three groups tested, the Board of Directors had the fewest number of scales in which there was a significant difference between the perceived and the desired environment scores.

Between groups

In order to get a more complete picture of the responses of the groups to the perceived and desired environment, comparisons were made between groups for each of the measurements. The data for these measurements are presented in Tables 33 through 38.

Student perceived -- faculty desired. -- Review of the data included in Table 33 reveals that for each of the six scales the scores for the desired environment, as expressed by the faculty, were higher than those for the perceived environment reported by the students.

Student desired -- faculty perceived. -- Inspection of the data presented in Table 34 indicates the students had desired mean scale scores significantly higher than those reported by the

TABLE 32

MEANS AND STANDARD DEVIATIONS ON PERCEIVED AND DESIRED COLLEGE ENVIRONMENT SCORES AS REPORTED BY THE BOARD OF DIRECTORS

Scale	Perceived N = 17		Desired N = 17		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	18.88	2.59	19.53	2.67	.65	.72
Scholarship	20.29	3.93	25.88	1.76	4.59	5.34**
Community	22.88	4.20	25.24	2.44	2.36	2.00
Awareness	13.06	4.87	22.35	3.22	9.29	6.57**
Propriety	23.29	3.51	25.94	1.98	2.65	2.70*
Religion	28.47	1.97	29.41	1.06	.94	1.73

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 33

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR STUDENTS AND ON DESIRED COLLEGE ENVIRONMENT SCORES FOR THE FACULTY

Scale	Students Perceived N = 231		Faculty Desired N = 16		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.28	2.49	17.69	2.09	1.41	2.20*
Scholarship	14.47	4.86	25.87	3.16	11.40	9.25**
Community	20.98	3.70	25.00	1.41	4.02	4.25**
Awareness	11.76	3.63	23.19	3.45	11.43	12.21**
Propriety	22.42	3.58	25.69	2.24	3.27	3.59**
Religion	26.48	2.70	28.19	2.07	1.71	2.47*

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 34

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR STUDENTS AND ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR THE FACULTY

Scale	Students Desired N = 231		Faculty Perceived N = 16		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.21	2.61	16.00	2.03	1.21	1.81
Scholarship	23.04	4.36	13.94	4.09	9.10	8.10**
Community	23.24	3.06	20.25	3.34	2.29	3.76**
Awareness	21.67	5.70	8.44	2.61	13.23	9.21**
Propriety	23.90	3.15	21.37	3.69	2.53	3.06**
Religion	28.16	2.34	26.63	3.98	1.53	2.39*

* significant at the .05 level of confidence

** significant at the .01 level of confidence

faculty for the perceived environment on five scales--scholarship, community, awareness, propriety, and religion. Except for religion, the differences were significant at the .01 level of confidence. There was no significant difference for practicality.

Faculty perceived -- board desired. -- The data included in Table 35 indicate that the scale scores for the desired environment reported by the board were significantly higher on all scales from the perceived environment scores reported by the faculty. The greatest differences were for awareness and scholarship.

Faculty desired -- board perceived. -- As indicated by the data presented in Table 36, there were three scales for which the desired environment reported by the faculty was significantly higher than that perceived by the board. These were scholarship, awareness, and propriety. There was no significant difference for the scales of practicality, community, and religion.

Student perceived -- board desired. -- The analyses of the responses of the students for the perceived environment and the board for the desired environment are presented in Table 37. An inspection of these data reveals that there were significant differences at the .01 level for each of the scales. In each instance the board indicated a desired environment of significantly higher scores than the students perceived the environment to exist.

Student desired -- board perceived. -- Means and standard deviations for the responses of the students and board are included in Table 38. These data reveal significant differences at the .05 level for practicality and scholarship and at the .01 level for

TABLE 35

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR THE FACULTY AND ON DESIRED COLLEGE ENVIRONMENT SCORES FOR THE BOARD OF DIRECTORS

Scale	Faculty Perceived N = 16		Board Desired N = 17		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.00	2.03	19.53	2.67	3.53	4.25**
Scholarship	13.94	4.09	25.88	1.76	11.94	11.01**
Community	20.25	3.34	25.24	2.44	4.99	4.93**
Awareness	8.44	2.61	22.35	3.22	13.91	13.58**
Propriety	21.37	3.69	25.94	1.98	4.57	4.47**
Religion	26.63	3.98	29.41	1.06	2.78	2.79**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 36

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR THE FACULTY AND ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR THE BOARD OF DIRECTORS

Scale	Faculty Desired N = 16		Board Perceived N = 17		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.69	2.09	18.88	2.59	1.19	1.45
Scholarship	25.87	3.16	20.29	3.93	5.58	4.48**
Community	25.00	1.41	22.88	4.20	2.12	1.92
Awareness	23.19	3.45	13.06	4.87	10.13	6.86**
Propriety	25.69	2.24	23.29	3.51	2.40	2.32*
Religion	28.19	2.07	28.47	1.97	.23	.40

