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ANOMIE, SUICIDAL IDEATION, AND
STUDENT ECOLOGY IN A COLLEGE POPULATION

A DISSERTATION
Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the
Graduate School of the Ohio State University

By

David Lewis Greth, B.A., M.A.

* * * * * *

The Ohio State University
1971

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FIELDS OF STUDY

Major Field: Counseling Psychology

Professors Francis P. Robinson, Maude A. Stewart, W. Bruce Walsh, Lyle D. Schmidt, Samuel H. Osipow, Frank M. Fletcher, Theodore Kaul.
Suicide (i.e., self-murder) today represents the fifth leading cause of death among adolescents from 15 to 19 years of age. At present, it is exceeded only by accidents, malignant neoplasms, cardiovascular-renal disease, and homocides as a cause of death among adolescent populations in the United States. (Jacobs, 1971)

This problem is of considerable interest to the college counselor in that demographic data indicate behavior in university settings is generally twice as high as the local population norms (Temby, 1961; Carpenter, 1959). The reason for this phenomenon has been the subject of considerable speculation, but little empirical validation, throughout the literature. In general, these speculations center around one of two possibilities: a) students who attend universities are more emotionally unstable as a group, prior to admission, than their non-university peers, and b) aspects of the university environment are significant in bringing about emotional instability and concomitant suicidal ideation.

Of these two possibilities, this writer considers the latter to be a more fruitful area for research in that: a) the traditional efforts of trait-factor theorists to assess suicidal personality "types" have been largely unsuccessful, and b) the latter
alternative allows the researcher to assess behavior in terms of individuals in interaction with an environment, rather than in terms of personality "traits" (i.e., unique internal predispositions to behave).

This study will, therefore, emphasize environmental "press" rather than individual "personality" in an attempt to gain further insight into the etiology of suicidal ideation (i.e., cognitions commonly reported by suicidal individuals) on the college campus. To accomplish this goal demographic data will be utilized in combination with recently developed environmental and personal assessment techniques aimed at describing student behavior within an ecological frame of reference.
In recent years the mortality rate from suicide has shown a world-wide increase. One of the most striking features of this increase has been an upswing in suicide among young persons. Statistics indicate that within the United States, suicide was the fifth leading cause of death among persons of age 15-24, as of 1964. Although this does not represent a large percentage of the population (approximately 4.0 to 8.4 per 100,000 population), suicide remains the number one cause of unnecessary and stigmatizing death among America's youth (Schneidman, 1966).

Within the educational community, the problem seems to be even more severe. Recent studies indicate that at major American universities rates are approximately twice as high as would be expected in the general population, e.g., 16 per 100,000 at Harvard (Temby, 1961), 14 per 100,000 at yale (Parrish, 1957). Similar findings have been made at British Universities, where suicide rates range up to twelve times higher than the population norms, e.g., Oxford University: 26.4 per 100,000 (Parnell, 1951; Carpenter, 1959).

Until recently, controlled investigations into the causes of this phenomenon have been exceedingly rare. Most studies have been
largely descriptive in nature, usually demographic in content, and often founded on multiple untested assumptions. The obvious complexity of the question of student suicide caused investigators to shy away from empirical analysis, while relying on anecdotal speculations, or unsupported opinions and contentions regarding the "strom and stress" of late adolescence and early adulthood (Kubie, 1964).

Because of a lack of uniform definition, the literature includes studies of completed suicide, attempted suicide, "partial" suicide, threatened suicide, all lumped together under the rubric of "suicidal behavior," even though many investigators believe that these phenomena are not comparable. Further difficulties in drawing generalizations about suicide arise as a result of the wide differences in study designs, the use of small and unrepresentative samples, and the continuous fallacy of post-hoc reasoning, i.e., the study of suicidal individuals after their crises.

It wasn't until the 19th century that any reliable statistics were available on youthful suicide. Early in this era there was a striking increase in self-inflicted deaths among young people, and a corresponding rise in public concern. In his survey of 19th century European statistics, MacDonald (1906-07) found increases in suicides among the young in France, England, and Russia, with an "enormous increase" in Prussia. Suicides among German youth were exceedingly high, and have remained so to the present day.
Early in the 20th century interest in the statistics of juvenile suicide lagged somewhat, and it wasn't until Mulcoch's (1955) study of youthful suicide in England and Wales (1938-1953) that survey material again became available. The patterning which he found is consistent to this day, i.e.:

1) more males than females commit suicide  
2) more females than males attempt suicide  
3) suicide and suicide attempts increase with age  
4) suicidal activity among the young is not influenced by overall social conditions (e.g., war, depression) as much as it is by immediate concerns of family and school

More recent data seem to support these findings. Vital Statistics of the United States, 1964, in its analysis of death rates for suicide by age, color, and sex indicates that:

1) There is a direct correlation between suicide rates and advancing age. Below the age of 14 suicide is a rarity, accounting for less than one death per 200,000 children. There is an 8 to 10 fold increase between the ages of 15 and 19 (approximately 5.0 cases per 100,000 population), and at ages 20-24 the suicide rate doubles again (approximately 10.0 cases per 100,000 population).

2) For all age groups, both white and nonwhite, the relative incidence of suicide is always higher for males than females in an average ratio of 3 males = 1 female.

3) In general, suicide rates for nonwhites are below those for whites in all age groups and both sexes.

4) Among married persons the suicide rate is generally lower than for unmarried persons, except in the under 24 age range where the rate is substantially higher. Among divorced persons it is exceptionally high.

It is interesting to note that the suicide rate among divorced persons is closely approximated by that of students at
large universities. Whether similar causes are involved is purely a matter of speculation. Many theories have, however, been pro-
pounded, and a very large number of variables have been associated with adolescent suicide. They include:

Chronic depression (Lawler, Nakielny, and Wright, 1963; Cerny Cerna, 1962)
Hallucinations, delusions, schizophrenic reactions (Lawler, et al., 1963; Toolan, 1962)
Guilt—self-blame for parent's suicide (Cain and Fast, 1966); over sexual freedom (Jensen, 1955); anxiety and guilt over sexual impulses (Mohr and Despres, 1958); arousing guilt as a means of hurting others (Block and Christianse, 1966); remorse (Bakwin, 1964); shame about failure and reactions of others (Iga, 1961)
Fear—of punishment (Bakwin, 1964; MacDonald, 1906-07; Zumpe, 1959); failure in school, especially college (Jensen, 1955; Rook, 1959)
Desire to control environment (Mohr and Depres, 1958); need to force attention and love from others (Bender and Schilder, 1937; Bergstrand and Otto, 1962; Faigel, 1966; Gould, 1965); manipulativeness (Toolan, 1962); blackmail (Launay, et al., 1964; Ringel Spiel and Stepan, 1955)
Feeling of worthlessness (Hendin, 1964); of inadequacy (Iga, 1961; severely reduced self-esteem (Munter, 1966); sense of failure (Gunther, 1967)
Loneliness and creation of unreal world (Bergsma, 1966; Maycock, 1966); withdrawal (Morrison and Smith, 1967); isolation (Jacobs and Teicher, 1967); fantasy life (Lawler, et al., 1963)
Feelings of helplessness—dependency needs, insecurity (Iga, 1966); when dependency removed security (Iga, 1966); when dependency removed (Lourie, 1966); lack of love and protection (Zumpe, 1959)
Impulsivity (Geisler, 1953; Gould 1965); ineffective self-control (Iga, 1966); crises in control of aggressive urges; hypersensitivity, suggestibility, magical thinking (Schneer, Kay, and Brozovschy, 1961)
Identification—wish for reunion with dead parent (Keeler, 1954; Launay, 1964; Mohr and Despres, 1958; Moss and Hamilton, 1956); follow example of parent's suicidal behavior (Lourie, 1966)
Feelings of hopelessness—futility; last resort (Jacobs and Teicher, 1967; Tuckman, Youngman and Leifer, 1966)
Desire for escape from unbearable situation (Bender, 1953);
        tired of poor treatment (Faigel, 1966); feels unloved (Mohr
        and Despres, 1958; Peck, 1967)
        Loss of love object, concept of death, puberty (Alexander and
        Alderstein, 1958; Nagy, 1959)
        Feelings of rage and desire for revenge (Bender and Schilder,
        1937; Moss and Hamilton, 1956)

        Despite the large number of variables, however, few methodo-
        logically sound and meaningful studies of suicide exist. Those
        which do exist can be divided into two general categories:

        1) Those dealing with psychological factors in suicidal be-
           havior, and

        2) Those dealing with environmental-social factors in sui-
           cidal behavior.

        Each of these categories will be reviewed separately.

        Psychological Factors

        Since suicide is a complex behavioral act stemming from
        multiple conflicting motivations, it is not surprising to find
        many and varied theories devised to account for suicidal be-
        havior (Stengel, 1969). Probably the most popular of these the-
        ories is that of Freud (1929) and Henry and Short (1954) which
        postulates that the suicidal act is a result of aggression turned
        inward because of external restraints on the individual which
        prohibit him from acting out his hostility. Though this position
        makes intuitive sense, research support is not clear cut. For
        example, Winfield and Sparer (1953) found suicidal individuals to
        be less extrapunitive than non-suicidal individuals; Farberow
(1950) found them to be more extrapunitive than (non-suicidal individuals; and Fisher and Hinds (1951), Vinoda (1966) and Eisenthal (1967) found no differences between suicidal types and normals on this dimension.

