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CHARACTERISTICS OF FRESHMEN COLLEGE STUDENTS IN NEED OF AND RECEPTIVE TO COUNSELLING.

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THE CHARACTERISTICS OF COLLEGE FRESHMEN IN NEED OF, AND RECEPTIVE TO, COUNSELING WAS STUDIED WITH THE STRUCTURED-OBJECTIVE RORSCHACH TEST (SORT) TO--(1) MODIFY THE SORT, (2) CLASSIFY SUBJECTS INTO COUNSELING AND NON-COUNSELING GROUPS, (3) DETERMINE IF THE SORT COULD DIFFERENTIATE BETWEEN COUNSELING AND NON-COUNSELING SUBJECTS, AND (4) CONSTRUCT ADDITIONAL SORT DISCRIMINATIVE INDICES. THE SAMPLE TESTED OVER TWO YEARS INCLUDED FRESHMEN FROM THREE STATE INSTITUTIONS OF HIGHER EDUCATION WHICH DIFFERED IN STUDENT CHARACTERISTICS AND COUNSELING PHILOSOPHIES. THE CHOICE INTENSITY TECHNIQUE WAS FOUND TO BE RELIABLE AND ALSO APPEARED TO YIELD DIFFERENCES BETWEEN COUNSELING CATEGORIES. THE SORT APPEARED TO BE ABLE TO DISCRIMINATE TO SOME DEGREE BETWEEN STUDENTS WHO SEEK COUNSELING AND THOSE WHO DON'T. ONLY ONE FACTOR, M, WAS SIGNIFICANT OR INDICATIVE OF A TREND AT ALL THREE SCHOOLS. IT IS BELIEVED, HOWEVER, THAT DEFINITE TRENDS COULD BE ESTABLISHED OVER A LONGER TESTING PERIOD. THERE IS ALSO A POSSIBILITY THAT THE ENVIRONMENTAL DIFFERENCES BETWEEN THE SCHOOLS ENCOURAGED AND/OR SUPPRESSED COUNSELING VISITS, LEADING TO DIFFERENCES IN THE COUNSELING CATEGORY FACTOR. HOWEVER, THE DISCRIMINATIVE VALUE OF THE SORT WAS DEMONSTRATED. (SK)

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LANGER

UTAH STATE
UNIVERSITY

CHARACTERISTICS OF FRESHMEN
COLLEGE STUDENTS IN NEED OF
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COOPERATIVE RESEARCH PROJECT NO. 5-8207

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UTAH STATE UNIVERSITY

Characteristics of Freshmen College Students in Need of and Receptive to Counselling

Cooperative Research Project No. 5-8207

Philip Langer
Utah State University
Logan, Utah

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Philip Langer
Project Director

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Statement of the Problem

Introduction

World War II generated an increased demand by the military for objective personality tests that could be used for mass screening and/or diagnostic purposes (Harrower and Steiner, 1954). The apparent success of these tests led post-war organizations with identical problems, (i.e., the need to accurately and rapidly classify large groups) to encourage the development of similar measures. Included among these were American colleges and universities, faced with ever-increasing student enrollments.

One aspect of this multifaceted classification problem for the schools has been to predetermine which students will eventually seek counseling help. The investigator, while at Potsdam State (New York), participated in such a project which employed the MMPI as a screening device. It soon became evident that the MMPI profiles were of little use in predicting which students would eventually seek help. Other studies (e.g. Heilbrun, 1962) have also failed to produce substantive results.

Worse, from the standpoint of the students and the school, students often dropped out because of the overwhelming nature of their personal problems. In many instances it became evident that if these students had been reached earlier, and engaged in preventive counseling, they would have been able to continue. Therefore, an objective-type personality instrument capable of locating students who eventually seek counseling help would be of significant value.

The Group Rorschach

The Rorschach (Rorschach, 1942) would seem a likely choice, since it has proved to be an excellent source of clinical material. The original however was designed as an individual test. Since World War II, variations constructed for group testing have been developed.

The term "group Rorschach" actually applies to any version of the Rorschach that can be administered simultaneously to a large number of Ss, regardless of objectivity in scoring. Harrower and Steiner (1954) have indicated potentialities for the group version, although the central problems of objectivity in scoring and diagnostic value (whether directly related to the traditional Rorschach or not) remain basically unresolved.

This study is concerned with one specific variation of the group Rorschach, the Structured-Objective Rorschach Test, hereafter called the SORT. A fuller description will be given later. We shall restrict ourselves now to brief descriptions of some other group Rorschachs for comparative purposes.

Group Rorschachs can be dichotomized along the response dimension: Ss either respond freely (ad-lib) or must choose from a prepared list of responses. The earliest group variations were an example of the ad-lib type. The blots were reproduced on 35 mm slides which were then projected onto a screen. Ss wrote down their responses in specially prepared booklets, which included a set of location charts to aid the scorer (Harrower and Steiner, 1954). Munroe (1944) had previously developed a technique for the rapid analysis of Rorschach responses, which helped in scoring these protocols. However this method still

required the services of a clinically trained scorer and was quite time consuming.

The suggested response, or multiple-choice variants of the Rorschach, were a later development designed to circumvent the need for a trained scorer. Such tests presently include the more frequently used SORT (Stone, 1958) and Harrower Multiple-Choice Rorschach (Harrower and Steiner 1954), as well as lesser-known variations by Hire (1950) and O'Reilly (1958). These tests undoubtedly represent a much more radical break with the original Rorschach (Holtzman et al., 1961) than the ad-lib response types.

Concerning the latter, it has been argued that because S is forced to choose responses from a suggested list he is no longer responding to the blots in a manner similar to the traditional Rorschach (e.g. Harrower and Steiner, 1954). As we shall indicate in our review of the literature, the SORT does indeed represent a mixture of the traditional and non-traditional Rorschach.

This does not detract, however, from the intended use of the SORT in this study. The investigator has conducted over 100 clinical interviews with Ss who took the SORT in conjunction with various research projects. By combining the personality scores derived from the SORT, along with a more traditional Rorschach interpretation (based on individual factor scores and specific response-items), E has been able to locate areas of psychological disturbance. Moreover, Ss who were either contemplating counseling and/or receptive to the idea, were convinced to seek aid at once. The sensitivity of the SORT, therefore, led to a consideration of its potential as a screening device.

Objectives

The general purpose of this study is to evaluate the SORT as a device for screening students who will eventually seek counseling help. This project will not be concerned with those students who need counseling help but refuse to seek it, since they represent a different group and should be the focus of another study.

More specifically, we intend to: (1) modify the scoring of the SORT factors by employing a choice intensity measure for each response-item; (2) obtain normative data for each school on the modified SORT; (3) classify Ss into those who seek counseling help and those who do not; (4) construct discriminative indices for the SORT based on the mean choice intensity and frequency of choice for response-items for each blot; and (5) determine if these new indices, as well as the modified individual SORT scoring factors, identify those students in need of and receptive to counseling.

Definition of Terms

The Structured-Objective Rorschach Test (SORT)

The SORT is a multiple-choice version of the Rorschach (Stone, 1958). Each S is presented with the blots in either booklet form or projected on a screen using 35 mm slides. (The latter technique has been used sparingly for two reasons: (1) it has been difficult to get accurate color reproductions on slides; and (2) blowing up the blots on a screen tends to distort blot characteristics.)

For each blot S chooses his answers from a prepared list of 30 responses, grouped into 10 triads. S selects one and only one response per triad for a total of 10 responses per blot, and 100 for the entire

test. The response-items have been prescored for two or more of the following factors (Stone, 1958, p. 3). The factors are as follows:

Responses to blot area

1. Whole-blot (W)
2. Major blot-details (D)
3. Minor blot-details (Dd)
4. White-space (S)

Determinant factors

5. Responses closely resembling the form of the stimulus (F)
6. Responses poorly resembling the form of the stimulus (F-)
7. Responses involving human movement or posture-tension (M)
8. Responses involving animal movement or posture-tension (FM)
9. Responses involving color and closely resembling the form of the stimulus (FC)
10. Responses involving color and poorly resembling the form of the stimulus (CF)
11. Responses involving textural density of gray or shading (Fch)

Content Factors

12. Responses involving whole animals or pairs of animals (A)
13. Responses involving total human figure or parts of humans (H)

Statistically derived scores

14. Modal responses (P)
15. Rare responses (O)

The factor reliabilities (Stone, 1958) are: W (.77), D (.75), Dd (.67), S (.62), F (.64), F- (.71), M (.80), FM (.78), FC (.90), CF (.63), Fch (.77), A (.72), H (.68), P (.92), and O (.77).

Stone (1958, pp. 14-16) derived 30 personality traits (or signs) from the individual scoring factors or combinations of factors. The 30 traits described below are broken down into several areas. (The factor or factor combinations are also included in parentheses to aid the reader.)

Mental Functioning

Intellectual level does not necessarily reflect intellectual performance. It is desirable to know such features as the type of approach to intellectual situations used, adaptability to the reasoning processes, flexibility of ideas, and ability to organize (structure) mental processes.

Theoretical (W): Facility for thinking in broad, general, or abstract terms; facility for getting perspective, visualizing the overall picture, and seeing relationships between the parts.

Practical (D): Tendency for thinking or attacking problems on the basis of practical, concrete, or very definite details.

Pedantic (Dd): Preference for thinking and attacking problems from the standpoint of fine, minute details; tendency to be perfectionistic and to focus on precise, sometimes trivial details.

Induction (W:M): Facility for logical thinking based upon inferences from elements; utilization of their accumulative synthesis to lead to conclusions, principles, or generalizations; ability to organize details into a meaningful whole.

Deduction (D:M): Readiness to employ the logical approach in which established or speculative theories, principles, or generalizations are applied to data or details for the purpose of analyzing their relationships to one another (and to the principle probably involved). A balance between facilities for inductive and deductive thinking, especially when both are high, would point toward a mental adaptiveness of "efficiency" wherein such intellectual potential as the individual has is the more effective because of versatility in logical processes.

Rigidity (S): Tendency toward the dogmatic or toward fixed ideas. Higher scores suggest an unwillingness to change a point of view in spite of evidence to the contrary; low scores suggest an uncritical acceptance of others' viewpoints.

Structuring (F): Facility for mental alertness and precision and exactitude in preception of reality. Occasionally this relates to a somewhat rigid and formalistic way of solving problems, but usually indicates an awareness of and conformity to the environment and its demands.

Concentration (F-:F): Capacity for attending to the task at hand or for avoiding distractions from one's environment or from one's own extraneous thoughts.

Reductives

Factors that result in lowering intellectual performance below one's mental potential are called reductives and are listed below.

Low Generalization (W less than 42): The Theoretical (W) factor rates so low that attention to principles, perspectives, or theoretical implications is difficult.

Perfectionism (Dd over 63): The Pedantic (Dd) factor is so extremely high that thought is lost in a welter of preoccupation with minutiae.

Poor Control (F- over 57): The preponderance of "F-" in the Concentration factor is such that thought is not channeled readily into effective processes.

High Anxiety (Fch over 63): The Anxiety (Fch) factor is so high that acceptance of one's own conclusions is difficult; as a result, the ability to "think" a thing through is impaired. Excessive worry and feelings of insecurity or incapacity may be dominant.

Compulsivity (S + F + D/3 over 57): A combination of the Structuring (F), Rigidity (S), and Pedantic (Dd) factors is of such magnitude that needless repetition, excessive exactness, and unreal conformity result in preventing the full mental processes from proceeding to a logical conclusion.

Interests

These facets of behavior refer to the range of reactions to perceptual experience. Sensitivity to a variety of kinds of percepts implies a broader range of interests than does a paucity of percept types.

Range (H:P::A): Tendency of interests to be either expansive or to be narrow and confined.

Human Relationships (H): Disposition toward the perception of and attention to elements having human connotations.

Responsiveness

Two frames of reference are involved here. The first derives from the modality of responses, the second from the

frequency of responses. It is assumed that responses to items most frequently seen by the majority of the normative group are indicative of conformity. Conversely, consistent selection of rarely observed items implies a disposition toward uniqueness.

Popular (P): Tendency to perceive the same features in the same way as others; to see things as other persons do; empathic tendencies.

Original (O): Disposition to perceive the unique, the different, and the non-conforming, perhaps even the eccentric; emphasis on individualism of actions.

Temperament

The attributes listed under this heading relate largely to deep inner feelings, for which there often are compensations in outwardly observed behavior. Many of the compensations can become occupational advantages.

Persistence (S): The determination not to deviate from a set source. It may appear as doggedness or stick-to-itiveness. It can range from inability to stick to or complete a task along to the further extreme of stubbornness, defiance, or contentiousness.

Aggressiveness (F:M): The aspiration toward goals by means of well-accepted and morally developed procedures; willingness and desire to work; sense of a mature self-control with social conformity.

Social Responsibility (FC:M): Willingness to subserve oneself, even though no personal gains are evident; energetic acceptance of one's obligations to himself, to his family, and to society.

Cooperation (CF:FC): Willingness to use a teamwork approach; sensitivity toward others in combination with appreciation and responsiveness in human relationships. Willingness to submerge one's immediate needs to the long-range interests of other persons is implied.

Tact (FM:FC:M): Control of impulses and biases; maturity expressed in the ability to maintain a stable relationship with superiors, peers, and inferiors. There is balance between inner impulses, conscious self-control, and demands of the social environment.

Confidence (FM:M): Ego-strength, self-confidence, morale; inner feelings of prestige or personal worth, ranging from feelings of inferiority to strong feelings of self-assurance.

It implies ability to withstand stresses and strains and to maintain feelings of self-worth (prestige) in the face of adversity.

Consistency of Behavior (F::SFch): Predictability of actions; tendency for characteristic behavior patterns to be stable and well established.

Anxiety (Fch): Generalized apprehensiveness, uneasiness, or internal disquietude; self-concern and preoccupation with personal well-being, feeling, emotions, and sensations, resulting from a feeling of insecurity. A low anxiety score indicates composure; however, excessive composure, or almost complete absence of anxiety, may indicate a tendency to smother feelings to the point of seeming cold and insensitive. Anxiety may reflect itself in feelings of insecurity, expressions of inadequacy, or construction of behavior; it may also reflect itself in erratic behavior.

Moodiness (FM:F-::FM): Sharp fluctuations in mood, ranging from elation to depression. The intensity and duration of either phase may vary greatly.

Activity Potential (M): Control of emotional energy; energy endowment; capacity to follow through on a planned course of action; concentration of energies in a given direction, as opposed to dissipation of strength in non-productive channels.

Impulsiveness (F-:F): Tendency to act upon impulse rather than on the basis of a considered plan; reflected in spur-of-the-moment decisions.

Flexibility (M::FC:CF): Adaptability; faculty for accepting and handling most life situations in a mature manner; capacity to adjust readily from one type of situation to another.

Conformity (O:P): Tendency to accept and be directed by the socially accepted codes, customs, and mores.

Stone (1958) acknowledged that he relied quite heavily upon the traditional Rorschach for interpretation. He asserted that the test is non-clinical, although by this he meant that it did not purport to measure pathological behavior. However he has used the SORT in counseling (i.e. clinical) situations, which weakens somewhat his characterization of the SORT as non-clinical.

To aid counselors Stone (1958) prepared on an empirical basis abacs or systematized tables for traits derived from two or more factors (e.g. social responsibility--FC:M). These tables yield descriptive ratings of: high, above average, average, below average, and low.

Traits based on a single factor (e.g. theoretical--W) were assigned descriptive rankings directly on the basis of standardized scores, as follows: high--65-80, above average--56-65, average--45-55, below average--35-44, and low--20-34.

Choice Intensity

Normally when a response-item on the SORT is chosen, each of the factors pre-scored is assigned a weight of one. For example, on Blot No. 1, the suggested response "Halloween Lantern" has been pre-scored Dd, S. If selected, Dd and S are each given a score (or weight) of one toward their final total.

Based on research to be discussed later (Langer and Hick, 1966), Ss in this study were not only required to choose one response per triad, but also to give some indication of choice intensity. The intensity scale was as follows: 5--very good choice, 4--good choice, 3--neutral (neither good nor poor), 2--poor choice, and 1--very poor choice. This choice intensity technique is essentially a differential weighting system. Under this modification if S chose "Halloween Lantern" and gave it a rating of 5 (very good choice), each of the factors (Dd and S) was assigned a weight of 5 (instead of 1) toward the total factor score.

Counseling Visit

A counseling visit was defined as an interaction between some designated staff member and student not based entirely on a request for information. Any advice-seeking (apart from an informational request) was considered to be a counseling visit, regardless of (1) the nature of the problem, (2) the length of visit, and (3) whether the student sought help voluntarily or was referred. The number of individual counseling visits was recorded until a total of three had been reached. It was assumed that the number of visits might be a relevant variable.

This definition of a counseling visit was arrived at through discussions with counselors. Most agreed that they regarded a visit as a counseling situation if the student departed at all from a simple request for information. This meant, as an example, that if a student requested information about how to register he was not considered to be seeking counseling (i.e. advice) unless he changed the topic to what to take. Including requests for information would have hopelessly broadened the definition of counseling.

Each school was allowed complete freedom to designate which members of the staff would be involved in the study. The personnel assigned in each school were primarily in the following categories: (1) Potsdam State College (New York)--regular counseling staff and teaching faculty; (2) Trenton State College (New Jersey)--regular counseling staff and dorm resident counselors; and (3) Utah State University (Utah)--regular counseling staff, dorm resident counselors, and staff of the Church of Jesus Christ of Latter-day Saints (Mormon) Institute located adjacent to the campus.

SAMPLE TESTED

The freshman students tested at these institutions in 1965 and 1966 were taken from the following groups: (1) Potsdam State College--freshman psychology course; (2) Trenton State College--freshman history course; and (3) Utah State University--freshman psychology course.

These schools were selected in order to diversify sample characteristics. The investigator was familiar with the staff at all three schools and was assured full cooperation. Moreover, the schools differed somewhat in their philosophy of counseling. At Potsdam State, faculty members were specifically assigned students and encouraged to see them. At the other schools it was more a matter of making counseling available to those who desired it.

LIMITATIONS OF THE STUDY

The following represent major limitations in this study:

(1) Students who sought counseling help outside the designated staff assigned were not recorded. It was not considered feasible to give every staff member at each institution the names of all the students tested. Further, it was assumed that the staff designated at each school who normally engaged in counseling would be more highly motivated to maintain records.

(2) The definition of a counseling visit was loosely defined to encourage reporting. It may indeed have been too loosely defined, and all visits recorded. However spot checks at each school did not bear this out.

(3) Each counselor kept a record of the number of counseling visits until three. This resulted in students being classified in terms of zero, one, two, or three visits. Students who sought help more than three

times were classified with the three-visit group. The beyond-three visit group probably represented a different group as compared to the three-visit group, but there were so few Ss in the former category that no meaningful analysis of the data was possible. Hence these Ss were included in the three-visit group.

(4) Although some attempt was made to get a diverse student population, no claim is made to the representativeness of the sample studied as compared to the total college freshmen population.

Chapter 2

Review of the Literature

The Structured - Objective Rorschach Test (SORT)

Stone (1958) obtained response-items from various sources, including Beck, Klopfer and Kelley, and Harrower-Erickson. The responses were pre-scored using Beck's (1952) charts for the location scores, and a variety of other sources for the remainder of the scoring pattern. The response-items were then submitted to a panel of trained Rorschach clinicians to determine if there was agreement concerning the scoring patterns. The items for which there was unanimous agreement were accepted.

These response-items were then given to a group of Ss along with the Rorschach blots. Ss were asked if they could "see" the response-items suggested. Of the 390 items originally chosen, 300 were retained for the final version of the SORT (Stone, 1958).

Content Validity

Stone (1958) assumed that since he employed the original Rorschach blots to elicit responses drawn entirely from Rorschach protocols, the test was basically related to the Rorschach. This, as we shall indicate later, is not necessarily true.

Concurrent Validity

Three studies were conducted, one of which is pertinent (Stone, 1958). The SORT was given to freshmen students at Brigham Young University and correlated with the first year grade point average (GPA). The highest

relationships were between the GPA and F, F-, Fch, and P. No explanation was given for the results.

Construct Validity

In a series of studies Stone (1958) compared SORT data with supervisory ratings on the same personnel. Although the two methods showed marked disagreement in many areas, Stone felt that there was sufficient evidence to claim validity for the personality traits measured by the SORT.

Further Analysis of the SORT

The research has been trichotomized into the following areas: response set, validation, and internal consistency. Admitting of overlap between these areas, the reader should keep in mind the following: (1) the findings represent a mixture of traditional and non-traditional Rorschach, and (2) the SORT appears to suffer from a lack of internal consistency.

Response Set

Response set has been characterized as an internalized style of test response, which appears to be independent of the stimulus item (Cronbach, 1946; Cronbach, 1950). Operational definitions of set have included such response patterns as agree - disagree (acquiesence), and social desirability (Couch and Kenniston, 1960; Edwards, 1957).

One study involving response set could also be constructed as a measure of validation. Using Dd as an index of perfectionism (i.e., compulsivity), Ss ranked high on Dd were unable to reevaluate the blot stimuli on a second administration of the SORT. This was in contrast to a group of Ss originally high on D, who were able to systematically modify their responses (Langer, 1962b).

A second study examined the relationship between social desirability, defined as a score on the Gough Adjective Checklist, and P responses (assumed also to be a measure of social desirability) on the SORT. The relationship was confirmed for males, but not females (Langer, 1962c). This replicated a previous study concerning sex differences in response set (Langer, 1962a).

Acquiesence and social desirability scores derived from the Gough Adjective Check List were correlated with W and Dd scores on the SORT. Male and female acquiesence scores were related to Dd and W respectively, but the data overall indicated that response set on the SORT was a complex problem (Langer, 1962d).

This assumption was supported in a subsequent study which related scores on the Bass Scale of Social Acquiesence (Bass, 1956) and the Marlowe-Crowne Scale of Social Desirability (Crowne and Marlowe, 1960) to all the SORT factors. There were only a few chance relationships (Langer and Hick, 1965a).

Validation Studies

Two studies (Langer et al., 1963a; Langer et al., 1963b) related anxiety, defined as a score on the Taylor Manifest Anxiety Scale (MAS) (Taylor, 1953), to all factors on the SORT. Both studies found an H-MAS relationship. However, Fch should have been related to anxiety, both in Stone's (1958) empirical keying and traditional Rorschach rationale (Klopfer et al., 1954). In addition, Hammes and Osborne (1962) using a modified version of the MAS, found anxiety related to Dd and S. These studies indicated that at least some of the SORT factors were following neither the SORT nor the traditional Rorschach.

A comparison of scores on the Bernberg (1955) Human Relations Inventory (measuring conformity) and the SORT yielded relationships between the Inventory and O and Fch (Langer et al., 1963b). Neither of these relationships could be explained in terms of Stone's (1958) rationale.

Correlating five traits on the SORT related to rigidity (Stone, 1958) with Schaie's Test of Behavioral Rigidity (Schaie, 1960) resulted in a highly significant finding. Schaie (1960) organized his subtests into three rigidity factors: (1) motor-cognitive rigidity, (2) personality-perceptual rigidity, and (3) psychomotor speed. The five SORT indices of rigidity were defined as follows: (1) rigidity--high S; (2) compulsivity--high S, F, and D; (3) consistency of behavior--high F, high or low S, and low Fch; (4) flexibility--high M and CF, low FC; and (5) conformity--low O, high P. A canonical analysis (Cooley and Lohnes, 1962) yielded three significant roots. Subtest loadings from the Test of Behavioral Rigidity on these roots showed a high degree of internal consistency, while for the SORT it was necessary to define factor loadings individually, either in terms of the traditional Rorschach (F, FC, CF) or SORT (Dd, S, D, O). The SORT factor combinations broke down, demonstrating a lack of internal consistency (Langer and McKain, 1964).

A test of Stone's (1958) assertion that the SORT was non-clinical was made by comparing scores on the SORT and the Harrower Multiple-Choice Rorschach (Harrow and Steiner, 1954). The Harrower Multiple-Choice Rorschach (HMCR) was originally developed as a clinical multiple-choice version of the Rorschach. In this test S is allowed one response out of 10 per blot, with five responses previously adjudged indicative of pathology, and five normal.

The SORT factors were correlated with poor responses on the HMCR. Two SORT factors were related: H and M. The M-poor response relationship was negative, in keeping with traditional Rorschach; the H-poor response relationship was positive which substantiated previous evidence of an H-anxiety relationship (Langer et al., 1963a, Langer et al., 1963b). The two tests were basically dissimilar, however, which validated Stone's (1958) assumption.

A canonical analysis (Cooley and Lohnes, 1965) yielded three roots. These were submitted to a panel of trained Rorschach clinicians for evaluation. Because both tests lacked internal consistency, no clinical evaluations could be given for any of the roots, within either a traditional or non-traditional Rorschach (SORT or HMCR) framework (Langer and Wood, 1965). Again, the problem of internal consistency on the SORT seemed critical.

Internal Consistency

This lack of internal consistency on the SORT appeared to be a function of two major weaknesses (Langer and Hick, 1965b). First, the SORT requires 10 responses per blot, which may force Ss to make many unrealistic choices. It must be remembered that in the course of a normal Rorschach administration S usually gives from 20 to 45 responses for all 10 blots (Klopfer et al., 1954). The SORT in contrast, requires 100 responses. Ss often stated in interviews that they selected responses on many occasions because they were forced to make a choice.

The second weakness was somewhat related to the first. Inquiries concerning the reasons for specific response choices indicated that Ss were not necessarily responding to the pre-assigned blot characteristics. That is, responses were being elicited in a manner not related to the perceptual-cognitive processes which supposedly influenced responses on

the traditional Rorschach (and the basis on which the SORT blots were pre-scored). By presenting S with a list of responses, he can justify choice of a given response-item simply on the grounds that he must make a selection from the prepared list. S does not have to justify choice in any other terms, including the blot characteristics which supposedly influenced the response choice.

A three-phase research project was undertaken (Langer and Hick, 1965b) to test these assumptions. As indicated earlier, the first proposed weakness concerned the number of choices per blot. This problem was treated in two ways: (1) by varying the SORT administration to allow Ss to select as many or as few responses per blot; and (2) maintaining the usual SORT administration (10 responses per blot), but allowing Ss to indicate some measure of enthusiasm for their choice. The third phase of the research dealt with remarks by Ss, noted previously, concerning the bases for their choice of answers. This part involved an investigation of the location scores.

For the first experiment (Langer and Hick, 1965b) Ss were administered the SORT both under forced and free-choice conditions, using a counterbalanced design. For the forced-choice (regular) administration, S was required to select one response per triad, for a total of 10 per blot. Within the free-choice condition S could make as many or as few responses per blot as desired.

The major results were: (1) the factor reliabilities under free-choice conditions were higher than forced-choice, and (2) there appeared to be an order effect, with factor reliabilities for the forced-choice administration which preceded the free-choice exceeding those of the forced-choice procedure which followed the free.

Results tended to support the assumption that the regular SORT administration forced Ss to make too many choices per blot. First, the higher factor reliabilities under free-choice leads to the assumption that when S was free to select any number of responses within the free-choice situation, choices were more likely to be made on the basis of the blot characteristics.

Second, the order effect may reflect the fact that Ss under the forced-choice administration probably developed a strategy which compromised between responding to the blot characteristics and such extrinsic qualities as social desirability, etc.

Apparently the test strategy developed within the free-choice condition based on the blot characteristics, broke down when followed by the forced-choice administration. On the other hand, when the forced-choice proceded the free-choice administration, S adopted the compromise strategy discussed above. (Seemingly, not having known a better world, S makes the most of what he must face.) In addition, frequency of response on the free-choice administration following the forced was lower, compared to the free-choice administration which preceded the forced-choice. This conservatism was probably a reaction to S's strain of previously giving 10 responses per blot.

Other results which tended to support the hypothesis that S compromised choices under the forced-choice administration were: (1) some factors showed greater variability across treatment levels (W, D, F, FC, Fch, A, P), while others were relatively more stable (Dd, S, F-, CF, and O); (2) under free-choice conditions certain triads disappeared (i.e., practically no response-items chosen), while others were overchosen; and (3) under forced-choice conditions the response-item most frequently chosen within a given triad contained one or more of the variable factors.

In a second study (Langer and Hick, 1966) Ss were administered the SORT using specially prepared answer sheets. In front of each response there was a three inch line, marked off at one end as "good choice" and at the other "poor choice." After the response-item there was a two inch line marked at one end "good form resemblance," and at the other "poor form resemblance." For each item chosen, S was required to indicate by slash marks along both lines, choice intensity as well as form resemblance.

The choice and form resemblance ratings were assigned values from five to one (good to poor) by dividing each line into five equal parts. A differential weighting system for the factors was achieved by multiplying each factor in the response-item chosen by the choice intensity score assigned to it. These modified factor scores were then summated to yield total scores for each SORT factor.

In addition the Taylor Manifest Anxiety Scale (MAS) (Taylor, 1953) and the Sarason Test Anxiety Questionnaire (TAQ) (Gordon and Sarason, 1955) were given between the two SORT administrations.

To determine the reliability of the choice intensity measure, all response selections changed between the two SORT administrations were eliminated (about one-third of all the responses were changed). The median reliability coefficient of choice intensity for response-items selected on both administrations for all Ss was .48.

The relationship between choice intensity and form resemblance was determined by scores on the first SORT administration. The median correlation coefficient for all Ss was .66.

The only SORT factor even remotely related to the MAS and TAQ was H. The results (albeit tenous) replicated previous studies which found H related to anxiety (Langer and Hick, 1966).

A third study (Langer and Norton, 1965b) dealt with the blot location scores assigned to response-items. These scores were considered critical for the following reasons: (1) all response-items on the SORT are keyed for location; (2) S is directed to make his choice on the bases of form resemblance (Stone, 1958); and (3) previous work by Smith and George (1954) indicated that location scores for the Harrower Multiple-Choice Rorschach (Harrower and Steiner, 1954) did not hold up on the average in one out of six responses.

As noted earlier, responses on the SORT were pre-scored by a panel of Rorschach clinicians (Stone, 1958), using Beck's charts (Beck, 1952). A critical assumption on the SORT could be paraphrased as follows: when S makes a choice he "sees" something in the blot resembling the response. Not even Stone would argue that S really "sees" every response, but the question remains as to how many of the responses S actually does "see" in the blot.

Ss were administered the SORT in the usual manner, with two changes. First, the test was given individually, and second, after S made his choice he was asked to outline on standard Rorschach location charts where he saw the choice. The tester then traced the area outlined by S and asked "Is this where you saw . . .?"

For this study E did not force Ss to make a response within every triad as would normally occur in the group-testing situation. In other words, if S could not really see or even pretend to see any of the suggested responses within a given triad, that triad was omitted. This rate of rejection varied somewhat from blot to blot and the significance of this shall be presented later.

The results are given in Table 2-1. Location responses were characterized as follows: (1) those that fell within the assumed blot area ("predicted location"); (2) location at variance with the assumed location but classifiable according to Beck's charts ("other classifiable"), and deviation from the assumed location scores which could not be interpreted in terms

Table 2-1

Location Scores

Blot No.	Predicted Location (f)	Other Classifiable (f)[a]	Unclassifiable (f)[b]	Total (f)	% Predicted
1	254	165	65	484	52.5
2	211	259	11	481	43.9
3	243	201	37	481	50.5
4	243	191	36	470	51.7
5	273	211	12	496	55.0
6	227	224	25	476	47.7
7	144	258	17	419	34.4
8	190	231	8	429	44.3
9	154	269	25	448	34.4
10	216	217	6	439	49.2
Total	2155	2226	242	4623	46.6

[a]"Other classifiable" refers to location scores classifiable according to Beck s charts.
[b]"Unclassifiable" refers to those which do not follow Beck s schemata (1952).

of Beck's location charts ("nonclassifiable"). The latter consisted primarily of choices interpretable within the Klopfer system as de or di (Klopfer et al., 1954).

It is interesting to note, whereas Smith and George (1954) found roughly one of six location scores invalid on the Harrower Multiple-Choice Rorschach, this study yielded a prediction index on the SORT of 46.6% across all cards. Although this figure varied from blot to blot, within each blot there was a great deal of variance. For example, in Blot 5, response No. 121, "Butterfly," scored as a W, was seen as a W response by all Ss who selected that response. Yet on the same blot response No. 130, "Bee Stinger," was seen less than 10% of the time as a D3 response by those who chose it.

The study produced several other findings. Referring to Table 2-1, it can be seen that the number of responses given for each blot varied considerably. Thus out of a potential 500 responses, Blot 5 elicited 496 responses, whereas Blot 7 p_duced 415. Further, Table 2-1 suggests that those blots with the highest rejection rate also produced on the average the lowest percentages of predicted responses.

Furthermore, this relationship seemed stronger for the last five blots as compared to the first five (with the exception of Blot 2). This suggested that the strain of giving forced choices increased during the test, rather than remained a constant.

Conclusion

The research cited indicated that the SORT does not completely follow the empirical keying developed by Stone (1958). Particularly

significant were findings (both clinical and normative) that many choices were apparently compromise selections, although all choices are normally given equal weight. This apparently was a major factor contributing to the breakdown in internal consistency.

Maintaining the usual SORT format (one response per triad) involved the problem of eliminating, or at least minimizing, the effects of compromise choices. The alternative suggested was a choice intensity technique, yielding a differential weighting system. This was carried out in this study, following a modification of the choice intensity technique previously developed (Langer and Hick, 1966).

Chapter 3

Procedures

The overall procedures for this study were as follows: (1) three institutions were sampled--Potsdam State College (New York), Trenton State College (New Jersey), and Utah State University (Utah); (2) the SORT was modified by a choice intensity technique; (3) normative data was obtained from each school for two consecutive years (1965-66, 1966-67); (4) Ss were divided into two groups--those who sought counseling and those who do not; and (5) the groups were compared on the modified SORT factors as well as the frequency and mean choice intensity of individual response-items.

The investigator conducted all testing at Potsdam State and Trenton State; specially trained assistants were responsible for the testing program at Utah State. Testing at all schools was finished by mid-October.

Ss at Potsdam State were tested in general psychology sections of approximately 30 students each. Testing at Trenton State College in 1965 was accomplished in freshmen history sections of 30-35 students, while in 1966 the testing was done in large history lecture sections of 100 students each. Students at Utah State University were tested in general psychology discussion sections of approximately 40 students each. Testing normally took 50 minutes.

Procedures for Administering the SORT

Normal SORT

For the regular SORT administration (no choice intensity) E hands out the SORT booklets and standard IBM scoring sheets, and instructs Ss to respond to the blots in the following manner (Stone, 1958, pp. 20-21):

SAY: Open your booklet to the Instructions to Examinees on page 1. Read these instructions silently while I read them aloud: "You will see a series of ten ink blots, one at a time, either projected on a screen or in serial order on a group of small cards. These blots really do not represent anything in particular. However, people do see certain things in the blots; and different people see different things. You are to look at the blot and then at a list of possible things to be seen. You will notice that the things you might see are arranged in groups of three and are numbered. With each group of three you are to do two things: First, choose the one of the three items which you think is most clearly represented by the blot or by some part of the blot. Second, look at the number of that choice and blacken in the dotted lines opposite that number on the answer sheet under the heading marked "Blot No. 1," or "Blot No. 2," etc.