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 37

MEANS AND STANDARD DEVIATIONS ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR THE STUDENTS AND ON DESIRED COLLEGE ENVIRONMENT SCORES FOR THE BOARD OF DIRECTORS

Scale	Students Perceived N = 231		Board Desired N = 17		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	16.28	2.49	19.53	2.67	3.25	5.16**
Scholarship	14.47	2.86	25.88	1.76	11.41	9.62**
Community	20.98	3.70	25.24	2.44	4.26	4.66**
Awareness	11.76	3.63	22.35	3.22	10.59	11.68**
Propriety	22.42	3.58	25.94	1.98	3.52	4.00**
Religion	26.48	2.70	29.41	1.06	2.93	4.44**

* significant at the .05 level of confidence

** significant at the .01 level of confidence

TABLE 38

MEANS AND STANDARD DEVIATIONS ON DESIRED COLLEGE ENVIRONMENT SCORES FOR THE STUDENTS AND ON PERCEIVED COLLEGE ENVIRONMENT SCORES FOR THE BOARD OF DIRECTORS

Scale	Students Desired N = 231		Board Perceived N = 17		Mean Difference	t
	Mean	S.D.	Mean	S.D.		
Practicality	17.21	2.61	18.88	2.59	1.67	2.55*
Scholarship	23.04	4.36	20.29	3.93	2.75	2.52*
Community	23.24	3.06	22.88	4.20	.36	.45
Awareness	21.67	5.70	13.06	4.87	8.61	6.07**
Propriety	23.90	3.15	23.29	3.51	.60	.75
Religion	28.16	2.34	28.47	1.97	.31	.54

* significant at the .05 level of confidence

** significant at the .01 level of confidence

awareness. The difference for practicality was somewhat unusual in that the perceived environment score was higher than the desired score. This was the only instance in which a perceived score was higher than the desired score. For the scales of scholarship and awareness, the more familiar pattern of having higher desired scores existed. There was no significant difference for community, propriety, or religion.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The study was an institutional environmental study of Northwest College, Kirkland, Washington, initiated to ascertain the perceptions of and desires for the institutional environment as reported by the students, faculty, and the Board of Directors, and to make comparisons between the expressed perceptions of and expressed desires for the environment.

An attempt was also made to develop a supplement to the major instrument, College and University Environment Scales, which would make it possible to obtain some measurement of the religion environment of an institution.

It was hoped that such a study would assist in describing a specific church related college, would provide an initial environmental measurement of an institution with a Bible College program, would also be an initial study of the environment of an Assemblies of God college, and would introduce the measurement of a factor of apparent importance to many independent and church related colleges--religion.

While some studies have included responses for the perceived environment from non-students (e.g. Faculty, Board of Directors,

Alumni, and constituency), a response for both the perceived and the desired environmental characteristics from non-students as well as students, was believed to be of value.

The objectives of the study led to the development of the following research questions:

1. How do the students, faculty, and Board of Directors perceive the institutional environment of Northwest College, and are there significant differences in their responses?

2. What ideal type of institutional environment do the students, faculty, and Board of Directors desire, and are there significant differences in their responses?

3. Are there significant differences between the responses for the perceived and desired environment, as reported by the students, faculty, and Board of Directors?

4. Are there between-group differences in the responses of the students, faculty, and Board of Directors for measurements of the perceived and desired environment?

On the basis of these research questions, nine hypotheses were stated:

1. There are no significant differences in the perception of the institutional environment as reported by the students, faculty, and Board of Directors.

2. There are no significant differences in the perception of the institutional environment as reported by selected subgroups of students.

3. There are no significant differences in the desired institutional environment as reported by the students, faculty, and Board of Directors.

4. There are no significant differences in the desired institutional environment as reported by selected subgroups of students.

5. There will be no significant differences between the perceived environment and the desired environment as expressed by the students.

6. There will be no significant differences between the perceived environment and the desired environment as expressed by selected subgroups of students.

7. There will be no significant differences between the perceived environment and the desired environment as expressed by the faculty.

8. There will be no significant differences between the perceived environment and the desired environment as expressed by the Board of Directors.

9. There will be no significant differences between the desired institutional environment as expressed by one group (students, faculty, Board of Directors) and the perception of the existing environment as reported by another group.

The related literature revealed that, with the exception of P. E. Jacob, there was a general belief that students experience changes in college and that the college environment may make a contribution to these changes. The major contribution appears to be through the social and informal encironmental factors and through student subcultures on the campus. To a lesser extent, the direct academic experience may be of significance to influencing student changes.

The environment may have a significant influence on the student's desire to seek advanced training. However, as pointed out by Astin, one must be careful in making such conclusions without considering the respective inputs to the colleges.