In cross cultural comparisons Kendall (1970) found a very equivocal relationship between aggression, depression, and suicide. Lester (1967) was able to shed some light on this problem by dividing randomly selected undergraduate students into three categories: 1) attempted and threatened suicide; 2) intellectually considered suicide and 3) non-suicidal, and then administering the Devries Suicide Potential Scale and the Buss and Durkee Hostility Inventory. The results permitted Lester to identify suicidal individuals as being more aggressive, impulsive, resentful, and irritable than the non-suicidal individuals, thereby disconforming the Freudian view of suicide as resulting from an inability to express aggressiveness and hostility in an extrapunitive manner. In later research Lester (1968a) went so far as to postulate irritability as a stable and enduring trait of suicidal individuals. Regarding the Freudian view of the childhood etiology of neurotic syndromes, Lester (1968b) further found no association between suicidal ideation and childhood experiences of psychological punishment.

More recent investigations of suicidal behavior have been directly or indirectly based on the premise that no one particular
suicidal "type" can be identified, but rather that suicide exists as a problem solving mechanism available to individuals whose attitudes toward life and death are fairly equivocal (Teicher and Jacobs, 1966), (Appelbaum, 1963), (Hopp, 1967), (Tuckman et. al., 1966). To test this hypothesis Neuringer (1968) utilized semantic differential ratings to assess attitudes toward life and death among suicidal, psychosomatic, and normal hospitalized adult male patients. When the three groups were compared on evaluative, activity, and potency response factors, it was found that the greatest divergence between attitudes on all three factor scores occurred among the suicidal subjects. This divergence of attitude toward life and death may be one of the conditions that makes the choice between living and dying possible.

Similar results are reported by Spiegel and Neuringer (1963), Lester (1967) and Eisenthal (1968) who found less expressed dread of death among suicidal subjects, and by Cash and Kooker (1970) who found suicide attempters to be more inconsistent in their attitudes toward death two control groups who had not attempted suicide.

In college populations, the situation specific nature of the suicidal response is evident in several studies, i.e., Braaten and Darling (1962), Knight (1968), Callender (1968), Peck (1968), Schrut (1968), Geraud (1968), Boker (1969). Seiden (1966) found that suicidal students at Berkeley could be significantly dif-
differentiated from their fellow students on the basis of age, class standing, major subject, nationality, emotional condition, and academic achievement. Further, suicidal students presented similar behavior patterns before suicidal crises (e.g., worry, insomnia, withdrawal, general emotional disturbance, depression) which were precipitated by scholastic anxieties, concern over physical health, and difficult interpersonal relationships. It must be noted, however, that all of the aforementioned factors merely correlate with suicidal behavior on campus. Not all of these factors are independent, and many may be caused by a third factor, i.e., the depersonalization and anomie associated with mass education.

It is to this latter point that the discussion of the second major area of suicide research will be devoted—the influence of environmental-social factors on suicidal behavior.

Environmental-Social Factors

The overwhelming bulk of sociological literature on suicide concludes that a lack of interpersonal relatedness, especially in regard to family, and social disorganization are major factors in bringing about suicidal crises. Though there is still a great deal of disagreement regarding precise definition and criteria for terms such as "family disorganization," there is little ques-
tion that such factors as broken homes, early death of parents, and general social isolation play a large part in the etiology of suicidal behaviors (McCulloch and Philip, 1967).

Typical findings of recent demographic studies include:

Barter, et al., 1968: Suicidal behavior in adolescents appears to be the combination of progressive family disorganization and social maladjustment... Those adolescents who are unable to achieve an adequate family relationship, or who have sustained a parent loss, and who have a minimal social life, and who need continued aid from a social agency or mental health clinic have a significantly higher rate of suicidal behavior.

Greer, 1964, 1966; Levi, et al., 1966; Hill, 1969: Suicide is significantly more common among depressed men and women who lost a mother and/or father prior to the age of 14.

Tuckman and Connon (1962): In a study of 100 consecutive attempted suicides there is an important association between suicidal behavior on one hand and family disorganization and delinquency on the other.

Bruhn, 1962: Absence or loss of one or both parents by death or by separation due to marital disharmony characterized 42% of a group of 91 attempted suicides.

Tuckman and Youngman, 1964: Family disorganization, defined operationally as contact with a community health or welfare agency, was a characteristic of 51% of a sample of 222 adults who attempted suicide.

Dorpat, et al., 1965: 50% of 114 subjects who completed suicide and 64% of 121 subjects who attempted suicide came from broken homes.

Teicher and Jacobs, 1966: In an adolescent population, a recent onslaught of problems usually characterized by a chain-reaction dissolution of meaningful social relationships and progressive social isolation often precipitates suicidal attempts.

Lester, 1970 (Jul.): Suicide found to be common in city areas which are characterized by a high degree of social disorganization.
In general, when such individuals arrive for treatment, they cannot be significantly differentiated on the basis of admission complaint or personality profile (Hopp, 1967; Ravensborg and Foss, 1969). Ravensborg and Foss (1969) could differentiate successful suicides from comparison groups in an inpatient population only in terms of social competence variables, with suicides tending to be younger, more intelligent, and better educated. It would seem therefore, that though suicidal persons lack comparability in terms of psychological "factors," i.e., in terms of those personality characteristics which typify the suicidal individual, many do share an unstable environment upon which they are dependent and over which they have little control. This environment may be characterized as lacking in interpersonal closeness (Lalli and Turner, 1968); and lacking structure (Dublin, 1967).

In light of these findings, certain tentative conclusions seem justified:

1) In general, university students are higher suicidal risks than their non-university peers.

2) To date, attempts at assessment of suicidal "personality types" have been largely unsuccessful when standard instruments are used.

3) Suicidal behavior is highly correlated with dependence upon an uncontrollable, loosely structured environment which fosters depersonalization.
Toward An Ecological Theory of Campus Suicide

Anomie has been defined as a state of society in which normative standards of conduct and belief are weak or lacking; also a similar condition in the individual commonly characterized by disorientation, anxiety, and isolation. This definition is probably based on the work of Durkheim (1897), who seems to be the first researcher to postulate a relationship between anomie and suicide. In his classic sociological study, Durkheim noted the low frequency of suicide among many working poor populations compared with the high rate of suicide among managerial groups. He explains this seemingly paradoxical relationship as follows:

...the source of the crises is an abrupt growth of power and wealth. Then, truly, as the conditions of life are changed, the standard according to which needs were regulated can no longer remain the same... The scale is upset; but a new scale cannot be immediately improvised. Time is required for the public conscience to reclassify men and things. So long as the social forces thus freed have not regained equilibrium, then respective values are unknown and so all regulation is lacking for a time. The limits are unknown between the possible and the impossible, what is just and what is unjust, legitimate claims and hopes and those which are immoderate... Anomy, therefore, is a regular and specific factor in suicide in our modern societies... (It) results from man's activity's lacking regulation and his consequent sufferings. (Durkheim, 1897)

Surprisingly, though the concept of anomie has often been referred to in connection with suicidal behavior, to date there is only one published study that has investigated anomie in suicidal
individuals. This study (Lester, 1970) was admittedly inadequate in that the total number of subjects consisted of 42 college students divided into three groups. Further doubt is introduced by Lester's reliance upon an instrument (an anomie scale devised by Srole, 1956) for which there are no data regarding validity or reliability. Results were inconclusive in that:

Scores on Srole's anomie scale did not...appear to be related to a history of suicidal threats and attempts in a population of college students. This may reflect the inadequacy of the measure of anomie or the possibility that anomie is not a long-term stable personality trait in suicidal individuals but rather a transient state during suicidal crises. Anomie scores did correlate with scores on the suicide potential scale (Devries, 1966), which does seem to assess suicide potential independently of emotional disturbance (see Lester, 1968). Thus, there was some support for the hypothesis. Clearly, a more intensive analysis is called for. (Lester, 1970)

In light of the large amount of literature attesting to the growing problem of depersonalization and anomie on the college campus, as summarized by Keniston, 1970, it would seem advisable to carry out the "more intensive analysis" Lester calls for. If the sociological findings listed earlier are correct, a high degree of correlation could be expected between student feelings of anomie and suicidal potential.

Of central importance in the definition of anomie are the ideas of "sudden change" and "deregulation" of the psychological environment. These two concepts are also of central importance
in describing the initial experience of college students, who often face drastic alterations of stable psychological and social behavior patterns. At the interface, these changes undoubtedly lead to emotional symptoms similar to those reported in cases of student suicide. At levels of lesser intensity, the experience of anomie may account for perennial feelings of dissatisfaction which often manifest themselves in periodic campus disorders and student movements.

That student movements may function to alleviate feelings of anomie is illustrated in a study by Seiden (1966), who found a 20% drop in admissions to the student mental health service, and no suicides during the Free Speech Movement on the Berkeley Campus. A similar drop in suicides, psychosomatic disorders, and neurotic conditions was noted during both world wars. Seiden therefore concludes that therapeutic acting out, a sense of community, and the discovery of meaning in living can function effectively in combatting student suicide.

Among non-college adolescents, the effects of a sudden alteration in life circumstances has a similar effect. Schrut (1968) found that "...the adolescent girl attempting suicide characteristically saw herself as being subjected to an unjust, demanding, and often irreconcilable isolation with a typical chronically progressive diminution of receptive interfamilial communication (p. 108)." Similarly, Teicher and Jacobs (1966)
found that adolescent suicidal behavior can be meaningfully understood as a situational reaction often characterized by a chain-reaction dissolution of meaningful social relationships. Anomie, and the concomitant suicidal ideation, seem to be most prevalent where there is a "syndrome of lack of authority" (Sutter et al., 1964), and least prevalent where religious affiliation and social structure are strong (Dublin, 1967).

In summary, Durkheim's assertion of a relationship between sudden destructuring of an individual's psychological cosmos and suicidal impulses, seems to be supported on a correlational basis by the research literature. The present study is an attempt to systematize the nature of this relationship by studying the environmental perceptions and interactions of college students having high and low suicide potential.