Proceed to the next group of three items and follow the same directions. Do this for all ten groups of three referring to each blot. When the examiner projects a new blot or you turn to a new card, you will follow the same directions as above, which are:

1. Select the one response from each group of three items that you think is best represented by the blot or some part of the blot.

2. Note the number of your choice.

3. Blacken in the dotted lines opposite that number on the answer sheet.

4. Continue on to the next group of three and follow the same procedure.

"Make no marks of any kind in the booklet. The examiner will announce the number of each blot and the first number in the booklet which corresponds to it. Be sure that you are looking at the proper place in the booklet and marking in the proper place on the answer sheet.

"There are no right or wrong answers to this test. If you do decide to change an answer, though, erase your mark thoroughly and blacken in the dotted lines opposite your new choice. Be sure to make one choice from each group of three items. If you see none of the three things listed, select the one most like what you do see. If you see more than one, select the one that is best represented. Work as rapidly as you can and do not spend much time on any one group; your first impressions will probably be best in a test like this."

After reading these directions,

SAY: Are there any questions?

Answer any questions; then

SAY: You will have about two minutes for each blot. This will be sufficient for you to record your first impressions. I will tell you when one minute has passed, which is half the time for viewing each blot.

The proctor allows 2 minutes for each blot and is instructed to make sure that Ss do not move on to the next blot until the two minutes are up.

Procedural Differences for the Modified (Choice Intensity) SORT

For this study the SORT booklets, specially prepared answer sheets (Appendix B), and Instructions to Examinees (Appendix C) were distributed in that order to Ss. A carefully detailed set of Instructions to Examiners was also prepared (Appendix D), although this consisted essentially of an amplification of the Instructions to Examinees handout, as well as some procedural comments noted below.

The specific procedures for the modified SORT are given in Appendix D. They follow the regular SORT in general detail, with certain modifications.

First of all Ss were directed not only to select one response per triad, but to also indicate the intensity of their choice enthusiasm by reference to the following scale:

5. Very good choice
4. Good choice
3. Neutral (Neither good nor poor)
2. Poor choice
1. Very poor choice

Second, Ss indicated their choice intensity by placing the appropriate number in the space provided before each response-item on the answer sheet.

Third, Ss were instructed to move on to the next blot when they finished, regardless if E had called time. Based on observations made in previous research, E allowed three minutes for the first two blots before requesting Ss to move to the next blot. The investigator then steadily decreased the time alloted for each blot to two minutes for the last four blots. This proved sufficient for even the slowest Ss to finish on time. Although E called time throughout the test, this usually served as a pacing device, since most Ss were responding at a faster rate than the maximum alloted time per blot.

Data Procedures

Counseling Data

The SORT answer sheets from each school were alphabetized and the names of the testees were sent to each school. Sufficient copies were forwarded to the individual school to provide lists for all assigned faculty.

Along with these lists, explanatory sheets defining the term "counseling visit" were also forwarded (Appendix E):

1. We will consider a counseling situation to be any meeting in which advice is sought. Indeed, anything but a direct request for information is to be considered a counseling situation. For example, suppose the student comes in requesting knowledge about the subjects needed to graduate with a degree in a certain area. If all he seeks is specific information, then it is not to be considered a counseling situation. However, if in the course of the same meeting he begins to talk about his vocational objectives or whether he is fit for college, etc., we want this to count as a counseling situation.

2. We are not interested in the nature of the counseling situation; be it personal, academic, or vocational.

3. We are not interested in the time spent on the counseling situation. It can be fifteen minutes, or fifty minutes. We still count it as a counseling situation.

4. Will you please indicate on the mimeographed list of names by a check mark the number of counseling meetings up to the first three. In other words, you will indicate whether the student made one, two, or three visits with you. After that it is not necessary to keep a record of the number of visits that the student made. Do not count a request for counseling as a counseling visit except if the student begins to discuss his problem, then it may be counted as a counseling visit.

5. If in doubt, view it as a counseling situation.

We know that these are crude indices of counseling, but we feel that they should be broad enough to include most students that are seeking help of some kind. Again, will you please maintain this record until June, 1966(7) and then forward this to the appropriate individual. We appreciate your help in this matter. The school will be appraised of the results of our study.

Normative SORT Data

Each year a few answer sheets had to be discarded because Ss had (1) not responded to all triads of response-items, (2) scored all three response-items within each triad, or (3) selected the response-items without indicating choice intensity. The names, however, were kept on the counseling lists.

In order to obtain the fullest cooperation from each school, the SORT trait scores for each S were derived and sent to the respective schools. Standardization of scores was based on the SORT data for each school for that specific year.

Using a computer program modified to include the choice intensity technique[1] (Hurst and Langer, 1965) each school received the following individual information about each testee: (1) raw scores for each of the

[1]The original proposal called for a log transformation of the intensity scores. As a check, the process was carried out for one school without significant difference in the results. Moreover, log transformations carried out with the intensity scores obtained in previous research (Langer and Hick, 1966) yielded similar non-significant results. The log transformation procedure was therefore dropped from further consideration.

15 factors; (2) standard scores for each of the 15 factors; and (3) the 30 SORT traits recorded from five-high to one-low (based on the abac tables and standardized scores). This was the only use to which the normative SORT data was put. Two detailed handouts (Appendixes F and G), accompanied the data sheets explaining the IBM sequence and defining each of the SORT traits.

Counseling Records

In May letters were sent to each school requesting the return of the counseling data. The individuals in charge of the project at each school collected and returned the results.

Chapter 4

Results and Discussion

As indicated earlier, the general purpose of this study was to determine whether or not the SORT, modified by the choice intensity technique, could differentiate between Ss seeking counselling help and those that did not. Because of the possibility of differences among the counselling Ss, the counselling Ss were further classified into one, two or three or more visit categories. The SORT data was analyzed[1] with respect to the following: (1) the raw modified SORT factor scores, and (2) the rank order of the response-items by frequency and mean choice intensity scores. In addition, the reliability of the choice intensity technique was also determined.

Preliminary Statistical Procedures

Sample Size

Table 4-1 presents the sample sizes at each school for both years.[2] The mean sample size was approximately 225 students.

The high ratio of female to male Ss (997:375) could be attributed, in part, to the larger female student populations at Potsdam State College and

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[1]Deviations in statistical procedures from the original proposal will considered throughout the chapter.

[2]The relatively small sample size at Trenton State College (1966-67) was occasioned by a violent rainstorm which held down attendance.

Trenton State College. The greater number of female Ss in the Utah State University sample was assumed to be a function of the general psychology

Table 4-1

All Schools - 1965-66 and 1966-67:
Numbers of Freshmen Students Tested

	Year	Males	Females	Total
Potsdam State College	1965-66	81	147	228
Trenton State College	1965-66	80	157	237
Utah State University	1965-66	66	182	248
Total				713
Potsdam State College	1966-67	43	133	176
Trenton State College	1966-67	69	167	236
Utah State University	1966-67	36	211	247
Total				659
Combined Totals		375	997	1372

course (from which the Utah State University Ss were selected), since there are twice as many males as females enrolled on the Utah State University campus.

Reliability of the Choice Intensity Techniques

The SORT was modified in this study to permit Ss to assign a measure of choice enthusiasm for each response-item selected. The scale ranged from five to one (very good choice to very poor choice).

Table 4-2

Reliability of the Choice Intensity Technique

Classification of Responses[a]	Number of Responses	Percentage of Total
0-0	24,730	56.46
0-1	4,652	10.67
1-0	4,503	10.28
1_X-1_Y	4,229	9.66
1_X-1_X	5,686	12.98

[a]0-0 = rejection of response-item on both administrations.
0-1 = rejection of response-item on first administration and selection on second.
1-0 = selection of response-item on first administration and rejection on second.
1_X-1_Y = response-item selected on both administrations but different choice intensity score assigned each time.
1_X-1_X = response-item selected on both administrations and same choice intensity score assigned each time.

Portions of the 1965-66 sample at Utah State University (N = 146) were administered the modified SORT twice within a one week period. These results are given in Table 4-2.

The question of reliability divided itself into two separate problems. The first dealt with whether or not the reliabilities of the SORT response-items were changed through the use of the choice intensity technique. The second problem dealt with the reliability of the choice intensity technique itself.

The data from the 0-0, 1-0, and 0-1 classifications gave a measure of the stability of the SORT response-items within a one-week period. A total of 34,645 response-items (79.19%), were either selected or rejected on both administrations of the SORT. This compared quite favorably with the effects of a previous choice intensity study (Langer and Hick, 1966) which showed that about 33% of the response-items were changed within a three-week period.

The other question involved the reliability of the choice intensity technique itself. Classifications 1_X-1_Y and 1_X-1_X represented response-items selected on both SORT administrations, and thus given a choice intensity score both times. Product-moment correlations were derived between intensity score pairs for all Ss. The average correlation coefficient for all Ss was .55 ($P<.001$). The range was from .75 to -.68, with only five Ss having negative correlations. The results indicated that the choice intensity technique itself was reliable and did not significantly effect the reliability of the response-items.

The differences in reliability between the choice intensity technique employed in this study and the one previously cited (Langer and Hick, 1966) were mainly due to differences in the scaling techniques. In the latter study Ss indicated intensity scores by a slash mark along a line, while in this study Ss responded with a specific number. The earlier procedure undoubtedly did not lend itself to as much preciseness of recall by S on the second administration. The differences in time between the two administrations (three weeks versus one week) was also undoubtedly a contributing factor.

Counselling Categories

Based on the records kept by the counselling personnel at each school, Ss were assigned to one of the following four counselling categories:[3]

Category 0 - no visits

Category 1 - one visit

Category 2 - two visits

Category 3 - three or more visits

Tables 4-3 and 4-4 list the counselling category totals at each school for 1965-66 and 1966-67 respectively.[4]

Table 4-3

All Schools - 1965-66:
Counselling Category Totals

School	Categories 0	1	2	3
Potsdam State College	46	51	70	61
Trenton State College	210	17	6	4
Utah State University	220	5	3	20
Totals	476	73	79	85

[3]For this study the term "counselling categories" will include all four groups unless indicated otherwise.

[4]The small number of Ss in several of the counselling categories made an analysis of sex differences meaningless, and thus sex differences were dropped from consideration.

Tables 4-3 and 4-4 indicated that the greatest number of counselling visits were made at Potsdam State. The increase in number of counselling

Table 4-4

All Schools - 1966-67
Counselling Category Totals

School	Categories 0	1	2	3
Potsdam State College	19	192	26	10
Trenton State College	157	6	8	4
Utah State University	181	29	16	11
Totals	357	227	50	25

visits reported at Utah State for 1966-67, was a function of increased pressure to return the lists.

Major Statistical Procedures

Relation of SORT Factors to Counselling Categories

An analysis of variance of the raw weighted[5] SORT factors by counselling categories determined which factors discriminated among the counsel-

[5]A log transformation of the intensity scores for one of the schools made no difference in the analysis of variance. The procedure was dropped from further consideration.

Table 4-5

All Schools - 1965-66:
F Ratios for SORT Factors by Counselling Categories

Factor	Potsdam State	Trenton State	Utah State
W	1.86	.88	.31
D	2.19	.57	.83
Dd	2.88*	.71	.52
S	2.43	3.78*	.42
F	4.21**	2.22	.51
F-	.11	1.26	1.50
M	.47	2.65*	.54
FM	.68	1.07	.63
FC	.25	.20	.15
CF	.31	1.25	.68
Fch	.55	.04	.13
A	1.23	.83	.14
H	.43	3.40*	1.26
P	.17	1.61	.72
O	.62	.84	.11

*P<.05.
**<.01.

ling groups at each school.[6]

Tables 4-5 and 4-6 list the F ratios for 1965-66 and 1966-67 respec-

[6]Originally we had intended to combine the data for all schools, but decided against it for two reasons: (1) universality of a factor or response-item could be demonstrated by referring to the individual schools, and (2) explanations were difficult enough at the individual school level let alone a combined population.

A third study (Langer and Norton, 1965b) dealt with the blot location scores assigned to response-items. These scores were considered critical for the following reasons: (1) all response-items on the SORT are keyed for location; (2) S is directed to make his choice on the bases of form resemblance (Stone, 1958); and (3) previous work by Smith and George (1954) indicated that location scores for the Harrower Multiple-Choice Rorschach (Harrower and Steiner, 1954) did not hold up on the average in one out of six responses.

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"There are no right or wrong answers to this test. If you do decide to change an answer, though, erase your mark thoroughly and blacken in the dotted lines opposite your new choice. Be sure to make one choice from each group of three items. If you see none of the three things listed, select the one most like what you do see. If you see more than one, select the one that is best represented. Work as rapidly as you can and do not spend much time on any one group; your first impressions will probably be best in a test like this."

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SAY: Are there any questions?

Answer any questions; then

SAY: You will have about two minutes for each blot. This will be sufficient for you to record your first impressions. I will tell you when one minute has passed, which is half the time for viewing each blot.

The proctor allows 2 minutes for each blot and is instructed to make sure that Ss do not move on to the next blot until the two minutes are up.

Procedural Differences for the Modified (Choice Intensity) SORT

For this study the SORT booklets, specially prepared answer sheets (Appendix B), and Instructions to Examinees (Appendix C) were distributed in that order to Ss. A carefully detailed set of Instructions to Examiners was also prepared (Appendix D), although this consisted essentially of an amplification of the Instructions to Examinees handout, as well as some procedural comments noted below.

The specific procedures for the modified SORT are given in Appendix D. They follow the regular SORT in general detail, with certain modifications.

First of all Ss were directed not only to select one response per triad, but to also indicate the intensity of their choice enthusiasm by reference to the following scale:

5. Very good choice
4. Good choice
3. Neutral (Neither good nor poor)
2. Poor choice
1. Very poor choice

Second, Ss indicated their choice intensity by placing the appropriate number in the space provided before each response-item on the answer sheet.

Third, Ss were instructed to move on to the next blot when they finished, regardless if E had called time. Based on observations made in previous research, E allowed three minutes for the first two blots before requesting Ss to move to the next blot. The investigator then steadily decreased the time alloted for each blot to two minutes for the last four blots. This proved sufficient for even the slowest Ss to finish on time. Although E called time throughout the test, this usually served as a pacing device, since most Ss were responding at a faster rate than the maximum alloted time per blot.

Data Procedures

Counseling Data

The SORT answer sheets from each school were alphabetized and the names of the testees were sent to each school. Sufficient copies were forwarded to the individual school to provide lists for all assigned faculty.

Along with these lists, explanatory sheets defining the term "counseling visit" were also forwarded (Appendix E):

1. We will consider a counseling situation to be any meeting in which advice is sought. Indeed, anything but a direct request for information is to be considered a counseling situation. For example, suppose the student comes in requesting knowledge about the subjects needed to graduate with a degree in a certain area. If all he seeks is specific information, then it is not to be considered a counseling situation. However, if in the course of the same meeting he begins to talk about his vocational objectives or whether he is fit for college, etc., we want this to count as a counseling situation.

2. We are not interested in the nature of the counseling situation; be it personal, academic, or vocational.

3. We are not interested in the time spent on the counseling situation. It can be fifteen minutes, or fifty minutes. We still count it as a counseling situation.

4. Will you please indicate on the mimeographed list of names by a check mark the number of counseling meetings up to the first three. In other words, you will indicate whether the student made one, two, or three visits with you. After that it is not necessary to keep a record of the number of visits that the student made. Do not count a request for counseling as a counseling visit except if the student begins to discuss his problem, then it may be counted as a counseling visit.

5. If in doubt, view it as a counseling situation.

We know that these are crude indices of counseling, but we feel that they should be broad enough to include most students that are seeking help of some kind. Again, will you please maintain this record until June, 1966(7) and then forward this to the appropriate individual. We appreciate your help in this matter. The school will be appraised of the results of our study.

Normative SORT Data

Each year a few answer sheets had to be discarded because Ss had (1) not responded to all triads of response-items, (2) scored all three response-items within each triad, or (3) selected the response-items without indicating choice intensity. The names, however, were kept on the counseling lists.

In order to obtain the fullest cooperation from each school, the SORT trait scores for each S were derived and sent to the respective schools. Standardization of scores was based on the SORT data for each school for that specific year.

Using a computer program modified to include the choice intensity technique[1] (Hurst and Langer, 1965) each school received the following individual information about each testee: (1) raw scores for each of the

[1]The original proposal called for a log transformation of the intensity scores. As a check, the process was carried out for one school without significant difference in the results. Moreover, log transformations carried out with the intensity scores obtained in previous research (Langer and Hick, 1966) yielded similar non-significant results. The log transformation procedure was therefore dropped from further consideration.

15 factors; (2) standard scores for each of the 15 factors; and (3) the 30 SORT traits recorded from five-high to one-low (based on the abac tables and standardized scores). This was the only use to which the normative SORT data was put. Two detailed handouts (Appendixes F and G), accompanied the data sheets explaining the IBM sequence and defining each of the SORT traits.

Counseling Records

In May letters were sent to each school requesting the return of the counseling data. The individuals in charge of the project at each school collected and returned the results.

Chapter 4

Results and Discussion

As indicated earlier, the general purpose of this study was to determine whether or not the SORT, modified by the choice intensity technique, could differentiate between Ss seeking counselling help and those that did not. Because of the possibility of differences among the counselling Ss, the counselling Ss were further classified into one, two or three or more visit categories. The SORT data was analyzed[1] with respect to the following: (1) the raw modified SORT factor scores, and (2) the rank order of the response-items by frequency and mean choice intensity scores. In addition, the reliability of the choice intensity technique was also determined.

Preliminary Statistical Procedures

Sample Size

Table 4-1 presents the sample sizes at each school for both years.[2] The mean sample size was approximately 225 students.

The high ratio of female to male Ss (997:375) could be attributed, in part, to the larger female student populations at Potsdam State College and

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[1]Deviations in statistical procedures from the original proposal will considered throughout the chapter.

[2]The relatively small sample size at Trenton State College (1966-67) was occasioned by a violent rainstorm which held down attendance.

Trenton State College. The greater number of female Ss in the Utah State University sample was assumed to be a function of the general psychology

Table 4-1

All Schools - 1965-66 and 1966-67:
Numbers of Freshmen Students Tested

	Year	Males	Females	Total
Potsdam State College	1965-66	81	147	228
Trenton State College	1965-66	80	157	237
Utah State University	1965-66	66	182	248
Total				713
Potsdam State College	1966-67	43	133	176
Trenton State College	1966-67	69	167	236
Utah State University	1966-67	36	211	247
Total				659
Combined Totals		375	997	1372

course (from which the Utah State University Ss were selected), since there are twice as many males as females enrolled on the Utah State University campus.

Reliability of the Choice Intensity Techniques

The SORT was modified in this study to permit Ss to assign a measure of choice enthusiasm for each response-item selected. The scale ranged from five to one (very good choice to very poor choice).

Table 4-2

Reliability of the Choice Intensity Technique

Classification of Responses[a]	Number of Responses	Percentage of Total
0-0	24,730	56.46
0-1	4,652	10.67
1-0	4,503	10.28
1_X-1_Y	4,229	9.66
1_X-1_X	5,686	12.98

[a] 0-0 = rejection of response-item on both administrations.
0-1 = rejection of response-item on first administration and selection on second.
1-0 = selection of response-item on first administration and rejection on second.
1_X-1_Y = response-item selected on both administrations but different choice intensity score assigned each time.
1_X-1_X = response-item selected on both administrations and same choice intensity score assigned each time.

Portions of the 1965-66 sample at Utah State University (N = 146) were administered the modified SORT twice within a one week period. These results are given in Table 4-2.

The question of reliability divided itself into two separate problems. The first dealt with whether or not the reliabilities of the SORT response-items were changed through the use of the choice intensity technique. The second problem dealt with the reliability of the choice intensity technique itself.

The data from the 0-0, 1-0, and 0-1 classifications gave a measure of the stability of the SORT response-items within a one-week period. A total of 34,645 response-items (79.19%), were either selected or rejected on both administrations of the SORT. This compared quite favorably with the effects of a previous choice intensity study (Langer and Hick, 1966) which showed that about 33% of the response-items were changed within a three-week period.

The other question involved the reliability of the choice intensity technique itself. Classifications 1_X-1_Y and 1_X-1_X represented response-items selected on both SORT administrations, and thus given a choice intensity score both times. Product-moment correlations were derived between intensity score pairs for all Ss. The average correlation coefficient for all Ss was .55 ($P<.001$). The range was from .75 to -.68, with only five Ss having negative correlations. The results indicated that the choice intensity technique itself was reliable and did not significantly effect the reliability of the response-items.

The differences in reliability between the choice intensity technique employed in this study and the one previously cited (Langer and Hick, 1966) were mainly due to differences in the scaling techniques. In the latter study Ss indicated intensity scores by a slash mark along a line, while in this study Ss responded with a specific number. The earlier procedure undoubtedly did not lend itself to as much preciseness of recall by S on the second administration. The differences in time between the two administrations (three weeks versus one week) was also undoubtedly a contributing factor.

Counselling Categories

Based on the records kept by the counselling personnel at each school, Ss were assigned to one of the following four counselling categories:[3]

Category 0 - no visits

Category 1 - one visit

Category 2 - two visits

Category 3 - three or more visits

Tables 4-3 and 4-4 list the counselling category totals at each school for 1965-66 and 1966-67 respectively.[4]

Table 4-3

All Schools - 1965-66:
Counselling Category Totals

School	Categories 0	1	2	3
Potsdam State College	46	51	70	61
Trenton State College	210	17	6	4
Utah State University	220	5	3	20
Totals	476	73	79	85

[3]For this study the term "counselling categories" will include all four groups unless indicated otherwise.

[4]The small number of Ss in several of the counselling categories made an analysis of sex differences meaningless, and thus sex differences were dropped from consideration.

Tables 4-3 and 4-4 indicated that the greatest number of counselling visits were made at Potsdam State. The increase in number of counselling

Table 4-4

All Schools - 1966-67
Counselling Category Totals

School	Categories 0	1	2	3
Potsdam State College	19	192	26	10
Trenton State College	157	6	8	4
Utah State University	181	29	16	11
Totals	357	227	50	25

visits reported at Utah State for 1966-67, was a function of increased pressure to return the lists.

Major Statistical Procedures

Relation of SORT Factors to Counselling Categories

An analysis of variance of the raw weighted[5] SORT factors by counselling categories determined which factors discriminated among the counsel-

[5]A log transformation of the intensity scores for one of the schools made no difference in the analysis of variance. The procedure was dropped from further consideration.

Table 4-5

All Schools - 1965-66:
F Ratios for SORT Factors by Counselling Categories

Factor	Potsdam State	Trenton State	Utah State
W	1.86	.88	.31
D	2.19	.57	.83
Dd	2.88*	.71	.52
S	2.43	3.78*	.42
F	4.21**	2.22	.51
F-	.11	1.26	1.50
M	.47	2.65*	.54
FM	.68	1.07	.63
FC	.25	.20	.15
CF	.31	1.25	.68
Fch	.55	.04	.13
A	1.23	.83	.14
H	.43	3.40*	1.26
P	.17	1.61	.72
O	.62	.84	.11

*P<.05.
**<.01.

ling groups at each school.[6]

Tables 4-5 and 4-6 list the F ratios for 1965-66 and 1966-67 respec-

[6]Originally we had intended to combine the data for all schools, but decided against it for two reasons: (1) universality of a factor or response-item could be demonstrated by referring to the individual schools, and (2) explanations were difficult enough at the individual school level let alone a combined population.

Table 4-6

All Schools - 1966-67:
F Ratios for SORT Factors by Counselling Categories

Factor	Potsdam State	Trenton State	Utah State
W	1.34	2.13	2.08
D	.38	.67	1.52
Dd	.60	.38	1.71
S	.92	.97	1.90
F	.19	.76	.54
F-	1.09	.43	2.83*
M	2.35	1.00	3.57*
FM	1.05	.31	2.30
FC	1.94	1.37	.06
CF	.15	1.99	2.41
Fch	.54	1.49	.78
A	.58	1.66	2.33
H	2.06	.87	1.75
P	1.70	2.81*	1.13
O	.60	.14	.88

*P<.05.
**P<.01.

tively. A detailed breakdown of the analysis of variance for each school is given in the Appendix, Tables A-1 to A-6.

For the combined data (1965-67), there were seven significant factors: Dd, F, S, H, P, F-, and M (twice). These eight significant find-

Table 4-7

Summary of SORT Factors

School and Year	Factors											
	W	D	Dd	S	F	F-	M	FM	CF	A	H	P
Potsdam State 1965-66		T[a]	S[b]	T	S							
Potsdam State 1966-67							T				T	
Trenton State 1965-66				S	T		S				S	
Trenton State 1966-67	T											S
Utah State 1965-66												
Utah State 1966-67		T				S	S	T	T	T		

[a]T = F ratio greater than 2.00 but not significant.
[b]S = significant at .05 level or beyond.

ings represented a level considerably above chance. In addition, by arbitrarily designating an F ratio of 2.00 or greater as indicative of a trend (which is an accepted practice in a pilot study such as this), there were 10 additional findings which included the following factors: D, Dd, S, F, M, H, FM, CF, A, and W (twice). This yielded a total of 18 significant or trend findings involving 12 different factors. Table 4-7 summarizes this data for the schools.

M was the only factor that was either significant or indicative of a trend for each of the three schools. However not a single other factor repeated, either as significant or indicative of a trend, at the same school. Thus, while a large number of SORT factors (N = 12) showed potential in terms of differentiating among the counselling categories, none (except M) warranted any assumptions of universality and/or stability. This lack of replication cannot be explained at present.

The next problem dealt with the differences in category means between the counselling and non-counselling groups (or among the counselling groups) with respect to the SORT factors. Tables 4-8 and 4-9 present this data for the significant factors only. The counselling category means for all factors are given in the Appendix, Tables A-1 to A-6.

Some interesting trends were noted for the counselling category means in Table 4-8. First of all, the pattern of category means within each school with respect to rank order was consistent. For Potsdam State College (Dd and F), the mean for Category 1 was highest, with Categories 0, 3, and 2 following in that order. For Trenton State College (S, M, and H), Category 3 had the highest mean, with 1, 0, and 2 in descending order. In addition, the factors cited previously as indicative of trends at Potsdam State College (D and S), and Trenton State College (F), were also consis-

Table 4-8

All Schools - 1965-66:
Counselling Category Means for
Significant SORT Factors

School	Potsdam State		Trenton State	
Factor	DD		S	
	Category	Means	Category	Means
	0	42.59	0	41.04
	1	45.49	1	42.18
	2	38.80	2	30.67
	3	39.02	3	57.25
Factor	F		M	
	0	91.28	0	31.04
	1	98.51	1	36.41
	2	83.34	2	28.33
	3	89.87	3	46.75
Factor			H	
			0	74.62
			1	81.47
			2	56.67
			3	93.75

tent within the pattern at each school set by the significant factors. It appeared on the basis of the 1965-66 data that the decision to use a four category system was a sound one.[7]

Unfortunately, the 1965-66 findings were not replicated by the 1966-67 data. For factor P, which was the only significant factor at Trenton State

[7]As a further test of our four counselling category decision, we ran a second analysis of variance for the 1965-66 data, using a two category system. This involved collapsing Categories 1, 2, and 3 into one category (counselling) and maintaining Category 0. No factors were significant at any of the schools, and this reinforced our previous assumption that the four category group was more informative.

College, Category 2 had the lowest mean, but Category 0 was highest (instead of Category 3). Neither of the two significant factors for Utah State University (F- and M) were consistent with respect to the rank order of category means. For F-, Category 3 was highest and Category 2 lowest, while for M Category 2 was highest and Category 3 lowest.

Table 4-9

All Schools - 1966-67:
Counselling Category Means for
Significant SORT Factors

School	Trenton State		Utah State	
Factor	P		F-	
	Category	Means	Category	Means
	0	174.87	0	38.70
	1	165.67	1	38.03
	2	145.75	2	35.00
	3	151.25	3	48.18
Factor			M	
			0	31.54
			1	29.86
			2	40.88
			3	26.09

In addition, the 1966-67 trend factors were also inconsistent. Factors M and H for Potsdam State College did not parallel each other or the 1965-66 data. Factor W (Trenton State College) did not follow either factor P or the 1965-66 results. No consistent pattern of category means could be established among the Utah State University trend factors (W, FM, CF, and A). There was clearly a marked difference between the 1965-66 and 1966-67 data with respect to the category means.

But to repeat a point made earlier, the overall number of significant and trend results (N = 18) indicated that the SORT has potential. Aside from M, the lack of factor replications within each school was a serious question that cannot be presently answered. But the stable differences in the pattern of category means for the 1965-66 data led to the assumption that strong counselling practices existed at each institution, which differentially effected the student population (as defined by the SORT) with respect to the number of counselling visits.

Furthermore, it was impossible to explain just why a specific factor was significant or indicative of a trend at a given institution.[8] Moreover, the lack of factor replication made it impossible to assign specific factor characteristics to the various counselling groups at each school.

Frequency of Response-Items

One of the discriminative indices proposed for this study was the frequency of the specific response-items. This was based on the assumption that the frequencies associated with the response-item would have discriminative value. The 30 response-items for each blot were ranked by frequency within the four counselling categories. (The specific response-item frequencies are given in Appendix A as Tables A-7 to A-12.)[9]

Rank-difference correlations (Spearman rhos) were computed between all possible pairs of categories within each blot for each school. The 1965-66 results are given in Tables 4-10 to 4-12.[10]

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[8]Stone's (1958) traits were dropped as possible discriminative indices between counselling categories. Since the traits were derived from the raw factor scores it was felt the traits would contribute nothing except to increase: (1) the complexity of analyses, and (2) the possibility of chance findings.

[9]The term "rank" as used in the tables refers to the general position of order of the given item.

Table 4-10

Potsdam State College - 1965-66:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs by Response-Item Frequency

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.93**	.96**	.95**	.95**	.95**	.94**
Blot 2	.81**	.95**	.90**	.83**	.91**	.89**
Blot 3	.94**	.89**	.88**	.91**	.90**	.95**
Blot 4	.93**	.93**	.91**	.94**	.92**	.89**
Blot 5	.96**	.95**	.96**	.94**	.94**	.97**
Blot 6	.93**	.92**	.94**	.96**	.95**	.94**
Blot 7	.90**	.93**	.90**	.87**	.88**	.95**
Blot 8	.96**	.94**	.88**	.94**	.87**	.93**
Blot 9	.80**	.91**	.85**	.76**	.82**	.88**
Blot 10	.80**	.98**	.93**	.85**	.88**	.96**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-11

Trenton State College - 1965-66:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs by Response-Item Frequency

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.95**	.80**	.61**	.75**	.59**	.46**
Blot 2	.74**	.61**	.77**	.55**	.44*	.18
Blot 3	.91**	.67**	.37*	.53**	.26	.45*
Blot 4	.76**	.73**	.69**	.74**	.68**	.59**
Blot 5	.92**	.78**	.77**	.70**	.77**	.33
Blot 6	.85**	.77**	.81**	.70**	.67**	.66**
Blot 7	.85**	.73**	.74**	.77**	.66**	.71**
Blot 8	.94**	.55**	.71**	.43*	.63**	.12
Blot 9	.82**	.64**	.33	.52**	.23	.53**
Blot 10	.85**	.78**	.61**	.73**	.66**	.48**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-12

Utah State University - 1965-66:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs by Response-Item Frequency

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.79**	.79**	.94**	.65**	.74**	.76**
Blot 2	.60**	.65**	.79**	-.38*	.38*	.65**
Blot 3	.77**	.24	.84**	.36*	.71**	.27
Blot 4	.66**	.67**	.90**	.60**	.58**	.59**
Blot 5	.82**	.74**	.96**	.80**	.81**	.66**
Blot 6	.75**	.54**	.90**	.50**	.61**	.38*
Blot 7	.78**	.54**	.90**	.51**	.77**	.46**
Blot 8	.77**	.68**	.91**	.39*	.82**	.54**
Blot 9	.47**	.52**	.83**	.29	43*	.38*
Blot 10	.78**	.79**	.92**	.52**	.73**	.81**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

The pattern for all schools was one of uniformly high positive correlations. There were nine non-significant rhos; six at Trenton State College and three at Utah State University. Of the three at Utah State University, one was significant and negative (Blot 2, category pairs 1-2). Regardless of counselling category, Ss did not differ with respect to the rank order assigned to the response-items on the basis of frequency.

Tables 4-13 to 4-15 present the data for 1966-67.

For the 1966-67 data there were four non-significant rhos; all at Trenton State College. Of these four, two were negative. The remainder (N = 116) were positive and significant. The data for both years were comparable; response-item frequency could not be used to discriminate between the various counselling categories.

Mean Choice Intensity Scores

The second discriminative index proposed in this study was based on the mean intensity scores of the specific response-item. This now appeared to be critical for the following reasons: (1) the presence of 18 significant and trend findings between the weighted SORT factors and the counselling categories, and (2) the pattern of positive and highly significant correlations between the counselling category pairs based on the response-item frequencies. That is, it was assumed that while Ss in the various counselling categories were not necessarily selecting different

[10]It might be argued that differences in frequency could be a function of the specific triad. To test this assumption a chi-square analysis was made for the four counselling categories within each triad of responses for each school. There were 17 significant results out of a total of 300 chi-squares. No attempt was made to assess the implications of these findings since the number of significant results approximated chance.