The literature also indicated various methods of studying, describing, and classifying colleges; directories and statistical reports, information in accrediting reports, case studies, management surveys, alumni studies, sociological studies, and psychological approaches. These were classified into four major approaches:

an analytical approach emphasizing measurable quantitative factors such as size, location, endowment, size of faculty, holdings in the library, success of the alumni, etc.; a descriptive approach in which observers attempt to give a description on the basis of their observations and experience; a sociological approach in which the institution is described on the basis of the existence of subgroups and human interaction; and the psychological approach where an emphasis is placed on the phenomenological approach seeking responses from various persons associated with the college.

Examples of studies using the first technique were Astin's Environmental Assessment Technique (EAT) and the tabulation of the number of Ph. D. candidates the college graduates--a technique used by Knapp and Goodrich, Knapp and Greenbaum, and Astin and Holland.

Riesman and Jencks used a descriptive approach in describing the nature of San Francisco State College.

Martin Trow suggested that the student subcultures of collegiate, academic, vocational, and non-comformist orientation exist on the campus and thus provide a method by which the institution may be described.

The psychological approach was advocated by Stern and Pace on the basis of a need-press relationship suggested by Murray. Working on the basis of Murray's proposal, they developed the College Characteristics Index (CCI) to measure thirty factors of the college environment (press) and the Activities Index (AI) to

measure individual psychological needs. Both instruments were developed believing that there was a relationship between individual need-press factors. However, subsequent studies generally failed to support this initial belief.

Subsequently Pace modified the CCI approach and developed College and University Environment Scales--a 150-item instrument of thirty items for each of the five scales of practicality, scholarship, community, awareness, and propriety. Pace stressed institutional descriptions irrespective of individual psychological needs more than the CCI.

Similar approaches to institutional measurement were made by Thistlethwaite, Nunnaly, Pervin, and Petersen.

Studies of student, faculty, and board responses have been somewhat inconclusive regarding student-faculty comparisons, and indicate some differences between students and the board and between students and personnel workers.

The studies of McPeek, Cole, Reeves, and Butler indicate that female students and male students expressed different perceptions of and desires for the institutional environment.

It was also concluded that subcultures do exist on a campus and that differences in the description of the environment may differ according to the subculture orientation.

The studies of McPeek and Butler also indicate that based on a classification by academic major, some differences may occur in the perceptions of and desires for the institutional environment.

In addition to the work of Stern and Pace in developing

the CCI and CUES, other instruments have been developed.

With the results of these previous studies available, it appeared that further value might be derived from additional study of student subgroup responses, responses from non-student groups, and measurement of another facet of the environment--religion.

Northwest College is a coeducational institution which began in Seattle in 1934 in facilities provided by Hollywood Temple (now Calvary Temple) and is now located on a thirty-five acre campus in Kirkland, Washington. The institution offers a two-year Junior College program and a four-year Bible College program. It is sponsored by the Assemblies of God and is one of nine institutions of higher learning, approved as such by the Department of Education of the General Council of the Assemblies of God.

The college began as a three-year Bible Institute for training those interested in Christian service. In 1949 a fourth year was added to the curriculum and the institute became a Bible College. Responding to a desire to provide educational opportunities for those not anticipating full-time Christian service, a Junior College with a liberal arts transfer-oriented program was introduced in 1955. Curricula were subsequently developed to meet various non-ministerial, academic and professional interests, in addition to continuing the emphasis on ministerial preparation.

The student body is drawn mostly from the states of Washington, Oregon, Idaho and Montana. Because of many factors, such as the nature of the academic program, the entrance requirements, and the regulations of the College, the students are generally

religiously oriented.

The methods used in the study utilized techniques of measurement initiated by George Stern and C. Robert Pace, and further developed by Pace. That technique depended upon the responses of the measured group for an indication of the nature of the institutional environment. The major instrument used was the College and University Environment Scales, developed by Pace, which includes 150 items with thirty items to measure each of the five environmental factors of practicality, scholarship, community, awareness, and propriety.

In order to increase the meaningfulness of the study, a set of statements was developed to be similar in nature to those employed by CUES, but related to a religious environment on the campus. The thirty statements employed were selected on the basis of historical indications of a religious emphasis on a college campus, indications of various religious aspects of a college environment as stated by various writers, factors believed to have a potential for discrimination, and the experiences of the writer.

Statistical determination of the validity of the supplementary religious measurement was sought by obtaining responses on the scale from students at two publicly supported colleges and three church-sponsored colleges. An analysis of the responses indicated that for twenty-nine of the thirty statements, the responses from the church-sponsored colleges were significantly different in the keyed direction from the responses of those attending publicly supported colleges. Since the other statement was not discriminating in either direction, it was retained to maintain a

numerical balance within the instrument.