**Operational Definitions**

For the purpose of this research, the behavioral aspects of anomie are defined in terms of the following characteristics:

1. A high degree of social isolation (Jacobs, 1967)
2. Considerable self-doubt and self-depreciating (Darling and Braatan, 1961)
3. Feelings of depersonalization and desire to control an unpredictable environment (Lester, 1970a)
4. Irritability, resentment, aggression (Lester, 1967a)
5. Strong dependency needs (Schrut, 1968, Schneidmann, 1966, 1968)
To the extent that similar factors are reported in the Stern Personality and Environment Indices, it is hypothesized that students exhibiting the above characteristics (as defined by response patterns of the Stern Activities Index and College Characteristics Index) will also exhibit higher levels of suicidal ideation (as defined by the Devries Suicide Potential Scale) than a control group of peers who exhibit lower levels of these characteristics. Further, it is believed that these two groups will differ significantly in background characteristics and in level of involvement in campus affairs.

These hypotheses will be investigated by Utilizing Stern's Personality and Environment Indices in combination with the Devries Suicide Potential Scale. Scores earned on these instruments will be correlated and compared with self-reports of environmental interaction in an effort to elucidate the nature of environmental press in the development of suicidal ideation of the college campus.
CHAPTER III

METHODOLOGY

General Methodological Considerations

As mentioned earlier, speculations regarding suicidal behavior on the college campus tend to focus on one of two basic premises: a) students who attend universities are more emotionally unstable, prior to admission, than their non-university peers, or b) aspects of the university environment are significant in bringing about emotional instability and concomitant suicidal ideation.

Implicit in these premises are two opposing points of view regarding the investigation of individual personality characteristics. Devries (1963) notes that:

...One shcool of thought (normative) believes that abnormal behavior is an extension of normal behavior. The other school (clinical) believes that normal and abnormal behavior lie in two different dimensions. These two approaches reflect themselves in the field of clinical testing. In the first line of thought, tests are developed in which responses of normal individuals are compared with those of neuropsychiatric or non-normal individuals. The Minnesota Multiphasic Personality Inventory is a good example of this type of application.

With the second type of approach on the other hand, tests are constructed in such a manner that it allows the clinician to analyze each person's own test responses, viewed in a broad rather than specific theoretical framework.
Two types of test development have resulted from these different points of view. The normative (or "shotgun") approach usually concerns itself with establishing statistical criteria to describe normal functioning (usually consisting of base rate levels for various psychiatric categories), and compares these results with those obtained by applying the same criteria to abnormal individuals who manifest specific behavioral symptoms. In this way behavioral norms are established and individual inclinations toward pathology may be estimated.

In contrast, the clinical point of view assumes a qualitative frame of reference and focuses on the outstanding characteristics of the abnormal individual. These particular characteristics then serve as the basis for test development and individual assessment.

Though it is possible that suicide tends to be associated only with certain personality patterns, the present study does not take this frame of reference. Rather, it is hypothesized that suicide exists as a problem-solving device available to virtually everyone. It is further hypothesized that the feasibility of a suicidal response is strongly influenced by perceived environmental press and level of individual involvement in external activities. Specifically, low levels of environmental interaction are associated with high levels of suicidal potential.
Since research data to date tend to bear out the validity of this formulation, inferences regarding individual levels of suicide potential are made on the basis of expressed preferences for specific external activities rather than in terms of traditional dynamic theory and psychiatric classification. To this extent, then, the approach used in the present study is normative.

Measures

Since this study is an attempt to define a relationship between suicidal ideation and environmental interaction, it was necessary to find instruments whose theoretical base is primarily oriented toward assessment in terms of person-environment interaction, rather than in terms of internal dynamic variables. To this end three instruments were chosen:

1. The Devries Suicide Potential Scale
2. The Stern Activities Index
3. The Stern College Characteristics Index

Each of these is described separately.

The Devries Suicide Potential Scale

The SPS was developed by A. G. Devries (1963) as part of his continuing research on the assessment of suicide potential.
Prior to the development of the SPS the only instrument available for this purpose was the clinically-oriented Minnesota Multiphasic Personality Inventory. The latter instrument had several significant drawbacks.

Chronbach (1963) notes that the first major problem encountered using the MMPI concerns the inventory's psychiatric orientation. Since the original inventory was developed primarily to differentiate various types of clinical pathology, its usefulness when applied to normal subjects is questionable. This is especially true considering that MMPI profile scores are reported in terms of pathology levels for nine syndrome groups, thereby making interpretation of "normal" profiles exceedingly difficult.

Secondly, Devries (1963) notes that research indicates that among inpatient populations, responses to MMPI items may be significantly affected by factors other than psychiatric diagnosis, i.e., intelligence, age, number of re-tests, occupation, marital status, etc. (Brower, 1947; Wexner, 1954; Brozek and Keys, 1951). Within a psychiatric population, these factors were found to significantly affect MMPI response rates (Devries, 1963). What effects these factors have on the response patterns of normal subjects remains entirely unknown.

Thirdly, attempts to construct reliable suicide potential scales consisting of MMPI items have not met with success. To
date, these attempts have largely been restricted to psychiatric inpatient populations. Invariably such studies consist of post-hoc correlations between scores on the MMPI and recorded histories of suicidal behavior. As a result, most of the findings of these studies are confounded by a myriad uncontrolled variables and could not possibly be generalized to normal populations.

Though the Devries SPS has the same self-report format as the MMPI, it differs from the MMPI in that: 1) it is designed to measure only suicide potential, and 2) its item content was developed from a theory of critical incidents. Since the present study seeks to explore the influence of environmental factors in the development of suicidal ideation, the latter aspect of the SPS is of particular importance.

Devries (1963) describes the critical incident technique as follows:

It is assumed that experts are able to give examples of what they consider to be efficient or inefficient performance. These incidents are then grouped into series of one hundred. Each series is then compared with the previous ones in order to determine how many new incidents have been reported. When less than five new incidents have been reported, it is thought that the range of total incidents has been tapped...The next step in the procedure involves analyzing the incidents and classifying them according to similarity into a progression of more inclusive categories... (pp. 37-38)

By applying the above technique to 66 major studies of suicide, Devries was able to identify 224 incidents which seemed to
be pivotal in precipitating suicidal crises. Of these 224 incidents, the 50 most significant were chosen for inclusion in the SPS. These items were placed in a "true," "false," or "cannot say" format and were worded in such a manner that a normal non-suicidal group would answer half of the items as true and half as false. Five filler items were included in order to avoid possible unsuspected cumulative effects, and at no point in the inventory is any direct reference made to suicidal behavior.

The initial validation of the SPS was conducted by administering the scale in combination with the MMPI to 600 psychiatric inpatients who had been divided into suicidal and non-suicidal groups. The two inventories were analyzed separately in an effort to determine whether either scale could differentiate between suicidal and non-suicidal groups of persons.

Results of Devries' original study (Devries, 1963) indicate that both the MMPI and the SPS could differentiate suicidal from non-suicidal male inpatients, though the SPS was far less affected than the MMPI by control variables such as age and education. Devries notes that "In view of the finding that other variables besides psychiatric diagnosis and suicide affect MMPI responses, it is not possible to derive a suicide scale (from the MMPI) which can be scored in the usually MMPI fashion." (Devries, 1963, p. 116) It would seem, therefore, that since the SPS was demonstrated to be less affected by variables other than
suicidal tendency, it may be a more useful instrument than the MMPI when suicide potential is the only concern. (Lester, 1970)

Of particular importance to the present research are two cross-validation studies done by Lester (1967, 1968) in an attempt to assess the usefulness of the SPS in assessing suicidal ideation among college populations. In the first of these studies, Lester (1967) asked 43 undergraduates if: 1) they ever discussed the topic of suicide intellectually, 2) thought of suicide in relation to themselves, 3) threatened to commit suicide, or 4) attempted suicide. He then administered the Devries SPS and compared the results with the obtained self-report of suicidal ideation. Results indicated that "attempted and threatened" subjects scored an average of 5.5 (highest possible score = 13), "considered suicide" subjects scored an average 3.7, and "non-suicidal" subjects scored an average 2.6. These groups differed significantly on a one-way ANOV at the .01 level of significance.

In a replication of his earlier study, Lester (1968) increased his sample size to 87 undergraduates and attempted to control general maladjustment by administering the neuroticism scale of the Maudsley Personality Inventory. When the effects of neuroticism were thus controlled, SPS scores again successfully differentiated (.01 level) between students who had attempted and/or threatened suicide from those who had never considered suicide.
In light of these and other studies, Lester (1970b) concludes that the use of standard personality inventories in the prediction of suicidal behavior has not been fruitful. Rather, he asserts that task-specific inventories such as the Devries Suicide Potential Scale have considerable utility for future research. As a result, the SPS was included in the present study as a measure of suicidal ideation.

The Stern Activities Index and College Characteristics Index

These two inventories find their theoretical foundation in the needs-press theory of Murray (1938). First to be developed was the Stern Activities Index, which sought to define individual needs as 1) goals or purposes which an interaction serves, and 2) modes of behavior employed by an individual. By utilizing this interactional concept of need, Stern (1958) constructed personality scales based on the premise that:

...characteristic interactions which an individual undertakes may be classified. Inferences may also be made concerning the purposes which these characteristic interactions have for the individual...For our present purposes it is sufficient to note that the determination of needs characterizing an individual can only be made from an examination of the interactions in which he engages, and needs may therefore be identified as a taxonomic classification of the characteristic behaviors manifested by individuals in their life transactions. (Stern, 1958, p.1)
By asking an individual to indicate his preferences among various possible activities, it was assumed that a reasonable approximation of typical manifest behaviors could be obtained. To this end the instrument was constructed from an initial pool of over one thousand items describing commonplace daily activities and feelings which appeared to reflect the need processes described by Murray. The resulting inventory, named the Activities Index, contained 300 items arranged in a forced-choice "like"/"dislike" format. The needs being measured were eventually defined in terms of 30 scales: Abasement-Assurance; Achievement: Adaptability-Defensiveness; Affiliation; Aggression-Blame Avoidance; Change-Sameness; Conjunctivity-Disjunctivity; Counteraction; Defence-Restiveness; Dominance-Tolerance; Ego Achievement; Emotionality-Placidity; Energy-Passivity; Exhibitionism—Inferiority Avoidance; Fantasied Achievement; Harm Avoidance—Risktaking; Humanities, Social Sciences; Impulsiveness-Deliberation; Narcissism; Nurturance; Objectivity-Projectivity; Order-Disorder; Play-Work; Practicalness-Impracticalness; Reflectiveness; Science; Supplication-Autonomy; Understanding.