Table 4-13

Potsdam State College - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs by Response-Item Frequency

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.93**	.89**	.82**	.94**	.89**	.84**
Blot 2	.72**	.62**	.45*	.66**	.66**	.52**
Blot 3	.89**	.88**	.84**	.90**	.89**	.78**
Blot 4	.91**	.86**	.69**	.93**	.76**	.80**
Blot 5	.95**	.94**	.87**	.99**	.88**	.87**
Blot 6	.88**	.80**	.76**	.90**	.85**	.66**
Blot 7	.88**	.83**	.62**	.83**	.76**	.58**
Blot 8	.84**	.80**	.65**	.92**	.77**	.65**
Blot 9	.81**	.72**	.52**	.89**	.60**	.52**
Blot 10	.89**	.95**	.86**	.93**	.79**	.86**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-14

Trenton State College - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs by Response-Item Frequency

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.85**	.82**	.80**	.70**	.68**	.77**
Blot 2	.54**	.73**	-.01	.40*	.03	-.17
Blot 3	.86**	.74**	.74**	.77**	.67**	.75**
Blot 4	.68**	.76**	.82**	.61**	.55**	.80**
Blot 5	.79**	.86**	.74**	.78**	.75**	.74**
Blot 6	.63**	.76**	.71**	.64**	.59**	.67**
Blot 7	.68**	.63**	.49**	.48**	.59**	.79**
Blot 8	.74**	.92**	.78**	.71**	.79**	.87**
Blot 9	.65**	.78**	.49**	.76**	.32	.48**
Blot 10	.74**	.82**	.73**	.60**	.62**	.77**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-15

Utah State University - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs by Response-Item Frequency

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.95**	.98**	.89**	.93**	.84**	.86**
Blot 2	.86**	.80**	.92**	.74**	.81**	.68**
Blot 3	.92**	.83**	.65**	.71**	.75**	.38*
Blot 4	.85**	.80**	.80**	.74**	.63**	.56**
Blot 5	.94**	.95**	.90**	.88**	.82**	.81**
Blot 6	.92**	.84**	.75**	.76**	.62**	.61**
Blot 7	.88**	.81**	.86**	.70**	.87**	.72**
Blot 8	.89**	.83**	.83**	.87**	.78**	.68**
Blot 9	.79**	.61**	.82**	.49**	.70**	.62**
Blot 10	.89**	.90**	.71**	.84**	.69**	.57**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

response items, they were differentially weighting the response-items through the use of choice intensity scores.

The mean intensity score for each response-item was derived by adding all the intensity scores assigned to that item within the specific counselling category, and dividing by the frequency. These mean intensity scores were then ranked within each counselling category. Spearman rhos were determined between all possible category pairs based on the rank order of the mean intensity scores. (The specific mean intensity scores are given in the Appendix, Tables A-13 to A-18.)

For Potsdam State College there were six non-significant rhos (all positive) while the rest were positive and significant. However the data for the other two schools showed some interesting trends.

The uniformly high positive pattern of rhos previously noted between frequency and counselling categories broke down at Trenton State College (Table 4-17) and Utah State University (Table 4-18).

For Trenton State College there were 27 positive and significant rhos, and 33 non-significant rhos. Of these 33, four were negative. Although overall there were 56 positive rhos, the absence of significance in over half indicated that Ss were responding differentially to the response-items in terms of choice-intensity scores.

The data for Utah State University (Table 4-18) was even more striking. There were 37 non-significant rhos, of which 13 were negative. Here again, there was a marked difference between the counselling categories with respect to the choice intensity criterion as compared to frequency.

Of course our conjectures are based on the absence of, rather than the presence of, significant findings. That is, the data was characterized by

Table 4-16

Potsdam State College - 1965-66:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs
By Response-Item Mean Choice Intensity Score

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.69**	.14	.16	.28	.48**	.20
Blot 2	.72**	.71**	.64**	.76**	.75**	.78**
Blot 3	.31	.54**	.72**	.73**	.47**	.71**
Blot 4	.90**	.91**	.77**	.81**	.78**	.74**
Blot 5	.72**	.49**	.58**	.62**	.61**	.64**
Blot 6	.71**	.77**	.60**	.70**	.61**	.61**
Blot 7	.60**	.60**	.79**	.32	.55**	.64**
Blot 8	.53**	.56**	.63**	.59**	.45*	.53**
Blot 9	.65**	.62**	.52**	.63**	.65**	.73**
Blot 10	.67**	.41*	.57**	.54**	.52**	.59**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-17

Trenton State College - 1965-66:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs
By Response-Item Mean Choice Intensity Score

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.55**	.35	.62**	.20	.54**	.15
Blot 2	.45**	-.29	.43*	-.27	.11	-.07
Blot 3	.36*	.21	.10	.06	.23	.25
Blot 4	.69**	.38*	.29	.28	.38*	.19
Blot 5	.43*	.39*	.47**	.55**	.45**	.51**
Blot 6	.50**	.25	.25	.27	.14	.24
Blot 7	.53**	.34	.18	.17	-.05	.53**
Blot 8	.38*	.47**	.00	.54**	.25	.08
Blot 9	.50**	.24	.36*	-.01	.38*	.21
Blot 10	.74**	.55**	.36*	.27	.27	.20

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-18

Utah State University - 1965-66:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs
By Response-Item Mean Choice Intensity Score

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.29	.22	.59**	.26	.16	.41*
Blot 2	.42**	-.05	.20	-.09	-.03	.03
Blot 3	.26	-.02	.56**	-.13	.36*	-.11
Blot 4	.55**	.31	.62**	.14	.59**	.41*
Blot 5	.37*	-.09	.29	-.01	.38*	-.28
Blot 6	.29	.16	.48**	.17	.19	.54**
Blot 7	.43*	.56**	.60**	.30	.09	.43*
Blot 8	.23	-.25	.48**	.02	.52**	-.03
Blot 9	.38*	.24	.47**	.26	-.05	.31
Blot 10	.41*	.37*	.34	.15	.21	-.19

Note - df = 30 - 2 = 28.
*P <.05.
**P <.01.

the lack of significant positive correlations, rather than the presence of significant negative correlations.

One possible explanation for the pattern of the non-significant correlations at Trenton State College and Utah State University was the relatively small number of Ss in the counselling categories, as compared to Potsdam State College. Potsdam State College, with larger counselling category frequencies, showed roughly the same correlational pattern for choice intensity as for frequency.

The 1966-67 data helped resolve this question. The results are given in Tables 4-19 to 4-21.

For Potsdam State College there were 23 non-significant rhos (one negative), which was a marked departure from the previous year (four non-significant). This was in line with the previous assumption that the choice intensity score was a sensitive indicator of counselling category differences.

However, the basic question remained whether or not the pattern of non-significance was a statistical function of the small counselling category frequencies, or represented an experimental finding.

The climatic conditions that led to the smaller 1966-67 Trenton State College sample size inadvertently helped clarify matters. Although the counselling category frequencies were smaller in comparison to the previous year, there were 27 non-significant rhos, of which three were negative. This is somewhat less than the previous year (although hardly significant), but if smaller category frequencies were solely responsible for the absence of positive significant correlations, then the number of non-significant and negative correlations should have increased considerably. This did not happen.

Table 4-19

Potsdam State College - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs
By Response-Item Mean Choice Intensity Score

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.68**	.29	.61**	.54**	.34	.28
Blot 2	.35	.51**	.21	.74**	.32	.86**
Blot 3	.26	.44*	.23	.56**	.23	.32
Blot 4	.83**	.71**	.47**	.75**	.61**	.48**
Blot 5	.38*	.61**	.36*	.46**	.31	.48**
Blot 6	.58**	.40*	.45*	.46**	.64**	.33
Blot 7	.62**	.21	-.16	.49**	.13	.26
Blot 8	.22	.24	.38*	.57**	.33	.49**
Blot 9	.42*	.10	.28	.53**	.32	.13
Blot 10	.68**	.42*	.63**	.63**	.44*	.43*

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-20

Trenton State College - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs
By Response-Item Mean Choice Intensity Score

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	-.14	.29	.01	.42*	.30	.38*
Blot 2	.48**	.49**	.41*	.49**	.07	.02
Blot 3	.43*	.66**	.34	.54**	.70**	.61**
Blot 4	.43*	.64**	.28	.42*	.14	.16
Blot 5	.38*	.45*	.18	.68**	.55**	.67**
Blot 6	.44*	.36*	.04	.24	.08	.30
Blot 7	.58**	.36*	.36*	.66**	.31	.29
Blot 8	.54**	.51**	.17	.51**	.20	.63**
Blot 9	.29	.17	.25	.24	-.05	-.20
Blot 10	.56**	.67**	.60**	.26	.23	.48**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-21

Utah State University - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Counselling Category Pairs
By Response-Item Mean Choice Intensity Score

	Category Pairs					
	0-1	0-2	0-3	1-2	1-3	2-3
Blot 1	.67**	.55**	.06	.45*	-.22	.01
Blot 2	.54**	.22	.07	.56**	.29	.07
Blot 3	.52**	.44*	.34	.17	.25	.02
Blot 4	.67**	.74**	.20	.43*	.37*	.32
Blot 5	.30	.43*	.47**	.68**	.40*	.35
Blot 6	.42*	.19	.50**	.25	.42*	.22
Blot 7	.69**	.50**	.30	.74**	.34	.36*
Blot 8	.54**	.59**	.49**	.29	.27	.38*
Blot 9	.64**	.64**	.53**	.35	.27	.28
Blot 10	.43*	.17	.56**	.55**	.41*	.37*

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

On the other hand, the number of Ss in the counselling categories increased at Utah State University. There were 25 non-significant rhos (one negative), which was a decrease from the previous year. This would support the smaller counselling category frequency hypothesis, although the number of non-significant rhos was still considerably above the level found for the response-item frequencies.

Therefore, while it was impossible to reject the small counselling category frequency assumption unequivocally, the data for the two-year period indicated that differentiation among the response-items was clearly a function of the choice intensity score rather than frequency. A more direct test became necessary.

Relationship Between Choice Intensity Scores and Frequency

As a direct check, rhos were derived within each counselling category between the rank orders based on intensity scores and frequencies. It was assumed previously that the differences in counselling category means had to be a function of the choice intensity scores, since the item frequencies were essentially similar across all counselling categories.

Tables 4-21 to 4-23 give the 1965-66 data.

For Potsdam State College there were 33 non-significant rhos, of which three were negative.[11] The lack of an overall pattern of positive and significant rhos indicated once again the differential effects of the intensity measure. That is, the Ss were not automatically assigning the highest values to all items selected.

[11]A positive relationship indicated that the more frequently chosen items were assigned higher choice intensity scores; a negative relationship indicated the reverse. The trend was definitely toward positive relationships.

Table 4-22

Potsdam State College - 1965-66:
Rank-Difference Correlation Coefficients (Rhos)
Between Frequency and Mean Choice Intensity
Within the Same Category

	Category Pairs			
	0-0	1-1	2-2	3-3
Blot 1	-.05	.29	.19	.35
Blot 2	.23	.31	.10	.20
Blot 3	-.01	.43*	.41*	.13
Blot 4	.12	.05	.08	.11
Blot 5	.37*	.16	.20	.16
Blot 6	.36*	.28	.20	-.13
Blot 7	.26	.60**	.10	.22
Blot 8	.45*	.31	.20	.35
Blot 9	.14	.23	.06	.07
Blot 10	.28	.05	.20	.42*

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-23

Trenton State College - 1965-66:
Rank-Difference Correlation Coefficients (Rhos)
Between Frequency and Mean Choice Intensity
Within the Same Category

	Category Pairs			
	0-0	1-1	2-2	3-3
Blot 1	.51**	.69**	.50**	.76**
Blot 2	.31	-.02	.64**	.65**
Blot 3	.31	.50**	.51**	.71**
Blot 4	.07	.37*	.38*	.66**
Blot 5	.49**	.64**	.72**	.73**
Blot 6	.24	.51**	.57**	.66**
Blot 7	.26	.16	.68**	.57**
Blot 8	.39*	.61**	.69**	.73**
Blot 9	.34	.28	.50**	.64**
Blot 10	.26	.37*	.56**	.52**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-24

Utah State University - 1965-66:
Rank-Difference Correlation Coefficients (Rnos)
Between Frequency and Mean Choice Intensity
Within the Same Category

	Category Pairs			
	0-0	1-1	2-2	3-3
Blot 1	.37*	.76**	.70**	.37*
Blot 2	.26	.40*	.67**	.06
Blot 3	.43*	.73**	.80**	.19
Blot 4	.22	.44*	.64**	.17
Blot 5	.36*	.59**	.76**	.28
Blot 6	.08	.59**	.65**	.14
Blot 7	.45*	.52**	.79**	-.04
Blot 8	.39*	.33	.52**	.20
Blot 9	.29	.46**	.70**	.32
Blot 10	.26	.58**	.62**	.19

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Trenton State College had 10 non-significant rhos, with one negative. Utah State University had 15 non-significant rhos, with one negative. Of a total of 120 rhos, 62 were positive and significant, 53 positive and non-significant, and five non-significant and negative. The data indicated Ss in the different categories were responding differentially to the response-items in terms of choice intensity. This was clearly established at Potsdam State College, and to a lesser extent at Utah State University and Trenton State College.

Tables 4-25 to 4-27 list the 1966-67 data.

Potsdam State College had 25 non-significant rhos (three negative), Trenton State College had eight non-significant rhos (two negative), while Utah State University had 18 non-significant rhos. Of a total of 120 rhos 69 were significant and positive, 46 were positive and non-significant, and five were negative and non-significant. The data for both years were comparable.

There was further experimental evidence for the hypothesis that choice intensity scores were critical in differentiating among the counselling categories. There are some interesting parallel trends between the data in Table 4-7 and the results in Tables 4-22 to 4-27. A comparison of the 1965-66 and 1966-67 Potsdam State College results showed a decrease both in the number of non-significant rhos (33 to 25), and significant and trend SORT factors (from four to two). Utah State University showed an increase of 15 to 18 in the number of non-significant rhos, and simultaneously the number of significant and trend SORT factors increased from zero to six. Trenton State College decreased slightly in the number of non-significant rhos (from 10 to eight), and the number of significant and trend factors decreased from four to two.

Table 4-25

Potsdam State College - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Frequency and Mean Choice Intensity
Within the Same Category

	Category Pairs			
	0-0	1-1	2-2	3-3
Blot 1	.38*	.23	.04	.58**
Blot 2	.44*	.15	.10	.63**
Blot 3	.28	.36*	.50**	.56**
Blot 4	.32	.06	.16	.32
Blot 5	.24	.11	.59**	.60**
Blot 6	-.02	.26	.28	.38*
Blot 7	-.09	.38*	-.01	.45*
Blot 8	.13	.47**	.57**	.39*
Blot 9	.05	.08	.02	.17
Blot 10	.27	.08	.04	.30

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-26

Trenton State College - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Frequency and Mean Choice Intensity
Within the Same Category

	Category Pairs			
	0-0	1-1	2-2	3-3
Blot 1	-.02	.71**	.63**	.77**
Blot 2	.35	.73**	.58**	.67**
Blot 3	.41*	.78**	.36*	.70**
Blot 4	.22	.64**	.37*	.55**
Blot 5	.25	.65**	.61**	.78**
Blot 6	.12	.45*	.23	.73**
Blot 7	-.10	.64**	.44*	.66**
Blot 8	.48**	.58**	.79**	.57**
Blot 9	.39*	.71**	.35	.60**
Blot 10	.49**	.63**	.60**	.59**

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

Table 4-27

Utah State University - 1966-67:
Rank-Difference Correlation Coefficients (Rhos)
Between Frequency and Mean Choice Intensity
Within the Same Category

	Category Pairs			
	0-0	1-1	2-2	3-3
Blot 1	.52**	.51**	.62**	.24
Blot 2	.29	.16	.32	.21
Blot 3	.37*	.37*	.51**	.03
Blot 4	.27	.18	.37*	.45*
Blot 5	.19	.72**	.67**	.46**
Blot 6	.42*	.72**	.51**	.29
Blot 7	.25	.45*	.65**	.19
Blot 8	.55**	.16	.47**	.32
Blot 9	.37*	.35	.32	.37*
Blot 10	.23	.58**	.29	.40*

Note - df = 30 - 2 = 28.
*P<.05.
**P<.01.

We are hardly dealing here with a simple monotonic relationship, but it appeared that to the extent Ss made maximum use of the choice intensity scale, the SORT differentiated between and within counselling and non-counselling groups. The direct comparison of frequency and mean intensity rank orders within the same category bore this out.[12]

The SORT, as modified by the choice intensity techniques, appeared to have strong possibilities as a screening device.

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[12]It must be remembered that the choices based on frequency were essentially uniform across all categories. The lack of the same uniform positive pattern for the frequency-choice intensity relationships indicated that within the same category (and essentially similar frequencies) Ss were assigning choice intensity scores differentially.

Chapter 5

Summary and Conclusions

The general purpose of this study was to evaluate the potential of the SORT for predetermining which students would eventually seek counselling help. Specifically, the project involved: (1) modification of the SORT by means of a choice-intensity technique; (2) classification of Ss into those who sought counselling help and those who did not; and (3) construction of discriminative indices for the SORT based on the magnitude of the weighted factors, as well as the frequency and mean choice intensity scores of the specific response-items.

Freshmen Ss at Potsdam State College, Trenton State College, and Utah State University were tested in 1965 and again in 1966. During the year following the testing, counselling personnel at each of these schools kept records of student visitations. Ss were classified into the following counselling categories:

Category 0 - no visits

Category 1 - one visit

Category 2 - two visits

Category 3 - three or more visits

Conclusions

Summary of Data Analysis

The data for each school was analyzed separately for each year. The results were as follows:

(1) The choice intensity technique was a reliable measure. Based on a 1965 one week test - retest sample of Utah State University for those

response-items chosen on both administrations, the average product-moment correlation of the choice intensity scores for all Ss was .55 (P<.001).

(2) An analysis of variance of the SORT factors by counselling groups yielded (for both years) eight significant factors: (Dd, F, S, M (twice), H, F-, and P). Arbitrarily considering an F ratio of 2.00 or greater as indicative of a trend, gave 10 additional findings: (W (twice), D, S, F, M, FM, CF, A, and H). Of the 15 SORT factors, 12 were either significant and/or indicative of a trend. Only one factor, M, was significant or in the trend category at all three schools. No factor repeated itself at the same school.

(3) For the 1965-66 data, the rank order of counselling category means was consistent for both the significant and trend factors within the same school. This finding was not replicated by the 1966-67 data.

(4) There were no differences between counselling categories based on the rank order of response-item frequencies. The pattern was uniformly one of highly positive correlation.

(5) The choice intensity measure appeared to yield differences between the counselling categories. The pattern observed in (4) broke down. There was a significant increase in the number of non-significant and negative rhos. Based on rhos computed between the rank orders for frequency and choice intensity scores within the same category, the number of significant and trend SORT factors was negatively related to the number of positive frequency-choice intensity rhos. This indicated that while Ss were choosing essentially the same response-items across all counselling categories, they were differentially assigning choice intensity scores.

Significance of Project

It would appear that the modified choice intensity SORT has some discriminative value for Ss that eventually seek counselling help. Although the significant and/or trend factors (with the exception of M) did not demonstrate any marked consistency over the two year period, there is reason to believe that definite trends could be established over a longer period of testing. However, the absence of repeated significance for the factors over the two year period made it impossible to assign specific factor characteristics to the counselling populations. Hence the need for an extended testing period.

The most interesting finding was that the SORT factor significances were based primarily on differences within the counselling groups, rather than between the counselling and non-counselling groups. Furthermore, the factor patterns varied considerably between the schools, which bore out the earlier assumptions of school differences with respect to counselling practices as well as school populations.

Implications for Future Research

The definition of a counselling visit in this study was a broad one, which ignored the content of the visit. Still, the presence of significant findings and the between school differences indicated that there may be environmental factors differentially encouraging and/or suppressing visitations at the schools. The nature of these environmental factors is worth further investigation.

The choice intensity scale appeared to be the major factor in sensitizing the SORT to the various counselling groups. Modifications in the testing procedure might encourage greater flexibility in usage of the choice intensity scale.

Sex differences were not measured in this study because of the small counselling frequencies. Larger samples, where sex differences could be analyzed, might prove useful.

In summary the study has demonstrated the discriminative potential of the SORT and an expanded testing program is warranted.

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Appendixes

Appendix A

Data Tables

Table A-1

Potsdam State College 1965-66:
Analysis of Variance of SORT Factors by
Counselling Categories

Factor Source	W DF	SS	MS	F	Counselling Category	Factor Means
Total	227	104395.50			0	109.72
Treatment	3	2536.80	845.60	1.86	1	105.37
Error	224	101858.70	454.73		2	114.59
					3	110.38
Factor	**D**					
	227	285975.10			0	173.83
	3	8143.00	2714.33	2.19	1	182.98
	224	277832.10	1240.32		2	167.07
					3	169.90
Factor	**Dd**					
	227	46227.81			0	42.59
	3	1719.71	573.24	2.88*	1	45.49
	224	44508.10	198.70		2	38.80
					3	39.01

(Table continued on next page.)

Factor / Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	227	28272.25			0	41.11
Treatment	3	892.85	297.62	2.43	1	43.08
Error	224	27379.40	122.23		2	37.71
					3	40.13
Factor F						
	227	128671.50			0	91.28
	3	6870.60	2290.20	4.21**	1	98.51
	224	121800.90	543.75		2	83.34
					3	89.87
Factor F-						
	227	34014.79			0	38.07
	3	48.32	16.10	.11	1	37.94
	224	33966.47	151.64		2	37.13
					3	37.02
Factor M						
	227	37706.65			0	32.09
	3	234.07	78.02	.47	1	29.98
	224	37472.58	167.29		2	32.00
					3	30.03

(Table continued on next page.)

Factor Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	227	26395.04			0	37.65
Treatment	3	237.85	79.28	.68	1	40.04
Error	224	26157.19	116.77		2	39.69
					3	37.93
Factor	FC					
	227	27666.67			0	41.80
	3	90.68	30.23	.25	1	42.73
	224	27575.99	123.11		2	43.50
					3	42.31
Factor	CF					
	227	18799.63			0	24.37
	3	77.52	25.84	.31	1	22.80
	224	18722.11	83.58		2	22.90
					3	23.44
Factor	Fch					
	227	56495.67			0	60.87
	3	412.31	137.44	.55	1	61.84
	224	56083.36	250.37		2	61.90
					3	58.69

(Table continued on next page.)

Factor A Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	227	149863.80			0	118.04
Treatment	3	2423.70	807.90	1.23	1	121.67
Error	224	14744.01	658.21		2	114.09
					3	113.51
Factor H						
	227	91196.10			0	73.43
	3	526.50	175.50	.43	1	72.47
	224	90669.60	404.78		2	70.61
					3	69.43
Factor P						
	227	230403.40			0	184.76
	3	514.50	171.50	.17	1	184.39
	224	229888.90	1026.29		2	184.20
					3	181.05
Factor O						
	227	23320.97			0	19.52
	3	190.99	63.66	.62	1	21.12
	224	23129.98	103.26		2	18.79
					3	18.90

*P<.05.
**P<.01.

Table A-2

Trenton State College 1965-66:
Analysis of Variance of SORT Factors by
Counselling Categories

Factor / Source	W DF	SS	MS	F	Counselling Category	Factor Means
Total	226	131618.40			0	107.09
Treatment	3	1487.50	495.93	.88	1	111.76
Error	233	130130.60	558.50		2	105.33
					3	124.25
Factor	D					
	226	297215.40			0	170.48
	3	2169.70	723.23	.57	1	168.18
	233	295045.70	1266.29		2	169.00
					3	193.25
Factor	Dd					
	226	47076.90			0	40.11
	3	426.34	142.11	.71	1	41.82
	233	46650.56	200.22		2	37.17
					3	49.25

(Table continued on next page.)

Factor Source	S DF	SS	MS	F	Counselling Category	Factor Means
Total	226	47076.90			0	41.00
Treatment	3	1718.00	572.67	3.78*	1	42.18
Error	233	35265.57	151.35		2	30.67
					3	57.25
Factor	F					
	226	128897.30			0	88.75
	3	3589.80	1196.60	2.22	1	86.94
	233	125307.50	537.80		2	75.00
					3	113.25
Factor	F-					
	226	32386.66			0	37.83
	3	515.15	171.72	1.26	1	36.00
	233	31871.51	136.79		2	46.33
					3	40.50
Factor	M					
	236	43705.58			0	31.04
	3	1440.75	480.25	2.65*	1	36.41
	233	42264.83	181.39		2	28.33
					3	46.75

(Table continued on next page.)

Factor Source	FM DF	SS	MS	F	Counselling Category	Factor Means
Total	236	27190.06			0	36.91
	3	371.19	123.73	1.07	1	37.47
	233	26818.87	115.10		2	31.67
					3	44.00
Factor	FC					
	236	30144.92			0	41.63
	3	75.77	25.26	.20	1	41.59
	233	30069.15	129.05		2	42.00
					3	46.00
Factor	CF					
	236	18530.06			0	22.82
	3	293.23	97.74	1.25	1	25.00
	233	18236.83	78.27		2	28.33
					3	19.50
Factor	Fch					
	236	49291.04			0	58.69
	3	24.65	8.22	.04	1	58.35
	233	49266.39	211.44		2	59.83
					3	56.75

(Table continued on next page.)

Factor	A					
Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	236	124325.30			0	109.66
Treatment	3	1321.90	440.63	.83	1	112.94
Error	233	123003.40	527.91		2	109.33
					3	127.00
Factor	H					
	236	99295.00			0	74.62
	3	4164.20	1388.07	3.40*	1	81.47
	233	95127.80	408.27		2	56.67
					3	93.75
Factor	P					
	236	255478.40			0	177.32
	3	5184.10	1728.03	1.61	1	186.65
	233	250294.30	1074.22		2	169.67
					3	207.25
Factor	O					
	236	21938.77			0	19.43
	3	235.13	78.38	.84	1	16.47
	233	21703.64	93.15		2	17.83
					3	14.50

*P<.05.
**P<.01.

Table A-3

Utah State University 1965-66:
Analysis of Variance of SORT Factors by
Counselling Categories

Factor Source	W DF	SS	MS	F	Counselling Category	Factor Means
Total	250	154220.20			0	108.58
Treatment	3	580.80	193.60	.31	1	100.40
Error	247	153639.40	622.02		2	110.33
					3	104.80
Factor	D					
	250	335753.70			0	163.76
	3	3352.90	1117.63	.83	1	165.20
	247	332400.80	1345.75		2	195.33
					3	168.85
Factor	Dd					
	250	57168.65			0	41.10
	3	360.40	120.13	.52	1	44.60
	247	56808.25	229.99		2	45.67
					3	44.85

(Table continued on next page.)

Factor Source	S DF	SS	MS	F	Counselling Category	Factor Means
Total	250	35640.36			0	40.43
Treatment	3	179.81	59.94	.42	1	45.20
Error	247	25460.55	143.56		2	45.33
					3	40.65
Factor	F					
	250	173314.60			0	86.86
	3	1059.80	353.27	.51	1	96.00
	247	172254.80	697.39		2	99.67
					3	90.35
Factor	F-					
	250	35812.75			0	36.40
	3	640.00	213.33	1.50	1	29.40
	247	35172.75	142.40		2	47.33
					3	37.80
Factor	M					
	250	47970.63			0	30.46
	3	312.78	104.26	.54	1	26.60
	247	47657.85	192.95		2	39.33
					3	30.85

(Table continued on next page.)

Factor	FM					
Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	250	33395.75			0	38.74
Treatment	3	254.89	84.96	.63	1	45.40
Error	247	33140.86	134.17		2	42.33
					3	39.35
Factor	FC					
	250	32563.94			0	38.99
	3	58.56	19.52	.15	1	38.80
	247	32505.38	131.60		2	35.33
					3	39.95
Factor	CF					
	250	16195.73			0	24.80
	3	132.59	44.20	.68	1	21.00
	247	16063.14	65.03		2	27.67
					3	23.35
Factor	Fch					
	250	67242.90			0	57.19
	3	106.94	35.65	.13	1	53.00
	247	67135.96	271.80		2	59.67
					3	58.85

(Table continued on next page.)

Factor	A					
Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	250	162664.70			0	108.65
Treatment	3	278.70	92.90	.14	1	112.00
Error	247	162386.00	657.43		2	117.33
					3	109.30
Factor	H					
	250	111602.20			0	72.19
	3	1683.30	561.10	1.26	1	60.00
	247	109918.90	445.02		2	89.67
					3	71.00
Factor	P					
	250	274484.80			0	176.85
	3	2371.50	790.50	.72	1	167.80
	247	272113.30	1101.67		2	200.33
					3	172.85
Factor	O					
	250	32304.55			0	19.50
	3	41.99	14.00	.11	1	21.00
	247	32262.56	130.62		2	22.00
					3	20.40

*P<.05.
**P<.01.

Factor Source	S DF	SS	MS	F	Counselling Category	Factor Means
Total	246	29968.39			0	45.32
Treatment	3	336.15	112.05	.92	1	41.22
Error	243	29632.24	121.94		2	42.12
					3	43.70
Factor	F					
	246	128474.70			0	97.74
	3	301.70	100.57	.19	1	94.21
	243	128173.00	527.46		2	93.00
					3	96.20
Factor	F-					
	246	37606.83			0	39.79
	3	497.90	165.97	1.09	1	38.91
	243	37108.93	152.71		2	42.92
					3	35.80
Factor	M					
	246	46902.09			0	39.58
	3	1320.85	440.28	2.35	1	33.88
	243	45581.24	187.58		2	29.00
					3	30.80

(Table continued on next page.)

Factor / Source	FM DF	SS	MS	F	Counselling Category	Factor Means
Total	246	29648.62			0	36.79
Treatment	3	378.58	126.19	1.05	1	39.91
Error	243	29270.04	120.45		2	36.62
					3	39.60
Factor	FC					
	246	26849.12			0	42.53
	3	629.41	209.80	1.94	1	39.61
	243	26219.71	107.90		2	37.85
					3	33.30
Factor	CF					
	246	17389.11			0	25.10
	3	32.63	108.77	.15	1	23.79
	243	17356.48	714.26		2	23.81
					3	23.40
Factor	Fch					
	246	48984.79			0	54.74
	3	321.80	107.27	.54	1	56.99
	243	48662.99	200.26		2	53.92
					3	58.60

(Table continued on next page.)

Factor	A					
Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	246	128069.90			0	110.95
Treatment	3	915.50	305.17	.58	1	114.71
Error	243	127154.40	523.27		2	113.81
					3	106.00
Factor	H					
	246	98051.20			0	83.74
	3	2432.60	810.87	2.06	1	77.01
	243	95618.60	393.49		2	70.58
					3	69.60
Factor	P					
	246	225976.70			0	189.32
	3	4656.40	1552.13	1.70	1	178.05
	243	221320.30	910.78		2	170.50
					3	169.20
Factor	O					
	246	30768.36			0	22.68
	3	225.78	75.26	.60	1	21.47
	243	30542.58	125.69		2	24.50
					3	21.30

*P<.05.
**P<.01.

Table A-5

Trenton State College 1966-67:
Analysis of Variance of SORT Factors by
Counselling Categories

Factor / Source	W / DF	SS	MS	F	Counselling Category	Factor Means
Total	174	93043.50			0	104.34
Treatment	3	3346.70	1115.57	2.13	1	117.67
Error	171	89696.80	524.54		2	89.13
					3	93.50
Factor	**D**					
	174	199559.60			0	166.89
	3	23094.00	769.80	.67	1	152.33
	171	197250.20	1153.51		2	154.50
					3	167.75
Factor	**Dd**					
	174	35289.74			0	40.52
	3	232.72	77.57	.38	1	40.17
	171	35057.02	205.01		2	35.50
					3	43.50

(Table continued on next page.)

Factor Source	FM DF	SS	MS	F	Counselling Category	Factor Means
Total	174	18097.72			0	37.51
Treatment	3	96.76	32.25	.31	1	36.83
Error	171	18000.96	105.27		2	34.63
					3	34.50
Factor	FC					
	174	24281.64			0	40.54
	3	570.31	190.10	1.37	1	36.17
	171	23711.33	138.66		2	35.25
					3	32.00
Factor	CF					
	174	12380.31			0	21.73
	3	418.38	139.45	1.99	1	30.17
	171	11961.93	69.95		2	22.88
					3	21.50
Factor	Fch					
	174	40946.78			0	56.79
	3	1041.87	347.29	1.49	1	66.17
	171	39904.91	233.36		2	49.50
					3	52.00

(Table continued on next page.)

Factor Source	S DF	SS	MS	F	Counselling Category	Factor Means
Total	174	25927.34			0	39.20
Treatment	3	432.99	144.33	.97	1	32.17
Error	171	25494.35	149.09		2	35.63
					3	34.75
Factor	F					
	174	92790.90			0	87.69
	3	1221.50	407.17	.76	1	76.50
	171	91569.40	535.49		2	81.25
					3	94.50
Factor	F-					
	174	25730.31			0	36.98
	3	193.86	64.62	.43	1	34.00
	171	25536.45	149.34		2	33.25
					3	40.00
Factor	M					
	174	29207.24			0	30.51
	3	504.03	168.01	1.00	1	30.33
	171	28703.21	167.86		2	22.38
					3	30.25

(Table continued on next page.)

Factor	A					
Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	174	93954.50			0	111.14
Treatment	3	2658.40	886.13	1.66	1	101.67
Error	171	91296.10	533.90		2	94.88
					3	102.75
Factor	H					
	174	63710.20			0	73.45
	3	961.15	320.38	.87	1	80.50
	171	62749.05	366.95		2	65.38
					3	67.25
Factor	P					
	174	185221.80			0	174.87
	3	8688.60	2846.20	2.81*	1	165.67
	171	176533.20	1032.36		2	145.75
					3	151.25
Factor	O					
	174	17192.88			0	18.79
	3	43.23	14.41	.14	1	21.33
	171	17149.65	100.29		2	19.75
					3	18.75

*P<.05.
**P<.01.

Table A-6

Utah State University 1966-67:
Analysis of Variance of SORT Factors by
Counselling Categories

Factor Source	W DF	SS	MS	F	Counselling Category	Factor Means
Total	236	109455.80			0	106.30
Treatment	3	2861.90	953.97	2.09	1	100.76
Error	233	106593.90	457.48		2	116.38
					3	100.55
Factor	D					
	236	283349.00			0	169.19
	3	5433.00	181.10	1.52	1	166.14
	233	277916.00	119.28		2	172.13
					3	190.91
Factor	Dd					
	236	44202.82			0	39.14
	3	953.68	317.89	1.71	1	43.93
	233	43249.14	185.62		2	44.25
					3	43.00

(Table continued on next page.)

Factor Source	S DF	SS	MS	F	Counselling Category	Factor Means
Total	236	32579.96			0	40.17
Treatment	3	779.31	259.77	1.90	1	43.44
Error	233	31800.65	136.48		2	43.81
					3	35.00
Factor	F					
	236	126881.20			0	85.95
	3	869.50	289.83	.54	1	88.97
	233	126011.70	540.82		2	92.88
					3	85.73
Factor	F-					
	236	34624.46			0	38.70
	3	1217.96	405.99	2.83*	1	38.03
	233	33406.50	143.38		2	35.00
					3	48.18
Factor	M					
	236	40812.92			0	31.54
	3	1795.79	598.60	3.57*	1	29.86
	233	39017.13	167.46		2	40.88
					3	26.09

(Table continued on next page.)

Factor Source	FM DF	SS	MS	F	Counselling Category	Factor Means
Total	236	2542.15			0	38.29
Treatment	3	732.34	244.11	2.30	1	34.10
Error	233	24688.81	105.96		2	40.81
					3	41.73
Factor	FC					
	236	29521.46			0	38.80
	3	20.82	6.94	.06	1	39.21
	233	29500.64	126.61		2	37.81
					3	39.00
Factor	CF					
	236	15814.33			0	24.09
	3	475.87	158.62	2.41	1	23.34
	233	15338.46	65.83		2	24.44
					3	30.64
Factor	Fch					
	236	52892.05			0	57.26
	3	525.16	175.05	.78	1	57.31
	233	52366.89	224.75		2	60.94
					3	63.09

(Table continued on next page.)