A student information questionnaire was used to provide information for an analysis of responses by student subgroups based on sex, college residence, attendance at other colleges, college program, and participation in extra-curricular activities.

In order to secure a measurement of how the respondents described the existing environment (perceived) and also how they described an ideal environment (desired) the instrument was administered twice--the first for perceived responses, the second for desired responses. The regular daily required chapel period was used for the students and faculty. The two responses were secured one week apart. Responses from the Board of Directors were sought at the time of their semi-annual meeting. Usable responses on both measurements were received from 231 of 354 students, 16 of 17 faculty members, and 17 of 18 board members.

The responses were then analyzed by the computation of means, standard deviations, mean differences, and F or t values. The means, standard deviations, and F values were calculated by computer using the BMD01V program for calculating analysis of variance. A .05 level of confidence was accepted for significant differences in responses.

The findings of the study are summarized in Tables 39 through 43.

As indicated in Table 39, there were differences in responses for the perceived environment between the students and faculty on one scale--awareness; between faculty and board on

TABLE 39

SUMMARY OF THE PERCEIVED SCALE SCORE DIFFERENCES AS REPORTED BY THE STUDENTS, FACULTY, AND BOARD OF DIRECTORS

Groups	Practicality	Scholarship	Community	Awareness	Propriety	Religion
S-F-B	xx	xx		xx		x
St.-Fac.				xxS		
Fac.-Bd.	xxB	xxB		xxB		
St.-Bd.	xxB	xxB				xxB
St. Subgroups						
Male-Female			xxF		xxF	xxF
Dorm-Non-Dorm	xD				xND	
Transfer-Nat.						
J.C.-B.C.	xBC	xxBC				
Extra Cur.						

x significant at the .05 level

xx significant at the .01 level

the letter indicates the group having the higher scale score

three scales--practicality, scholarship, and awareness; and between students and the Board of Directors on three scales--practicality, scholarship, and religion.

Differences in student responses based on the selected subgroups measured were: women perceived community, propriety, and religion at a higher level than men; dormitory students had higher scores on propriety; there were no differences in the reported perception by transfer and native students on any scale; Bible College students gave higher scores to practicality and scholarship than Junior College students; and there were no differences on any scale between the responses from participants and non-participants in extra-curricular activities.

As summarized in Table 40, the faculty's scale scores for desired environment for scholarship, community, and propriety were higher than student scores; board scores for practicality were higher than those reported by the faculty; and student-board comparisons revealed higher board scores for practicality, scholarship, community, and propriety.

Analyses of student subgroup responses revealed that: women had higher desired scale scores on practicality, community, propriety, and religion than men; dormitory students had a higher score on practicality and non-dormitory students higher on scholarship and propriety; native students had higher scores on practicality and community than transfer students; Junior College students had higher scale scores for practicality and awareness and Bible College students higher for propriety; and participants in extra-curricular activities had a higher score on the religion scale

TABLE 40

SUMMARY OF THE DESIRED SCALE SCORE DIFFERENCES AS REPORTED BY THE STUDENTS, FACULTY, AND BOARD OF DIRECTORS

Group	Practicality	Scholarship	Community	Awareness	Propriety	Religion
S-F-B	xx	xx	xx		xx	
St.-Fac.		xxFe	xxFe		xxFe	
Fac.-Bd.	xxB					
St.-Bd.	xxB	xxB	xxB		xxB	
St. Subgroups						
Male-Female	xxF		xxF		xxF	xxF
Dorm-Non-Dorm	xD	xxND			xxND	
Transfer-Nat.	xN		xN			
J.C.-B.C.	xJC			XJC	xBD	
Extra Cur.						xPart.

x significant at the .05 level

xx significant at the .01 level

the letter indicates the group having the higher scale score

than non-participants.

Analyses of student responses for the perceived and desired environment are summarized in Table 41. The analyses revealed significant differences on all six scales. Subgroup analyses revealed that for the practicality scale the male students, transfer students, and Bible College students did not describe the perceived and desired environment differently. All other subgroups did have significantly different responses on the practicality scale. On the scale for propriety no significant differences were manifested between the responses for perceived and desired environment by transfer students. All other subgroups revealed significant differences in their responses. For the other scales of scholarship, community, awareness, and religion, there were significant differences for every student subgroup between their description of the existing environment and the desired environment.

Based on subgroup difference totals, male students had no differences on one scale; transfer students on two scales; and Bible College students no differences on one scale. Other subgroups had differences on all six scales. In each instance where there was a difference, the scale score for the desired environment was higher than for the perceived environmental measurement.

Responses from the faculty, which are included in Table 42, indicated a difference in perceived and desired responses for all scales except religion. As with student responses, the scores for the desired environment were higher.