In a number of studies conducted between 1953 and 1970, it has been found that (a) the Activities Index can be useful in isolating unique configurations of needs among various campus subcultures and academic groups, (b) Index configurations have a high degree of correspondence with independent analyses of
other personality assessment devices such as the Thematic Apperception Test and Sentence Completion Tests, and (c) AI needs patterns tend to be psychologically meaningful for each group tested (Stern, 1970).

The needs assessed in the Activities Index are not independent, but form factor clusters which are systematically related. Together these factors form a circumplex in which adjacent factors are more closely related than distant ones, with the end of the series reverting back to the beginning of the circumplex. The following is a summary statement of the meaning of each factor (after Stern, 1970):

I. Achievement Orientation: five factors

The first two factors in this dimension are concerned with social aggressiveness or ego strength, one politically oriented and the other more personal in nature. The next two factors concern intellectual aspects of achievement, and the last factor reflects interest in development of useful, applied skills. A high score in this area indicates strong ego strivings. A low score indicates indifference to personal achievement.

1. Self-Assertion (in Ego Achievement, Dominance, Exhibitionism, and Fantasied Achievement): need to achieve personal power and sociopolitical recognition.


3. Intellectual Interests (in Reflectiveness, Humanities, Social Science, Understanding, and Science): highest loadings on this dimension are concerned with various forms of intellectual activities, the arts as well as the sciences, the empirical as well as the abstract.

4. Motivation (in Achievement, Counteraction, Understanding, and Energy): need for achievement expressed as a more conventional form of striving per se, regardless of
goal. High loadings on this factor involve elements of competitiveness, perseverance, and intellectual aspiration.

5. Applied Interests (in Practicalness, Science, and Other): concern with achieving success through concrete, tangible, socially acceptable activities. Items on this scale involve orderly and conventional applications of skills in business and science, with a high emphasis on diligence and utility.

II. Dependency Needs: seven factors

The first factor in this scale (Applied Interests) is shared with the preceding area, but now implies a more compulsive level of personal organization. The next factor in the sequence substitutes conformity for compulsion and is followed by a less self-abrasive series of factors which emphasize emotional closeness rather than submission. High scorers in this area are characterized by dependent, submissive, socially controlled behavior; low scorers tend to be autonomous, ascendent, and nonconformist.

5. Applied Interests. See Area I.


-12. Diffidence-Egoism: inverse of Factor 12, Area III. Moderately high score represents a de-emphasis on self as a primary source of gratification, and good reality testing. High scores in selflessness may imply poorly defined self-concept and low self-esteem.

6. Orderliness (in Conjointivity, Sameness, Order, and Deliberation): high scores indicate interest in activities stressing personal organization, deliberation, and self control through the use of ritual behaviors.

7. Submissiveness (in Adaptability, Abasement, Nurturance, and Deference): emphasizes a high level of control (as in Factor 6), with the addition of social conformity, other-directedness, and humility. Since some "Nurturance" items appear in this context, it is possible that the submissive individual's interest in supportive activities may reflect his own unexpressed need for help.

-2. Timidity-Audacity: inverse of Factor 2. In this reversed form, it suggests anxiety associated with risk taking; dislike of sports and social activities; fantasies which might conceivably incur harm or blame.

8. Closeness: (in Supplication, Sexuality, Nurturance, and Deference): shares both the Nurturance and De-
ference scales with Factor 7, but lacks the abrasive and self-denying qualities implicit in Factor 7. Emphasis is placed on personal needs for warmth and emotional supportiveness.

III. Emotional Expression

Beginning with the Closeness factor shared with the preceding area, five additional factors stress high levels of social participation and emotional spontaneity. The final factor in this group, Self-Assertion, overlaps with Area I, thereby bringing the circle to a close.

8. Closeness: See Area II
9. Sensuousness (n Sensuality, Narcissism, and Sexuality): emphasizes sensual gratification, i.e., aesthetic experience and an appreciation of the fine arts.
10. Friendliness (n Affiliation and Play): emphasizes friendly playful relationships with other people. High scorers like simple, uncomplicated forms of amusement enjoyed in a group setting.
11. Expressiveness-Constraint (n Emotionality, Impulsiveness, Exhibitionism, and Sexuality): is concerned with emotional lability and freedom from self-imposed controls. High scorers appear to be outgoing, spontaneous, impulsive, and uninhibited.
12. Egoism-Diffidence (n Narcissism, Fantasied Achievement, and Projectivity): reflects extreme preoccupation with the self, i.e., appearance, comfort, achievement, and public recognition. High scorers may manifest narcissistic egoism and childish self-centerdness.
1. Self-Assertion: See Area I. The egocentric aspects of the previous two factors express themselves in the ascendent and manipulative aspects of Factor I, thereby completing the circle.

IV. Educability

This dimension was derived from second-order factor space and is of less magnitude than the preceding three. "Unlike them it is not associated with a separate segment of the circumplex, the first three having already divided it up between themselves, but overlaps both dimensions I and II. . . . It excludes the extreme self-assertive aspects of Achievement Orientation on the one hand and the physical and emotional sources of anxiety at the other extreme of the Dependency Needs Area."
"Insofar as it combines elements of both intellectuality and submissiveness, this dimension is of intrinsic interest to the educator. Reflecting interests in academic activities coupled with orderliness and conformity, this factor seems likely to be specifically associated with academic achievement. Persons high on this factor are not likely to be original or creative; they are, however, likely to accept direction readily and be educationally tractable. "Loadings with this dimension come from Factor 3, Intellectual Interests, Factor 4 Motivation, Factor 5 Applied Interests, Factor 6 Orderliness, and Factor 7 Submissiveness." (Stern, 1970, p. 52)

The College Characteristics Index (CCI)

Since the Activities Index served primarily to assess "needs," the College Characteristics Index was assigned primarily to assess environmental "press." The AI served as the prototype from which the CCI was developed, the scales of the AI being carried over intact in the form to which they had ultimately been modified from the original Murray taxonomy.

It can be seen then that Stern's definition of "press" rests upon inferences from events represented in the objective perceptual fields of subjects being tested.

There may of course be a genuine disparity between the veridical one. Each of us does live in an incontrovertibly private universe. But there can be no disparity for the perceiver under ordinary circumstances...(Therefore) the collectively perceived significates of various press are entirely adequate source from which to infer the environmental situation to which individuals are responding. (Stern, 1970, pp. 11-12)
By modifying the wording of Activities Index items from "I would like/dislike..." to "At this college...," the College Characteristics Index provides a description of the unique activities and events which constitute a given college environment. Since this description is a result of both individual perception and consensual agreement, results can be reported in terms of individual personality profiles (as in AI) and in terms of group culture matrices.

The final CCI inventory (Form 458) underwent extensive validation at a variety of colleges. Results supporting Stern's theoretical point of view are reported in his recent book, *People in Context* (Stern, 1970).

The relationship between CCI first-order factors is not the same as those of the AI. Rather than forming a distinct circumplex of scores, CCI factors tend to split into two distinct second-order groups: Intellectual Climate and Nonintellectual Climate. First order factors contained within these two groups consist of two linear sequences or chains that attach to each other at one end, but are open at the other.

The institutional dimensions defined by the second-order factors of the CCI are fairly easy to interpret. The major dimension involved, Intellectual Climate, seems to be the counterpart of the Achievement Orientation dimension of the AI. "This may be attributable to the fact that these data involve educa-
tional institutions and intellectual components of the environment are therefore overdetermined. If this is the case, environmental factors in nonacademic settings may conceivably have less variance associated with intellectual emphases and more associated with the distinction between opportunities for the expression of emotionality and those that support dependency needs." (Stern, 1970, p.55). The second dimension, Nonintellectual Climate, extends these concerns into the area of student affairs, both academic and social. It should be noted that the Intellectual and Nonintellectual Climate factors may not be completely independent. If this is the case, data regarding these two factors will remain qualified until the precise nature of their statistical relationship is clarified. For the purposes of the present research, these two dimensions will be treated as independent factors.

A third dimension, Impulse Control, is less well defined. Generally it seems to designate emotional constriction and maximal institutional control. Stern describes this second-order factor as "... a rare enough type of situation, but one that may perhaps be detected by a score based on Factor 8 Academic Organization (p Blame Avoidance, Order, Conjunctivity, Deliberation, Deferece, and Narcissism), and Factor -10 Work (p Prudishness, Harm Avoidance, Work, and Deliberation)." (Stern, 1970, p.58)
The three second-order factors which compose the basis of the institutional dimensions defined by the CCI are composed of the following first-order factors (after Stern, 1970):

I. Intellectual Climate: 8 factors composing the conventional aspects of an academic program, i.e., staff, standards of achievement, opportunities for development of self-assurance, noncustodial student personnel practices, and absence of vocationalism.

-10. Work-Play (Prudishness, Harm Avoidance, Work, and Deliberation): high scores reflect an absence of activities associated with dating, athletics, and other forms of collegiate play or amusement.