Factor	A					
Source	DF	SS	MS	F	Counselling Category	Factor Means
Total	236	117149.40			0	106.53
Treatment	3	3418.00	1139.33	2.33	1	102.03
Error	233	113731.40	488.12		2	112.31
					3	121.18
Factor	H					
	236	83407.40			0	75.85
	3	1842.70	614.23	1.75	1	72.38
	233	81564.70	350.06		2	84.00
					3	69.55
Factor	P					
	236	241069.00			0	176.90
	3	3450.30	1150.10	1.12	1	172.52
	233	237618.70	1019.82		2	190.19
					3	174.18
Factor	O					
	236	29076.23			0	19.80
	3	326.43	108.81	.88	1	19.72
	233	28749.80	123.39		2	15.81
					3	22.45

*P<.05.
**P<.01.

Table A-7

Potsdam State College 1965-66:
Frequency Ranking of Response-Items
By Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	F[b]	R	F	R	F	R	F
1	19	44	19	48	19	68	19	55
2	12	37	12	43	25	54	25	49
3	6	36	25	38	6	54	12	48
4	25	35	2	35	12	52	6	47
5	18	33	6	35	29	49	18	42
6	7	31	18	33	18	49	2	41
7	2	29	29	32	7	43	13	38
8	29	25	7	29	2	36	7	37
9	22	25	13	27	14	33	29	36
10	13	23	22	24	13	31	22	26
11	14	19	9	21	23	28	23	23
12	28	16	14	21	1	28	9	22
13	23	13	23	20	22	28	14	21
14	9	12	17	12	9	23	28	19
15	1	12	28	12	11	16	1	17
16	17	10	27	12	28	16	17	16
17	11	8	1	11	24	14	24	12
18	5	8	5	10	17	13	5	11
19	24	8	30	7	27	13	11	10
20	26	6	24	7	5	9	27	9
21	27	5	16	6	16	8	30	6
22	30	5	4	6	4	7	20	4
23	3	5	11	5	3	6	4	3
24	15	4	3	4	30	5	10	3
25	16	3	15	3	15	5	26	3
26	8	3	10	2	8	4	3	3
27	4	2	21	2	26	3	16	2
28	10	1	20	1	10	2	21	2
29	21	1	26	1	21	1	8	2
30	20	1	8	1	20	1	15	2

[a]R = response-item number.
[b]F = frequency.

(Table continued on next page.)

	Categories							
BLOT NO. 2	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	33	3	31	21	48	16	35
2	21	32	8	28	3	44	15	35
3	16	26	15	28	16	37	21	34
4	15	26	26	26	15	37	3	30
5	26	22	21	26	10	37	10	29
6	9	22	16	26	26	36	24	28
7	24	21	20	23	24	35	8	28
8	5	20	10	23	4	34	25	26
9	25	20	25	23	25	31	5	26
10	10	20	12	22	28	30	26	25
11	12	19	4	22	9	29	29	24
12	4	19	22	19	8	27	12	24
13	28	18	24	19	17	26	9	22
14	8	18	30	19	29	22	4	22
15	13	17	5	18	5	20	20	21
16	29	16	17	17	13	20	22	19
17	17	15	28	16	20	19	17	19
18	23	14	29	15	23	18	30	18
19	20	12	9	15	12	18	28	18
20	30	12	14	14	30	18	2	17
21	22	11	23	13	22	17	1	14
22	2	8	6	11	2	17	23	14
23	11	7	2	10	11	15	14	13
24	6	7	1	10	6	15	13	13
25	7	6	13	9	7	14	6	13
26	1	5	18	8	14	13	7	11
27	18	5	7	8	1	9	27	9
28	27	4	11	6	18	7	11	8
29	14	3	19	2	19	3	18	7
30	19	2	27	2	27	3	19	6

(Table continued on next page)

	Categories							
BLOT NO. 3	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	41	1	48	1	66	1	54
2	27	36	27	38	12	52	27	45
3	22	34	21	37	27	51	30	41
4	8	34	12	32	22	46	12	39
5	21	28	8	31	6	40	22	39
6	12	26	18	30	18	38	6	36
7	4	25	22	29	30	36	18	34
8	30	24	6	28	20	36	8	32
9	13	24	13	24	8	34	21	31
10	18	21	30	21	21	33	13	28
11	17	21	29	19	13	29	20	27
12	20	17	4	17	4	27	17	23
13	6	17	17	16	14	25	14	17
14	11	15	11	16	17	21	15	16
15	15	12	24	15	29	20	4	15
16	29	12	14	14	7	18	7	15
17	14	10	20	14	9	18	9	14
18	24	9	15	13	15	16	11	14
19	28	9	7	13	23	15	25	13
20	9	8	28	11	28	14	23	12
21	25	5	25	9	11	14	29	12
22	26	5	9	7	25	12	5	10
23	10	4	23	6	16	11	24	10
24	16	4	5	5	24	9	28	8
25	5	4	16	5	26	7	10	8
26	7	4	26	4	10	4	3	5
27	2	3	10	3	5	3	16	4
28	23	3	3	2	3	2	26	3
29	3	2	2	1	2	2	19	2
30	19	1	19	0	19	1	2	2

(Table continued on next page.)

BLOT NO. 4	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	35	3	40	3	56	30	50
2	21	32	30	37	30	46	3	49
3	30	29	8	32	5	44	5	41
4	8	25	5	29	22	44	22	36
5	11	24	21	29	8	43	8	32
6	5	24	22	25	21	39	11	31
7	25	24	25	25	25	36	25	31
8	15	23	14	25	15	33	21	30
9	23	22	15	21	11	30	15	30
10	22	22	11	20	14	28	18	27
11	9	18	17	19	17	27	14	26
12	14	17	16	19	26	27	9	21
13	26	17	23	18	20	27	16	21
14	18	16	9	16	18	24	23	21
15	16	15	12	16	12	24	12	20
16	17	15	20	16	9	23	26	19
17	4	13	10	15	16	19	20	18
18	10	12	26	15	23	17	4	14
19	20	11	4	14	10	16	17	13
20	12	10	18	13	28	15	19	13
21	28	9	27	10	4	15	1	11
22	6	9	1	10	6	11	27	11
23	1	8	6	8	29	9	10	10
24	29	8	29	8	13	9	7	8
25	13	6	19	6	24	8	6	6
26	27	5	28	6	1	8	29	6
27	2	3	24	5	27	7	13	5
28	19	3	13	5	2	6	28	5
29	7	3	7	3	19	4	24	4
30	24	2	2	1	7	4	2	1

(Table continued on next page.)

	Categories							
BLOT NO. 5	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	25	45	1	50	1	69	1	59
2	1	44	25	47	25	65	25	57
3	5	36	23	46	23	56	23	49
4	23	33	5	43	7	54	7	42
5	30	32	30	35	30	53	30	41
6	7	31	7	31	5	46	5	37
7	15	24	10	27	19	41	18	31
8	10	21	15	25	18	40	12	31
9	19	20	17	22	10	36	15	28
10	12	19	20	21	13	31	20	28
11	18	19	19	20	15	26	10	26
12	20	16	13	19	12	25	19	24
13	13	15	18	18	17	24	13	24
14	17	15	12	18	20	23	6	22
15	29	14	8	13	6	21	17	16
16	16	12	29	11	29	14	29	16
17	6	10	16	10	8	13	16	12
18	21	10	21	9	14	13	8	12
19	8	10	6	7	24	12	24	10
20	24	9	14	7	11	9	14	9
21	14	7	9	7	21	6	21	9
22	11	6	11	6	16	6	9	7
23	9	5	28	5	4	3	28	4
24	22	4	22	3	9	3	11	4
25	2	2	27	3	28	3	4	2
26	26	1	24	2	27	3	22	2
27	3	0	4	1	26	2	2	2
28	28	0	26	1	22	2	27	2
29	4	0	2	1	2	1	26	1
30	27	0	3	0	3	0	3	0

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	4	35	4	41	4	59	4	48
2	30	34	30	37	9	47	30	46
3	14	33	23	35	23	47	9	44
4	19	32	14	34	30	46	14	38
5	9	30	9	33	14	44	23	35
6	23	29	19	30	16	40	26	32
7	12	25	1	26	19	35	19	31
8	1	23	17	23	1	32	1	30
9	16	21	26	22	26	31	17	28
10	26	20	12	20	10	30	16	27
11	17	18	16	20	3	28	3	25
12	3	18	10	17	12	26	12	25
13	25	14	3	16	15	25	10	25
14	22	13	15	16	25	22	22	23
15	27	12	25	15	17	21	25	23
16	15	12	27	14	21	20	15	20
17	11	11	7	14	27	17	21	20
18	10	10	21	14	22	17	29	12
19	29	9	11	14	7	16	11	11
20	5	9	29	11	20	15	20	10
21	8	8	22	11	11	14	7	10
22	21	8	2	9	29	13	5	8
23	7	8	18	7	28	11	8	7
24	18	7	20	7	2	10	18	6
25	20	6	6	6	18	8	2	6
26	2	5	24	4	5	7	27	6
27	24	4	5	4	8	7	6	5
28	28	3	28	3	24	5	24	3
29	6	2	8	3	6	4	28	3
30	13	1	13	1	13	1	13	3

(Table continued on next page.)

BLOT NO. 7	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	40	18	48	18	65	18	55
2	18	38	1	41	1	54	1	48
3	12	35	12	36	12	53	12	47
4	24	28	5	28	24	47	5	38
5	5	27	14	27	14	35	24	36
6	28	23	24	27	5	31	7	29
7	14	19	9	26	26	31	26	28
8	9	19	20	22	7	30	14	28
9	23	18	26	21	6	30	28	26
10	15	18	23	20	28	29	21	25
11	26	17	29	18	21	28	20	24
12	7	17	28	18	20	26	27	22
13	6	17	19	16	9	24	23	22
14	20	17	27	16	27	24	9	20
15	27	17	11	15	23	22	29	18
16	19	16	7	14	29	21	30	17
17	21	13	30	14	15	21	13	17
18	25	12	25	14	30	20	15	16
19	30	12	15	13	19	16	11	13
20	29	11	6	13	8	16	6	13
21	8	10	21	11	11	16	19	12
22	11	9	8	11	25	15	25	11
23	13	9	4	10	2	14	8	11
24	2	5	13	10	13	14	2	11
25	17	4	2	8	4	9	4	10
26	16	4	22	3	17	3	17	4
27	4	2	3	2	3	2	22	3
28	10	2	17	1	16	2	3	2
29	3	1	16	1	10	1	16	2
30	22	0	10	0	22	1	10	1

(Table continued on next page.)

	Categories							
BLOT NO. 8	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	23	41	23	45	23	68	23	54
2	3	36	3	38	5	53	15	52
3	15	29	5	32	3	50	3	49
4	5	27	15	32	15	49	5	49
5	19	26	30	29	9	46	17	38
6	9	24	9	29	17	40	9	35
7	26	24	17	27	26	36	20	33
8	17	23	19	24	29	34	11	32
9	8	22	26	24	20	34	29	32
10	12	22	16	23	19	31	8	26
11	16	20	11	22	30	27	25	23
12	29	19	12	22	12	27	19	22
13	30	19	8	20	11	27	16	22
14	11	17	20	18	16	25	26	20
15	20	15	27	17	8	23	27	18
16	27	15	29	16	25	20	12	18
17	14	14	14	15	14	20	30	17
18	4	12	4	14	10	16	28	12
19	28	8	2	10	27	14	10	11
20	2	8	25	9	2	13	4	8
21	25	7	21	9	4	10	1	7
22	6	7	10	7	28	9	14	7
23	10	7	28	5	6	7	21	6
24	21	4	22	5	1	7	22	5
25	22	4	6	4	18	5	2	5
26	18	3	13	3	21	5	6	4
27	13	3	1	3	22	2	13	2
28	1	2	18	1	13	1	24	2
29	24	1	7	1	7	1	18	1
30	7	0	24	1	24	0	7	0

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	7	33	17	38	7	51	25	46
2	13	29	25	37	17	50	17	42
3	17	28	7	36	6	47	7	40
4	25	27	24	33	25	43	6	36
5	24	24	28	29	13	41	24	36
6	11	23	21	24	12	37	28	35
7	6	23	13	24	19	36	13	31
8	29	22	11	23	28	31	19	28
9	19	21	2	22	24	31	12	28
10	1	19	19	21	1	27	11	25
11	4	17	6	21	29	26	3	24
12	28	17	4	18	2	25	1	22
13	2	15	3	16	11	23	14	20
14	27	15	14	15	23	21	21	19
15	12	15	10	14	21	21	23	17
16	21	15	1	13	22	18	4	17
17	16	14	27	13	3	18	9	15
18	23	12	12	13	27	18	2	14
19	3	12	30	12	4	16	20	14
20	14	11	15	12	16	16	27	13
21	20	10	22	12	15	15	29	13
22	22	10	5	11	9	14	16	13
23	10	8	16	10	14	14	30	12
24	8	7	9	9	20	13	15	10
25	30	7	29	9	30	13	10	8
26	9	6	8	5	10	10	22	8
27	5	6	20	5	26	8	5	7
28	15	6	23	5	5	7	18	6
29	18	4	18	3	18	4	8	6
30	26	4	26	1	8	4	26	2

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	26	41	8	45	26	64	26	57
2	8	37	26	45	8	58	21	47
3	21	35	4	33	21	52	8	47
4	4	28	21	33	4	47	4	39
5	14	27	2	31	10	44	15	37
6	17	25	10	30	17	42	28	34
7	10	24	28	27	14	41	10	32
8	3	22	15	27	3	38	17	32
9	23	21	23	26	23	36	23	29
10	29	20	17	26	28	30	3	26
11	28	20	14	21	15	27	14	24
12	15	19	18	17	29	27	11	22
13	11	18	24	17	24	21	18	20
14	24	16	30	13	11	19	24	20
15	6	15	19	12	2	18	2	19
16	2	15	12	12	18	15	1	16
17	16	11	6	12	6	15	6	16
18	20	10	29	11	20	14	29	14
19	18	10	3	11	1	14	30	13
20	1	9	11	10	16	13	22	12
21	22	9	1	9	22	13	9	10
22	30	6	16	8	30	13	20	9
23	7	5	22	7	5	8	16	9
24	12	4	20	6	12	7	12	7
25	27	4	5	5	7	6	5	6
26	9	4	25	3	9	6	19	5
27	5	3	9	3	19	4	7	4
28	25	1	13	3	27	4	27	3
29	19	1	7	3	25	2	25	1
30	13	0	27	2	13	2	13	0

Table A-8

Trenton State College 1965-66:
Frequency Ranking of Response-Items
By Category

BLOT NO. 1	Categories							
	0		1		2		3	
Rank	R[a]	F[b]	R	F	R	F	R	F
1	19	187	19	17	12	6	19	4
2	25	162	25	14	19	5	12	4
3	12	159	12	13	18	4	25	4
4	6	152	6	13	7	4	29	4
5	18	128	7	12	14	4	2	3
6	13	123	29	11	6	4	5	3
7	7	122	18	11	22	3	18	3
8	29	115	13	11	2	3	7	2
9	23	109	2	8	25	3	13	2
10	2	101	23	8	29	3	23	2
11	1	90	1	8	27	3	9	2
12	9	75	22	7	9	2	15	1
13	14	68	28	6	5	2	4	1
14	28	68	17	5	17	2	3	1
15	17	64	9	5	1	2	22	1
16	22	64	11	4	13	2	14	1
17	11	39	15	3	28	2	17	1
18	5	37	27	3	24	2	24	1
19	24	33	14	3	23	1	6	0
20	27	28	5	2	3	1	20	0
21	30	22	4	2	30	1	11	0
22	4	19	24	2	20	1	16	0
23	15	17	16	1	16	0	8	0
24	3	17	3	1	4	0	21	0
25	16	15	10	0	10	0	10	0
26	26	14	8	0	8	0	26	0
27	8	11	20	0	11	0	27	0
28	10	9	21	0	21	0	28	0
29	21	9	26	0	26	0	1	0
30	20	9	30	0	15	0	30	0

[a]R = response-item number.
[b]F = frequency.

(Table continued on next page.)

BLOT NO. 2	Categories							
	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	134	26	11	16	6	26	4
2	21	130	3	10	3	6	3	4
3	15	126	21	10	21	6	30	3
4	26	114	9	8	5	4	15	3
5	16	104	15	8	28	4	4	3
6	8	102	5	7	15	4	21	3
7	10	101	23	7	12	4	22	2
8	30	94	30	7	26	3	16	2
9	24	87	12	7	9	3	24	2
10	9	84	14	6	8	3	10	2
11	17	77	24	6	22	2	8	2
12	4	76	6	6	25	2	20	1
13	12	75	17	6	10	2	13	1
14	25	74	8	6	29	2	29	1
15	6	71	16	6	23	2	12	1
16	22	65	28	5	24	2	17	1
17	20	65	18	5	14	1	9	1
18	5	59	11	5	4	1	18	1
19	28	57	10	5	13	1	11	1
20	29	56	29	5	27	1	6	1
21	23	55	20	5	6	1	7	1
22	2	52	4	4	2	0	5	0
23	13	42	22	4	1	0	1	0
24	14	39	1	4	17	0	2	0
25	11	32	25	4	19	0	25	0
26	18	26	7	3	11	0	19	0
27	7	22	2	3	20	0	27	0
28	1	22	13	3	18	0	28	0
29	27	17	19	2	7	0	14	0
30	19	13	27	2	30	0	23	0

(Table continued on next page.)

	Categories							
BLOT NO. 3	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	182	1	17	1	5	1	4
2	27	172	22	15	27	4	12	4
3	22	137	27	14	6	4	21	3
4	18	119	8	11	21	4	4	2
5	6	119	13	10	30	4	9	2
6	12	115	20	9	18	3	18	2
7	8	110	12	9	10	3	7	2
8	13	106	17	9	15	3	30	2
9	20	101	4	8	8	3	29	2
10	21	101	21	8	12	3	24	2
11	30	81	30	7	7	3	26	2
12	28	78	11	7	22	3	6	2
13	11	72	6	7	24	2	27	2
14	17	67	18	6	25	2	14	2
15	4	66	28	6	20	2	17	1
16	7	55	15	4	4	2	16	1
17	14	55	29	4	14	2	13	1
18	15	46	9	4	16	2	20	1
19	29	46	14	3	17	1	23	1
20	9	42	16	2	13	1	15	1
21	24	36	5	2	23	1	22	1
22	23	33	25	2	28	1	3	0
23	5	23	7	2	2	1	19	0
24	25	22	10	1	29	1	2	0
25	10	21	26	1	11	0	25	0
26	2	20	24	1	19	0	10	0
27	16	20	23	1	9	0	5	0
28	26	12	3	0	3	0	28	0
29	3	6	19	0	26	0	11	0
30	19	4	2	0	5	0	8	0

(Table continued on next page.)

BLOT NO. 4	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	151	3	13	30	5	15	3
2	30	130	30	11	3	5	9	3
3	5	118	9	10	17	3	3	3
4	22	118	4	10	4	3	11	3
5	21	115	16	10	8	3	30	3
6	25	111	15	10	21	3	22	3
7	8	98	22	9	22	3	5	2
8	14	98	21	9	11	3	4	2
9	11	91	25	9	9	3	21	2
10	15	86	20	8	14	3	25	2
11	18	77	11	8	25	2	19	2
12	16	74	10	8	12	2	18	2
13	9	71	23	7	20	2	1	1
14	20	71	8	7	5	2	28	1
15	26	68	14	5	16	2	14	1
16	23	63	5	5	23	2	17	1
17	10	61	26	5	27	2	16	1
18	17	56	17	4	26	2	8	1
19	12	55	29	4	15	2	27	1
20	4	54	1	3	18	1	26	1
21	28	46	18	3	6	1	23	1
22	1	42	13	2	29	1	10	1
23	7	39	6	2	2	1	2	0
24	6	36	27	2	24	1	6	0
25	27	28	28	2	10	1	7	0
26	29	27	2	1	19	1	20	0
27	19	23	24	1	13	1	24	0
28	13	23	12	1	28	0	13	0
29	24	22	19	0	7	0	29	0
30	2	16	7	0	1	0	12	0

(Table continued on next page.)

	Categories							
BLOT NO. 5	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	198	1	17	1	6	1	4
2	25	180	23	14	30	5	12	4
3	23	156	25	14	10	5	25	4
4	5	147	7	14	25	5	23	4
5	30	140	30	11	15	5	19	3
6	7	131	5	10	7	5	13	3
7	18	111	13	10	23	4	7	3
8	12	104	19	9	5	4	5	3
9	19	95	10	9	18	3	18	3
10	13	91	18	9	19	3	29	2
11	10	89	17	7	6	2	30	2
12	15	87	12	6	17	2	17	1
13	20	85	20	6	20	2	6	1
14	17	74	29	5	24	2	20	1
15	8	53	6	5	21	1	8	1
16	6	52	15	4	12	1	15	1
17	29	48	8	3	13	1	11	0
18	24	31	26	3	28	1	3	0
19	14	30	14	3	16	1	4	0
20	21	24	11	2	27	1	2	0
21	9	24	21	2	8	1	21	0
22	16	22	4	2	4	0	22	0
23	22	19	22	2	22	0	9	0
24	28	17	16	1	2	0	24	0
25	26	17	28	1	3	0	10	0
26	11	13	24	1	26	0	26	0
27	2	10	9	0	11	0	27	0
28	27	10	3	0	14	0	28	0
29	4	8	2	0	29	0	14	0
30	3	0	27	0	9	0	16	0

(Table continued on next page.)

BLOT NO. 6	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	4	172	4	15	1	5	14	4
2	30	157	30	14	9	5	17	3
3	23	153	23	14	26	5	9	3
4	9	131	14	12	23	5	23	3
5	1	127	1	11	14	5	30	3
6	14	122	16	10	17	4	4	3
7	17	109	9	9	30	4	3	2
8	19	104	19	8	4	4	12	2
9	26	103	21	7	21	3	19	2
10	10	87	26	7	11	2	10	2
11	21	75	10	6	12	2	26	2
12	15	74	12	6	10	2	1	2
13	12	74	25	6	29	2	28	1
14	16	73	3	5	19	2	22	1
15	3	67	11	5	22	1	6	1
16	27	62	7	4	18	1	16	1
17	7	48	27	4	2	1	27	1
18	11	46	8	4	6	1	25	1
19	22	45	18	4	20	1	20	1
20	25	40	17	3	27	1	8	1
21	28	30	15	3	15	1	21	1
22	8	29	29	3	16	1	7	0
23	20	28	13	2	8	1	2	0
24	18	26	5	2	5	1	24	0
25	5	21	20	2	3	0	18	0
26	29	19	22	2	25	0	11	0
27	6	15	24	1	24	0	5	0
28	2	14	2	1	28	0	13	0
29	13	12	28	0	7	0	29	0
30	24	8	6	0	13	0	15	0

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	18	179	18	15	18	6	5	4
2	1	156	1	11	14	5	18	4
3	12	148	20	9	24	4	1	3
4	24	127	7	9	1	4	14	3
5	5	113	23	9	5	4	9	3
6	14	101	14	9	11	4	12	3
7	9	92	28	8	20	3	26	2
8	20	89	26	8	29	3	23	2
9	28	84	12	8	27	3	28	2
10	26	83	5	8	9	3	24	2
11	21	78	24	7	26	3	27	2
12	7	76	6	7	19	2	29	2
13	27	75	27	6	2	2	20	2
14	6	70	11	6	7	2	19	1
15	23	68	29	5	23	2	2	1
16	30	63	9	5	6	2	8	1
17	29	60	19	5	12	2	13	1
18	13	54	30	4	30	2	21	1
19	15	52	15	4	21	1	11	1
20	25	49	13	4	13	1	10	0
21	11	43	25	3	8	1	3	0
22	2	41	2	3	28	1	15	0
23	19	39	8	3	10	0	16	0
24	8	39	3	3	16	0	7	0
25	4	24	21	3	3	0	25	0
26	17	22	4	2	4	0	4	0
27	10	14	17	2	17	0	17	0
28	22	12	10	2	25	0	6	0
29	3	11	22	1	22	0	22	0
30	16	7	16	0	15	0	30	0

(Table continued on next page.)

BLOT NO. 8	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	23	169	3	16	15	5	9	4
2	3	164	23	15	17	4	16	3
3	5	157	5	11	10	4	3	3
4	15	147	12	11	20	4	5	3
5	9	130	19	10	23	4	27	3
6	12	110	17	10	4	3	23	3
7	17	107	9	10	5	3	12	3
8	19	95	15	9	30	3	30	3
9	29	89	29	8	8	3	19	2
10	16	89	8	7	26	3	20	2
11	20	88	26	7	25	3	15	2
12	26	84	14	7	22	2	22	1
13	27	75	11	6	3	2	11	1
14	8	72	30	6	29	2	17	1
15	30	71	20	6	19	2	14	1
16	11	66	16	6	2	2	26	1
17	14	51	25	5	1	2	6	1
18	25	46	27	5	9	2	13	1
19	28	45	4	4	16	2	29	1
20	4	37	28	3	28	1	1	1
21	10	31	6	2	12	1	18	0
22	22	29	22	2	14	1	10	0
23	21	24	18	1	11	1	2	0
24	1	23	21	1	21	0	21	0
25	2	20	13	1	18	0	25	0
26	6	12	2	1	6	0	4	0
27	18	11	24	0	24	0	24	0
28	13	9	10	0	13	0	28	0
29	24	8	7	0	7	0	7	0
30	7	4	1	0	27	0	8	0

(Table continued on next page.)

BLOT NO. 9	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	7	144	7	11	19	5	23	3
2	17	134	17	11	12	5	3	3
3	25	124	25	10	25	5	11	3
4	13	108	24	10	7	5	25	3
5	6	106	19	9	2	4	9	2
6	24	105	11	9	17	4	20	2
7	11	99	30	8	29	4	6	2
8	19	93	13	8	6	3	16	2
9	28	90	27	7	22	3	28	2
10	12	84	3	6	14	3	13	2
11	1	82	16	6	24	2	17	1
12	21	67	4	6	4	2	4	1
13	3	64	6	6	13	2	12	1
14	29	64	21	6	1	2	7	1
15	4	63	2	6	11	1	15	1
16	2	59	12	6	16	1	1	1
17	14	57	14	5	18	1	5	1
18	23	56	1	5	28	1	18	1
19	27	55	9	5	5	1	19	1
20	16	53	5	5	20	1	8	1
21	30	52	28	5	9	1	14	1
22	9	47	23	4	23	1	22	1
23	20	46	15	4	30	1	29	1
24	22	44	29	4	27	1	27	1
25	15	41	22	3	15	1	21	1
26	5	38	10	2	10	0	30	1
27	26	28	20	2	3	0	2	0
28	10	23	8	1	21	0	10	0
29	18	19	18	0	26	0	26	0
30	8	14	26	0	8	0	24	0

(Table continued on next page.)

BLOT NO. 10	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	26	183	26	13	26	5	23	4
2	8	165	21	13	21	5	17	3
3	21	153	17	12	4	4	21	3
4	4	131	4	12	10	4	4	3
5	15	110	8	11	8	3	1	3
6	17	104	3	10	9	3	15	3
7	10	103	14	9	14	3	11	3
8	28	101	10	9	15	3	28	2
9	23	95	15	8	23	3	9	2
10	24	88	24	8	18	3	8	2
11	14	87	28	8	29	3	27	2
12	3	87	23	7	12	2	26	2
13	29	72	11	6	28	2	14	1
14	2	70	1	6	17	2	6	1
15	11	65	30	5	3	2	3	1
16	18	59	18	5	2	2	10	1
17	6	57	9	4	24	2	30	1
18	1	49	29	4	1	2	18	1
19	16	42	6	3	22	1	20	1
20	20	39	25	3	27	1	29	1
21	12	38	5	2	5	1	2	0
22	30	33	7	2	19	1	7	0
23	9	27	20	2	16	1	5	0
24	22	22	12	2	6	1	24	0
25	5	18	19	2	30	1	25	0
26	27	15	22	2	25	0	19	0
27	19	14	2	1	11	0	12	0
28	7	14	27	1	13	0	13	0
29	13	9	13	0	7	0	22	0
30	25	8	16	0	20	0	16	0

Table A-9

Utah State University 1965-66:
Frequency Ranking of Response-Items
By Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	F[b]	R	F	R	F	R	F
1	19	201	19	5	19	3	19	17
2	12	174	25	5	12	3	12	16
3	25	162	23	4	13	3	18	15
4	18	147	6	4	29	3	29	15
5	6	147	13	4	2	2	25	15
6	13	147	9	3	18	2	7	13
7	7	128	12	3	23	2	6	11
8	29	123	29	3	25	2	2	10
9	2	107	18	3	6	2	13	10
10	22	91	3	2	1	1	14	9
11	23	83	2	2	9	1	23	8
12	1	79	28	2	7	1	9	6
13	9	66	4	1	5	1	5	6
14	28	63	1	1	17	1	1	6
15	17	54	22	1	22	1	24	5
16	14	52	16	1	8	1	22	5
17	5	45	17	1	27	1	11	4
18	24	36	11	1	3	0	3	4
19	3	31	14	1	4	0	28	4
20	27	30	8	1	11	0	17	4
21	11	29	7	1	21	0	4	3
22	4	26	10	1	15	0	27	3
23	8	24	20	0	16	0	8	1
24	30	19	24	0	24	0	26	1
25	15	17	5	0	10	0	21	1
26	26	16	26	0	26	0	15	1
27	10	14	27	0	20	0	20	1
28	16	13	21	0	28	0	10	0
29	20	12	15	0	14	0	16	0
30	21	3	30	0	30	0	30	0

[a]R = response-item number.
[b]F = frequency.

(Table continued on next page.)

	Categories							
BLOT NO. 2	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	137	20	4	8	3	21	16
2	8	136	28	4	3	3	16	12
3	10	125	25	3	26	3	26	12
4	21	124	10	3	21	3	3	11
5	26	120	17	3	24	2	8	9
6	16	116	3	3	16	2	15	9
7	15	114	16	2	30	2	23	8
8	28	88	8	2	15	2	10	8
9	4	85	9	2	22	1	5	8
10	24	80	14	2	5	1	30	8
11	6	75	4	2	10	1	25	7
12	17	74	15	2	4	1	12	7
13	22	72	5	2	13	1	7	6
14	30	71	24	2	29	1	13	6
15	20	69	26	2	12	1	6	6
16	12	66	23	2	17	1	2	6
17	25	62	7	1	6	1	17	6
18	5	59	12	1	11	1	4	6
19	23	57	11	1	2	0	22	6
20	14	51	6	1	20	0	24	6
21	13	49	21	1	18	0	28	6
22	9	46	22	1	7	0	11	5
23	29	45	1	1	1	0	29	5
24	2	43	2	1	9	0	9	5
25	1	40	13	1	25	0	14	5
26	7	35	29	1	19	0	20	4
27	11	28	27	0	27	0	1	2
28	18	25	18	0	28	0	18	2
29	27	22	19	0	14	0	27	1
30	19	17	30	0	23	0	19	0

(Table continued on next page.)

	Categories							
BLOT NO. 3	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	181	1	5	6	3	27	14
2	27	171	8	4	1	2	1	13
3	13	136	6	4	17	2	8	13
4	22	126	13	4	7	2	13	12
5	6	124	20	3	20	2	18	11
6	21	116	12	3	10	2	22	10
7	12	114	22	3	23	2	21	10
8	30	101	29	3	27	2	20	10
9	8	101	27	3	14	2	30	10
10	20	100	18	2	30	2	6	8
11	18	99	30	2	19	1	4	8
12	17	94	17	2	18	1	12	8
13	11	76	21	2	13	1	2	7
14	4	63	4	1	26	1	10	6
15	9	62	10	1	8	1	28	6
16	28	62	16	1	22	1	23	5
17	7	55	11	1	2	1	11	5
18	14	49	9	1	29	1	24	5
19	24	46	26	1	3	0	14	5
20	29	45	24	1	9	0	17	5
21	23	40	25	1	21	0	25	5
22	15	35	14	1	4	0	7	4
23	5	31	23	1	5	0	5	4
24	10	30	2	0	24	0	16	3
25	2	26	3	0	25	0	29	3
26	16	24	19	0	16	0	9	3
27	25	21	5	0	12	0	15	3
28	26	20	28	0	28	0	26	1
29	3	13	7	0	11	0	3	0
30	19	3	15	0	15	0	19	0

(Table continued on next page.)

	Categories							
BLOT NO. 4	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	162	26	4	30	2	3	16
2	30	136	9	4	17	2	15	12
3	22	128	3	4	3	2	9	11
4	25	124	14	4	25	2	22	11
5	21	122	11	3	5	2	5	11
6	15	114	21	3	21	2	30	11
7	5	111	16	3	22	2	25	10
8	9	100	30	3	14	2	21	10
9	11	100	22	3	9	2	16	8
10	8	94	17	2	10	2	18	8
11	20	80	5	2	16	1	8	8
12	14	79	23	2	26	1	11	7
13	16	77	6	2	28	1	20	7
14	4	72	10	1	11	1	12	7
15	18	71	28	1	8	1	14	6
16	17	70	4	1	15	1	26	6
17	26	67	1	1	2	1	10	6
18	12	61	20	1	6	1	29	6
19	23	60	12	1	20	1	24	5
20	10	58	8	1	24	1	6	5
21	28	48	25	1	12	0	1	4
22	1	39	29	1	7	0	17	4
23	6	37	19	1	1	0	23	4
24	29	33	15	1	4	0	4	4
25	24	28	18	0	18	0	27	3
26	27	26	2	0	19	0	19	3
27	7	25	24	0	27	0	13	2
28	13	24	13	0	13	0	28	2
29	19	18	7	0	29	0	7	1
30	2	18	27	0	23	0	2	0

(Table continued on next page.)

BLOT NO. 5	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	210	1	5	1	3	1	20
2	25	197	25	5	23	3	25	17
3	23	165	5	4	25	3	5	15
4	5	162	30	4	13	3	23	15
5	7	148	13	4	19	2	30	15
6	30	140	19	3	5	2	7	13
7	18	114	7	3	7	2	12	13
8	12	113	10	3	10	2	18	12
9	15	109	23	3	30	2	15	10
10	10	93	17	2	18	2	19	10
11	19	92	16	2	17	1	10	7
12	20	87	12	2	8	1	13	7
13	13	85	18	1	6	1	17	6
14	17	80	6	1	29	1	21	5
15	29	56	29	1	12	1	20	5
16	6	50	9	1	20	1	8	4
17	24	44	24	1	9	0	14	3
18	8	41	21	1	11	0	6	3
19	21	38	22	1	4	0	28	3
20	9	31	20	1	2	0	24	3
21	14	24	15	1	21	0	9	3
22	16	23	8	1	22	0	27	2
23	28	17	4	0	16	0	29	2
24	11	14	11	0	24	0	16	2
25	27	14	3	0	3	0	4	1
26	22	9	26	0	26	0	22	1
27	2	9	2	0	27	0	26	1
28	4	8	28	0	28	0	3	0
29	26	5	14	0	14	0	11	0
30	3	1	27	0	15	0	2	0

(Table continued on next page.)