TABLE 41

SUMMARY OF THE PERCEIVED AND DESIRED SCALE SCORE DIFFERENCES AS REPORTED BY THE STUDENTS

Groups	Practicality	Scholarship	Community	Awareness	Propriety	Religion
Students	xx	xx	xx	xx	xx	xx
Sex						
Male		xx	xx	xx	xx	xx
Female	xx	xx	xx	xx	xx	xx
Residence						
Dormitory	xx	xx	xx	xx	xx	xx
Non-Dorm	x	xx	xx	xx	xx	xx
Attendance						
Transfer		xx	x	xx		xx
Native	xx	xx	xx	xx	xx	xx
Program						
J. C.	xx	xx	xx	xx	x	xx
B. C.		xx	xx	xx	xx	xx
Extra-Cur.						
Yes	xx	xx	xx	xx	xx	xx
No	xx	xx	xx	xx	xx	xx

x significant at the .05 level

xx significant at the .01 level

TABLE 42

SUMMARY OF THE PERCEIVED AND DESIRED SCALE SCORE DIFFERENCES AS REPORTED BY THE FACULTY AND THE BOARD OF DIRECTORS

Group	Practicality	Scholarship	Community	Awareness	Propriety	Religion
Faculty	x	xx	xx	xx	xx	
Board		xx		xx	x	

x significant at the .05 level

xx significant at the .01 level

As summarized in Table 42 , the Board of Directors gave responses which indicated significantly higher desired scores for scholarship, awareness, and propriety, with no significant differences for practicality, community, and religion. The Board of Directors had the greatest number of scales of any group or subgroup for which there were no differences between perceived and desired scale scores.

Cross group analyses were made between responses for the perceived and desired environment. The summary of these analyses is given in Table 43.

It was believed this would provide possibilities for maximum contrast--particularly between students and board. These analyses revealed significantly higher desired scale scores in all instances except between student desires and faculty perception for practicality; between faculty desires and board perceptions for practicality, community, and religion; and between student

TABLE 43

SUMMARY OF CROSS-GROUP COMPARISONS FOR RESPONSES FOR PERCEIVED AND DESIRED ENVIRONMENT AS REPORTED BY THE STUDENTS, FACULTY, AND BOARD OF DIRECTORS

Groups	Practicality	Scholarship	Community	Awareness	Propriety	Religion
Student Per. Fac. Desired	x	xx	xx	xx	xx	x
St. Desired Fac. Perceived		xx	xx	xx	xx	xx
Fac. Perceived Bd. Desired	xx	xx	xx	xx	xx	xx
Fac. Desired Bd. Perceived		xx		xx	x	
St. Perceived Bd. Desired	xx	xx	xx	xx	xx	xx
St. Desired Bd. Perceived	x	x		xx		

x significant at the .05 level

xx significant at the .01 level

desires and board perception for practicality, community, propriety, and religion.

Practicality scale scores for student desired--board perceived comparisons revealed that the perceived environment scores given by the board were significantly higher than the desires score given by the students.

Of the 36 cross-group comparisons, the desired scale scores were higher in 28 instances, the perceived in one instance, and no differences in seven instances.

Conclusions

The research was conducted in an attempt to ascertain the validity of the stated hypotheses which had resulted from the research questions and the reasons for the study. On the basis of the findings, the following conclusions may be made regarding the hypotheses.

> Hypotheses 1 There are no significant differences in the perception of the institutional environment as reported by the students, faculty, and Board of Directors.

The findings indicate that there were some significant differences in the perception of some aspects of the environment as reported by the students, faculty, and Board of Directors. On these bases the hypothesis is rejected.

> Hypotheses 2 There are no significant differences in the perception of the institutional environment as reported by selected subgroups of students.

Analyses of the responses of the students analyzed by subgroups indicated that there were differences in seven of thirty comparisons. Thus the hypothesis is accepted as related to those

comparisons for which there were no differences. As related to the seven occurrences of differences, the hypothesis is rejected.

> Hypothesis 3 There are no significant differences in the desired institutional environment as reported by the students, faculty, and Board of Directors.

The analyses indicate that for all scales except awareness there were differences in one or more of the comparisons that were made. The hypothesis is therefore rejected as related to five scales and accepted for the awareness scale.

> Hypothesis 4 There are no significant differences in the desired institutional environment as reported by selected subgroups of students.

There were differences in fourteen comparisons of the thirty that were made, with differences on each scale in at least one comparison. It is therefore concluded that the hypothesis should be rejected.

> Hypothesis 5 There will be no significant differences between the perceived environment and the desired environment as expressed by the students.

Differences existed for each scale between the responses for the perceived environment and those for the desired environment. It is thus concluded that the hypothesis is to be rejected.

> Hypothesis 6 There will be no significant differences between the perceived environment and the desired environment as expressed by selected subgroups of students.

The hypothesis is rejected on the basis that of the sixty comparisons made, there were differences in fifty-six instances, and it is concluded that there are differences between the perception of and desires for the environment as indicated by student subgroups.