-11. Nonvocational Climate (Impracticalness, Sensuality, Restiveness, Disorder, and Defensiveness): reflects opportunities to engage in theoretical, artistic, and other "impractical" activities and an absence of pressures to conform to conventional values.

1. Aspiration Level (Counteraction, Change, Fantasied Achievement, and Understanding): high scores indicate high intellectual aims, self-confidence, and expectations of successful interaction in academic and administrative matters.

2. Intellectual Climate (Reflectiveness, Humanities, Social Sciences, Sensuality, Understanding, and Fantasied Achievement): aims at reflecting institutional dedication to scholarly activities in the humanities, arts, and social sciences.

3. Student Dignity (Objectivity, Assurance, and Tolerance): high scores reflect a non-authoritarian administration. Students are treated as mature adults and possess a high level of self-determination.

4. Academic Climate (Humanities-Social Science and Science): high scores indicate that the school in question provides good staffing and physical facilities, considerable attention being given to excellence in the conventional areas of humanities, natural sciences, and social sciences.

5. Academic Achievement (Achievement, Energy, Understanding, Counteraction, and Conjunctivity): high scores indicate high institutional demand for student achievement via special courses, examinations, honors, tutorials, etc.

6. Self-Expression (Ego Achievement, Emotionality, Exhibitionism, and Energy): high scores reflect institutional
press toward development of student leadership potential and self-assurance via student drama and music, etc.

II. Nonintelectual Climate: primarily 3 factors dealing with highly structured student affairs, both academic and social. These factors are basically supportive in nature, catering to adolescent dependency needs. Other nonintellectual factors concern themselves with a) student play, b) emphasis on technical and vocational courses, and c) the Self-Expression factor shared with Area I.

6. Self-Expression: See Area I.

7. Group Life (Affiliation, Supplication, Nurturance, and Adaptability): primary concern is with warm, friendly, mutually supportive group activities typical of adolescent togetherness, but also reflecting the serious concern on college cultures for the welfare of other students and less fortunate members of the community.

8. Academic Organization (Blame Avoidance, Order, Conjunctivity, Deliberation, Deference, and Narcissism): reflects the environmental counterparts of orderliness and submissiveness (AI Factors 6 and 7) through institutional stress on organization and structure in the academic environment.

9. Social Form (Narcissim, Nurturance, Adaptability, Dominance, and Play): high scores reflect heightened self-awareness and consciousness of position or role because of a formal institutionalization of activities incorporated in Factor 7 (Group Life). Schools high on this factor apparently offer "finishing school" opportunities for the development of social skills.

10. Play-Work (Sexuality, Risktaking, Play, and Impulsiveness): high scores indicate many opportunities for playfull student socializing, i.e., informal dating during the week, late parties (despite regulations), frequent dances, etc.

11. Vocational Climate (Practicalness, Puritanism, Deference, Order, and Adaptability): emphasizes applied activities, rejection of aesthetics, orderliness, and conformity in student faculty relationships.

III. Impulse Control: "The third environmental component may very well be associated with emotional constriction and maximal institutional control...There are still, to be sure, contemporary survivals of sadomasochistic festivities as may be reflected in the axis of Area III, as the recent motion picture Mondo Cane attempts to document, but the identification of this dimension with colleges on the basis of the CCI is nevertheless limited. This may be due to an inadequate repre-
sentation of extremely coercive and extremely permissive schools in the sample or, on the other hand, to a deficiency of revelant scales and items in the CCI. It is in any event a rare enough type of situation, but one that may perhaps be detected by a score based on Factor 8 Academic Organization (p Blame Avoidance, Order, Conjunctivity, Deliberation, Deference, and Narcissism), and Factor -10 Work (p Prudishness, Harm Avoidance, Work, and Deliberation)." (Stern, 1970, p. 58)
Hypotheses

The present study is aimed at developing an empirical paradigm for the assessment of suicide potential based upon observable environmental interaction rather than interpersonality dynamics. It is hypothesized that specific types of environmental interaction (operationally defined by the Stern Activities Index and College Characteristics Index) tend to be correlated with specific levels of suicidal ideation (operationally defined by the Devries Suicide Potential Scale).

The nature of these correlations is hypothesized as follows:

1. Students scoring high on the Devries Suicide Potential Scale (raw score ≥ 6) will exhibit consensual preferences for different types of activities have different consensual environmental perceptions than students scoring low on the Devries SPS (raw score ≤ 5). This will be reflected in the following AI and CCI factor scores for high SPS students:

   I. Achievement Orientation:
   1. Self Assertion: low score
   2. Audacity-Timidity: low score
   3. Intellectual Interests: low score
   4. Motivation: low score
   5. Applied Interests: high score

   II. Dependency Needs
   5. Applied Interests: high score
   -11. Constraint-Expressiveness: high score
   -12. Diffidence-Egoism: low score
   6. Orderliness: high score
   7. Submissiveness: high score
   -2. Timidity-Audacity: high score
   8. Closeness: high score
III. Emotional Expression
   8. Closeness: high score
   9. Sensuousness: high score
  10. Friendliness: low score
  11. Expressiveness-Constraint: high score
  12. Egoism-Diffidence: high score

I. Intellectual Climate
  -10. Work-Play: low score
  -11. Nonvocational Climate: high score
  1. Aspiration Level: low score
  2. Intellectual Climate: low score
  3. Student Dignity: low score
  4. Academic Climate: low score
  5. Academic Achievement: high score
  6. Self-Expression: low score

II. Nonintellectual Climate
  6. Self-Expression: low score
  7. Group Life: low score
  8. Academic Organization: high score
  9. Social Form: low score
 10. Play-Work: high score
 11. Vocational Climate: high score

III. Impulse Control: low score

2. As a group, students who live with parents (or other family members) and commute to the University will manifest generally lower levels of suicidal ideation than students who reside at the University.

Subjects

The sample consists of 317 freshman and sophomore Ohio State University students presently enrolled in Introductory Psychology. For purposes of comparison this sample is made up of two groups: 317 subjects taken from the OSU main campus at Columbus, and 77 students taken from the OSU branch campus at Marion, Ohio.
Administration

All subjects received, in order: 1. A general questionnaire to obtain biographical data for each subject (see Appendix), 2. The Devries Suicide Potential Scale, 3. The Stern Activities Index, or 4. The College Characteristics Index. All questionnaires were responded to anonymously, number codes being used to identify each subject. An average of 90 minutes per trial was required to administer these materials during successive evenings at each location. No more than 35 subjects participated at any given administration.
CHAPTER IV
RESULTS AND DISCUSSION

Before any statistical comparisons could be made, it was necessary to empirically define what was meant by high vs. low levels of suicidal ideation. This amounted to choosing an appropriate cutoff score on the Devries SPS.

Background for this decision was provided by recent research comparing the SPS scores of three groups of college students who reported 1) attempts and/or threats of suicide, 2) consideration of suicide, and 3) no consideration of suicide in relation to themselves. Results of this study (Lester, 1967a) and a replication study (Lester, 1968c) indicated that "attempted and threatened" subjects (average SPS score = 5.5/13) could be significantly differentiated from subjects who had only "considered suicide" (average score = 3.7/13), or were non-suicidal (average score = 2.6/13). On the basis of these results, as well as those of Devries (1963), it was decided to make the lower cutoff score for the high suicidal ideation group 6 responses or more on the SPS.

Four groups of respondents were therefore operationally defined: 1) high suicidal ideation (SPS ≥ 6), main campus, 2) low suicidal ideation (SPS ≤ 5), main campus, 3) high suicidal ideation (SPS ≥ 6), branch campus, and 4) low suicidal ideation
(SPS ≤ 5), branch campus. In each case, t-tests indicated groups 1 and 3 to be significantly different from groups 2 and 4 in SPS response rate (t = 28.4, p. < .001). Statistical comparisons of Group 1 with Group 3 and Group 2 with Group 4 were not significant.

Further information was obtained about the two groups by administering a biographical background questionnaire (see Appendix). Results are reported in terms of percentage response for each sample. Data was obtained from each subject regarding: 1) age, 2) University class, 3) home town size, 4) family ties, 5) presence of brothers and/or sisters in family, 6) membership in campus organizations, 7) membership in non-campus organizations, 8) level of involvement in campus affairs, 9) academic hours: present quarter, 10) grade-point average to date, and 11) place of residence. Separate statistical analysis of these data was not undertaken since a) many demographic variables within the two samples are not comparable, and b) sample sizes are sufficiently discrepant to render intragroup statistical comparisons meaningless. Nevertheless, the percentage results reported for each variable indicate no major response discrepancies within each group.
Group Comparisons Utilizing the Stern Activities Index

Tables 2 through 13 summarize the AI scores of all four comparison groups. Norms were available only for like-sexed groups and comparisons were made on this basis. Significant comparisons were made on this basis. Significant comparisons are marked with an (*), for F ratios with significance ≤ .01.

High SPS males (Group 1) on the main University campus differ from their low SPS counterparts (Group 2) in several subtle, yet significant ways. First of all, Group 1 men are significantly lower than Group 2 men on two needs scales: Energy-Passivity and Objectivity-Projectivity. This would suggest that Group 1 subjects tend to form a modal group characterized by sluggishness, inertia, and egocentric perceptions and beliefs. Such a group may even manifest irrational beliefs and superstitions bordering on paranoia. Students who are low on these two groups report that they tend to "sleep long hours every night in order to get lots of rest; take frequent rest periods when working on any project; and avoid things that require intense concentration." (Stern, 1970, p. 335) When activity is undertaken, such students often take a fatalistic frame of reference, paying considerable attention to incidental "signs or omens" which point the way to success or failure.