BLOT NO. 6	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	4	183	30	4	23	3	23	16
2	30	159	4	4	30	3	4	16
3	23	156	19	3	14	3	17	15
4	9	147	25	3	18	2	9	13
5	14	128	16	3	12	2	30	12
6	19	114	23	3	19	2	12	11
7	1	111	7	3	4	2	26	11
8	17	107	14	3	25	2	1	10
9	12	100	9	2	2	1	14	10
10	26	97	3	2	20	1	19	9
11	3	87	17	2	3	1	15	8
12	16	85	12	2	9	1	3	8
13	10	84	1	2	27	1	10	6
14	15	84	26	2	7	1	21	6
15	25	71	10	2	1	1	20	5
16	21	63	24	2	16	1	25	5
17	22	53	15	2	8	1	8	4
18	7	49	20	1	10	1	27	4
19	27	44	6	1	5	1	29	4
20	20	41	29	1	17	0	7	3
21	11	36	21	1	21	0	28	3
22	29	33	11	1	22	0	5	3
23	18	26	2	1	6	0	11	3
24	5	26	13	0	24	0	16	3
25	8	24	18	0	11	0	18	2
26	2	22	5	0	26	0	24	2
27	28	20	27	0	13	0	13	2
28	6	11	28	0	28	0	22	2
29	24	9	22	0	29	0	6	1
30	13	8	8	0	15	0	2	1

(Table continued on next page.)

BLOT NO. 7	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	185	18	5	1	3	18	19
2	18	184	1	4	23	2	1	15
3	12	162	9	4	18	2	9	13
4	24	144	26	3	29	2	12	13
5	9	110	14	3	20	2	24	12
6	5	107	24	3	12	2	20	10
7	14	101	20	2	8	2	26	9
8	28	99	6	2	4	1	27	9
9	20	95	23	2	6	1	6	9
10	21	90	12	2	10	1	28	9
11	26	90	4	2	26	1	15	8
12	6	77	29	2	17	1	30	8
13	27	75	28	2	13	1	21	8
14	13	74	21	2	21	1	5	7
15	7	67	11	2	15	1	14	6
16	30	63	2	1	9	1	11	6
17	23	56	10	1	24	1	23	6
18	25	51	25	1	25	1	13	5
19	29	51	30	1	14	1	7	5
20	11	48	5	1	5	1	4	4
21	15	44	7	1	28	1	2	4
22	8	43	15	1	27	1	29	3
23	4	35	19	1	19	0	25	2
24	19	33	27	1	16	0	8	2
25	2	30	13	1	3	0	22	2
26	17	18	16	0	11	0	3	1
27	16	16	17	0	2	0	17	1
28	22	16	3	0	7	0	10	1
29	10	9	22	0	22	0	19	1
30	3	6	8	0	30	0	16	0

(Table continued on next page.)

BLOT NO. 8	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	23	183	23	5	15	3	23	16
2	15	167	9	4	5	3	15	15
3	5	165	15	4	12	3	3	13
4	3	134	17	3	27	2	5	13
5	8	111	20	3	2	2	9	12
6	17	104	4	2	20	2	17	11
7	16	103	3	2	30	2	20	10
8	12	102	29	2	16	2	11	9
9	9	101	5	2	23	2	29	8
10	20	101	10	2	8	2	16	8
11	29	90	26	2	19	1	25	7
12	19	80	12	2	17	1	19	7
13	30	77	27	2	29	1	27	7
14	25	76	30	2	9	1	12	6
15	26	76	1	2	3	1	30	6
16	11	65	16	2	25	1	8	6
17	27	63	19	2	24	1	26	6
18	2	56	2	1	11	0	28	5
19	10	52	25	1	4	0	10	5
20	28	47	6	1	7	0	4	5
21	4	42	28	1	18	0	1	4
22	14	38	14	1	22	0	14	4
23	21	37	11	1	6	0	22	4
24	22	30	8	1	21	0	2	3
25	1	29	18	0	10	0	21	2
26	13	14	7	0	26	0	6	2
27	6	13	21	0	13	0	7	2
28	18	12	13	0	28	0	18	1
29	7	8	22	0	14	0	13	0
30	24	6	24	0	1	0	24	0

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	17	150	7	4	1	3	6	13
2	7	136	17	3	9	2	7	12
3	13	136	24	3	24	2	13	12
4	19	124	11	3	21	2	11	11
5	6	122	27	3	27	2	19	10
6	25	116	29	3	6	2	27	9
7	1	107	3	2	16	2	22	9
8	11	102	1	2	4	1	3	8
9	24	101	6	2	23	1	17	8
10	29	92	19	2	10	1	1	8
11	28	76	15	2	11	1	25	8
12	9	75	20	2	19	1	29	8
13	27	74	4	2	13	1	9	7
14	12	71	14	2	7	1	21	7
15	22	70	18	2	15	1	28	7
16	21	67	10	1	17	1	12	7
17	3	59	13	1	12	1	23	6
18	4	52	2	1	25	1	18	6
19	2	52	30	1	29	1	16	6
20	14	51	5	1	30	1	14	6
21	30	50	21	1	14	1	24	5
22	23	47	23	1	28	1	30	5
23	10	46	26	1	3	0	2	4
24	16	44	9	1	2	0	5	3
25	5	44	25	1	5	0	4	3
26	15	33	22	1	26	0	26	3
27	26	30	12	1	20	0	20	3
28	20	29	28	1	18	0	10	2
29	18	24	16	0	22	0	15	2
30	8	7	8	0	8	0	8	1

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	26	192	8	5	8	3	26	16
2	8	165	26	5	17	3	21	15
3	21	160	10	5	23	3	8	15
4	4	147	4	5	26	3	17	12
5	15	127	28	4	1	2	4	12
6	23	121	2	3	10	2	3	12
7	17	118	21	3	29	2	14	10
8	28	102	15	3	21	2	15	10
9	10	98	23	3	15	2	23	10
10	3	96	14	2	5	1	10	10
11	11	85	16	2	3	1	28	10
12	14	81	18	2	4	1	29	9
13	29	76	24	2	28	1	24	8
14	24	66	20	1	6	1	6	6
15	1	65	17	1	11	1	1	6
16	2	58	19	1	14	1	12	5
17	18	57	1	1	20	1	11	5
18	6	55	3	1	18	0	16	5
19	16	42	29	1	9	0	20	4
20	20	40	7	0	2	0	18	3
21	30	39	6	0	7	0	7	3
22	12	37	12	0	12	0	2	2
23	22	29	5	0	16	0	5	2
24	7	27	9	0	24	0	9	2
25	9	26	25	0	25	0	25	2
26	19	18	11	0	19	0	27	2
27	5	17	27	0	27	0	19	1
28	27	14	13	0	13	0	22	1
29	25	10	22	0	22	0	30	1
30	13	10	30	0	30	0	13	0

Table A-10

Potsdam State College 1966-67:
Frequency Ranking of Response-Items
By Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	F[b]	R	F	R	F	R	F
1	19	18	19	176	19	22	19	10
2	12	15	6	148	6	22	6	8
3	6	14	12	134	12	19	7	7
4	25	13	25	132	18	17	13	7
5	23	12	18	129	7	15	2	6
6	2	12	7	119	2	15	12	6
7	18	12	29	108	25	14	25	6
8	13	11	13	101	14	13	23	5
9	7	10	2	99	29	13	29	5
10	28	8	1	81	22	12	17	5
11	9	8	23	82	13	11	28	5
12	1	7	22	81	1	10	1	4
13	29	7	28	65	23	9	11	4
14	17	6	9	63	9	9	18	4
15	22	5	17	51	28	9	27	4
16	14	5	14	67	17	8	9	3
17	26	4	11	46	27	8	22	3
18	4	3	27	43	11	5	14	3
19	30	3	5	26	20	4	24	2
20	15	3	24	26	24	4	16	1
21	11	3	30	21	26	3	5	1
22	24	2	4	18	5	3	4	1
23	5	2	15	17	30	3	8	0
24	20	1	26	15	8	2	3	0
25	10	1	3	12	15	2	10	0
26	27	1	10	11	10	2	26	0
27	16	1	8	10	3	1	20	0
28	8	1	16	10	4	1	21	0
29	3	0	21	8	16	1	15	0
30	21	0	20	8	21	0	30	0

[a]R = response-item number.
[b]F = frequency.

(Table continued on next page.)

	Categories							
BLOT NO. 2	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	17	3	129	10	16	3	10
2	21	17	21	110	15	15	8	7
3	15	13	15	93	3	15	21	7
4	26	10	26	90	21	15	16	5
5	5	9	16	88	24	13	26	5
6	10	8	25	86	8	13	22	5
7	17	8	24	84	25	13	25	5
8	24	8	8	80	6	12	23	4
9	18	8	10	80	29	10	11	4
10	8	7	9	77	18	10	15	4
11	29	7	4	72	28	10	4	4
12	28	7	20	69	23	10	28	4
13	9	7	12	69	16	9	29	4
14	4	7	5	68	20	9	6	4
15	25	7	22	67	4	9	17	3
16	12	6	28	67	26	9	12	3
17	22	6	30	66	1	8	20	3
18	13	6	17	63	9	8	14	3
19	11	5	13	58	12	8	10	3
20	7	5	29	54	13	8	13	3
21	30	4	6	52	17	7	5	2
22	23	4	11	43	30	6	30	2
23	16	3	14	41	7	5	9	2
24	6	3	18	41	5	5	18	2
25	20	2	23	40	27	4	24	1
26	2	1	2	35	22	3	7	1
27	27	1	7	35	14	3	2	0
28	1	1	1	28	2	3	27	0
29	19	0	19	12	19	2	19	0
30	14	0	27	12	11	2	1	0

(Table continued on next page.)

BLOT NO. 3	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	19	1	164	1	22	1	9
2	6	13	27	131	27	20	27	8
3	22	13	8	114	21	17	22	7
4	21	12	22	113	22	16	8	7
5	27	11	18	110	18	16	21	6
6	8	11	20	99	12	15	4	5
7	18	10	4	93	13	14	11	5
8	13	9	12	89	8	13	13	5
9	12	9	21	88	30	13	18	4
10	11	8	11	85	6	12	17	4
11	30	8	30	83	4	10	30	4
12	20	7	6	79	20	9	12	4
13	25	7	13	78	17	8	28	4
14	15	7	17	63	9	8	20	3
15	28	6	14	61	15	8	25	3
16	17	5	28	54	11	7	14	3
17	4	5	15	51	24	6	7	3
18	29	5	29	48	28	6	6	3
19	9	4	25	43	29	6	16	2
20	16	4	24	41	7	5	5	2
21	7	4	9	40	3	4	15	2
22	23	4	7	38	23	4	29	2
23	14	3	23	34	10	4	2	1
24	10	2	5	20	5	4	10	1
25	24	2	16	18	14	4	24	1
26	26	1	10	17	26	3	23	1
27	5	1	3	14	25	3	19	0
28	3	0	2	14	16	2	3	0
29	19	0	26	13	19	0	26	0
30	2	0	19	4	2	0	9	0

(Table continued on next page.)

BLOT NO. 4	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	14	3	136	30	16	22	8
2	15	11	30	126	21	16	3	7
3	30	11	21	121	3	15	15	5
4	5	10	22	107	8	14	2	1
5	16	10	5	100	15	14	8	5
6	8	10	15	96	5	13	9	4
7	22	9	9	90	25	13	11	4
8	21	9	8	81	22	12	5	4
9	26	8	16	79	9	12	16	4
10	9	8	26	77	11	11	25	4
11	12	7	11	75	16	11	14	4
12	20	7	14	75	18	10	6	4
13	4	6	25	68	14	10	28	4
14	10	6	4	68	1	8	18	3
15	14	6	18	62	20	8	17	3
16	18	6	12	61	23	8	1	3
17	23	6	20	57	26	8	20	3
18	11	6	23	57	12	7	12	3
19	25	6	10	56	10	7	26	3
20	28	4	17	51	6	6	30	3
21	27	4	27	43	4	6	10	3
22	2	4	1	42	24	5	29	2
23	17	3	28	36	28	5	19	2
24	6	3	29	25	27	4	27	2
25	29	3	24	23	17	4	4	2
26	19	3	6	23	29	3	23	2
27	24	3	7	21	2	3	7	1
28	13	2	13	21	19	2	13	1
29	7	1	19	14	13	2	2	0
30	1	1	2	14	7	0	24	0

(Table continued on next page.)

	Categories							
BLOT NO. 5	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	18	1	175	1	24	1	10
2	25	18	25	175	25	23	23	10
3	23	16	23	156	23	20	5	9
4	30	15	5	132	5	17	25	8
5	5	14	30	115	30	17	7	6
6	18	14	7	103	7	15	18	5
7	7	10	10	103	10	14	10	5
8	10	10	18	99	18	14	12	5
9	15	9	13	91	20	11	30	5
10	20	8	20	83	19	10	15	5
11	12	8	19	75	13	10	20	4
12	13	7	12	69	17	10	29	4
13	21	6	15	69	15	9	19	3
14	19	5	17	62	12	8	17	3
15	8	5	29	57	14	7	9	3
16	9	4	6	49	9	6	21	3
17	6	4	9	47	6	6	13	3
18	14	3	8	41	29	6	14	2
19	17	3	14	33	24	5	16	2
20	29	2	21	31	8	5	26	1
21	28	2	16	31	21	4	28	1
22	24	2	24	27	11	3	4	1
23	16	2	11	17	4	3	27	1
24	11	1	28	16	28	3	8	1
25	2	1	2	15	16	3	2	0
26	4	1	4	11	2	2	3	0
27	22	1	27	11	26	1	11	0
28	27	1	22	8	22	1	6	0
29	3	0	26	4	27	1	22	0
30	26	0	3	2	3	0	24	0

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	4	17	4	146	30	17	4	8
2	19	13	30	128	4	15	9	6
3	14	13	14	122	23	15	1	6
4	30	10	23	120	14	15	19	6
5	23	10	19	117	12	13	23	6
6	3	9	9	112	3	13	17	5
7	16	9	1	104	19	13	14	5
8	1	8	17	95	17	12	11	5
9	26	8	26	92	1	12	30	5
10	10	7	10	72	9	11	27	4
11	17	7	12	69	26	11	16	4
12	9	7	16	69	7	11	26	4
13	29	7	3	67	15	11	22	4
14	21	6	15	62	25	10	15	4
15	7	6	22	59	16	9	29	4
16	12	6	25	57	10	9	21	3
17	8	6	7	55	6	7	12	3
18	25	6	11	51	22	7	3	2
19	27	5	21	50	20	6	25	2
20	11	5	27	37	21	6	2	2
21	22	5	29	37	27	5	8	2
22	15	5	5	28	18	5	10	2
23	24	4	18	27	29	5	5	2
24	18	3	8	23	28	4	7	2
25	2	2	20	23	11	4	20	1
26	28	2	28	22	5	4	18	1
27	6	1	2	21	8	4	13	1
28	13	1	6	18	24	3	6	0
29	5	1	24	10	2	1	28	0
30	20	1	13	7	13	0	24	0

(Table continued on next page.)

BLOT NO. 7	Categories							
	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	16	18	158	24	20	18	8
2	18	15	1	146	1	19	1	6
3	12	14	12	143	14	17	24	6
4	14	10	24	112	18	16	28	6
5	9	10	20	106	27	16	11	5
6	6	10	5	99	12	15	20	5
7	24	10	14	92	5	15	15	5
8	28	9	26	81	9	13	26	5
9	21	9	9	79	20	13	7	4
10	5	8	28	69	6	10	9	4
11	26	7	7	66	8	9	2	4
12	27	7	23	65	30	9	6	4
13	23	6	30	65	28	9	23	4
14	30	6	27	64	21	8	12	4
15	7	6	6	63	26	8	4	3
16	20	6	15	56	17	7	14	3
17	13	6	29	53	11	7	5	3
18	25	5	21	52	29	7	19	3
19	29	4	8	45	2	6	27	3
20	19	4	25	44	19	5	21	2
21	8	3	13	43	23	5	8	2
22	11	3	2	40	7	4	29	2
23	15	3	11	37	15	4	25	2
24	2	2	19	31	13	4	13	2
25	10	2	4	27	10	3	30	2
26	22	2	17	19	16	3	10	1
27	17	2	16	14	25	2	17	1
28	16	2	22	13	4	1	16	1
29	3	1	10	10	3	1	3	0
30	4	1	3	5	22	1	22	0

(Table continued on next page.)

BLOT NO. 8	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	15	17	23	165	23	22	5	9
2	23	13	5	132	12	20	23	8
3	3	13	3	132	3	20	8	7
4	9	12	9	119	9	17	15	6
5	5	12	15	119	15	15	3	5
6	27	11	19	92	5	15	19	5
7	12	12	16	92	16	14	29	5
8	30	12	17	90	26	14	26	5
9	17	11	12	90	20	13	16	5
10	19	8	26	86	29	12	27	4
11	26	7	29	81	19	11	30	4
12	20	7	30	77	30	11	11	4
13	16	7	20	75	14	11	10	3
14	8	7	27	68	17	10	17	3
15	2	6	8	65	8	9	1	3
16	22	5	14	65	25	6	21	3
17	21	4	11	60	27	6	12	3
18	4	4	10	42	4	6	14	3
19	11	4	4	40	6	5	18	2
20	29	3	25	34	22	4	22	2
21	6	3	2	33	28	3	9	2
22	28	3	28	27	1	3	20	2
23	10	3	1	25	2	3	2	2
24	14	1	21	21	11	3	28	1
25	18	1	6	19	10	2	25	1
26	25	1	22	19	21	2	4	1
27	24	1	7	8	18	1	13	1
28	13	1	18	6	13	0	7	1
29	7	0	24	6	7	0	6	0
30	1	0	13	5	24	0	24	0

(Table continued on next page.)

BLOT NO. 9	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	7	13	7	136	17	21	17	7
2	17	13	17	123	13	18	13	7
3	13	12	13	112	7	16	7	6
4	28	12	25	110	25	16	22	6
5	24	12	6	96	24	15	25	6
6	25	11	24	92	11	12	6	6
7	3	9	19	89	12	11	3	5
8	12	9	12	81	6	11	19	4
9	21	9	1	76	28	11	12	4
10	19	7	11	75	1	10	10	4
11	5	7	28	75	23	10	21	4
12	11	6	2	70	19	10	28	4
13	27	6	21	69	4	10	29	4
14	4	6	27	62	27	9	24	3
15	14	6	30	59	29	9	1	3
16	6	6	4	53	2	8	8	3
17	1	5	29	53	20	8	27	3
18	30	5	23	52	9	8	4	2
19	16	5	3	46	3	7	5	2
20	2	5	22	44	21	7	15	2
21	23	4	14	44	30	6	2	2
22	10	4	16	42	15	5	11	2
23	9	4	9	42	5	5	20	2
24	22	3	5	42	16	3	18	2
25	20	3	15	36	10	3	23	1
26	8	2	10	36	22	2	26	1
27	26	2	20	33	14	2	9	1
28	29	2	18	26	18	2	16	1
29	18	1	26	17	8	2	14	1
30	15	1	8	13	26	1	30	1

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	26	18	26	175	26	23	26	10
2	8	15	8	140	8	22	15	7
3	17	13	21	130	21	18	28	7
4	21	13	15	111	15	17	8	7
5	15	12	17	106	17	16	17	6
6	23	12	10	98	28	14	21	6
7	28	10	4	98	6	13	10	5
8	4	8	23	89	11	12	6	5
9	3	8	3	79	23	12	24	5
10	6	8	14	78	3	11	2	4
11	11	7	28	75	4	11	23	4
12	14	6	29	74	14	9	4	3
13	12	6	24	70	24	9	11	3
14	10	6	11	66	10	9	3	3
15	1	6	2	64	2	8	1	3
16	30	6	18	63	1	7	16	3
17	2	5	6	62	18	7	14	2
18	24	5	1	49	29	7	9	2
19	18	4	30	43	20	5	12	2
20	20	4	20	40	30	5	5	2
21	29	4	5	32	12	5	30	2
22	5	3	22	31	22	4	20	2
23	7	2	9	30	19	3	19	2
24	9	2	12	28	9	3	22	1
25	12	2	19	22	5	2	19	1
26	16	2	16	22	27	2	13	1
27	22	2	7	22	16	2	7	1
28	25	1	27	10	25	1	29	1
29	13	1	25	7	7	1	25	0
30	27	0	13	2	13	0	27	0

Table A-11

Trenton State College 1966-67:
Frequency Ranking of Response-Items
By Category

BLOT NO. 1	Categories 0		1		2		3	
Rank	R[a]	F[b]	R	F	R	F	R	F
1	19	142	19	6	12	7	19	4
2	12	118	6	6	25	7	25	4
3	25	118	1	5	6	7	6	4
4	6	114	18	5	19	6	12	3
5	18	107	7	5	2	6	23	3
6	7	94	25	5	18	6	9	2
7	29	92	12	3	14	5	7	2
8	13	90	23	3	28	4	1	2
9	1	72	28	3	22	3	30	2
10	2	71	13	3	9	3	18	2
11	23	71	15	2	7	3	14	2
12	22	56	11	2	23	3	13	2
13	9	55	20	2	1	2	2	1
14	14	49	22	2	13	2	11	1
15	28	45	9	1	8	2	3	1
16	17	39	2	1	29	2	16	1
17	5	30	17	1	11	1	17	1
18	27	27	26	1	17	1	28	1
19	11	26	30	1	5	1	22	1
20	24	23	14	1	20	1	29	1
21	15	17	10	1	24	1	5	0
22	30	15	24	1	16	1	4	0
23	3	13	5	0	30	1	20	0
24	4	12	20	0	15	1	24	0
25	10	12	3	0	4	0	10	0
26	16	9	16	0	10	0	8	0
27	20	9	27	0	3	0	27	0
28	26	9	21	0	21	0	21	0
29	8	7	4	0	26	0	26	0
30	21	4	8	0	27	0	15	0

[a]R = response-item number.
[b]F = frequency.

(Table continued on next page.)

	Categories							
BLOT NO. 2	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	21	102	15	5	12	6	3	4
2	15	98	2	4	26	5	4	3
3	3	98	10	4	9	5	20	3
4	26	91	16	4	15	5	13	3
5	16	83	30	4	24	5	16	2
6	24	71	23	4	3	4	24	2
7	10	65	26	3	17	4	7	2
8	30	65	20	3	6	4	11	2
9	8	64	8	3	2	4	26	2
10	6	62	21	3	30	4	10	2
11	9	61	25	3	16	3	29	2
12	17	59	7	2	5	3	18	2
13	12	58	4	2	21	3	25	2
14	4	52	5	2	8	3	5	1
15	25	49	6	2	20	3	8	1
16	28	48	3	1	25	3	23	1
17	20	46	17	1	29	2	19	1
18	22	44	12	1	13	2	9	1
19	4	41	11	1	23	2	30	1
20	29	41	13	1	10	2	14	1
21	23	38	29	1	28	2	28	1
22	2	37	22	1	19	1	22	1
23	11	33	9	1	14	1	6	0
24	7	31	24	1	4	1	17	0
25	14	31	18	1	18	1	2	0
26	13	27	1	1	22	1	1	0
27	1	21	28	1	11	0	27	0
28	18	13	19	0	27	0	21	0
29	37	13	14	0	7	0	12	0
30	19	8	27	0	1	0	15	0

(Table continued on next page.)

BLOT NO. 3	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	140	1	6	1	6	1	4
2	27	118	27	5	12	6	9	3
3	22	104	6	4	18	5	22	3
4	21	86	22	4	9	5	20	3
5	6	83	28	4	20	5	12	3
6	18	83	17	3	27	5	27	3
7	12	82	18	3	22	4	18	2
8	8	79	21	3	6	4	30	2
9	30	74	9	3	13	4	17	2
10	20	68	11	3	28	4	4	2
11	13	64	20	3	15	3	14	2
12	17	60	13	3	4	3	6	1
13	11	59	8	2	17	3	23	1
14	14	54	14	2	24	3	11	1
15	4	52	4	2	21	3	8	1
16	28	47	12	2	30	2	26	1
17	9	41	10	1	26	2	13	1
18	15	36	15	1	8	2	21	1
19	7	36	23	1	29	2	29	1
20	29	33	24	1	2	2	15	1
21	23	29	25	1	25	1	5	1
22	25	22	7	1	11	1	28	1
23	24	22	30	1	23	1	2	0
24	5	21	29	1	10	1	3	0
25	10	15	2	0	7	1	10	0
26	26	15	19	0	14	1	19	0
27	16	12	5	0	5	1	24	0
28	3	8	3	0	3	0	25	0
29	2	8	26	0	19	0	7	0
30	19	0	16	0	16	0	16	0

(Table continued on next page.)

	Categories							
BLOT NO. 4	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	125	5	6	8	6	3	4
2	30	100	30	5	3	6	8	3
3	21	96	22	4	22	6	22	8
4	22	86	18	4	5	5	21	3
5	9	80	25	4	30	5	5	2
6	15	78	21	4	21	4	15	2
7	5	75	8	3	11	4	26	2
8	25	69	3	3	27	4	18	2
9	11	62	11	3	14	4	12	2
10	8	59	14	3	4	3	14	2
11	14	59	15	3	26	3	30	2
12	16	58	10	3	15	3	10	1
13	18	54	1	2	16	3	9	1
14	4	53	23	2	18	3	17	1
15	26	51	20	2	10	2	16	1
16	12	49	7	2	17	2	28	1
17	20	49	9	1	28	2	20	1
18	23	48	2	1	20	2	4	1
19	10	44	27	1	9	2	11	1
20	17	43	17	1	23	2	23	1
21	27	33	16	1	12	2	6	1
22	29	30	26	1	19	2	29	1
23	6	28	28	1	25	1	27	1
24	28	23	6	0	13	1	25	1
25	1	22	19	0	2	1	2	0
26	24	18	4	0	1	1	19	0
27	13	18	24	0	7	0	24	0
28	7	17	13	0	6	0	13	0
29	19	11	29	0	29	0	7	0
30	2	9	12	0	24	0	1	0

(Table continued on next page.)

BLOT NO. 5	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	138	1	6	1	8	1	4
2	25	137	30	5	5	6	25	4
3	23	122	7	5	10	6	30	3
4	5	119	25	4	19	6	10	3
5	30	99	6	4	23	6	5	3
6	7	91	19	4	15	6	15	3
7	19	78	23	4	25	6	7	3
8	10	71	15	4	7	5	23	3
9	13	70	12	3	30	4	21	2
10	12	67	10	3	16	3	20	2
11	17	66	18	3	17	3	16	2
12	15	65	16	2	6	2	14	1
13	18	62	5	2	18	2	18	1
14	20	54	26	2	29	2	24	1
15	29	42	13	1	12	2	12	1
16	8	39	14	1	20	2	17	1
17	6	35	24	1	8	2	6	1
18	24	26	17	1	24	2	29	1
19	9	26	29	1	9	1	8	1
20	16	25	20	1	14	1	4	0
21	21	21	21	1	28	1	2	0
22	14	20	8	1	13	1	19	0
23	2	17	4	0	27	1	13	0
24	11	15	2	0	4	0	11	0
25	28	13	3	0	3	0	3	0
26	26	8	11	0	26	0	26	0
27	27	8	9	0	11	0	9	0
28	22	7	28	0	21	0	28	0
29	3	2	22	0	22	0	22	0
30	4	2	27	0	2	0	27	0

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	4	128	1	5	19	7	1	4
2	9	107	9	5	4	6	23	4
3	14	106	15	5	23	6	19	4
4	23	105	30	5	9	5	30	3
5	30	102	4	4	1	5	4	3
6	1	90	27	4	10	4	27	2
7	19	89	16	3	15	4	14	2
8	26	84	19	3	25	4	17	2
9	17	80	23	3	28	3	9	2
10	12	61	12	3	14	3	15	2
11	10	56	10	2	17	3	26	2
12	3	55	24	2	16	3	12	2
13	21	44	20	2	30	3	10	1
14	16	43	17	2	12	3	7	1
15	15	43	22	1	26	2	18	1
16	22	39	11	1	3	2	6	1
17	11	38	6	1	22	2	16	1
18	25	37	14	1	27	2	8	1
19	7	33	18	1	29	2	11	1
20	27	33	28	1	8	2	29	1
21	18	32	21	1	18	2	2	0
22	29	30	25	1	2	1	3	0
23	28	22	3	1	6	1	13	0
24	20	22	5	1	21	1	21	0
25	5	17	26	1	5	1	25	0
26	8	16	8	1	11	1	5	0
27	6	12	7	0	13	1	24	0
28	24	11	13	0	7	1	28	0
29	2	10	29	0	24	0	22	0
30	13	6	2	0	20	0	20	0

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	18	125	24	5	24	7	24	4
2	1	121	18	5	20	7	20	4
3	12	104	12	5	14	6	12	3
4	24	90	1	4	5	6	7	3
5	5	84	14	4	18	4	14	3
6	9	78	30	4	1	4	1	2
7	26	73	9	4	2	4	18	2
8	20	71	6	3	11	4	6	2
9	28	63	27	3	12	4	5	2
10	14	62	19	2	7	4	30	2
11	21	55	2	2	26	4	2	2
12	23	51	5	2	30	3	27	2
13	15	51	25	2	28	3	11	1
14	6	49	21	2	25	3	25	1
15	30	49	29	2	17	2	8	1
16	27	47	15	2	8	2	16	1
17	7	44	20	2	6	2	17	1
18	13	41	7	1	9	2	28	1
19	29	41	4	1	16	2	26	1
20	11	37	11	1	29	2	15	1
21	2	35	17	1	19	1	29	1
22	25	34	8	1	13	1	3	0
23	8	33	23	1	23	1	4	0
24	19	27	26	1	27	1	21	0
25	4	22	3	0	15	1	10	0
26	16	16	10	0	10	0	19	0
27	17	14	13	0	4	0	9	0
28	10	13	28	0	21	0	13	0
29	22	12	22	0	22	0	22	0
30	3	1	16	0	3	0	23	0

(Table continued on next page.)

	Categories							
BLOT NO. 8	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	23	135	20	5	23	8	23	4
2	3	128	15	5	3	7	5	3
3	5	112	16	4	5	6	3	3
4	15	96	3	4	19	5	16	3
5	17	90	5	4	9	5	27	3
6	9	89	23	4	15	5	15	3
7	19	85	29	3	26	4	19	2
8	26	78	27	3	29	4	29	2
9	12	73	9	3	11	4	9	2
10	29	67	8	3	16	4	12	2
11	8	62	30	3	17	3	20	2
12	11	62	12	3	8	3	8	2
13	30	60	4	2	12	3	11	1
14	16	56	11	2	27	3	10	1
15	20	54	22	2	30	3	28	1
16	14	47	25	2	14	3	17	1
17	27	42	17	2	20	2	1	1
18	25	34	10	1	4	2	30	1
19	28	25	19	1	21	1	4	1
20	4	24	-	1	18	1	26	1
21	10	19	1	1	28	1	14	1
22	6	18	14	1	10	1	18	0
23	22	16	26	1	1	1	7	0
24	2	15	21	0	25	1	21	0
25	21	14	18	0	7	0	25	0
26	1	12	6	0	2	0	2	0
27	13	11	24	0	6	0	24	0
28	18	7	28	0	13	0	13	0
29	24	4	7	0	22	0	22	0
30	7	2	13	0	24	0	6	0

(Table continued on next page.)

BLOT NO. 9	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	7	102	7	6	17	7	25	4
2	25	94	17	6	7	6	7	3
3	17	88	13	5	6	5	24	3
4	24	85	1	5	1	5	12	3
5	13	77	30	5	28	5	21	3
6	6	76	19	4	13	5	28	3
7	11	74	25	3	12	4	1	2
8	1	73	12	3	25	4	4	2
9	28	64	24	3	11	4	15	2
10	19	63	6	3	24	3	17	2
11	12	58	11	3	15	3	18	1
12	21	53	4	2	19	3	5	1
13	27	50	21	2	4	3	3	1
14	4	50	23	2	22	3	14	1
15	29	50	27	2	21	3	22	1
16	16	45	2	1	2	2	16	1
17	14	43	15	1	26	2	2	1
18	2	40	28	1	27	2	10	1
19	3	40	5	1	23	2	13	1
20	9	40	26	1	29	2	20	1
21	30	38	22	1	3	1	6	1
22	20	38	18	0	18	1	30	1
23	22	35	3	0	20	1	9	1
24	15	34	9	0	9	1	19	0
25	23	34	10	0	30	1	8	0
26	5	27	16	0	16	0	26	0
27	18	21	20	0	5	0	27	0
28	10	21	14	0	10	0	11	0
29	8	11	29	0	14	0	29	0
30	26	10	8	0	8	0	23	0

(Table continued on next page.)

BLOT NO. 10	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	26	139	26	6	26	8	4	3
2	8	128	17	5	10	6	21	3
3	21	123	4	5	8	6	26	3
4	10	90	21	4	15	6	28	3
5	15	89	8	4	28	5	1	2
6	4	88	3	3	23	4	8	2
7	17	82	24	3	6	4	17	2
8	3	81	28	3	4	4	18	2
9	23	73	23	3	21	4	14	2
10	29	61	14	2	2	3	9	2
11	28	61	20	2	29	3	15	2
12	14	60	1	2	1	3	10	2
13	18	58	12	2	18	3	23	2
14	24	57	13	2	17	3	12	1
15	11	47	15	2	24	3	22	1
16	6	47	10	2	19	2	19	1
17	2	43	9	2	20	2	2	1
18	30	32	11	2	3	2	3	1
19	1	30	29	2	14	2	11	1
20	20	26	6	1	16	2	27	1
21	22	24	16	1	7	1	6	1
22	5	19	2	1	12	1	29	1
23	12	18	30	1	11	1	24	1
24	9	15	5	0	9	1	16	0
25	16	14	25	0	22	1	25	0
26	7	12	19	0	25	0	5	0
27	25	9	18	0	27	0	20	0
28	19	6	7	0	13	0	13	0
29	27	6	22	0	5	0	7	0
30	13	5	27	0	30	0	30	0

Table A-12

Utah State University 1966-67:
Frequency Ranking of Response-Items
by Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	F[b]	R	F	R	F	R	F
1	19	160	19	29	19	16	19	10
2	12	138	12	25	12	13	6	8
3	13	134	13	23	25	13	2	7
4	18	129	18	21	18	11	25	7
5	6	118	25	20	13	12	18	7
6	25	117	6	20	29	10	12	6
7	29	109	29	18	6	10	29	6
8	7	103	7	16	7	9	7	5
9	2	78	2	13	1	9	9	5
10	23	78	22	13	23	7	23	5
11	1	77	1	12	2	6	22	5
12	22	62	23	11	9	6	14	5
13	9	59	9	8	22	6	17	4
14	23	49	27	7	28	6	13	4
15	5	46	5	5	17	5	28	4
16	17	42	8	5	5	5	1	3
17	27	38	28	5	14	4	5	3
18	14	35	14	5	11	3	27	3
19	24	30	11	4	24	3	11	2
20	11	29	17	4	27	2	10	2
21	3	26	3	4	8	1	15	2
22	8	18	4	4	4	1	8	1
23	4	17	16	4	26	1	26	1
24	26	13	24	4	3	1	24	1
25	10	12	30	4	10	0	3	1
26	15	12	15	1	16	0	30	1
27	30	8	26	1	20	0	20	1
28	16	8	10	0	21	0	21	0
29	30	8	21	0	15	0	4	0
30	21	7	20	0	30	0	16	0

[a]R = response-item number.
[b]F = frequency.