Hypothesis 7 there will be no significant differences between the perceived environment and the desired environment as expressed by the faculty.

With differences on five of the six scales, the hypothesis is rejected for those scales, and it is concluded that there are differences between what exists and what is desired by the faculty. The hypothesis is accepted for the religious scale.

Hypothesis 8 There will be no significant differences between the perceived environment and the desired environment as expressed by the Board of Directors.

Indications of differences on three of the six scales were evident by the findings and the hypothesis is thus partially accepted. It is accepted for practicality, community, and religion and rejected for the scales of scholarship, awareness, and propriety.

Hypothesis 9 There will be no significant differences between the desired institutional environment as expressed by one group (students, faculty, Board of Directors) and the perception of the existing environment as reported by another group.

Cross-group comparisons of the perceived and desired scale scores indicated that the hypothesis is to be rejected since significant differences occured for each scale in at least three of the comparisons made.

Thus all the hypotheses were rejected--totally or in part--as they had been stated.

In addition to the acceptance or rejection of the proposed hypotheses, other observations may also be made.

It appears that it may be possible to measure the religious environment on a campus, that the religious environment may differ

on campuses, and that church related schools have a more "religious" environment.

Among the three groups participating in the study there was greater agreement between the faculty and students in the perception of the environment than any other between-group relationship. The desired scale scores indicated a greater agreement between the faculty and the board for the desired environment than any other between-group relationship. Thus the faculty perceived the environment more in agreement with the students, but expressed desires more in agreement with the board. It may be that the experience of being on campus affects the description of the institution while other factors such as age, education, experiences, and responsibilities influence what is desired for the college.

On the basis of the differences in the perceptions, it may be concluded that the faculty, with the lowest scale scores, was the most "critical" of the environment and the board, with the highest scale scores, was the most "complimentary".

If student perceptions of the environment are used as the basis of a "true" judgment of the environment, it appears that the board may have an unrealistic appraisal of the institutional environment. This appraisal may reflect insufficient contact with the college or inaccurate knowledge.

Comparisons of scale scores involving the board appear to indicate that the board may be more nearly satisfied with the institution than either the faculty or the students.

Results from the analyses based on student subgroup

classifications indicate that some factors apparently make a difference in the evaluation of and expectations for the college. As a single factor, sex appears to have a greater importance than any other single factor used in the study, with women students describing it with higher scores, but also having higher scores on desired measurements.

The greatest number of differences in the desires occured for practicality, thus indicating there is less uniformitory in what is wanted for that aspect of the environment and that there may be difficulty in meeting all desires. On the basis of the number of differences between the perceived and desired environment by the student subgroups and cross-group comparisons of perceived-desired measurements, there appears to be better satisfaction with the practicality aspect of the environment than any other. Further observation, however, revealed that these lack of differences were for Bible College, male, and transfer students. This may reflect the historical emphasis of the College in preparing students for professional religious involvement upon graduation. The divergences may indicate a need for some modification of the existing programs.

On the basis of the differences on the awareness and scholarship scales, it would appear that there is greater potential for dissatisfaction with these two characteristics than any others.

On the basis of the differences between the perceived and desired environments responses by the faculty and board, we may conclude that, except for religion, there may not be complete

satisfaction among the policy making groups with the College, and that steps may need to be initiated to affect some modification in the institutional character.

It also appears that in the evaluation of these two groups the college has been successful in developing a religious emphasis to meet their expectations, and they may see little need for modification of the program related to religious emphases.

It is concluded that there is room for institutional change and in the institution studied it is for a greater quality of each characteristic.

Recommendations

As a result of the findings and the subsequent conclusions to which these findings led, there are several recommendations that may be suggested, which are related both to the particular institutional program and to further study, both at Northwest College and at other colleges.

1. Some provision should be made for greater contact by the Board of Directors with the College and its activities. This could perhaps be accomplished by their spending more time on campus, visiting with students and faculty, and/or establishing times for meetings and discussions of the nature of the college.

2. On the basis of the evaluation and desires, some institutional attention should be given to developing a greater sense of awareness and raising the scholastic level of the institution.

3. When significant differences between perceived and desired environment did occur, based on sex, they occurred consistently with women. Some attention should be given, therefore, to meeting more adequately the needs of the female students. The institution historically has emphasized preparation for the ministry. Since that is primarily a male-oriented profession, some attention should be given to both academic and social programs which would better serve the women students.

4. Additional emphasis appears to be needed for Junior College students. Once again the orientation toward ministerial training may be evident, this time in the expression of the Junior College students.

5. If the institution is to seek to become what the Board of Directors desires, some clear definition of their desires should be made known and practical steps taken to implement programs and policies which will assist in the realization of those desires.