Of the various hypothesized differences in group factor scores, only one proved significant. High SPS subjects were found
TABLE 1
AI-CCI FACTOR SIGNIFICANCE LEVELS

Gp. 1: high SPS, main campus
Gp. 2: low SPS, main campus
Gp. 3: high SPS, branch campus
Gp. 4: low SPS, branch campus

Gp. 1 AI (N=11) vs. Gp. 2 AI (N=40): Male

<table>
<thead>
<tr>
<th>First-order factors (needs)</th>
<th>Mean Score</th>
<th>F-Ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy-Passivity</td>
<td>$M_1=5.6$</td>
<td>10.64</td>
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<tr>
<td></td>
<td>$M_2=7.3$</td>
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<tr>
<td>Narcissism</td>
<td>$M_1=6.6$</td>
<td>3.77</td>
<td>.025</td>
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<tr>
<td></td>
<td>$M_2=5.1$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objectivity-Projectivity</td>
<td>$M_1=7.2$</td>
<td>4.40</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>$M_2=8.6$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexuality-Prudishness</td>
<td>$M_1=5.9$</td>
<td>3.29</td>
<td>.025</td>
</tr>
<tr>
<td></td>
<td>$M_2=4.4$</td>
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<table>
<thead>
<tr>
<th>First-order factors (needs)</th>
<th>Mean Score</th>
<th>F-Ratio</th>
<th>p</th>
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<tbody>
<tr>
<td>Aggression-Blame Avoidance</td>
<td>$M_{13}=5.7$</td>
<td>2.32</td>
<td>.05</td>
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<td></td>
<td>$M_{24}=4.7$</td>
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<tr>
<td>Energy-Passivity</td>
<td>$M_{13}=6.0$</td>
<td>6.02</td>
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<td></td>
<td>$M_{24}=7.0$</td>
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<td></td>
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<tr>
<td>Objectivity-Projectivity</td>
<td>$M_{13}=7.2$</td>
<td>6.42</td>
<td>.001</td>
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<td></td>
<td>$M_{24}=8.5$</td>
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<tr>
<th>Second-order factors (factors)</th>
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<th>F-Ratio</th>
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<tbody>
<tr>
<td>Motivation</td>
<td>$M_{13}=23.1$</td>
<td>2.15</td>
<td>.05</td>
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<td>$M_{24}=25.4$</td>
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<tr>
<td>Egoism-Diffidence</td>
<td>$M_{13}=13.6$</td>
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<td>.025</td>
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<td></td>
<td>$M_{24}=11.6$</td>
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</table>
TABLE 1 (b)

Gp. 1 AI (N=9) vs. Gp. 2 AI (N=70): Female

<table>
<thead>
<tr>
<th>First-order factors (needs)</th>
<th>Mean Score</th>
<th>F-Ratio</th>
<th>p</th>
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<tbody>
<tr>
<td>Affiliation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>M₁ = 4.6</td>
<td>3.73</td>
<td>.05</td>
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<tr>
<td>M₂ = 6.5</td>
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Gps. 1 & 3 AI (N=12) vs. Gps. 2 & 4 AI (N=86): Female

<table>
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<th>First-order factors (needs)</th>
<th>Mean Score</th>
<th>F-Ratio</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>Counteraction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M₁₃ = 3.7</td>
<td>4.00</td>
<td>.01</td>
<td></td>
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Gp. 1 CCI (N=8) vs. Gp. 2 CCI (N=50): Male

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<td>M₂ = 2.5</td>
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<td>.05</td>
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<td>M₂ = 6.5</td>
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<td>Nurturance</td>
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<td>M₂ = 5.8</td>
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<tr>
<td>Objectivity-Projectivity</td>
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<tr>
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<td>10.38</td>
<td>.005</td>
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<tr>
<td>M₂ = 6.5</td>
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Second-order factors (factors)

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<td>M₂ = 22.3</td>
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TABLE 1 (c)

Gp. 3 CCI (N=4) vs. Gp. 4 CCI (N=12): Male

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<td></td>
<td>M$_{4}$=6.0</td>
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<td>Understanding</td>
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Gps. 1 & 3 CCI (N=12) vs. Gps. 2 & 4 CCI (N=62): Male

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<td>Affiliation</td>
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<td>M$_{24}$=6.4</td>
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<tr>
<td>Conjunctivity-Disjunctivity</td>
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<td>6.98</td>
<td>.005</td>
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<tr>
<td></td>
<td>M$_{24}$=7.0</td>
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<tr>
<td>Nurturance</td>
<td>M$_{13}$=3.8</td>
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<td>M$_{24}$=5.5</td>
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<td>Understanding</td>
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<td>M$_{24}$=5.7</td>
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</table>

Second-order factors (factors)

|                              | Mean Score | F-Ratio | p     |
| Student Dignity              | M$_{13}$=14.1 | 14.47   | .001  |
|                              | M$_{24}$=18.9 |         |       |
| Group Life                   | M$_{13}$=18.7 | 5.35    | .005  |
|                              | M$_{24}$=21.8 |         |       |

Third-order factors (areas)

|                              | Mean Score | F-Ratio | p     |
| Intellectual Climate         | M$_{13}$=157.7 | 2.66    |       |
|                              | M$_{24}$=171.1 |         |       |
### TABLE 1 (d)

Gp. 1 CCI (N=11) vs. Gp. 2 CCI (N=51): Female

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<td>.010</td>
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<td></td>
<td>M₂=4.7</td>
<td></td>
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<tr>
<td>Conjunctivity-Disjunctivity</td>
<td>M₁=5.2</td>
<td>3.38</td>
<td>.025</td>
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<td></td>
<td>M₂=6.6</td>
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<td>Science</td>
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<td>.001</td>
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<tr>
<td></td>
<td>M₂=7.1</td>
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<tr>
<td>Sensuality-Puritanism</td>
<td>M₁=4.7</td>
<td>4.96</td>
<td>.005</td>
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<td>M₂=6.1</td>
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<tr>
<td>Sexuality-Purdishness</td>
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<td>.010</td>
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<td>M₂=6.7</td>
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<th>Second-order factors (factors)</th>
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<td></td>
<td>M₂=14.2</td>
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<tr>
<td>Vocational Climate</td>
<td>M₁=25.6</td>
<td>4.75</td>
<td>.010</td>
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<td></td>
<td>M₂=22.6</td>
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<td>M₂=182.5</td>
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<td></td>
<td>M₂=27.3</td>
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### TABLE 1 (e)

**Gps. 1 & 3 CCI (N=13) vs. Gps. 2 & 4 CGI (N=66): Female**

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<td>$M_{24}=6.0$</td>
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<td>Objectivity-Projectivity</td>
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**Second-order factors (factors)**

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<td>Play-Work</td>
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<td>$M_{24}=25.3$</td>
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<td>Vocational Climate</td>
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**Third-order factors (areas)**

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**Fourth-order factors (cultures)**

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<td>$M_{24}=114.5$</td>
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PLEASE NOTE:

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UNIVERSITY MICROFILMS
to be significantly higher in Egoism (and concomitantly lower in Diffidence) than low SPS male, main campus subjects. This factor reflects extreme preoccupation with the self, i.e., "pretending to be a famous movie star," "catching a reflection of myself in a mirror or window," "having lots of time to take care of my hair, hands, face, clothing, etc."

A comparison of Group 3 (branch campus, high SPS males) with Group 4 (branch campus, low SPS males) revealed similar trends, but since statistical significance was not reached in this comparison, it will not be considered separately.

Combined data of all four comparison groups (1 and 3 vs. 2 and 4) again reveal significant differences in Energy-Passivity, and Objectivity-Projectivity.

A comparison of Group 1 females (main campus, high SPS) with Group 2 females (main campus, low SPS) revealed no statistically significant differences.

Because of discrepant sample sizes, a comparison of Groups 1 and 3 with Groups 2 and 4 yields little significant data. The only significant difference apparent in the combined comparison of high vs. low SPS females concerns the "Counteraction" need area. Here it is found that high SPS females in general tend to avoid and withdraw from activities which might result in frustration or failure.
Group Comparisons Utilizing
The College Characteristics Index

Tables 14 through 25 summarize the CCI scores of all four comparison groups. Again, norms were available only for like-sexed groups and comparisons were made on this basis. Significant comparisons are marked with an asterisk (*), for F ratios with significance ≤ .05.

Because of a somewhat better of greater sensitivity of the instrument, the CCI yielded far better results than the AI in comparing high versus low SPS subjects.

High SPS main campus men (Group 1) differed significantly from their low SPS main campus counterparts (Group 2) in several significant ways. First of all, Group 1 men were significantly higher than Group 2 men on the Abasement-Assurance scale. Such individuals are described by Stern as self-deprecating and self-devaluing, readily acknowledging inadequacy, ineptitude, inferiority, and accepting humiliation and other forms of self-degradation. Typical environmental descriptions of individuals in this category go as follows: "People here learn to accept criticism without talking back...There is a lot of apple-polishing (and buttering-up) (of teachers) around here...Students set high standards of achievement for themselves (here)...The college administration has little tolerance for (student) complaints and protests." (Stern, 1970, p. 318)
PLEASE NOTE:

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UNIVERSITY MICROFILMS
Another area of significant difference is the Achievement scale. In a similar vein as the preceding factor, Group 1 men described their environment as follows: "Most courses require intensive study and preparation out of class...Examinations here provide a genuine measure of a student's achievement and understanding...Students who work for high grades are not likely to be regarded as odd." (Stern, 1970, p. 320) The environment is seen as containing obstacles to success, and as providing few readily available means for the individual to prove his personal worth without intense striving.