(Table continued on next page.)

BLOT NO. 2	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	118	8	18	3	15	8	8
2	8	113	26	17	21	11	3	8
3	21	110	15	16	16	9	21	8
4	26	103	10	16	23	9	15	7
5	15	101	21	15	26	9	26	6
6	10	99	6	15	8	9	24	5
7	16	94	3	14	6	9	10	5
8	4	72	16	14	30	8	12	5
9	30	72	30	13	10	7	30	5
10	22	67	22	13	28	7	16	5
11	6	67	20	11	25	7	22	4
12	28	67	25	10	15	7	4	4
13	16	63	28	9	9	6	28	4
14	24	61	17	9	13	6	5	4
15	20	59	1	9	20	5	17	4
16	25	55	12	9	24	5	6	3
17	12	51	5	8	11	5	20	3
18	23	50	24	8	12	4	25	3
19	5	41	23	8	4	4	29	2
20	13	40	9	7	17	4	2	2
21	9	39	14	7	14	3	14	2
22	14	38	29	6	18	3	18	2
23	2	38	18	6	5	3	23	2
24	29	34	4	6	22	2	9	2
25	11	29	2	6	1	1	13	2
26	7	29	13	6	29	1	27	2
27	1	24	7	4	7	1	7	1
28	18	22	11	4	2	0	11	1
29	27	16	19	3	19	0	1	1
30	19	11	27	2	27	0	19	0

(Table continued on next page.)

BLOT NO. 3	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	146	27	24	1	13	27	8
2	27	139	1	22	27	13	22	8
3	6	105	13	19	18	11	11	7
4	22	101	21	18	22	10	6	7
5	13	101	22	17	30	10	17	6
6	12	95	6	17	20	10	1	6
7	8	93	11	14	13	8	15	6
8	21	92	17	13	12	8	21	6
9	18	90	8	13	6	8	9	5
10	20	85	30	12	9	7	20	5
11	30	80	18	11	8	7	28	4
12	11	66	20	10	14	6	29	4
13	17	65	12	10	10	5	25	3
14	9	51	28	10	17	5	2	3
15	28	51	7	8	21	5	5	3
16	4	46	9	8	4	4	8	3
17	14	46	15	7	5	4	16	3
18	29	45	24	7	29	3	30	3
19	23	44	29	7	11	3	7	3
20	7	37	4	6	28	3	12	3
21	24	33	5	6	24	3	13	3
22	15	33	2	6	3	3	18	2
23	5	30	16	5	23	2	3	2
24	16	27	10	5	7	2	14	2
25	25	23	23	5	26	2	23	2
26	2	21	14	3	15	1	4	1
27	10	19	25	3	25	1	10	1
28	26	16	26	2	19	1	24	1
29	3	14	3	1	2	0	19	0
30	19	2	19	1	16	0	26	0

(Table continued on next page.)

	Categories							
BLOT NO. 4	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	3	127	3	18	30	13	3	10
2	22	112	22	17	21	13	5	9
3	30	104	30	16	15	12	22	7
4	5	102	21	16	3	11	15	7
5	15	100	25	16	9	8	11	6
6	21	98	17	15	25	8	20	6
7	8	91	5	15	5	8	30	6
8	11	90	8	14	8	8	8	5
9	25	90	15	14	23	7	9	5
10	9	71	11	12	4	6	25	5
11	14	69	9	11	17	6	18	5
12	17	66	4	11	18	6	12	5
13	26	66	1	11	10	6	26	5
14	18	62	20	11	22	5	16	4
15	20	62	16	10	12	5	21	4
16	10	58	10	9	26	5	23	4
17	4	56	26	9	11	5	14	3
18	16	52	14	8	24	4	29	3
19	28	51	12	8	16	4	28	2
20	23	51	24	7	14	3	6	2
21	12	33	29	7	1	3	17	2
22	1	33	13	7	20	2	19	1
23	6	23	28	6	27	2	7	1
24	29	22	23	5	6	2	27	1
25	27	22	18	4	29	2	13	1
26	19	21	7	4	2	2	1	1
27	2	20	27	4	19	1	2	0
28	7	19	6	3	28	1	10	0
29	24	16	19	2	13	1	4	0
30	13	12	2	0	7	0	24	0

(Table continued on next page.)

BLOT NO. 5	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	172	1	29	1	16	25	11
2	25	156	25	23	25	15	1	10
3	23	131	5	21	5	14	30	10
4	5	126	23	21	23	12	5	8
5	30	119	30	21	18	11	19	7
6	7	114	7	20	7	10	23	7
7	13	90	15	17	13	9	7	7
8	18	87	17	16	12	9	13	6
9	19	80	20	15	20	9	18	6
10	12	81	10	14	30	8	10	6
11	10	78	12	13	29	7	16	4
12	20	78	19	11	8	5	15	4
13	17	66	13	10	10	5	12	4
14	15	65	18	9	15	5	20	3
15	29	50	6	7	19	4	8	3
16	8	45	8	7	17	4	4	2
17	6	44	29	6	21	3	24	2
18	24	35	24	6	24	3	11	1
19	16	27	27	4	6	2	14	1
20	14	25	16	4	14	2	9	1
21	11	22	21	3	11	1	21	1
22	9	22	26	2	26	1	22	1
23	21	22	22	2	9	1	6	1
24	22	14	9	2	16	1	17	1
25	27	13	28	2	28	1	3	1
26	4	10	14	2	22	1	29	1
27	26	9	11	2	2	0	2	0
28	28	8	4	1	3	0	28	0
29	2	8	3	0	4	0	26	0
30	3	1	2	0	27	0	27	0

(Table continued on next page.)

BLOT NO. 6	Categories 0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	4	146	30	23	4	15	23	8
2	23	138	9	21	30	14	4	8
3	30	128	23	20	23	12	12	6
4	9	119	1	19	9	10	19	6
5	1	101	4	18	10	9	30	6
6	19	94	14	17	15	9	27	6
7	14	93	26	16	19	9	7	5
8	12	81	17	14	1	8	17	5
9	15	80	21	12	3	7	15	5
10	26	80	19	12	16	7	16	5
11	16	79	12	11	25	7	21	4
12	17	77	15	10	17	6	2	4
13	10	67	10	10	26	5	9	4
14	3	65	27	9	21	5	1	4
15	21	63	16	9	8	5	26	3
16	25	49	3	8	22	4	3	3
17	27	47	11	8	14	4	13	3
18	7	38	5	7	27	4	14	3
19	22	36	18	6	13	3	28	3
20	11	32	22	6	11	3	22	3
21	28	28	20	5	12	3	10	3
22	5	25	6	4	18	3	25	2
23	18	25	7	4	20	2	5	2
24	8	24	28	4	28	2	8	2
25	20	23	25	4	7	1	11	2
26	29	20	8	4	2	1	29	2
27	2	15	24	3	6	1	18	1
28	6	10	13	2	24	0	20	1
29	13	8	29	2	29	0	6	1
30	24	5	2	2	5	0	24	0

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	1	147	1	26	18	16	18	10
2	18	143	18	23	24	11	1	9
3	12	129	5	18	1	10	5	7
4	24	127	26	17	12	10	12	7
5	5	106	24	17	14	8	20	6
6	26	88	20	16	9	8	26	5
7	9	80	12	16	27	8	23	5
8	20	79	9	15	6	7	14	5
9	28	79	29	13	5	7	7	5
10	14	75	14	12	20	7	28	4
11	21	72	23	11	2	6	9	4
12	7	62	7	9	28	6	30	4
13	13	60	15	9	8	5	24	4
14	27	57	13	8	21	5	19	3
15	30	56	27	8	26	5	13	3
16	15	46	28	8	30	5	15	3
17	11	44	30	8	23	5	25	3
18	23	43	11	8	29	5	29	3
19	29	43	4	7	19	4	27	3
20	6	42	19	7	13	4	2	2
21	8	39	17	6	11	4	6	2
22	25	36	21	6	25	3	11	2
23	4	33	10	5	15	3	8	2
24	2	32	8	5	7	3	21	2
25	19	28	25	4	10	2	22	2
26	17	20	6	4	4	2	10	1
27	16	12	2	3	17	0	16	1
28	22	10	22	1	3	0	4	1
29	10	7	3	0	22	0	3	0
30	3	6	16	0	16	0	17	0

(Table continued on next page.)

	Categories							
BLOT NO. 8	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	23	141	23	26	23	15	23	10
2	15	138	15	22	5	12	15	10
3	5	133	3	20	26	12	5	9
4	3	109	5	20	15	12	8	8
5	9	96	30	16	3	10	11	7
6	17	93	9	15	16	10	17	7
7	20	90	16	15	20	9	3	5
8	12	81	20	14	9	9	25	5
9	29	80	8	13	29	8	20	5
10	8	78	26	12	12	8	19	5
11	16	78	12	12	30	7	29	4
12	11	72	17	11	8	7	16	4
13	26	67	19	11	2	6	28	4
14	19	65	27	9	17	5	2	4
15	27	65	11	9	21	4	26	4
16	30	54	10	8	10	4	30	3
17	25	48	25	8	11	4	12	2
18	2	40	2	8	14	4	27	2
19	28	45	29	7	19	3	10	2
20	4	37	4	7	25	3	9	2
21	22	35	28	6	6	2	1	2
22	1	32	21	4	4	2	4	2
23	14	32	13	4	22	1	22	1
24	10	28	14	3	27	1	21	1
25	21	23	22	3	18	1	7	1
26	6	11	18	3	28	1	14	1
27	13	11	6	3	24	0	18	0
28	18	9	1	1	13	0	6	0
29	7	6	7	1	7	0	13	0
30	24	5	24	0	1	0	24	0

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	25	125	17	22	17	11	17	9
2	17	113	6	19	24	10	9	8
3	7	106	13	17	7	9	25	7
4	13	105	19	14	21	9	24	7
5	6	102	7	14	2	8	19	6
6	24	95	11	14	5	8	11	6
7	11	86	3	14	13	8	12	5
8	1	81	1	13	25	8	6	5
9	19	79	9	12	11	7	13	5
10	29	76	24	12	29	6	28	5
11	12	73	12	11	9	6	14	4
12	28	63	22	11	12	5	3	4
13	9	63	25	11	1	5	29	4
14	21	62	21	11	30	5	2	4
15	3	53	28	11	22	5	1	3
16	4	49	29	10	14	5	7	3
17	2	47	27	9	19	5	4	3
18	23	44	26	9	28	5	27	3
19	14	43	5	8	27	5	5	3
20	16	42	30	8	18	5	30	2
21	22	41	14	8	4	4	23	2
22	27	40	23	6	10	4	15	2
23	30	38	16	6	6	4	20	2
24	20	37	10	4	3	3	21	2
25	15	33	20	4	26	3	22	2
26	5	28	15	4	20	2	16	1
27	18	26	8	3	15	2	18	1
28	10	22	4	2	23	1	26	1
29	26	15	2	2	8	1	10	0
30	8	12	18	1	16	0	8	0

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	F	R	F	R	F	R	F
1	26	154	8	26	8	15	26	10
2	8	136	21	24	15	14	8	8
3	21	132	26	24	26	13	10	7
4	4	117	23	20	21	11	28	7
5	15	111	4	19	17	9	14	7
6	17	104	15	18	23	9	4	7
7	23	97	17	14	11	9	18	6
8	29	78	1	12	3	8	21	6
9	10	77	11	12	29	7	24	5
10	11	73	18	11	4	7	1	4
11	28	70	20	11	24	6	2	4
12	1	69	10	10	18	5	11	4
13	3	69	2	10	28	5	23	4
14	24	62	29	9	6	5	20	3
15	14	57	28	9	5	4	6	3
16	18	53	6	8	10	4	30	3
17	2	43	14	8	2	4	17	3
18	6	41	12	7	1	4	3	3
19	20	34	3	7	30	4	19	2
20	30	31	24	6	12	3	16	2
21	12	31	16	4	20	3	13	2
22	9	30	20	3	14	2	9	2
23	16	24	22	3	16	2	15	2
24	5	23	25	3	25	2	5	1
25	7	15	13	3	19	2	7	1
26	22	20	5	2	22	1	22	1
27	27	17	19	2	9	1	27	1
28	19	14	27	2	27	1	29	1
29	13	12	7	2	13	0	25	0
30	25	8	9	1	7	0	12	0

Table A-13

Potsdam State College 1965-66:
Rank Mean Choice Intensity Scores of
Response-Items by Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	$\bar{X}$[b]	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	20	5.00	21	4.50	19	4.24	4	4.33
2	21	5.00	19	4.19	8	4.00	19	4.11
3	19	4.36	6	4.06	21	4.00	24	3.83
4	16	4.33	20	4.00	10	4.00	6	3.79
5	13	4.04	18	3.94	18	3.92	18	3.67
6	30	4.00	7	3.93	28	3.88	13	3.66
7	6	3.94	30	3.86	17	3.85	16	3.50
8	7	3.87	16	3.83	23	3.79	7	3.49
9	23	3.85	13	3.81	6	3.78	17	3.44
10	15	3.75	23	3.75	7	3.60	29	3.42
11	18	3.70	4	3.67	9	3.48	5	3.36
12	1	3.58	29	3.63	22	3.46	3	3.33
13	4	3.50	5	3.50	5	3.44	30	3.33
14	22	3.40	9	3.48	3	3.33	9	3.27
15	17	3.40	2	3.43	25	3.30	22	3.27
16	27	3.40	25	3.42	13	3.30	25	3.24
17	11	3.38	27	3.42	16	3.25	27	3.22
18	5	3.38	1	3.36	14	3.24	23	3.22
19	28	3.38	24	3.29	2	3.22	1	3.12
20	8	3.33	3	3.25	1	3.21	2	3.02
21	25	3.31	14	3.19	29	3.18	8	3.00
22	2	3.28	17	3.08	4	3.14	10	3.00
23	14	3.26	8	3.00	30	3.00	26	3.00
24	12	3.24	22	3.00	12	3.96	12	2.90
25	29	3.20	10	3.00	24	2.93	28	2.84
26	9	3.08	12	2.91	11	2.75	15	2.50
27	3	3.00	28	2.83	27	2.69	14	2.42
28	24	2.88	15	2.67	15	2.40	20	2.25
29	10	2.00	11	2.60	26	1.67	11	2.00
30	26	1.83	26	1.00	20	1.00	21	2.00

[a] R = response-item number.
[b] $\bar{X}$ = mean choice intensity score.

(Table continued on next page.)

	Categories							
BLOT NO. 2	0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	1	4.60	2	4.20	3	4.30	3	4.17
2	3	4.21	20	4.09	16	4.00	16	3.91
3	16	3.92	3	4.06	2	3.88	18	3.86
4	2	3.75	1	3.80	18	3.86	2	3.82
5	21	3.50	16	3.73	1	3.67	1	3.64
6	30	3.42	21	3.54	21	3.50	14	3.54
7	17	3.40	18	3.50	17	3.50	21	3.50
8	7	3.33	8	3.46	10	3.32	20	3.38
9	8	3.22	30	3.42	20	3.31	17	3.37
10	26	3.14	17	3.35	8	3.26	26	3.36
11	10	3.00	9	3.33	14	3.15	8	3.32
12	20	2.92	13	3.33	4	3.59	30	3.22
13	5	2.90	14	3.29	19	3.00	10	3.21
14	29	2.81	11	3.17	9	2.93	28	3.06
15	18	2.80	15	3.11	7	2.93	7	3.00
16	15	2.77	10	3.09	12	2.89	6	3.00
17	13	2.76	26	3.04	15	2.86	12	3.00
18	27	2.75	5	3.00	30	2.83	15	2.89
19	12	2.74	4	2.91	26	2.81	4	2.86
20	9	2.73	24	2.89	5	2.80	24	2.86
21	11	2.71	22	2.74	27	2.67	29	2.83
22	24	2.67	7	2.63	11	2.60	9	2.73
23	4	2.63	25	2.61	29	2.55	11	2.63
24	19	2.50	12	2.55	22	2.53	13	2.54
25	22	2.45	29	2.53	6	2.47	22	2.53
26	6	2.43	28	2.50	25	2.45	19	2.50
27	25	2.35	19	2.50	13	2.40	25	2.42
28	28	2.33	6	2.36	24	2.29	27	2.22
29	14	2.33	23	2.00	28	2.20	5	2.08
30	23	2.29	27	1.50	23	2.11	23	1.64

(Table continued on next page.)

	Categories							
BLOT NO. 3	0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	19	5.00	1	4.65	1	4.64	1	4.54
2	1	4.61	8	4.29	2	4.00	3	4.20
3	3	4.00	4	4.12	8	3.88	2	4.00
4	20	3.82	21	3.95	6	3.85	4	4.00
5	8	3.76	7	3.92	20	3.64	19	4.00
6	5	3.75	6	3.75	21	3.64	8	3.94
7	27	3.72	27	3.74	27	3.59	21	3.87
8	4	3.60	10	3.67	7	3.56	6	3.72
9	6	3.59	25	3.67	11	3.50	7	3.47
10	29	3.58	11	3.63	4	3.44	20	3.37
11	13	3.54	5	3.60	9	3.39	13	3.36
12	16	3.50	17	3.43	13	3.34	9	3.36
13	7	3.50	18	3.43	5	3.33	18	3.26
14	25	3.40	9	3.43	18	3.21	28	3.25
15	2	3.33	13	3.29	25	3.08	25	3.23
16	23	3.33	14	3.29	3	3.00	11	3.21
17	21	3.32	2	3.00	29	2.95	27	3.18
18	18	3.19	3	3.00	30	2.94	5	3.10
19	11	3.13	15	3.00	12	2.90	12	3.00
20	9	3.13	28	3.00	28	2.86	29	3.00
21	28	3.11	20	3.00	10	2.75	30	2.88
22	15	3.08	29	2.95	22	2.70	22	2.85
23	30	3.08	22	2.86	15	2.69	23	2.67
24	17	2.86	30	2.86	16	2.55	15	2.56
25	12	2.85	24	2.73	17	2.52	14	2.53
26	22	2.68	12	2.72	23	2.40	10	2.50
27	14	2.60	16	2.40	14	2.36	24	2.50
28	24	2.44	26	2.25	24	2.33	17	2.48
29	10	2.00	23	1.50	26	2.29	26	2.33
30	26	2.00	19	0.00	19	1.00	16	1.50

(Table continued on next page.)

	Categories							
BLOT NO. 4	0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	2	4.33	3	4.43	3	4.45	3	4.35
2	3	4.31	2	4.00	2	4.33	1	3.82
3	1	4.25	5	3.93	1	4.13	5	3.76
4	5	3.96	21	3.90	4	3.80	6	3.67
5	4	3.85	20	3.81	20	3.74	4	3.57
6	20	3.64	1	3.80	5	3.68	20	3.39
7	21	3.59	4	3.71	21	3.67	21	3.37
8	13	3.33	19	3.67	13	3.22	19	3.31
9	16	3.27	13	3.60	11	3.20	15	3.20
10	15	3.22	11	3.50	15	3.09	11	3.03
11	10	3.08	16	3.26	6	3.09	2	3.00
12	8	3.08	6	3.25	9	3.00	28	3.00
13	11	2.92	10	3.20	7	3.00	9	2.95
14	12	2.90	9	3.19	8	2.81	16	2.95
15	9	2.89	18	3.08	18	2.79	8	2.84
16	18	2.81	15	3.00	10	2.75	10	2.80
17	6	2.78	27	3.00	16	2.74	12	2.80
18	14	2.76	12	2.88	12	2.71	22	2.75
19	7	2.67	8	2.81	14	2.64	17	2.62
20	19	2.67	14	2.80	29	2.56	14	2.62
21	28	2.67	23	2.67	30	2.37	29	2.50
22	27	2.60	28	2.50	17	2.33	13	2.40
23	22	2.59	30	2.46	22	2.32	7	2.38
24	30	2.48	7	2.33	27	2.14	30	2.32
25	17	2.40	17	2.16	28	2.07	27	2.27
26	26	1.88	26	2.13	19	2.00	23	2.14
27	23	1.81	22	2.08	23	2.00	18	2.07
28	25	1.75	25	1.88	26	1.96	26	1.95
29	29	1.50	29	1.50	24	1.88	25	1.71
30	24	1.00	24	1.00	25	1.83	24	1.50

(Table continued on next page.)

	Categories							
BLOT NO. 5	0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	1	4.55	26	5.00	1	4.70	26	5.00
2	2	4.00	1	4.72	2	4.00	1	4.81
3	26	4.00	14	4.43	28	4.00	4	4.50
4	25	3.89	25	4.06	4	4.00	13	3.83
5	7	3.65	2	4.00	13	3.81	11	3.75
6	9	3.60	24	4.00	7	3.63	25	3.60
7	13	3.60	7	3.87	21	3.50	30	3.51
8	14	3.57	23	3.61	25	3.34	2	3.50
9	30	3.53	13	3.58	23	3.30	7	3.50
10	5	3.39	6	3.43	5	3.28	28	3.50
11	22	3.25	5	3.42	14	3.08	23	3.43
12	23	3.24	28	3.40	9	3.00	5	3.16
13	18	3.11	30	3.34	26	3.00	9	3.14
14	29	3.07	22	3.33	29	3.00	15	3.07
15	16	2.92	8	3.31	18	2.78	18	2.77
16	15	2.88	9	3.29	8	2.77	8	2.75
17	24	2.67	15	3.16	30	2.74	29	2.75
18	21	2.60	20	3.05	10	2.67	24	2.70
19	6	2.60	4	3.00	6	2.62	14	2.67
20	8	2.60	29	2.91	15	2.42	16	2.67
21	10	2.57	18	2.67	17	2.38	20	2.61
22	12	2.42	10	2.63	27	2.33	22	2.50
23	11	2.33	12	2.61	20	2.26	6	2.45
24	17	2.27	17	2.50	12	2.12	21	2.44
25	19	2.20	21	2.44	24	2.08	12	2.42
26	20	2.00	27	2.33	16	2.00	10	2.27
27	4	0.00	19	2.20	22	2.00	17	2.00
28	3	0.00	11	1.83	19	1.95	19	1.58
29	27	0.00	16	1.70	11	1.89	27	1.50
30	28	0.00	3	0.00	3	0.00	3	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	4	4.20	4	4.39	4	4.29	4	4.31
2	5	3.67	28	4.00	1	4.00	8	4.00
3	28	3.67	6	3.83	6	4.00	18	3.83
4	1	3.65	22	3.82	7	3.81	6	3.80
5	19	3.59	1	3.81	5	3.57	19	3.77
6	9	3.53	19	3.60	19	3.46	28	3.67
7	6	3.50	11	3.57	28	3.45	13	3.67
8	3	3.50	7	3.57	14	3.39	5	3.63
9	18	3.43	9	3.45	12	3.35	1	3.60
10	14	3.42	14	3.44	17	3.33	7	3.50
11	30	3.38	3	3.38	3	3.29	15	3.40
12	23	3.31	30	3.35	15	3.28	14	3.39
13	7	3.25	10	3.29	10	3.23	11	3.36
14	22	3.08	17	3.26	23	3.21	3	3.36
15	10	3.00	15	3.25	9	3.13	22	3.30
16	11	3.00	16	3.15	2	3.10	30	3.20
17	15	3.00	2	3.11	11	3.07	2	3.17
18	17	2.94	13	3.00	8	3.00	10	3.16
19	16	2.76	23	2.94	22	2.88	23	3.14
20	12	2.76	18	2.86	21	2.85	12	3.04
21	24	2.75	12	2.80	29	2.77	9	2.98
22	21	2.75	8	2.67	30	2.76	21	2.70
23	25	2.64	21	2.64	18	2.63	29	2.67
24	8	2.63	20	2.57	16	2.60	17	2.54
25	2	2.60	5	2.50	24	2.40	20	2.40
26	29	2.56	29	2.45	20	2.33	16	2.37
27	26	2.45	27	2.43	26	2.19	26	2.34
28	27	2.33	26	2.27	13	2.00	24	2.33
29	20	2.00	24	2.25	27	1.94	25	1.96
30	13	1.00	25	2.00	25	1.68	27	1.67

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	2	4.40	1	4.41	10	5.00	25	4.45
2	26	4.24	27	4.38	3	5.00	1	4.25
3	1	4.13	23	4.10	16	4.50	26	4.11
4	3	4.00	2	4.00	23	4.41	10	4.00
5	12	3.94	26	3.86	1	4.39	2	4.00
6	25	3.92	25	3.79	22	4.00	24	3.75
7	23	3.78	18	3.77	26	4.00	12	3.74
8	27	3.65	24	3.74	25	3.93	23	3.73
9	24	3.54	12	3.64	2	3.93	29	3.56
10	17	3.50	20	3.64	24	3.79	3	3.50
11	10	3.50	8	3.45	18	3.55	18	3.47
12	28	3.43	14	3.44	7	3.53	20	3.42
13	18	3.42	28	3.44	12	3.53	27	3.41
14	19	3.19	30	3.36	27	3.46	22	3.33
15	29	3.18	11	3.20	8	3.44	17	3.25
16	8	3.10	29	3.17	9	3.33	7	3.21
17	9	3.05	9	3.15	5	3.23	28	3.15
18	14	2.95	5	3.04	28	3.17	21	2.92
19	7	2.94	16	3.00	29	3.14	8	2.82
20	30	2.92	21	3.00	20	3.04	9	2.75
21	5	2.89	17	3.00	4	3.00	14	2.75
22	20	2.88	22	3.00	30	3.00	13	2.71
23	21	2.77	19	2.94	19	2.88	15	2.69
24	16	2.75	6	2.92	17	2.67	5	2.63
25	15	2.61	13	2.70	14	2.57	30	2.53
26	6	2.53	3	2.50	21	2.50	4	2.50
27	4	2.00	15	2.23	11	2.38	19	2.42
28	13	1.89	7	2.14	6	2.20	11	2.23
29	11	1.89	4	2.00	15	2.14	6	1.92
30	22	0.00	10	0.00	13	2.07	16	1.50

(Table continued on next page.)

	Categories							
BLOT NO. 8	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	23	4.61	23	4.80	7	5.00	22	4.60
2	3	3.92	7	4.00	13	5.00	23	4.30
3	26	3.83	26	4.00	23	4.57	2	4.00
4	12	3.73	10	3.86	3	3.80	3	3.76
5	25	3.57	12	3.77	2	3.77	26	3.70
6	2	3.50	3	3.76	12	3.74	11	3.69
7	10	3.43	8	3.75	14	3.70	9	3.66
8	8	3.36	9	3.66	9	3.70	8	3.65
9	11	3.35	11	3.64	27	3.64	4	3.63
10	4	3.33	17	3.63	29	3.56	27	3.50
11	13	3.33	28	3.60	11	3.44	15	3.19
12	27	3.33	14	3.60	8	3.43	30	3.18
13	14	3.29	22	3.60	26	3.36	14	3.14
14	19	3.27	27	3.53	5	3.30	10	3.09
15	17	3.22	6	3.50	4	3.30	28	3.08
16	28	3.13	25	3.44	19	3.26	5	3.08
17	5	3.07	19	3.42	10	3.25	6	3.00
18	15	3.07	4	3.36	15	3.16	13	3.00
19	22	3.00	5	3.34	22	3.00	12	2.94
20	24	3.00	21	3.22	17	2.90	29	2.84
21	9	2.96	2	3.20	16	2.88	17	2.84
22	29	2.95	16	3.17	6	2.86	25	2.78
23	30	2.79	29	3.13	29	2.76	16	2.68
24	21	2.75	15	2.97	30	2.74	20	2.64
25	16	2.75	20	2.89	25	2.65	19	2.59
26	6	2.71	30	2.79	20	2.62	24	2.50
27	20	2.33	1	2.33	18	2.20	1	2.43
28	18	2.00	18	2.00	1	2.14	21	1.83
29	1	1.50	13	2.00	21	2.00	18	1.00
30	7	0.00	24	2.00	24	0.00	7	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	7	4.21	3	4.06	7	4.10	9	4.20
2	10	3.75	7	4.06	11	3.74	30	4.17
3	27	3.67	26	4.00	14	3.71	3	4.08
4	14	3.66	27	3.92	3	3.67	7	4.08
5	2	3.60	9	3.89	13	3.56	27	3.85
6	9	3.50	11	3.87	15	3.53	18	3.50
7	25	3.44	14	3.67	12	3.51	26	3.50
8	11	3.39	6	3.62	10	3.50	13	3.45
9	5	3.33	13	3.58	27	3.44	14	3.45
10	8	3.29	15	3.50	4	3.25	12	3.39
11	14	3.27	28	3.34	9	3.21	25	3.39
12	3	3.25	25	3.32	5	3.14	11	3.28
13	12	3.20	2	3.09	25	3.14	15	3.20
14	6	3.09	30	3.00	30	3.08	28	3.14
15	26	3.00	8	3.00	18	3.00	10	3.13
16	30	3.00	29	3.00	28	2.97	6	3.11
17	17	2.86	10	3.00	6	2.94	16	3.08
18	21	2.80	21	2.96	17	2.90	5	3.00
19	24	2.71	12	2.92	24	2.84	17	2.79
20	22	2.70	4	2.88	2	2.76	2	2.79
21	1	2.53	5	2.82	8	2.75	21	2.74
22	15	2.50	19	2.81	26	2.75	19	2.68
23	19	2.48	20	2.80	19	2.72	23	2.59
24	28	2.47	24	2.70	23	2.53	4	2.53
25	16	2.36	17	2.63	21	2.48	24	2.47
26	4	2.35	22	2.50	16	2.44	1	2.45
27	23	2.33	1	2.46	1	2.22	8	2.33
28	20	2.20	16	2.40	22	2.17	29	2.08
29	29	2.00	23	2.20	20	2.15	22	2.00
30	18	1.50	18	2.00	29	2.12	20	1.86

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	19	5.00	3	4.36	3	4.26	1	4.44
2	2	4.60	2	4.35	1	4.00	3	4.08
3	10	4.38	1	4.33	8	3.97	2	3.95
4	8	4.24	10	4.27	10	3.93	11	3.91
5	3	4.00	11	4.20	11	3.84	9	3.90
6	25	4.00	16	4.13	7	3.83	10	3.84
7	11	3.94	12	4.00	27	3.75	8	3.81
8	16	3.82	13	4.00	2	3.67	29	3.79
9	1	3.78	8	3.93	5	3.63	6	3.69
10	5	3.67	19	3.83	9	3.50	4	3.56
11	14	3.67	5	3.80	21	3.38	5	3.50
12	21	3.63	7	3.67	4	3.36	19	3.40
13	6	3.60	6	3.67	29	3.33	28	3.26
14	26	3.54	21	3.55	30	3.31	21	3.26
15	4	3.54	4	3.42	28	3.23	20	3.22
16	30	3.50	26	3.42	16	3.15	26	3.14
17	29	3.45	14	3.38	26	3.14	15	3.03
18	15	3.32	29	3.36	22	3.08	17	2.94
19	23	3.24	9	3.33	14	3.05	30	2.77
20	28	3.20	25	3.33	17	3.05	23	2.76
21	17	3.08	30	3.23	6	3.00	12	2.71
22	12	3.00	24	3.12	13	3.00	14	2.67
23	24	2.94	28	3.11	19	3.00	18	2.65
24	9	2.75	15	3.11	12	3.00	24	2.55
25	7	2.60	18	3.00	15	3.00	7	2.50
26	18	2.50	20	2.67	23	2.75	16	2.11
27	20	2.10	23	2.50	25	2.50	22	2.08
28	27	2.00	17	2.35	24	2.43	27	2.00
29	22	2.00	22	2.29	20	2.43	25	2.00
30	13	0.00	27	2.00	18	2.33	13	0.00

Table A-14

Trenton State College 1965-66:
Rank Mean Choice Intensity Scores of
Response-Items by Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	$\bar{X}$[b]	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	19	4.07	5	4.50	19	4.40	4	5.00
2	4	3.89	15	4.33	27	4.00	9	5.00
3	6	3.77	7	4.25	3	4.00	23	5.00
4	7	3.69	19	4.24	23	4.00	18	5.00
5	13	3.66	2	3.88	30	4.00	2	4.33
6	23	3.63	28	3.83	20	4.00	19	4.25
7	18	3.62	13	3.82	18	4.00	27	4.25
8	9	3.57	18	3.73	29	3.67	17	4.00
9	17	3.56	25	3.64	7	3.50	7	4.00
10	21	3.44	17	3.60	5	3.50	13	4.00
11	29	3.39	6	3.46	13	3.50	29	3.75
12	5	3.38	23	3.38	24	3.50	22	3.00
13	25	3.26	9	3.20	14	3.50	5	3.00
14	15	3.18	22	3.14	17	3.50	15	3.00
15	11	3.15	12	3.08	12	3.33	14	3.00
16	30	3.14	14	3.00	2	3.33	24	3.00
17	2	3.13	4	3.00	6	3.25	12	3.00
18	20	3.11	27	3.00	9	3.00	3	2.00
19	27	3.11	29	2.91	25	3.00	6	0.00
20	22	3.08	1	2.88	1	2.50	11	0.00
21	3	3.06	16	2.00	28	2.50	1	0.00
22	1	3.06	11	1.75	22	2.33	21	0.00
23	12	3.03	24	1.50	4	0.00	20	0.00
24	28	3.03	3	1.00	15	0.00	10	0.00
25	14	2.97	8	0.00	8	0.00	8	0.00
26	16	2.87	20	0.00	21	0.00	16	0.00
27	8	2.73	21	0.00	11	0.00	27	0.00
28	24	2.49	26	0.00	10	0.00	28	0.00
29	10	2.22	10	0.00	26	0.00	26	0.00
30	26	2.07	30	0.00	16	0.00	30	0.00

[a] R = response-item number.
[b] $\bar{X}$ = mean choice intensity score.