6. In view of the seeking of regional accreditation and the expansion of the academic program, a follow-up study after accreditation is recommended so that possible changes in the institutional nature may be identified.

7. Further measurements and analyses should be made involving faculty and board responses in an attempt to determine what factors may contribute to their responses and possible differences from student responses.

8. Because of the lack of analyses of similarly oriented institutions, it would be of assistance to have additional studies

made of those institutions.

9. Further use and refinement of the religious scale instrument should be continued. A wider use of the scale and greater refinement should assist in producing an instrument of greater value.

The study was believed to be of value for what it revealed about the institution under study, and it should provide some assistance in institutional improvement. It is also hoped that the study may have provided a basis for and assistance to other studies of college environments.

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APPENDIX A

Personal Information Data Form

Information Survey

Student

Name _____ No. _____
(last) (first) (middle)

Please indicate the answers to the following by encircling the appropriate number to the right of the item.

1. Sex
   Male 1
   Female 2

2. College residence
   Dormitory 1
   Off campus 2

3. Did you attend another college before attending Northwest?
   Yes 1
   No 2

4. Program in college
   Junior College 1
   Bible College 2

5. Have you held any student leadership positions or belonged to the annual staff, concert choir or basketball team?
   Yes 1
   No 2

APPENDIX B

Directions for Answering

Directions

Colleges and universities differ from one another in many ways. Some things that are generally true or characteristic of one school may not be characteristic of another. The purpose of College & University Environment Scales (CUES) is to help define the general atmosphere of different schools. The atmosphere of a campus is a mixture of various features, facilities, rules and procedures, faculty characteristics, courses of study, classroom activities, students' interests, extra-curricular programs, informal activities, and other conditions and events.

You are asked to be a reporter about your school. You have lived in its environment, participated in its activities, seen its features, and sensed its attitudes. What kind of place is it?

There are 180 statements in this booklet. You are to mark them TRUE or FALSE, using the answer sheet given you for this purpose. Do <u>not</u> write in the booklet.

Part I Personal Questionnaire

Enter your name in the space provided and indicate other information by encircling the appropriate number to the right of the item.

Part II Answer sheet

1. Use <u>pencil</u> only. No ball point pens.
2. Enter your name on the space provided on the answer sheet.
3. Indicate your answer to each statement by making a mark in the appropriate space. Use columns one and two only. One for true. Two for false.
4. Begin with question 151.

Directions

You have previously indicated your perceptions about the institutional environment that currently exists at Northwest College. You are now asked to indicate your answers to the same statements on the basis of what you desire Northwest College to be, not necessarily what it now is. Therefore, it may help to approach the statements by saying to yourself "If Northwest College was the type of institution I would like it to be the following statement would be true (or false)."

Answer sheet

1. Use pencil only. No ball point pens.

2. Enter your name on the answer sheet.

3. Indicate your answer to each statement by making a mark in the appropriate space. Use columns one and two only. One for true. Two for false.

   The answer sheet is numbered horizontally, not vertically.

4. Begin with question 151.

APPENDIX C

College and University Environment Scales

PLEASE NOTE:

Pages 153-160, Appendix C: "College and University Environment Scales," © 1962 by C. Robert Pace, not microfilmed at request of author. Available for consultation at University of Washington Library.

UNIVERSITY MICROFILMS.

APPENDIX D

Religion Scale

RELIGIOUS ENVIRONMENT MEASUREMENT SCALE

Colleges and Universities differ from one another. Some things that are generally true or characteristic of one school may not be characteristic of another. The atmosphere of a campus is a mixture of various features, facilities, rule and procedures, faculty characteristics, courses of study, classroom activities, students' interests, extra-curricular programs, and other conditions and events.

The purpose of the Religious Environment Measurement Scale is to help define and describe the religious atmosphere of different schools.

You are asked to be a reporter about your school. You have lived in its environment, participated in its activities, seen its features, and sensed its attitudes. What kind of place is it?

There are thirty statements in the scale. You are to mark them TRUE or FALSE, depending upon your knowledge and evaluation of whether the statement is generally true or false.

Instructions

1. Enter your name and other identifying information requested in the spaces provided.

2. Fill in the space marked T or F to indicate your answer. Proceed to answer every item of the thirty given. Blacken space T when you think the statement is generally characteristic or TRUE of your school, is a condition which exists, an event which occurs or might occur, is the way people generally act or feel.

   Blacken space F when the statement is generally FALSE or not characteristic of your school, is a condition which does not exist, an event which is unlikely to occur, or is not the way people generally act or feel.