It is not surprising, then, to find significant differences between Group 1 and Group 2 on the Affiliation scale. High SPS main campus men see their environment as fostering social detachment, social independence, self-isolation, and unsociableness. They describe their academic surroundings as lacking in school spirit, lacking in social opportunities (i.e., school-sponsored events aimed at helping people get acquainted), lacking in group cohesiveness, and manifesting a strong line of demarcation between students and faculty (i.e., "Professors talk at students, not with them...The professors seem to have little time for conversation with students...Facility members rarely or never call students by their first names.") (Stern, 1970, p. 323)

Similarly Group 1 men are significantly lower than Group 2 men on the Nurturance scale. They feel that the main campus
environment fosters disassociation from others, indifference, and mutual withholding of support, friendship, and affection. At a school which is low in nurturance, students report that "Upper-classmen do not play an active role in helping new students adjust to campus life...The college does not regard training people for service to the community as one of its major responsibilities...This school does not have a reputation for being very friendly...Most students here would not want pets (dogs, cats, etc.) even if they were allowed to have them." (Stern, 1970, p. 347)

A final significant scale comparison can be made on the basis of Objectivity-Projectivity (detached, nonmagical, unprejudiced, impersonal thinking versus autistic, irrational, paranoid, or otherwise egocentric perceptions and beliefs or suspicions).

Group 1 men are much high on Projectivity than Group 2 men. In describing their environment these (Group 1) students noted that "This school does not have a good reputation for academic freedom...Objective values are not stressed here...Most faculty members are not liberal in interpreting regulations and do not treat violations with understanding and tolerance...Some of the professors treat questions in class as if the students were criticizing them personally...The faculty tend to be suspicious of student's motives and often make the worst interpretation of even trivial incidents." (Stern, 1970, p. 348)
The Conjunctivity-Disjunctivity scale provides a supporting trend \((P = .07)\) indicating that the activity patterns of Group 1 students tend to be uncoordinated, disorganized, diffuse, and self-indulgent. Generally, high SPS males see their classes as disorganized, instruction goals as unclear (i.e., students don't know what is expected of them), and find it very difficult to take notes or prepare for examinations.

These scale scores combine to produce significantly lower scores for Group 1 men in two factor areas: Student Dignity and Group Life. As mentioned earlier, the former factor reflects administrative concern for the maintenance of a high level of self-determination and personal responsibility among the students. Low scores on this factor reflect an institutional climate which is authoritarian, coercive, and low on respect for the student as a mature adult.

Low scores on the Group Life factor indicate a perceived environmental press which is very low on mutually supportive group activities among the student body. Activities at such schools are described as being neither warm nor friendly, manifesting little concern for the welfare of fellow students or less fortunate members of the community.

Comparisons of Group 1 and Group 2 on general Area and Culture scores were not statistically significant.

Comparisons of Group 3 (branch campus, high SPS) with Group 4
(branch campus, low SPS) revealed similar trends to those found on the main campus. In addition, high SPS men at the branch campus manifested significantly lower scores on the Science and Understanding scales than did their low SPS counterparts.

The Science scale concerns itself with "the symbolic manipulation of physical objects through empirical analysis, reflection, discussion, and criticism." (Stern, 1970, p. 334) An environment characterized as being low on this scale is described as follows: "Few students are planning careers in science...A student who spends most of his time in a science lab is likely to be regarded as a little odd...The faculty and lab facilities in natural science are not very good at this school." (Stern, 1970, p. 334)

Similarly, the Understanding scale involves "Detached intellectualization, problem-solving, analysis, theorizing, or abstraction as ends in themselves." High SPS men saw the branch campus as containing professors who are not really dedicated to their fields; giving examinations which do not place any great emphasis on breadth of understanding, preparation, or critical judgment; and developing a student body which has little interest in topics such as poetry, philosophy, or mathematics (as compared with motion pictures, politics, or inventions).

Area and Culture comparisons for Group 3 vs. Group 4 were not statistically significant.

When groups 1 and 3 (all high SPS males) are combined with
groups 2 and 4 (all low SPS males), a pattern very similar to the one generated by the Group 1 - Group 2 comparison emerges, with a significantly lower score now manifested by combined Groups 1 and 3 on the Conjunctivity-Disjunctivity dimension. Also, as with the Group 1 - Group 2 comparison, high SPS men are significantly different from low SPS men on the factors of Student Dignity, Group Life, and the third-order factor, Intellectual Climate. Culture comparisons were not significant.

The environmental scale comparisons for female subjects are somewhat different from those of their male counterparts. On the Adaptability-Defensiveness scale, the high SPS females composing Group 1 were significantly higher than the low SPS females making up Group 2. This would indicate that high SPS females on the main campus tend to be accepting of criticism, advice and public humiliation. As a group they describe their environment as follows: "Students are expected to play bridge, gold, bowl together, etc., regardless of individual skill...Student organizations are closely supervised to guard against mistakes...Frequent tests are given in most courses...Students have little or no personal privacy." (Stern, 1970, p. 321-22)

Group 1 also scores significantly lower than Group 2 on Science and Sensuality-Puritanism, while scoring higher on Sexuality-Prudishness. This strange combination of scales would describe an environment in which empirical, analytic interests
are not fostered, while erotic heterosexual interests are. The paradoxical inclusion of high Puritanism would seem to indicate that the perceived environment contains highly sexual stimuli coupled with significant sanctions (overt or covert) against sexual behavior. Intuitively this resembles the popular conception of a similar environmental situation which existed in Victorian England.

When these scales are recombined into more general second-order factors, Group 1 females are found to be significantly lower than Group 2 on the Academic Climate factor and higher than Group 2 on Vocational Climate. These two factors generally summarize the view of high SPS females that their academic environment is of low quality in reference to staff and facilities in the conventional areas of the humanities, social sciences, and natural sciences, while emphasizing practical applied activities, the rejection of aesthetic experience, and a high level of orderliness and conformity in student-faculty relationships. Similarly, there is a supporting data trend indicating lower Group 1 scores for the Intellectual Climate factor, indicating that the academic environment does not encourage devotion to scholarly activities in the humanities, arts, and social sciences.

Third-order factor (Area) scores indicate that Group 1 is significantly lower than Group 2 on the Intellectual Climate factor, while being high on the fourth-order (Culture) Vocational
and Expressive factors. The former factor is interesting in that it "...is based on three loadings: CCI Vocational Climate, AI Egoism and AI Self-Assertion. The factor takes its name from the press loading, but this may not be entirely felicitous. The key variable is AI Egoism which derives from need scales Narcissism, Fantasied Achievement, and Projectivity. The students in schools characterized by this culture tend then to be egocentric and wishful, as well as exhibitionistic and manipulative (AI Self-Assertion). Leary's phrase—autocartic, managerial—comes to mind. The vocational press itself is based on Practicalness, Puritanism, Deference, Order, and Adaptiveness, suggesting a high degree of conventionality and authoritarian structure." (Stern, 1970, p. 210)

This view is reinforced by a low Gp. 1 score on the Expressive factor. This factor receives its primary loading from the second-order factor Vocational Climate. An environment low on the Expressive dimension would be characterized as work-oriented, conforming, and peopled by students who are high on Applied Interests and Orderliness. Such an environment is found to be non-self-actualizing, unaesthetic, non-gregarious, highly practical in orientation, strongly vocational, and restraining.

A comparison of Gp. 3 with Gp. 4 females was not possible because of the small number of subjects involved.

When Gps. 1 and 3 (all high SPS females) are compared with
Gps. 2 and 4 (all low SPS females), a pattern is formed which is very similar to the Gp. 1 - Gp. 2 female comparison, with the addition of high Abasement, high Projectivity, low Student Dignity, high Play, low Impulse Control, and Collegiate orientation as distinguishing characteristics of high SPS females. As with the male Gp. 1 - Gp. 2 comparison, this environment could be described as fostering self-deprecation, self-devaluation, irrationality, and suspicion in a setting dedicated to developing businesslike applications of skill rather than emphasizing speculative or theoretical approaches to practical affairs.

Further, this environment is perceived as not fostering self-determination or personal responsibility among students, but rather encouraging reliance upon an authoritarian administrative structure. Within this structure Play is found to be a distinguishing characteristic of high SPS females. The latter score would seem to reinforce the view held by high SPS females that the institutions they attend do not foster dedication to academics, but rather are "fountains of knowledge where students gather to drink."

The final significant areas of difference between Gps. 1 and 3 vs. Gps. 2 and 4 involve the third-order factor, Impulse Control (1 & 3 lower) and the fourth-order factor, Collegiate (1 & 3 higher). This combination suggests an environment characterized by great emotional constriction and institutional...
control, coupled with high loadings for Custodial Care and Academic Nonachievement. The latter factor, Collegiate, is described by Stern as follows:

The picture (of this factor is of an institutional setting that provides extensive facilities for student recreation and amusement, close policing lest the natives get too restless, and an uneasiness of purpose expressed in ambiguous standards of achievement and uncertain administrative practices. The combination suggests an administrative policy based on fear, the response of an anxious man living with wild animals: keep the beasts happy, do not make them angry, maintain constant vigilance, and never let them know you are afraid...The highest Collegiate culture scores are associated with four large universities, one of them contributing scores from six of its nine undergraduate colleges. (Note: Ohio State was included as one of these four schools) (Stern, 1970, p. 210)

Earlier it was noted that most psychological research in the area of suicide potential concerned itself with individual traits and factors which were considered apart from environmental press variables. This type of theorizing led researchers to view "the suicide" as an individual whose personal traits usually reflected various underlying conflicts, the result of which would be strong tendencies to seek suicide as a mode of adjustment during periods of stress. Unfortunately, no reliable empirical data was ever generated to support this point of view.

Similarly, the college suicide was seen as an individual
whose conflicting motives and emotional instability made adjustment to academic life overwhelmingly difficult. The possibility that the campus environment per se fostered the development of suicidal behavior was rarely considered. As a result, the present research sought to investigate the effect of environmental press, as well as personal needs in the development of suicidal ideation.