(Table continued on next page.)

	Categories							
BLOT NO. 2	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.09	2	5.00	9	4.00	13	5.00
2	3	4.00	19	4.50	25	4.00	16	4.50
3	2	3.79	27	4.50	13	4.00	3	4.50
4	16	3.53	8	3.83	8	3.67	7	4.00
5	18	3.35	3	3.80	28	3.50	9	4.00
6	30	3.29	18	3.80	22	3.50	18	4.00
7	8	3.28	14	3.67	24	3.50	11	4.00
8	9	3.26	13	3.67	3	3.33	26	3.75
9	10	3.22	21	3.60	16	3.33	21	3.67
10	21	3.20	26	3.45	27	3.00	30	3.67
11	20	3.18	15	3.38	6	3.00	22	3.50
12	26	3.14	7	3.33	10	3.00	4	3.33
13	14	3.10	16	3.33	15	3.00	12	3.00
14	17	3.09	30	3.29	21	2.83	8	3.00
15	29	3.05	9	3.25	12	2.75	10	3.00
16	11	2.91	10	3.20	26	2.67	6	3.00
17	15	2.87	17	3.17	29	2.50	20	3.00
18	7	2.77	12	3.14	5	2.50	24	3.00
19	12	2.69	1	3.00	23	1.50	29	3.00
20	13	2.69	4	3.00	14	1.00	15	2.67
21	4	2.64	5	3.00	4	1.00	17	2.00
22	6	2.62	24	2.83	2	0.00	1	0.00
23	24	2.61	11	2.80	11	0.00	2	0.00
24	27	2.59	20	2.80	17	0.00	5	0.00
25	28	2.58	29	2.60	1	0.00	19	0.00
26	22	2.54	23	2.43	20	0.00	25	0.00
27	5	2.53	6	2.17	18	0.00	14	0.00
28	25	2.47	22	2.00	7	0.00	28	0.00
29	19	2.38	25	2.00	19	0.00	23	0.00
30	23	2.20	28	1.60	30	0.00	27	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 3	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.54	1	4.76	1	4.60	1	5.00
2	3	3.83	25	4.50	2	4.00	6	4.50
3	8	3.83	9	4.00	7	4.00	14	4.00
4	6	3.71	26	4.00	20	4.00	17	4.00
5	2	3.70	4	4.00	8	4.00	18	4.00
6	9	3.69	8	3.91	29	4.00	22	4.00
7	21	3.56	11	3.71	15	4.00	27	4.00
8	13	3.44	13	3.70	16	3.50	13	4.00
9	5	3.43	27	3.57	18	3.33	21	4.00
10	27	3.38	15	3.50	21	3.25	30	4.00
11	4	3.38	7	3.50	27	3.25	7	3.50
12	7	3.36	20	3.44	17	3.00	4	3.50
13	11	3.28	21	3.38	4	3.00	9	3.50
14	15	3.24	6	3.29	28	3.00	29	3.50
15	25	3.23	30	3.14	23	3.00	12	3.25
16	17	3.22	17	3.00	22	2.67	20	3.00
17	20	3.21	16	3.00	24	2.50	16	3.00
18	28	3.17	5	3.00	6	2.50	23	3.00
19	18	3.03	14	3.00	10	2.33	15	3.00
20	12	2.94	18	2.83	12	2.00	26	2.50
21	22	2.92	28	2.83	14	2.00	24	2.50
22	10	2.81	22	2.73	30	2.00	8	0.00
23	24	2.75	12	2.56	25	2.00	2	0.00
24	16	2.75	29	2.25	13	2.00	11	0.00
25	29	2.61	10	2.00	5	0.00	3	0.00
26	23	2.58	24	2.00	9	0.00	5	0.00
27	30	2.57	23	1.00	11	0.00	10	0.00
28	14	2.55	19	0.00	19	0.00	25	0.00
29	19	2.50	3	0.00	26	0.00	19	0.00
30	26	2.50	2	0.00	3	0.00	28	0.00

(Table continued on next page.)

BLOT NO. 4	Categories 0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	4.25	3	4.38	19	4.00	1	5.00
2	1	3.98	1	4.33	2	4.00	16	5.00
3	2	3.88	21	4.11	21	4.00	5	5.00
4	5	3.75	4	4.10	3	3.80	3	4.67
5	4	3.69	2	4.00	5	3.50	21	4.50
6	6	3.67	6	4.00	20	3.50	22	4.33
7	20	3.65	5	3.80	10	3.00	11	4.00
8	21	3.58	18	3.67	8	3.00	4	4.00
9	11	3.47	8	3.43	16	3.00	10	4.00
10	15	3.27	9	3.30	4	3.00	28	4.00
11	9	3.23	27	3.00	12	3.00	30	3.67
12	10	3.20	14	3.00	29	3.00	9	3.67
13	13	3.09	11	3.00	11	2.67	19	3.50
14	14	2.97	20	2.88	22	2.67	27	3.00
15	12	2.96	16	2.80	14	2.67	8	3.00
16	19	2.96	15	2.80	23	2.50	17	3.00
17	16	2.93	17	2.75	27	2.50	18	3.00
18	18	2.81	30	2.73	26	2.50	23	3.00
19	7	2.79	10	2.63	9	2.33	25	3.00
20	28	2.63	22	2.22	15	2.00	26	3.00
21	22	2.62	24	2.00	6	2.00	15	2.67
22	8	2.59	23	2.00	25	2.00	14	1.00
23	27	2.54	13	2.00	17	2.00	2	0.00
24	17	2.50	25	1.89	30	1.80	12	0.00
25	26	2.46	26	1.60	18	1.00	13	0.00
26	30	2.35	29	1.25	13	1.00	6	0.00
27	23	2.08	28	1.00	24	1.00	24	0.00
28	29	1.96	12	1.00	1	0.00	20	0.00
29	24	1.91	19	0.00	28	0.00	7	0.00
30	25	1.74	7	0.00	7	0.00	29	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 5	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.64	1	5.00	13	5.00	1	5.00
2	2	4.10	16	5.00	1	4.83	20	4.00
3	13	3.71	13	3.80	20	4.00	25	3.75
4	25	3.61	25	3.71	25	3.40	13	3.67
5	7	3.54	14	3.67	5	3.25	30	3.50
6	9	3.38	7	3.21	7	3.20	23	3.50
7	14	3.37	5	3.10	30	3.20	18	3.33
8	23	3.30	24	3.00	27	3.00	12	3.25
9	30	3.22	8	3.00	16	3.00	17	3.00
10	5	3.18	18	2.89	6	3.00	15	3.00
11	15	3.05	20	2.83	8	3.00	29	3.00
12	29	3.04	29	2.80	15	2.80	6	3.00
13	26	3.00	23	2.79	23	2.75	5	3.00
14	8	2.89	30	2.64	18	2.67	7	2.67
15	18	2.83	10	2.44	10	2.60	8	2.00
16	28	2.82	19	2.33	17	2.50	19	1.33
17	6	2.81	12	2.33	24	2.00	2	0.00
18	10	2.71	15	2.25	21	2.00	9	0.00
19	20	2.67	6	2.20	12	2.00	14	0.00
20	11	2.62	26	2.00	19	2.00	3	0.00
21	17	2.43	21	2.00	28	2.00	10	0.00
22	24	2.42	22	2.00	3	0.00	4	0.00
23	16	2.41	17	1.86	4	0.00	16	0.00
24	27	2.40	28	1.00	11	0.00	21	0.00
25	12	2.35	4	1.00	9	0.00	11	0.00
26	21	2.33	11	1.00	14	0.00	26	0.00
27	19	2.25	2	0.00	2	0.00	24	0.00
28	4	2.25	3	0.00	26	0.00	28	0.00
29	22	2.15	9	0.00	22	0.00	22	0.00
30	3	0.00	27	0.00	29	0.00	27	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	4	4.29	4	4.53	15	5.00	8	5.00
2	5	4.00	1	4.00	16	4.00	12	5.00
3	1	3.79	19	3.63	5	4.00	4	4.67
4	2	3.57	22	3.50	1	4.00	3	4.00
5	28	3.57	14	3.50	14	3.80	6	4.00
6	8	3.52	9	3.44	4	3.50	21	4.00
7	14	3.52	23	3.43	11	3.50	17	4.00
8	9	3.38	17	3.33	29	3.50	1	4.00
9	15	3.35	15	3.33	10	3.50	27	4.00
10	6	3.33	30	3.21	21	3.33	28	4.00
11	23	3.30	10	3.17	17	3.25	14	4.00
12	3	3.27	3	3.00	9	3.20	9	3.67
13	11	3.26	7	3.00	6	3.00	19	3.50
14	19	3.26	2	3.00	27	3.00	30	3.33
15	7	3.23	5	3.00	20	3.00	10	3.00
16	22	3.18	21	2.86	8	3.00	16	3.00
17	17	3.08	12	2.83	18	3.00	25	3.00
18	30	3.08	18	2.75	30	3.00	22	3.00
19	21	3.03	13	2.50	26	3.00	23	3.00
20	10	2.98	8	2.50	23	2.80	26	2.50
21	12	2.93	29	2.33	12	2.50	20	2.00
22	13	2.92	26	2.29	22	2.00	11	0.00
23	29	2.74	27	2.25	19	2.00	5	0.00
24	20	2.71	24	2.00	2	1.00	13	0.00
25	16	2.67	11	1.60	3	0.00	18	0.00
26	18	2.62	16	1.60	25	0.00	7	0.00
27	26	2.55	25	1.17	7	0.00	24	0.00
28	27	2.42	20	1.00	24	0.00	15	0.00
29	24	2.13	6	0.00	28	0.00	29	0.00
30	25	1.75	28	0.00	13	0.00	2	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	25	4.12	25	4.67	26	4.67	8	5.00
2	2	4.12	27	4.50	29	4.33	2	5.00
3	1	3.97	1	4.45	1	4.25	1	4.67
4	23	3.96	26	4.38	28	4.00	24	4.50
5	26	3.80	24	4.00	20	3.67	26	4.50
6	3	3.64	22	4.00	24	3.50	28	4.00
7	24	3.57	4	4.00	23	3.50	13	4.00
8	12	3.57	23	3.77	18	3.33	19	4.00
9	18	3.48	21	3.67	6	3.00	20	4.00
10	27	3.37	12	3.50	9	3.00	18	4.00
11	17	3.32	18	3.33	2	3.00	11	4.00
12	5	3.23	7	3.33	12	3.00	23	4.00
13	29	3.22	2	3.33	21	3.00	5	3.75
14	10	3.21	5	3.13	5	2.75	9	3.67
15	8	3.18	11	3.00	30	2.50	29	3.50
16	28	3.18	17	3.00	14	2.40	14	3.33
17	9	3.16	30	3.00	27	2.33	27	3.00
18	20	3.15	29	2.80	7	2.00	21	3.00
19	16	3.14	9	2.80	11	2.00	12	2.67
20	7	3.07	15	2.75	19	2.00	4	0.00
21	21	3.06	28	2.75	8	2.00	10	0.00
22	30	2.92	3	2.67	13	1.00	3	0.00
23	6	2.86	8	2.67	4	0.00	16	0.00
24	14	2.85	20	2.67	3	0.00	7	0.00
25	22	2.83	10	2.50	10	0.00	15	0.00
26	11	2.72	14	2.33	16	0.00	22	0.00
27	4	2.71	6	2.29	17	0.00	17	0.00
28	15	2.62	19	2.20	15	0.00	25	0.00
29	13	2.56	13	1.25	22	0.00	6	0.00
30	19	2.49	16	0.00	25	0.00	30	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 8	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	23	4.50	23	4.67	23	5.00	15	5.00
2	7	4.00	9	4.30	26	4.33	23	5.00
3	8	3.79	2	4.00	16	4.00	29	5.00
4	26	3.76	11	4.00	3	4.00	9	4.75
5	3	3.76	26	3.71	9	4.00	27	4.33
6	9	3.73	3	3.56	10	3.75	6	4.00
7	12	3.73	4	3.50	5	3.67	1	4.00
8	19	3.43	14	3.43	4	3.67	12	4.00
9	10	3.35	8	3.29	25	3.67	11	4.00
10	11	3.35	12	3.27	8	3.67	26	4.00
11	27	3.33	16	3.17	19	3.50	30	4.00
12	22	3.31	29	3.13	29	3.50	5	3.67
13	2	3.30	21	3.00	17	3.25	3	3.33
14	5	3.27	5	2.90	15	3.20	13	3.00
15	25	3.13	30	2.83	2	3.00	20	3.00
16	17	3.10	27	3.80	14	3.00	16	3.67
17	14	3.08	25	2.80	11	3.00	17	2.00
18	4	3.05	28	2.67	1	3.00	19	2.00
19	15	3.00	17	2.60	28	3.00	22	1.00
20	1	2.91	19	2.40	12	3.00	14	1.00
21	24	2.88	15	2.22	20	3.00	2	0.00
22	28	2.77	20	2.17	30	2.67	4	0.00
23	20	2.75	22	2.00	22	2.00	18	0.00
24	16	2.72	13	2.00	13	0.00	7	0.00
25	29	2.72	6	1.00	18	0.00	21	0.00
26	13	2.67	18	1.00	6	0.00	8	0.00
27	6	2.67	1	0.00	7	0.00	10	0.00
28	30	2.56	10	0.00	24	0.00	24	0.00
29	21	2.04	7	0.00	27	0.00	25	0.00
30	18	2.00	24	0.00	21	0.00	28	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	7	4.14	3	4.33	4	4.50	18	5.00
2	13	3.71	7	4.18	7	4.20	3	4.33
3	9	3.57	8	4.00	9	4.00	15	4.00
4	11	3.48	13	4.00	13	4.00	11	4.00
5	25	3.48	5	3.80	20	4.00	6	4.00
6	3	3.34	25	3.80	12	4.00	30	4.00
7	12	3.32	22	3.67	16	4.00	7	4.00
8	14	3.28	28	3.60	11	4.00	9	4.00
9	6	3.20	12	3.50	14	3.67	13	4.00
10	27	3.15	2	3.50	2	3.25	25	3.67
11	10	3.13	27	3.43	23	3.00	16	3.00
12	8	3.07	9	3.40	15	3.00	23	3.00
13	2	3.07	11	3.33	18	3.00	14	3.00
14	26	3.04	17	3.18	25	3.00	5	3.00
15	4	2.97	21	3.00	17	2.75	27	3.00
16	15	2.85	15	3.00	29	2.75	8	3.00
17	21	2.84	29	3.00	19	2.60	17	3.00
18	17	2.83	30	2.88	24	2.50	21	3.00
19	28	2.81	6	2.83	6	2.33	20	2.50
20	24	2.78	14	2.80	30	2.00	28	2.50
21	5	2.76	10	2.50	5	2.00	1	2.00
22	16	2.68	20	2.50	28	2.00	19	2.00
23	23	2.64	16	2.50	1	2.00	22	2.00
24	30	2.60	19	2.44	22	1.67	12	2.00
25	19	2.56	23	2.25	27	1.00	29	2.00
26	1	2.52	1	2.20	3	0.00	4	1.00
27	20	2.52	24	2.20	8	0.00	2	0.00
28	18	2.37	4	1.67	26	0.00	10	0.00
29	22	2.30	18	0.00	21	0.00	26	0.00
30	29	2.28	26	0.00	10	0.00	24	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	10	4.16	7	4.50	1	4.50	30	5.00
2	1	3.98	11	4.50	4	3.75	3	5.00
3	2	3.90	8	4.36	8	3.67	29	5.00
4	3	3.90	10	4.11	2	3.50	20	5.00
5	11	3.86	3	4.10	3	3.50	10	5.00
6	8	3.81	2	4.00	10	3.50	1	4.33
7	7	3.71	5	4.00	5	3.00	21	4.33
8	4	3.71	12	4.00	6	3.00	15	4.33
9	21	3.55	1	4.00	16	3.00	9	4.00
10	5	3.50	4	4.00	19	3.00	4	4.00
11	29	3.36	28	3.63	14	3.00	11	4.00
12	19	3.36	21	3.62	27	3.00	6	4.00
13	15	3.30	30	3.60	28	3.00	17	4.00
14	14	3.26	26	3.54	26	3.00	28	4.00
15	9	3.26	29	3.50	21	3.00	14	4.00
16	26	3.23	17	3.25	29	3.00	26	3.50
17	12	3.21	14	3.22	12	2.50	8	3.50
18	20	3.21	20	3.00	9	2.33	27	3.00
19	6	3.16	27	3.00	18	2.33	18	3.00
20	28	3.07	15	2.88	15	2.33	23	2.75
21	30	3.06	23	2.86	17	2.00	5	0.00
22	25	3.00	9	2.50	23	1.67	12	0.00
23	13	2.89	22	2.50	24	1.50	2	0.00
24	16	2.86	24	2.50	22	1.00	19	0.00
25	17	2.81	6	2.33	30	1.00	22	0.00
26	23	2.75	19	2.00	7	0.00	7	0.00
27	24	2.70	25	1.67	13	0.00	24	0.00
28	18	2.68	18	1.60	11	0.00	25	0.00
29	27	2.13	16	0.00	25	0.00	16	0.00
30	22	2.00	13	0.00	20	0.00	13	0.00

Table A-15

Utah State University 1965-66:
Rank Mean Choice Intensity Scores of
Response-Items by Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	$\bar{X}$[b]	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	21	4.33	11	5.00	25	5.00	21	5.00
2	19	3.92	19	4.60	7	5.00	27	4.33
3	13	3.74	23	4.25	19	4.67	13	4.10
4	7	3.66	25	4.00	18	4.50	20	4.00
5	23	3.66	4	4.00	9	4.00	7	4.00
6	27	3.63	9	4.00	5	4.00	18	4.00
7	18	3.56	18	3.67	22	4.00	8	4.00
8	30	3.47	3	3.50	8	4.00	19	3.82
9	6	3.46	6	3.50	23	4.00	6	3.82
10	4	3.38	28	3.50	29	3.67	29	3.80
11	29	3.31	13	3.50	13	3.33	25	3.73
12	25	3.29	8	3.00	12	3.33	4	3.67
13	17	3.24	10	3.00	1	3.00	5	3.67
14	16	3.23	16	3.00	27	3.00	9	3.67
15	5	3.20	2	3.00	6	3.00	17	3.50
16	9	3.14	14	3.00	2	2.50	14	3.44
17	2	3.07	22	3.00	17	2.00	23	3.25
18	28	2.98	7	3.00	15	0.00	11	3.25
19	11	2.90	17	3.00	3	0.00	22	3.20
20	14	2.87	12	2.67	14	0.00	2	3.10
21	1	2.80	29	2.33	4	0.00	12	3.06
22	12	2.79	1	2.00	16	0.00	3	3.00
23	8	2.79	5	0.00	10	0.00	24	3.00
24	3	2.77	21	0.00	21	0.00	1	3.00
25	26	2.69	15	0.00	11	0.00	28	2.25
26	20	2.67	20	0.00	20	0.00	26	2.00
27	22	2.64	24	0.00	24	0.00	15	2.00
28	24	2.47	27	0.00	28	0.00	16	0.00
29	10	2.43	26	0.00	26	0.00	10	0.00
30	15	2.12	30	0.00	30	0.00	30	0.00

[a] R = response-item number.
[b] $\bar{X}$ = mean choice intensity score.

(Table continued on next page.)

BLOT NO. 2	Categories 0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	10	3.94	3	4.33	11	5.00	27	5.00
2	3	3.81	1	4.00	10	5.00	3	4.27
3	16	3.72	2	4.00	26	4.67	18	4.00
4	19	3.47	7	4.00	29	4.00	10	4.00
5	21	3.45	22	4.00	17	4.00	12	3.86
6	1	3.30	16	4.00	6	4.00	2	3.67
7	2	3.28	20	4.00	13	4.00	4	3.67
8	14	3.20	8	3.50	8	3.67	13	3.50
9	7	3.11	10	3.33	16	3.50	24	3.50
10	8	3.10	17	3.33	30	3.50	29	3.40
11	30	3.07	4	3.00	24	3.50	14	3.40
12	17	3.07	12	3.00	21	3.33	8	3.33
13	20	3.01	6	3.00	3	3.33	21	3.31
14	18	3.00	21	3.00	12	3.00	26	3.25
15	26	2.98	23	3.00	4	3.00	30	3.25
16	4	2.89	26	3.00	22	3.00	22	3.17
17	6	2.79	9	2.50	15	3.00	16	2.17
18	13	2.78	5	2.50	5	2.00	20	3.00
19	9	2.70	28	2.25	2	0.00	11	3.00
20	15	2.69	13	2.00	9	0.00	17	2.83
21	12	2.67	11	2.00	1	0.00	9	2.80
22	28	2.55	15	2.00	19	0.00	15	2.78
23	29	2.51	25	1.67	7	0.00	7	2.67
24	22	2.46	24	1.50	18	0.00	28	2.67
25	24	2.45	14	1.50	25	0.00	5	2.63
26	27	2.41	29	1.00	20	0.00	1	2.50
27	25	2.39	18	0.00	14	0.00	25	2.29
28	23	2.33	19	0.00	28	0.00	6	2.00
29	11	2.32	27	0.00	23	0.00	23	1.88
30	5	2.25	30	0.00	27	0.00	19	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 3	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.55	1	4.20	1	5.00	1	4.77
2	4	3.70	25	4.00	2	5.00	15	4.67
3	8	3.68	17	4.00	18	4.00	20	4.30
4	27	3.67	20	4.00	23	4.00	26	4.00
5	6	3.57	27	3.67	7	4.00	25	3.80
6	5	3.55	18	3.50	6	3.67	5	3.75
7	13	3.52	13	3.50	27	3.50	4	3.75
8	7	3.50	9	3.00	10	3.50	6	3.75
9	2	3.50	8	3.00	20	3.50	18	3.72
10	25	3.38	24	3.00	13	3.00	29	3.67
11	9	3.35	14	3.00	14	3.00	9	3.67
12	15	3.34	4	3.00	19	3.00	8	3.62
13	18	3.24	12	3.00	29	3.00	2	3.57
14	21	3.21	21	3.00	17	3.00	21	3.30
15	20	3.18	6	3.00	30	2.50	27	3.21
16	28	3.16	22	2.33	8	2.00	17	3.20
17	3	3.15	10	2.00	26	2.00	11	3.20
18	11	3.13	26	2.00	22	2.00	10	3.17
19	29	2.93	11	2.00	3	0.00	13	3.17
20	17	2.88	29	2.00	16	0.00	7	3.00
21	14	2.84	16	1.00	9	0.00	14	3.00
22	22	2.77	23	1.00	5	0.00	23	3.00
23	30	2.74	30	1.00	4	0.00	28	3.00
24	12	2.73	3	0.00	11	0.00	12	2.88
25	16	2.54	5	0.00	25	0.00	24	2.60
26	10	2.43	19	0.00	12	0.00	30	2.50
27	19	2.33	15	0.00	21	0.00	22	2.30
28	23	2.25	7	0.00	28	0.00	16	2.00
29	24	2.17	28	0.00	15	0.00	19	0.00
30	26	1.90	2	0.00	24	0.00	3	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 4	0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	3	4.25	1	5.00	11	5.00	1	4.50
2	1	4.03	19	5.00	21	4.00	28	4.50
3	5	3.72	4	5.00	3	4.00	3	4.44
4	4	3.69	5	4.00	20	4.00	20	4.14
5	21	3.69	21	4.00	2	4.00	6	4.00
6	10	3.64	3	3.75	6	4.00	11	4.00
7	2	3.56	26	3.75	16	4.00	5	3.82
8	20	3.39	22	3.33	5	4.00	4	3.75
9	15	3.29	11	3.33	24	4.00	14	3.67
10	9	3.20	20	3.00	30	4.00	21	3.60
11	11	3.00	10	3.00	28	4.00	16	3.38
12	6	3.00	15	3.00	22	3.50	14	3.33
13	12	2.97	12	3.00	9	3.50	17	3.00
14	16	2.96	28	3.00	14	3.50	7	3.00
15	19	2.94	25	3.00	8	3.00	19	3.00
16	7	2.92	14	2.75	15	3.00	9	3.00
17	14	2.73	16	2.67	10	3.00	8	2.88
18	8	2.64	17	2.00	26	3.00	22	2.82
19	13	2.63	6	2.00	17	3.00	12	2.71
20	17	2.56	9	2.00	25	2.00	30	2.64
21	22	2.42	8	2.00	12	0.00	10	2.50
22	30	2.34	29	2.00	1	0.00	26	2.50
23	18	2.32	23	1.50	4	0.00	27	2.33
24	28	2.31	30	1.33	13	0.00	18	2.25
25	29	2.15	2	0.00	18	0.00	13	2.00
26	26	2.04	18	0.00	19	0.00	29	1.83
27	23	2.00	7	0.00	23	0.00	24	1.80
28	25	1.90	13	0.00	7	0.00	25	1.80
29	27	1.85	24	0.00	29	0.00	23	1.75
30	24	1.68	27	0.00	27	0.00	2	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 5	0		1		2		3	
Rank	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$	R	$\overline{X}$
1	1	4.68	1	5.00	1	5.00	26	5.00
2	2	4.11	22	5.00	13	4.33	1	4.80
3	13	3.75	23	4.00	20	4.00	20	4.40
4	25	3.48	21	4.00	25	4.00	22	4.00
5	28	3.41	8	4.00	18	3.50	9	4.00
6	9	3.39	15	4.00	7	3.50	14	4.00
7	7	3.36	5	3.75	30	3.00	25	3.76
8	29	3.36	25	3.60	6	3.00	30	3.73
9	8	3.34	13	3.50	17	3.00	29	3.50
10	23	3.31	30	3.25	10	3.00	6	3.33
11	30	3.19	6	3.00	23	2.67	24	3.33
12	5	3.18	18	3.00	19	2.50	8	3.25
13	22	3.00	9	3.00	5	2.50	23	3.20
14	14	3.88	24	3.00	8	2.00	7	3.15
15	18	2.83	20	3.00	29	2.00	15	3.10
16	16	2.78	29	3.00	12	2.00	13	3.00
17	11	2.64	7	2.67	3	0.00	12	3.00
18	15	2.64	17	2.50	4	0.00	28	3.00
19	21	2.63	16	2.00	2	0.00	5	2.93
20	10	2.60	10	2.00	14	0.00	21	2.80
21	24	2.59	19	1.67	11	0.00	18	2.67
22	12	2.57	12	1.00	9	0.00	27	2.50
23	20	2.53	4	0.00	16	0.00	17	2.50
24	17	2.51	11	0.00	21	0.00	19	2.30
25	27	2.36	3	0.00	15	0.00	10	1.71
26	6	2.22	14	0.00	26	0.00	16	1.00
27	26	2.20	2	0.00	24	0.00	4	1.00
28	19	2.17	27	0.00	28	0.00	3	0.00
29	4	2.00	28	0.00	22	0.00	2	0.00
30	3	2.00	26	0.00	27	0.00	11	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	4	4.26	19	4.67	8	5.00	30	4.08
2	6	3.73	4	4.50	4	4.50	4	4.06
3	1	3.72	2	4.00	2	4.00	2	4.00
4	13	3.63	6	4.00	3	4.00	22	4.00
5	5	3.62	17	4.00	5	4.00	14	3.60
6	28	3.60	9	4.00	7	4.00	8	3.50
7	2	3.55	10	4.00	14	4.00	3	3.38
8	19	3.48	12	4.00	20	4.00	12	3.36
9	9	3.44	24	3.50	23	3.67	28	3.33
10	3	3.38	3	3.00	30	3.67	5	3.33
11	23	3.35	8	3.00	19	3.50	11	3.33
12	10	3.32	20	3.00	12	3.50	7	3.33
13	14	3.27	23	3.00	9	3.00	19	3.33
14	15	3.23	14	3.00	16	3.00	9	3.31
15	30	3.22	15	3.00	10	3.00	23	3.25
16	8	3.21	21	3.00	25	2.50	20	3.20
17	7	3.20	30	3.00	1	2.00	10	3.17
18	22	3.19	26	2.50	27	2.00	15	3.13
19	12	3.07	1	2.50	18	2.00	6	3.00
20	11	2.94	16	2.00	6	0.00	18	3.00
21	29	2.85	25	1.67	17	0.00	13	3.00
22	17	2.82	11	1.00	15	0.00	17	2.73
23	24	2.67	29	1.00	13	0.00	26	2.63
24	21	2.60	8	0.00	11	0.00	27	2.50
25	16	2.60	5	0.00	22	0.00	21	2.50
26	26	2.38	13	0.00	26	0.00	1	2.50
27	18	2.35	22	0.00	21	0.00	16	2.00
28	20	2.34	18	0.00	28	0.00	24	2.00
29	27	2.30	28	0.00	29	0.00	29	2.00
30	25	1.92	27	0.00	24	0.00	25	1.40

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.01	23	4.50	1	5.00	17	5.00
2	25	3.94	24	4.33	25	5.00	25	4.50
3	2	3.87	30	4.00	23	4.50	2	4.25
4	24	3.72	18	4.00	20	4.00	18	3.11
5	18	3.71	25	4.00	9	4.00	3	4.00
6	26	3.62	7	4.00	21	4.00	10	4.00
7	23	3.52	6	4.00	10	4.00	26	4.00
8	12	3.49	11	3.50	12	4.00	24	3.92
9	7	3.39	20	3.50	27	4.00	23	3.83
10	28	3.14	21	3.50	26	4.00	1	3.67
11	27	3.11	1	3.25	8	4.00	22	3.50
12	5	3.07	27	3.00	24	4.00	8	3.50
13	20	3.07	2	3.00	18	3.50	12	3.46
14	8	3.05	13	3.00	29	3.50	27	3.44
15	10	3.00	28	3.00	17	3.00	7	3.40
16	29	2.98	10	3.00	28	3.00	29	3.33
17	4	2.94	26	3.00	15	3.00	20	3.30
18	21	2.86	14	2.67	4	3.00	21	3.13
19	9	2.85	9	2.50	13	3.00	9	3.08
20	30	2.75	12	2.50	14	2.00	15	2.88
21	22	2.69	5	2.00	5	2.00	5	2.86
22	3	2.67	15	2.00	6	2.00	4	2.75
23	14	2.61	4	1.50	2	0.00	14	2.67
24	19	2.61	29	1.50	11	0.00	30	2.63
25	13	2.54	19	1.00	7	0.00	28	2.56
26	16	2.50	3	0.00	16	0.00	13	2.00
27	17	2.44	17	0.00	3	0.00	19	2.00
28	6	2.44	16	0.00	22	0.00	11	2.00
29	11	2.40	8	0.00	19	0.00	6	1.89
30	15	2.39	22	0.00	30	0.00	16	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 8	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	23	4.55	14	5.00	23	5.00	1o	5.00
2	9	3.82	23	4.40	24	5.00	23	4.69
3	26	3.59	8	4.00	25	5.00	2	4.33
4	22	3.50	6	4.00	3	4.00	12	4.00
5	3	3.43	27	4.00	9	4.00	8	4.00
6	2	3.41	2	4.00	2	4.00	5	3.69
7	11	3.40	28	4.00	8	4.00	14	3.50
8	8	3.35	12	3.50	12	3.67	6	3.50
9	12	3.34	3	3.50	15	3.67	19	3.29
10	5	3.28	17	3.33	30	3.50	11	3.22
11	15	3.27	4	3.00	27	3.50	10	3.20
12	18	3.25	16	3.00	5	3.33	9	3.17
13	14	3.24	25	3.00	16	3.00	3	3.15
14	28	3.23	26	3.00	19	3.00	25	3.14
15	10	3.23	30	3.00	17	2.00	27	3.14
16	1	3.17	1	2.50	29	2.00	1	3.00
17	27	3.14	5	2.50	20	2.00	4	3.00
18	19	3.14	10	2.50	1	0.00	16	3.00
19	7	3.13	29	2.50	6	0.00	20	2.80
20	25	3.12	20	2.33	13	0.00	28	2.80
21	17	3.09	15	2.25	14	0.00	30	2.67
22	4	3.05	19	2.00	7	0.00	17	2.64
23	16	2.81	9	1.75	4	0.00	29	2.63
24	29	2.74	11	1.00	11	0.00	7	2.50
25	30	2.69	7	0.00	18	0.00	26	2.50
26	20	2.59	18	0.00	26	0.00	15	2.40
27	21	2.49	13	0.00	21	0.00	22	2.25
28	6	2.46	24	0.00	28	0.00	21	1.00
29	13	2.43	22	0.00	22	0.00	13	0.00
30	24	1.83	21	0.00	10	0.00	24	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	7	4.26	30	5.00	19	5.00	7	4.33
2	3	3.69	3	4.00	13	5.00	8	4.00
3	13	3.63	12	4.00	24	4.00	13	3.83
4	27	3.61	14	4.00	15	4.00	2	3.75
5	9	3.51	18	3.50	14	4.00	21	3.57
6	15	3.45	6	3.50	7	4.00	11	3.55
7	14	3.43	11	3.33	27	3.50	14	3.50
8	12	3.34	7	3.25	16	3.50	17	3.38
9	11	3.29	9	3.00	21	3.50	6	3.31
10	25	3.19	4	3.00	1	3.33	25	3.25
11	17	3.18	10	3.00	9	3.00	16	3.17
12	6	3.16	13	3.00	12	3.00	27	3.11
13	28	3.11	23	3.00	11	3.00	24	3.00
14	10	3.09	15	3.00	10	3.00	9	3.00
15	2	3.08	21	3.00	17	3.00	5	3.00
16	5	3.02	17	3.00	23	3.00	20	3.00
17	8	3.00	24	3.00	29	3.00	19	2.90
18	26	2.97	27	3.00	6	2.50	12	2.86
19	1	2.93	19	2.50	4	2.00	29	2.75
20	24	2.93	1	2.50	25	2.00	1	2.75
21	16	2.86	29	2.33	28	2.00	3	2.50
22	18	2.83	28	2.00	30	1.00	10	2.50
23	20	2.76	25	2.00	3	0.00	15	2.50
24	21	2.72	2	1.00	20	0.00	4	2.33
25	4	2.71	5	1.00	2	0.00	26	2.33
26	30	2.58	26	1.00	5	0.00	18	2.17
27	29	2.54	20	1.00	22	0.00	22	2.11
28	19	2.48	22	1.00	8	0.00	28	2.00
29	23	2.17	16	0.00	26	0.00	23	1.67
30	22	2.07	8	0.00	18	0.00	30	1.40

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.11	1	5.00	28	5.00	30	5.00
2	2	3.88	2	4.00	11	5.00	6	4.00
3	10	3.85	3	4.00	3	5.00	19	4.00
4	8	3.82	19	4.00	26	4.33	21	3.73
5	4	3.77	20	4.00	6	4.00	7	3.67
6	3	3.72	10	3.80	5	4.00	2	3.50
7	11	3.56	21	3.67	8	4.00	3	3.50
8	5	3.53	4	3.40	14	4.00	25	3.50
9	9	3.50	15	3.33	10	3.50	8	3.47
10	28	3.50	29	3.00	15	3.50	26	3.38
11	19	3.50	17	3.00	29	3.50	4	3.33
12	16	3.50	24	3.00	1	3.00	1	3.33
13	6	3.47	28	3.00	4	3.00	15	3.30
14	21	3.38	16	3.00	20	3.00	10	3.30
15	7	3.37	14	3.00	23	3.00	20	3.00
16	29	3.26	26	2.60	17	2.67	29	3.00
17	12	3.16	8	2.40	21	2.50	28	3.00
18	26	3.13	23	2.00	9	0.00	22	3.00
19	15	3.09	18	1.50	2	0.00	17	2.92
20	14	3.02	12	0.00	12	0.00	12	2.80
21	30	2.90	5	0.00	18	0.00	18	2.67
22	25	2.80	6	0.00	16	0.00	11	2.60
23	27	2.71	9	0.00	7	0.00	14	2.60
24	24	2.68	7	0.00	19	0.00	24	2.25
25	23	2.66	11	0.00	24	0.00	16	2.20
26	20	2.65	22	0.00	22	0.00	5	2.00
27	17	2.57	13	0.00	27	0.00	23	2.00
28	22	2.55	27	0.00	25	0.00	27	1.50
29	18	2.42	25	0.00	13	0.00	9	1.00
30	13	2.30	30	0.00	30	0.00	13	0.00

Table A-16

Potsdam State College 1966-67:
Rank Mean Choice Intensity Scores of
Response-Items by Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	$\bar{X}$[b]	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	19	4.39	19	4.14	9	4.78	6	4.13
2	5	4.00	5	4.00	15	4.50	16	4.00
3	6	4.00	6	3.94	19	4.32	27	4.00
4	16	4.00	23	3.88	4	4.00	4	4.00
5	27	4.00	4	3.83	16	4.00	7	3.86
6	7	4.00	7	3.83	7	3.93	29	3.80
7	4	4.00	17	3.82	6	3.86	18	3.75
8	23	3.92	9	3.78	23	3.67	23	3.60
9	14	3.80	15	3.76	29	3.62	11	3.50
10	13	3.73	18	3.66	10	3.50	19	3.30
11	17	3.67	20	3.63	24	3.50	25	3.17
12	2	3.67	16	3.60	17	3.50	2	3.17
13	30	3.67	10	3.55	8	3.50	9	3.00
14	9	3.63	28	3.46	20	3.50	5	3.50
15	22	3.60	27	3.44	18	3.41	22	3.00
16	25	3.54	2	3.42	30	3.33	24	3.00
17	1	3.43	30	3.38	13	3.27	13	2.86
18	11	3.33	25	3.38	28	3.22	12	2.83
19	15	3.33	14	3.36	11	3.20	1	2.75
20	29	3.29	13	3.35	2	3.20	28	2.40
21	18	3.17	29	3.32	22	3.17	17	2.40
22	12	3.00	1	3.17	12	3.11	14	2.00
23	20	3.00	22	3.17	27	3.00	8	0.00
24	28	2.75	21	3.13	3	3.00	3	0.00
25	26	2.75	8	3.10	25	3.00	10	0.00
26	24	2.50	12	2.96	26	3.00	26	0.00
27	10	1.00	3	2.92	1	3.00	20	0.00
28	8	1.00	11	2.91	14	2.69	21	0.00
29	3	0.00	26	2.67	5	2.33	15	0.00
30	21	0.00	24	2.65	21	0.00	30	0.00

[a] R = response-item number.
[b] $\bar{X}$ = mean choice intensity score.