Name_____ Age_____ Sex_____

Class: Fr. Soph. Jr. Sr. Grad. College:_____

Major:_____

T	F		
0	0	1.	Students who regularly attend special religious services are considered odd and are often referred to by such names as "holy Joes."
0	0	2.	Professors often question the accuracy and integrity of the Bible.
0	0	3.	Attendance of regular chapel services is required.
0	0	4.	Only a few students take an active part in religious activities on the campus.
0	0	5.	Religion is made relevant to contemporary needs.
0	0	6.	Most students place a high value on a personal religious experience.
0	0	7.	Teachers often counsel and pray with students.
0	0	8.	Little effort is made by the college to stress a Christian influence in determining institutional policies and practices.
0	0	9.	Student prayer meetings are conducted and are usually well attended.
0	0	10.	Classes usually begin or conclude with prayer.
0	0	11.	Students often discuss religious topics in informal meetings and conversations.
0	0	12.	Faculty members often use Biblical stories for illustrations in non-Bible courses.
0	0	13.	Students often share spiritual problems with one another.
0	0	14.	Students are encouraged to witness to others about their faith.
0	0	15.	The Bible is frequently used as a basis for determining the moral code.
0	0	16.	Students often participate in various types of Christian ministry, e.g., Sunday school teaching, gospel teams, etc.
0	0	17.	There are regularly scheduled religious services, e.g., Religious Emphasis Week.
0	0	18.	Personal Christian faith is strengthened by attendance here.
0	0	19.	Attendance at Sunday church services is required.
0	0	20.	The Bible is seldom interpreted literally.
0	0	21.	It is unlikely that classes would be dismissed for special religious activities.
0	0	22.	Most students have personal daily devotions.
0	0	23.	Faculty members are active participants in school religious activities.
0	0	24.	Little interest is shown by students toward religion-oriented summer activities.
0	0	25.	The school sponsors small group meetings to discuss topics related to religion.
0	0	26.	A religious service with an outstanding church leader as the speaker would be poorly attended.
0	0	27.	Students are encouraged to enter the ministry.
0	0	28.	Professors attempt to emphasize religious values in their respective courses.
0	0	29.	Students pray before each meal.
0	0	30.	Counseling services are provided for those with spiritual and religious problems.

START ON SECOND SIDE OF ANSWER SHEET WITH NUMBER 151.

151. Students who regularly attend special religious services are considered odd and are often referred to by such names as "holy Joes".

152. Professors often question the accuracy and integrity of the Bible.

153. Attendance of regular chapel services is required.

154. Only a few students take an active part in religious activities on the campus.

155. Religion is made relevant to contemporary needs.

156. Most students place a high value on a personal religious experience.

157. Teachers often counsel and pray with students.

158. Little effort is made by the college to stress a Christian influence in determining institutional policies and practices.

159. Student prayer meetings are conducted and are usually well attended.

160. Classes usually begin or conclude with prayer.

161. Students often discuss religious topics in informal meetings and conversations.

162. Faculty members often use Biblical stories for illustrations in non-Bible courses.

163. Students often share spiritual problems with one another.

164. Students are encouraged to witness to others about their faith.

165. The Bible is frequently used as a basis for determining the moral code.

TURN ANSWER SHEET OVER AND BEGIN WITH NUMBER 1.

TURN ANSWER SHEET OVER AND BEGIN WITH NUMBER 166.

166. Students often participate in various types of Christian ministry, e.g., Sunday school teaching, gospel teams.

167. There are regularly scheduled special religious services, e.g., Religious Emphasis Weeks.

168. Personal Christian faith is strengthened by attendance here.

169. Attendance at Sunday church services is required.

170. The Bible is seldom interpreted literally.

171. It is unlikely that classes would be dismissed for special religious activities.

172. Most students have personal daily devotions.

173. Faculty members are active participants in school religious activities.

174. Little interest is shown by students toward religion-oriented summer activities.

175. The school sponsors small group meetings to discuss topics related to religion.

176. A religious service with an outstanding church leader as the speaker would be poorly attended.

177. Students are encouraged to enter the ministry.

178. Professors attempt to emphasize religious values in their respective courses.

179. Students pray before each meal.

180. Counseling services are provided for those with spiritual and religious problems.

VITA

John Wesley Lackey, the only child of Jerry and Mildred Lackey, was born May 22, 1927 in Raiford, Oklahoma. He was graduated from Capitol Hill High School, Oklahoma City, Oklahoma, in 1944. After service in the Signal Corps of the United States Army, he completed his undergraduate program and received a Bachelor of Arts degree from Oklahoma City University in 1949. A Master of Arts degree was conferred by Northwestern University, Evanston, Illinois, in 1954.

For the past twenty years Mr. Lackey has been engaged in teaching and administrative work at the post-high school level; three years at Great Lakes Bible Institute, Zion, Illinois; six years at Southwestern Assemblies of God College, Waxahachie, Texas; seven years as Dean of Education at Northwest College, Kirkland, Washington; and four years in his present position as Academic Dean at Southern California College, Costa Mesa, California.

He is married to the former Gayle Groenewold, and they have three sons--Mark, Stanley, and Roger.