This shift in emphasis was embodied in the two main hypotheses formulated earlier. The first hypothesis and its correlaries stated that students scoring high on the Devries Suicide Potential Scale should exhibit consensual preferences for different types of activities and have consensually different environmental perceptions than students scoring low on the Devries SPS. This hypothesis is supported to the extent that high SPS subjects (total male and female) could be differentiated from low SPS subjects on the basis of AI-CCI factor scores summarized in Table 1.

It is apparent from Table 1 that high SPS subjects differ from low SPS subjects primarily in terms of reported environmental perceptions. This lends credence to the view that perceived environmental press as well as individual needs must be considered in formulating a strategy for the assessment of suicide potential.

These data would also support the view that anomie may be a significant underlying factor in the etiology of suicidal
ideation on the college campus. In an earlier chapter, an anomic environment was described as fostering the following behavioral characteristics in individuals:

1. A high degree of social isolation (Jacobs, 1963)
2. Self-doubt and self-depreciation (Darling and Braatan, 1961)
3. Feelings of depersonalization and desire to control an unpredictable environment (Lester, 1970)
4. Irritability, resentment, and aggression (Lester, 1970)
5. Strong dependency needs (Shneidman 1966, 1968)

The data derived from the AI-CCI scales could be tentatively construed as forming an operational basis for the consensual description of a similar environment perceived by high SPS subjects. AI-CCI results indicate that high SPS students see the college campus as fostering self-depreciation and humiliation; lacking concern for the welfare of students; demanding high achievement (primarily in vocational rather than academic areas), while simultaneously providing few means for the individual to prove his personal worth without intensive striving; fostering social detachment and self-isolation; lacking in interpersonal closeness and affection; and supporting dependency upon an authoritarian environment which seems disorganized and incomprehensible to those high SPS students who live in it.

Hypothesis 2 postulated that the effects of this environment may be attenuated for students not living on campus.
Specifically, it was believed that commuting students would manifest lower levels of suicidal ideation than students who lived on campus.

Within the context of the present research it was impossible to arrive at a firm conclusion concerning this hypothesis. The reasons for this are twofold: 1) the total N for main-campus high SPS students was sufficiently low to disallow any meaningful determination of base rates for suicidal ideation among commuting and resident students, and 2) the main bulk of commuting students was found at the branch campus, where there are no resident students available for comparison. Also, any comparisons of main campus vs. branch campus students was not possible because of differences in environmental press at the two institutions. It is interesting to note, however, that on a percentage basis, the number of high SPS subjects was the same at both campuses (Columbus: 54 high SPS/ 328 total N = 16%; Marion Campus: 16 high SPS/ 98 total N = 16%).

Other limitations of the present research include a) the statistical difficulties inherent in comparing samples of unequal size, b) lack of generalizability of results beyond the university studied, and c) the lack of adequate theory to explain apparent response differences which exist between high SPS males and high SPS females in describing their perceived environments. Hopefully, future research will provide insight into these problems by 1) increasing hypothesis specificity regarding the needs and
environmental perceptions of high suicide potential students, 2) increasing sample sizes, and 3) sampling students in a wider variety of institutional settings, thereby increasing the possible generalizability of results.
CHAPTER V

SUMMARY

In general, this research has three concerns: a) to explore the possibility of developing an ecological framework for the assessment of variables surrounding the development of suicidal ideation (as defined by scores on the Devries Suicide Potential Scales, A. G. Devries, 1963) on the college campus, b) to study the usefulness of the Stern Activities Index and College Characteristics Index in delineating the expressed needs and environmental perceptions of students who manifest high levels of suicidal ideation, and c) to investigate differences in rates of suicidal ideation, expressed needs, and environmental perceptions of students in a large university setting versus those in a small college setting.

Results indicate that an ecological frame of reference may give the researcher considerable information regarding the personal and environmental components underlying the etiology of suicidal behavior. Further, it is evident that the Stern Activities Index and College Characteristics Index can be useful in isolating those personal needs and environmental perceptions which are characteristic of students who manifest high levels of suicidal ideation. This is especially true if attention is focused on the primary (first-order) factors defined by Stern in these two scales.
The present research formulated its hypotheses on the basis of Stern's more inclusive second-order factors. Of those factors postulated, motivation (AI), Sensuousness (AI), Equism-Diffidence (AI), Student Dignity (CCI), Group Life (CCI), Intellectual Climate (CCI), Academic Climate (CCI), Vocational Climate (CCI), Expressive (CCI), and Vocational (CCI) were found to differentiate significantly between high and low suicide potential subjects.

A much more complete picture of the high suicide potential subject is obtained by examining comparative data on the first-order factors. These factors indicate that high SPS men tend to be lethargic, passive, narcissistic, and suspicious, while maintaining a high self-image and being fairly demonstrative of their needs. Simultaneously, such men see their environment as fostering self-depreciation, high achievement, social independence and interpersonal isolation. In addition, high SPS men see instruction as disorganized and incomprehensible; instructors as aloof and distant; fellow students as providing little emotional support; and the general environment as being irrational, non-objective, and authoritarian.

The vast majority of high responses on SPS females do not report personal needs (as defined by the Stern Activities Index) significantly discrepant from those of the general population of female students.

As with their male counterparts, high SPS females find
their environment (as defined by responses on the Stern College Characteristics Index) to be depersonalizing, authoritarian, and possessing low quality staff and facilities. Fellow students in this environment are seen as egocentric, vocationally-oriented, manipulative, and conventional. In addition, high SPS females note an environmental emphasis on sexuality and a deemphasis on sensuality, again reflecting the manipulative, depersonalizing aspects of their perceived surroundings.

Comparisons of intergroup rates of suicidal ideation and types of AI-CCI response (Hypothesis 2) did not reveal any significant differences between the main campus and branch campus samples. The validity of this result is questionable, however, since the size of the branch campus sample was not sufficient to allow normal statistical analysis. Further research in this area will be necessary in order to arrive at meaningful conclusions.

As was mentioned earlier, the College Characteristics Index was much more sensitive than the Activities Index in differentiating high from low SPS subjects. This may be construed as giving support to the contention that the development of suicidal ideation may be influenced as much by perceived environmental press as by internal need.

The data accumulated in the present research might tentatively indicate that a highly depersonalizing, anomic environment
may foster the development of suicidal ideation, especially among students who manifest strong adolescent needs for support and indulgence. From this it could be hypothesized that the less emotionally mature members of the student community, those who are least prepared for entry into adult life, are most likely to manifest high levels of suicidal ideation when confronted with a non-supportive environment which demands coping behaviors they do not as yet possess.


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APPENDIX
Please respond to the following items:

1. Age

2. Sex

3. Year and quarter at OSU

4. Hometown background (please circle)
   a. Size of town:
      Small (less than 20,000 pop.)
      Medium (less than 100,000 pop.)
      Large (greater than 100,000 pop.)

   b. Present family ties:
      Very Close
      Average
      Distant

   c. Number of brothers:
      older ______
      younger ______

   d. Number of sisters:
      older ______
      younger ______

5. Names of OSU-Affiliated organizations to which you belong
   (e.g., Student Senate, marching band, dorm council, school fraternities, etc.):

6. Names of non-campus organizations to which you belong (e.g.,
   church groups, political groups, clubs, etc.):

7. Among you acquaintances here at OSU, how many would you say
   are close friends?
   casual friends?
40. I have no more family ties.
41. I did not grow up in a broken home.
42. I always feel poorest in early morning than at any other time of the day.
43. There often has been disharmony in our family.
44. Making sexual adjustments is not easy for me.
45. I have someone whose welfare I very much care for.
46. I never have great fears about the hereafter.
47. Lately I feel quite restless and fidgety.
48. I never feel that I am completely worthless.
49. I frequently have a drink in the morning.
50. I enjoy having a vacation.
51. I feel that I am more tenderhearted than most people.
52. In the last 5 years I have moved at least once every year.
53. I have no habits that are leading into repeated difficulties.
54. I like to have most things done very precisely.
55. I am not interested any more in the things that I used to enjoy doing.
Devries Suicide Potential Scale

1. I feel worse during the spring or fall than at other times of the year.
2. There were no heavy drinkers in my family.
3. I have not yet decided where I will make my home.
4. Weakness in myself or others makes me uncomfortable.
5. My nearest relatives understand the troubles that I am going through.
6. I wish I could be with someone I once loved very much.
7. I do not have serious financial difficulties.
8. I like sunny weather.
9. I do not become emotionally upset when I am sick in bed.
10. I cannot foretell changes in the weather.
11. Some of the people whom I liked and admired have died.
12. I feel that the people who supervise me tend to be too strict.
13. I feel much better now than I have felt in some time.
14. I have the feeling that if someone would pinch me I would not feel it.
15. I am seldom sick.
16. I like watching some television programs.
17. My sexual frustrations have not worsened lately.
18. My future happiness looks promising.
19. I would rather follow than lead others.
20. Recently I have difficulty sleeping.
21. I have had much pain when I was ill.
22. I seldom engage in social activities.
23. My interest in sex has not declined recently.
24. My future looks secure.
25. I think that I am to blame for almost all my troubles.
26. I enjoy listening to music.
27. When I am ill the doctor frequently prescribes sedatives for me.
28. Sometimes I am angry for a whole day.
29. I think that I have had more difficulties throughout life than most people.
30. Sometimes I am really very much afraid.
31. I often become very impatient.
32. I sometimes fear that I will lose control over myself.
33. I often feel that I am unwanted.
34. Lately things have happened to me that are enough to discourage anyone.
35. I like flowers.
36. Lately I have not felt like participating in my usual activities.
37. I am not actively religious.
38. I go on occasional drinking sprees.
39. Within the last two years I changed my jobs at least twice.