(Table continued on next page.)

BLOT NO. 2	Categories 0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	2	5.00	1	4.21	2	4.67	16	4.40
2	3	4.35	3	4.17	3	4.07	14	4.00
3	16	4.33	2	4.06	1	3.88	3	3.80
4	18	3.88	16	3.70	9	3.88	20	3.67
5	8	3.88	20	3.52	7	3.80	22	3.60
6	7	3.80	8	3.43	17	3.71	18	3.50
7	30	3.75	14	3.41	16	3.56	30	3.50
8	5	3.67	30	3.38	21	3.47	8	3.43
9	10	3.50	21	3.34	30	3.33	21	3.14
10	17	3.50	17	3.27	10	3.31	10	3.00
11	11	3.40	10	3.26	8	3.15	15	3.00
12	26	3.30	9	3.23	12	3.13	25	2.80
13	29	3.29	6	3.17	20	3.11	23	2.75
14	21	3.24	26	3.16	28	3.00	28	2.75
15	13	3.17	18	3.15	6	3.00	4	2.75
16	9	3.14	5	2.99	22	3.00	11	2.75
17	4	3.00	15	2.98	5	3.00	6	2.50
18	24	3.00	19	2.92	4	2.89	29	2.50
19	15	2.85	28	2.90	15	2.87	17	2.33
20	12	2.83	22	2.88	18	2.80	5	2.00
21	25	2.71	7	2.86	26	2.78	24	2.00
22	28	2.71	11	2.84	13	2.75	26	2.00
23	20	2.50	12	2.81	14	2.67	7	2.00
24	22	2.50	29	2.80	29	2.50	13	2.00
25	6	2.33	4	2.72	25	2.31	12	1.33
26	23	2.25	23	2.48	23	2.20	9	1.00
27	1	2.00	13	2.40	24	2.08	2	0.00
28	27	1.00	25	2.38	19	2.00	27	0.00
29	19	0.00	24	2.38	11	2.00	19	0.00
30	14	0.00	27	1.75	27	1.50	1	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 3	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	28	4.50	1	4.63	1	4.18	10	5.00
2	1	4.42	8	3.96	9	4.13	1	4.78
3	8	4.27	6	3.90	16	4.00	8	4.43
4	14	4.00	3	3.86	6	3.75	13	4.40
5	9	4.00	7	3.76	21	3.53	4	4.20
6	24	4.00	21	3.73	13	3.50	5	4.00
7	20	4.00	2	3.71	27	3.40	25	3.67
8	5	4.00	9	3.65	7	3.40	18	3.50
9	16	4.00	4	3.65	28	3.33	21	3.33
10	18	3.90	27	3.47	8	3.31	27	3.14
11	11	3.88	28	3.43	11	3.29	22	3.13
12	13	3.78	25	3.40	17	3.25	2	3.00
13	27	3.73	20	3.38	18	3.13	16	3.00
14	4	3.60	17	3.37	15	3.13	6	3.00
15	21	3.58	11	3.33	5	3.00	15	3.00
16	25	3.57	18	3.32	22	2.88	23	3.00
17	10	3.50	15	3.24	29	2.83	11	2.80
18	17	3.40	13	3.17	4	2.80	17	2.75
19	15	3.29	5	3.15	23	2.75	30	2.75
20	6	3.23	14	3.00	3	2.75	7	2.67
21	26	3.00	16	2.89	20	2.67	29	2.50
22	22	2.92	12	2.89	30	2.54	12	2.50
23	12	2.89	22	2.83	25	2.33	28	2.25
24	7	2.75	30	2.82	26	2.33	20	2.00
25	29	2.60	29	2.79	10	2.25	24	2.00
26	30	2.50	10	2.76	12	2.20	14	1.67
27	23	2.25	26	2.54	14	2.00	19	0.00
28	3	0.00	19	2.50	24	1.83	3	0.00
29	19	0.00	24	2.41	19	0.00	26	0.00
30	2	0.00	23	2.24	2	0.00	9	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 4	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	4.57	1	4.45	1	4.13	19	5.00
2	4	4.33	3	4.41	19	4.00	4	4.50
3	21	4.33	4	4.01	3	3.93	1	4.33
4	2	4.25	21	3.94	15	3.86	9	4.25
5	9	4.13	2	3.93	6	3.67	3	4.14
6	1	4.00	19	3.79	21	3.63	21	4.00
7	5	4.00	5	3.77	5	3.62	29	3.50
8	16	3.70	15	3.63	2	3.33	6	3.50
9	6	3.67	20	3.61	4	3.33	5	3.50
10	15	3.55	9	3.43	27	3.25	11	3.25
11	11	3.50	10	3.41	11	3.18	15	3.20
12	14	3.50	11	3.37	9	3.17	8	3.20
13	20	3.29	13	3.29	10	3.00	22	3.13
14	28	3.25	6	3.26	24	3.00	10	3.00
15	10	3.17	28	3.25	28	3.00	13	3.00
16	26	3.13	8	3.22	12	3.00	30	3.00
17	7	3.00	16	3.16	16	2.91	17	3.00
18	12	3.00	7	3.05	18	2.90	12	3.00
19	19	3.00	12	2.98	14	2.90	7	3.00
20	22	2.78	18	2.95	20	2.88	20	2.67
21	8	2.70	27	2.81	22	2.83	26	2.67
22	18	2.50	14	2.72	8	2.43	27	2.50
23	13	2.50	17	2.63	23	2.25	16	2.50
24	23	2.33	26	2.53	26	2.25	28	2.50
25	27	2.25	22	2.40	30	2.19	14	2.50
26	30	2.09	30	2.25	13	2.00	18	2.33
27	24	2.00	25	2.21	17	2.00	25	1.50
28	29	2.00	29	2.16	25	1.92	23	1.00
29	17	1.67	23	2.11	29	1.67	2	0.00
30	25	1.50	24	1.91	7	0.00	24	0.00

(Table continued on next page.)

BLOT NO. 5	Categories 0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	2	5.00	1	4.58	2	4.50	4	5.00
2	1	4.44	2	4.00	1	4.29	1	4.60
3	14	4.33	3	4.00	25	4.04	25	4.38
4	13	4.00	13	3.76	13	3.90	17	4.33
5	5	4.00	26	3.75	9	3.83	15	4.20
6	4	4.00	25	3.75	14	3.71	7	4.00
7	29	4.00	14	3.64	17	3.33	20	3.75
8	11	4.00	9	3.60	7	3.27	9	3.67
9	28	4.00	8	3.44	20	3.18	5	3.56
10	9	3.75	29	3.44	30	3.18	29	3.50
11	23	3.38	5	3.39	15	3.11	28	3.00
12	25	3.33	23	3.32	5	3.06	8	3.00
13	15	3.11	7	3.31	24	3.00	14	3.00
14	18	3.07	30	3.30	23	2.85	26	3.00
15	30	3.07	27	3.27	29	2.83	23	2.80
16	12	3.00	28	3.25	8	2.80	30	2.60
17	8	3.00	15	3.04	28	2.67	18	2.60
18	22	3.00	20	3.01	11	2.67	12	2.20
19	7	2.90	18	2.98	18	2.57	10	2.00
20	10	2.90	4	2.91	10	2.57	13	2.00
21	20	2.63	16	2.77	12	2.50	16	2.00
22	21	2.50	6	2.69	6	2.50	21	1.67
23	17	2.33	24	2.67	19	2.40	19	1.33
24	19	2.20	10	2.64	4	2.33	27	1.00
25	24	2.00	12	2.64	21	2.00	2	0.00
26	6	2.00	21	2.48	26	2.00	3	0.00
27	27	2.00	11	2.47	27	1.00	11	0.00
28	16	1.50	19	2.28	22	1.00	6	0.00
29	3	0.00	17	2.26	16	1.00	22	0.00
30	26	0.00	22	2.25	3	0.00	24	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	5	5.00	4	4.22	2	4.00	13	5.00
2	24	4.25	19	3.75	4	3.87	4	4.25
3	4	4.18	13	3.71	10	3.78	2	4.00
4	14	4.15	1	3.65	9	3.64	5	4.00
5	6	4.00	5	3.64	19	3.62	19	4.00
6	13	4.00	3	3.61	3	3.54	9	3.83
7	19	3.92	14	3.58	14	3.53	12	3.67
8	9	3.86	7	3.55	5	3.50	14	3.60
9	18	3.67	23	3.50	6	3.43	3	3.50
10	2	3.50	6	3.39	17	3.42	21	3.33
11	8	3.50	2	3.33	20	3.33	15	3.25
12	12	3.50	15	3.31	22	3.29	30	3.20
13	10	3.43	11	3.29	18	3.20	1	3.17
14	30	3.40	9	3.27	23	3.13	11	3.00
15	11	3.40	17	3.24	15	3.09	7	3.00
16	1	3.38	8	3.22	1	3.08	18	3.00
17	17	3.29	30	3.07	16	3.00	16	3.00
18	23	3.20	22	3.07	24	3.00	10	3.00
19	7	3.17	12	3.01	12	3.00	23	2.83
20	21	3.17	10	3.01	27	3.00	29	2.75
21	3	3.11	28	2.86	8	3.00	27	2.50
22	25	3.00	21	2.86	7	2.91	8	2.50
23	28	3.00	24	2.80	30	2.88	26	2.50
24	22	2.80	16	2.77	11	2.75	22	2.50
25	29	2.71	18	2.74	28	2.75	25	2.00
26	27	2.40	29	2.68	26	2.55	17	2.00
27	15	2.40	20	2.61	21	2.50	20	1.00
28	16	2.00	27	2.49	29	2.00	6	0.00
29	26	1.88	26	2.47	25	1.90	28	0.00
30	20	0.00	25	1.86	13	0.00	24	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	2	5.00	25	4.11	4	5.00	10	5.00
2	3	5.00	2	4.03	3	5.00	1	4.50
3	22	4.50	23	3.95	23	4.60	4	4.33
4	8	4.33	1	3.95	25	4.50	30	4.00
5	26	4.14	26	3.93	2	4.33	21	4.00
6	12	4.07	27	3.81	26	4.00	24	3.83
7	17	4.00	24	3.75	24	3.70	18	3.63
8	10	4.00	12	3.65	9	3.62	12	3.50
9	1	3.94	18	3.60	19	3.60	2	3.50
10	28	3.89	17	3.42	6	3.50	6	3.50
11	27	3.86	3	3.40	1	3.47	9	3.50
12	25	3.80	20	3.27	27	3.44	23	3.50
13	19	3.75	14	3.23	12	3.33	26	3.40
14	23	3.67	8	3.22	5	3.33	20	3.40
15	18	3.67	5	3.20	17	3.29	15	3.20
16	20	3.50	28	3.14	29	3.14	28	3.17
17	24	3.20	9	3.13	20	3.08	7	3.00
18	14	3.10	29	3.04	18	3.06	25	3.00
19	6	3.00	11	3.03	16	3.00	29	3.00
20	11	3.00	10	3.00	7	3.00	14	3.00
21	5	2.75	21	2.98	10	3.00	17	3.00
22	7	2.67	7	2.95	11	2.86	11	2.80
23	9	2.60	22	2.92	30	2.78	5	2.67
24	16	2.50	19	2.84	21	2.75	27	2.67
25	30	2.50	30	2.83	14	2.71	19	2.00
26	13	2.50	13	2.63	8	2.67	13	1.50
27	21	2.33	16	2.57	28	2.67	8	1.50
28	15	2.33	6	2.57	15	2.50	16	1.00
29	29	2.25	4	2.52	22	2.00	3	0.00
30	4	1.00	15	2.45	13	1.75	22	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 8	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	18	5.00	23	4.60	22	4.25	25	5.00
2	23	4.54	3	3.83	23	4.00	28	5.00
3	8	4.00	26	3.78	11	4.00	23	4.50
4	11	4.00	12	3.78	9	3.94	9	4.50
5	13	4.00	9	3.71	3	3.70	3	4.40
6	25	4.00	22	3.58	8	3.67	12	3.67
7	2	3.83	2	3.48	25	3.67	29	3.60
8	10	3.67	11	3.47	12	3.50	16	3.60
9	29	3.67	8	3.40	15	3.40	2	3.50
10	27	3.55	7	3.38	27	3.33	8	3.43
11	3	3.54	15	3.28	17	3.10	26	3.40
12	9	3.50	19	3.20	19	3.09	21	3.33
13	19	3.50	10	3.19	5	3.07	20	3.00
14	4	3.50	14	3.14	14	3.00	15	3.00
15	17	3.45	27	3.12	1	3.00	11	3.00
16	12	3.25	1	3.08	21	3.00	5	3.78
17	26	3.14	4	3.05	28	3.00	27	2.75
18	5	3.08	5	3.05	26	3.00	10	2.67
19	16	3.00	25	3.00	16	3.00	19	2.60
20	21	3.00	16	2.98	20	2.85	1	2.33
21	22	3.00	17	2.94	4	2.83	13	2.00
22	6	3.00	29	2.91	6	2.80	14	2.00
23	28	3.00	24	2.83	29	2.75	17	2.00
24	15	2.94	13	2.80	30	2.64	30	2.00
25	20	2.86	20	2.67	10	2.50	18	2.00
26	30	2.42	30	2.64	2	2.33	4	1.00
27	24	2.00	28	2.56	18	1.00	7	1.00
28	14	2.00	6	2.47	13	0.00	22	1.00
29	7	0.00	18	2.33	7	0.00	6	0.00
30	1	0.00	21	2.24	24	0.00	24	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	29	4.50	7	3.96	26	5.00	5	4.50
2	2	4.40	3	3.74	7	4.06	8	4.00
3	7	4.15	13	3.71	18	4.00	11	4.00
4	15	4.00	27	3.47	13	3.89	23	4.00
5	11	3.83	15	3.44	12	3.73	7	4.00
6	27	3.83	25	3.42	6	3.73	30	4.00
7	3	3.78	26	3.41	9	3.50	25	3.67
8	5	3.71	14	3.39	8	3.50	15	3.50
9	6	3.67	11	3.29	16	3.33	12	3.50
10	13	3.50	12	3.28	11	3.33	10	3.50
11	8	3.50	9	3.19	27	3.22	17	3.29
12	9	3.50	5	3.19	2	3.13	21	3.25
13	23	3.50	28	3.19	28	3.09	28	3.25
14	17	3.38	8	3.15	10	3.00	3	3.20
15	25	3.36	18	3.15	10	3.00	13	3.00
16	12	3.22	2	3.03	25	3.00	9	3.00
17	19	3.14	21	3.01	1	2.90	6	2.83
18	16	3.00	16	2.98	3	2.86	24	2.67
19	10	3.00	17	2.93	21	2.86	27	2.67
20	26	3.00	6	2.93	17	2.81	22	2.50
21	24	3.00	24	2.90	5	2.80	19	2.50
22	14	2.83	10	2.86	4	2.60	4	2.50
23	1	2.80	30	2.66	23	2.60	18	2.50
24	20	2.67	23	2.58	22	2.50	20	2.50
25	22	2.67	4	2.55	14	2.50	29	2.50
26	30	2.60	19	2.44	15	2.40	26	2.00
27	28	2.42	20	2.36	20	2.38	16	2.00
28	21	2.33	29	2.36	24	2.23	14	2.00
29	4	2.33	1	2.34	19	2.20	1	1.67
30	18	1.00	22	1.98	29	1.89	2	1.50

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	5	4.67	1	4.14	16	5.00	7	5.00
2	7	4.50	10	4.06	7	5.00	3	4.67
3	3	4.38	3	4.00	10	4.56	30	4.50
4	2	4.20	13	4.00	5	4.50	10	4.40
5	1	4.00	2	3.98	9	4.33	14	4.00
6	13	4.00	8	3.86	2	4.25	21	4.00
7	21	3.92	7	3.82	12	4.20	4	3.67
8	4	3.88	16	3.82	1	4.00	5	3.50
9	30	3.83	11	3.79	8	3.86	19	3.50
10	8	3.67	5	3.69	4	3.82	15	3.43
11	29	3.67	21	3.51	3	3.82	8	3.43
12	10	3.67	12	3.46	14	3.67	6	3.40
13	11	3.57	15	3.45	21	3.61	1	3.33
14	26	3.50	4	3.44	28	3.43	23	3.25
15	6	3.50	9	3.43	26	3.30	2	3.25
16	14	3.50	6	3.42	23	3.25	28	3.14
17	28	3.40	14	3.33	11	3.25	11	3.00
18	12	3.33	28	3.29	29	3.14	9	3.00
19	20	3.25	19	3.23	15	3.06	22	3.00
20	23	3.25	29	3.20	18	3.00	29	3.00
21	15	3.17	26	3.19	24	3.00	26	2.90
22	17	3.15	20	3.13	6	3.00	24	2.80
23	18	3.00	30	3.05	27	3.00	17	2.33
24	9	3.00	17	3.95	22	3.00	16	2.33
25	22	3.00	18	2.86	30	2.80	20	2.00
26	19	2.50	25	2.86	20	2.60	12	1.50
27	24	2.00	23	2.74	17	2.38	13	1.00
28	16	1.00	24	2.71	19	2.33	18	1.00
29	25	1.00	22	2.42	25	2.00	25	0.00
30	27	0.00	27	2.40	13	0.00	27	0.00

Table A-17

Trenton State College 1966-67:
Rank Mean Choice Intensity Scores of
Response-Items by Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	$\bar{X}$[b]	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	30	4.14	18	5.00	13	5.00	22	5.00
2	19	4.12	19	4.50	18	4.67	12	4.67
3	16	4.00	2	4.00	8	4.00	25	4.25
4	21	4.00	23	4.00	15	4.00	16	4.00
5	8	3.86	14	4.00	7	4.00	28	4.00
6	18	3.77	17	4.00	9	3.67	23	4.67
7	9	3.73	6	3.67	19	3.67	13	3.50
8	6	3.69	11	3.50	23	3.67	19	3.25
9	4	3.58	7	3.40	22	3.67	6	3.25
10	23	3.56	12	3.33	6	3.57	9	3.00
11	27	3.56	13	3.33	2	3.17	2	3.00
12	17	3.49	26	3.00	11	3.00	30	3.00
13	7	3.47	1	2.80	29	3.00	18	3.00
14	25	3.45	15	2.50	16	3.00	17	3.00
15	20	3.44	29	2.50	30	3.00	7	3.00
16	15	3.41	25	2.20	25	3.00	14	2.50
17	13	3.40	9	2.00	1	3.00	1	2.50
18	29	3.39	30	2.00	12	2.43	11	2.00
19	5	3.37	28	1.67	14	2.40	3	2.00
20	28	3.27	22	1.00	28	2.25	29	2.00
21	11	3.23	10	1.00	5	2.00	5	0.00
22	3	3.23	24	1.00	17	2.00	4	0.00
23	1	3.17	5	0.00	24	2.00	20	0.00
24	12	3.14	20	0.00	20	2.00	24	0.00
25	14	3.10	3	0.00	4	0.00	10	0.00
26	2	3.06	16	0.00	10	0.00	8	0.00
27	22	2.93	27	0.00	3	0.00	27	0.00
28	26	2.89	21	0.00	21	0.00	21	0.00
29	24	2.22	4	0.00	26	0.00	26	0.00
30	10	2.17	8	0.00	27	0.00	15	0.00

[a] R = response-item number.
[b] $\bar{X}$ = mean choice intensity score.

(Table continued on next page.)

	Categories							
BLOT NO. 2	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	3.99	4	4.50	2	4.00	8	5.00
2	20	3.50	20	4.33	3	4.00	3	5.00
3	16	3.48	16	4.25	16	3.67	23	4.00
4	2	3.43	2	4.25	10	3.50	14	4.00
5	9	3.39	3	4.00	23	3.50	29	3.50
6	14	3.39	30	4.00	9	3.40	11	3.50
7	8	3.30	15	4.00	26	3.40	4	3.33
8	30	3.29	21	3.33	17	3.25	9	3.00
9	10	3.25	8	3.33	6	3.25	26	3.00
10	17	3.19	10	3.25	14	3.00	20	2.67
11	21	3.15	29	3.00	19	3.00	10	2.50
12	1	3.10	17	3.00	15	3.00	25	2.50
13	26	3.08	9	3.00	30	3.00	7	2.50
14	18	3.08	23	3.00	18	3.00	13	2.33
15	12	3.07	5	2.50	12	2.67	5	2.00
16	7	2.97	6	2.50	21	2.67	30	2.00
17	29	2.90	26	2.33	8	2.67	24	2.00
18	15	2.89	12	2.00	24	2.60	16	2.00
19	19	2.88	18	2.00	13	2.50	22	2.00
20	6	2.74	25	2.00	5	2.33	19	1.00
21	22	2.61	22	2.00	4	2.00	28	1.00
22	11	2.58	11	1.00	29	2.00	18	1.00
23	25	2.53	13	1.00	20	2.00	6	0.00
24	24	2.52	24	1.00	25	1.67	17	0.00
25	28	2.50	7	1.00	28	1.50	2	0.00
26	5	2.49	1	1.00	22	1.00	1	0.00
27	4	2.48	28	1.00	11	0.00	27	0.00
28	27	2.46	19	0.00	27	0.00	21	0.00
29	13	2.37	14	0.00	7	0.00	12	0.00
30	23	2.08	27	0.00	1	0.00	15	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 3	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.58	1	5.00	11	5.00	1	5.00
2	8	3.99	30	5.00	14	5.00	6	5.00
3	2	3.75	4	5.00	8	4.50	8	4.00
4	21	3.55	28	3.75	1	4.50	14	4.00
5	9	3.54	8	3.50	21	4.33	4	3.50
6	4	3.52	20	3.33	9	4.00	9	3.00
7	6	3.48	21	3.33	5	4.00	18	3.00
8	7	3.39	9	3.00	18	3.80	20	3.00
9	15	3.39	18	3.00	2	3.50	26	3.00
10	20	3.38	6	3.00	4	3.33	28	3.00
11	25	3.32	13	3.00	13	3.25	11	3.00
12	11	3.31	27	3.00	27	3.20	12	2.33
13	27	3.28	17	2.67	15	3.00	17	2.00
14	13	3.27	12	2.50	6	2.75	21	2.00
15	28	3.21	14	2.50	30	2.50	30	2.00
16	18	3.18	11	2.33	28	2.50	27	2.00
17	3	3.13	22	2.25	20	2.40	13	2.00
18	5	3.05	10	2.00	25	2.00	22	1.33
19	22	3.00	23	2.00	22	2.00	23	1.00
20	12	2.90	24	2.00	7	2.00	15	1.00
21	24	2.73	25	2.00	12	1.83	5	1.00
22	17	2.72	29	2.00	24	1.67	29	1.00
23	29	2.70	15	1.00	23	1.00	2	0.00
24	16	2.67	7	1.00	10	1.00	3	0.00
25	14	2.61	2	0.00	26	1.00	10	0.00
26	30	2.58	19	0.00	29	1.00	19	0.00
27	23	2.41	5	0.00	17	1.00	24	0.00
28	26	2.33	3	0.00	3	0.00	25	0.00
29	10	2.20	26	0.00	19	0.00	7	0.00
30	19	0.00	16	0.00	16	0.00	16	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 4	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	4.12	16	4.00	1	5.00	23	5.00
2	1	4.09	8	4.00	2	5.00	3	4.50
3	2	3.89	3	4.00	10	3.50	20	4.00
4	21	3.72	7	4.00	14	3.50	4	4.00
5	5	3.64	14	4.00	21	3.50	15	4.00
6	4	3.40	21	4.00	4	3.33	27	4.00
7	20	3.35	5	3.83	3	3.33	10	4.00
8	9	3.28	20	3.50	26	3.00	21	3.67
9	10	3.27	1	3.50	11	3.00	12	3.50
10	6	3.25	11	3.33	9	2.50	5	3.50
11	15	3.18	10	3.33	8	2.50	9	3.00
12	11	3.13	22	3.25	12	2.50	8	3.00
13	19	3.09	2	3.00	19	2.50	11	3.00
14	16	3.07	17	3.00	5	2.40	16	3.00
15	12	2.96	26	3.00	15	2.33	22	2.00
16	8	2.68	9	3.00	17	2.00	17	2.00
17	18	2.63	30	3.00	25	2.00	30	2.00
18	14	2.47	15	2.33	30	1.80	18	2.00
19	7	2.47	18	2.00	22	1.67	28	2.00
20	30	2.45	25	1.75	16	1.67	26	1.50
21	17	2.33	23	1.00	28	1.50	14	1.50
22	27	2.30	27	1.00	20	1.50	29	1.00
23	22	2.22	28	1.00	18	1.33	6	1.00
24	13	2.17	6	0.00	27	1.25	25	1.00
25	29	2.10	4	0.00	13	1.00	2	0.00
26	26	2.08	19	0.00	23	1.00	19	0.00
27	25	2.06	24	0.00	7	0.00	24	0.00
28	23	1.96	13	0.00	6	0.00	13	0.00
29	28	1.87	29	0.00	29	0.00	7	0.00
30	24	1.78	12	0.00	24	0.00	1	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 5	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.70	20	5.00	14	5.00	14	5.00
2	2	4.29	1	4.83	1	4.63	1	4.50
3	14	3.65	13	4.00	25	3.33	23	3.00
4	13	3.64	8	4.00	30	3.00	25	3.00
5	25	3.58	7	3.80	6	3.00	6	3.00
6	7	3.42	25	3.75	13	3.00	29	3.00
7	29	3.29	23	2.75	29	3.00	5	2.67
8	8	3.23	5	3.50	5	2.83	15	2.67
9	5	3.18	30	3.40	7	2.60	16	2.50
10	30	3.15	10	3.33	8	2.50	20	2.50
11	23	3.07	14	3.00	24	2.50	30	2.33
12	4	3.00	26	2.50	23	2.50	10	2.33
13	3	3.00	6	2.50	20	2.50	7	2.00
14	26	3.00	12	2.33	12	2.50	24	2.00
15	28	2.92	18	2.33	19	2.17	8	2.00
16	9	2.88	17	2.00	15	2.17	18	2.00
17	15	2.88	24	2.00	10	2.00	17	2.00
18	18	2.76	16	2.00	28	2.00	21	1.50
19	20	2.72	15	1.75	18	2.00	12	1.00
20	24	2.69	19	1.50	9	2.00	4	0.00
21	27	2.50	29	1.00	16	2.00	2	0.00
22	10	2.48	21	1.00	17	1.33	19	0.00
23	11	2.47	4	0.00	27	1.00	13	0.00
24	17	2.30	2	0.00	4	0.00	11	0.00
25	22	2.29	3	0.00	3	0.00	3	0.00
26	12	2.25	11	0.00	26	0.00	26	0.00
27	6	2.14	9	0.00	11	0.00	9	0.00
28	16	2.12	28	0.00	21	0.00	28	0.00
29	19	2.04	22	0.00	22	0.00	22	0.00
30	21	1.90	27	0.00	2	0.00	27	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	2	4.20	19	5.00	5	5.00	8	4.00
2	4	4.02	14	5.00	8	4.00	4	4.00
3	5	3.82	4	4.25	22	4.00	29	4.00
4	1	3.73	1	4.20	29	3.50	30	3.67
5	19	3.55	25	4.00	1	3.40	19	3.50
6	14	3.45	9	4.00	4	3.33	1	3.25
7	15	3.40	6	4.00	19	3.14	10	3.00
8	7	3.30	22	4.00	17	3.00	11	3.00
9	9	3.25	5	4.00	6	3.00	14	3.00
10	6	3.25	24	3.50	13	3.00	9	2.50
11	3	3.22	10	3.50	2	3.00	17	2.50
12	24	3.18	15	3.20	16	3.00	27	2.50
13	22	3.18	23	3.00	12	3.00	15	2.50
14	13	3.17	28	3.00	11	3.00	26	2.50
15	23	3.16	8	3.00	15	3.00	7	2.00
16	10	3.16	11	3.00	10	2.75	6	2.00
17	30	3.12	16	2.33	28	2.67	16	2.00
18	28	3.09	12	2.33	18	2.50	23	2.00
19	11	3.03	30	2.20	9	2.40	18	2.00
20	12	3.02	3	2.00	30	2.33	12	1.50
21	8	3.00	20	2.00	23	2.17	2	0.00
22	17	2.85	26	2.00	7	2.00	3	0.00
23	20	2.77	17	1.50	27	2.00	13	0.00
24	29	2.63	18	1.00	3	2.00	21	0.00
25	27	2.58	21	1.00	26	2.00	25	0.00
26	21	2.50	27	1.00	14	2.00	5	0.00
27	18	2.50	7	0.00	25	1.50	24	0.00
28	16	2.35	13	0.00	21	1.00	28	0.00
29	26	2.35	29	0.00	24	0.00	22	0.00
30	25	1.97	2	0.00	20	0.00	20	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	2	4.29	23	5.00	24	4.14	8	5.00
2	25	4.15	2	4.50	6	4.00	17	5.00
3	1	4.07	24	4.40	27	4.00	26	5.00
4	3	4.00	26	4.00	25	3.67	27	5.00
5	27	3.85	18	4.00	26	3.50	5	4.50
6	23	3.75	29	4.00	2	3.50	20	4.25
7	26	3.68	27	3.67	18	3.25	14	4.00
8	18	3.65	1	3.50	23	3.00	1	4.00
9	12	3.64	14	3.50	15	3.00	25	4.00
10	24	3.54	25	3.50	29	3.00	2	4.00
11	10	3.46	30	3.25	19	3.00	12	4.00
12	29	3.24	7	3.00	28	3.00	24	3.75
13	14	3.24	20	3.00	1	2.75	18	3.00
14	17	3.21	17	3.00	14	2.67	28	3.00
15	30	3.10	5	3.00	20	2.57	30	3.00
16	28	3.10	12	3.00	17	2.50	16	3.00
17	22	3.08	9	3.00	12	2.50	7	2.67
18	16	3.00	6	2.67	9	2.50	6	2.00
19	8	2.97	21	2.50	11	2.50	15	2.00
20	7	2.95	11	2.00	5	2.33	11	1.00
21	5	2.93	19	1.50	7	2.25	29	1.00
22	20	2.89	8	1.00	13	2.00	3	0.00
23	11	2.84	15	1.00	30	1.67	4	0.00
24	6	2.84	4	1.00	16	1.50	21	0.00
25	9	2.82	3	0.00	8	1.50	10	0.00
26	21	2.62	10	0.00	10	0.00	19	0.00
27	15	2.53	13	0.00	4	0.00	9	0.00
28	19	2.44	28	0.00	21	0.00	13	0.00
29	4	2.36	22	0.00	22	0.00	22	0.00
30	13	2.29	16	0.00	3	0.00	23	0.00

(Table continued on next page.)

BLOT NO. 8	Categories 0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	23	4.64	2	5.00	23	4.38	23	5.00
2	10	3.74	10	5.00	12	4.33	28	5.00
3	3	3.68	23	4.75	9	3.80	4	5.00
4	26	3.64	4	4.50	26	3.75	14	5.00
5	9	3.56	3	4.25	8	3.33	19	4.50
6	7	3.50	12	4.00	15	3.20	1	4.00
7	12	3.44	16	4.00	3	3.00	26	4.00
8	8	3.42	26	4.00	14	3.00	16	3.67
9	11	3.30	15	3.40	5	3.00	8	3.50
10	14	3.06	8	3.33	25	3.00	12	3.50
11	5	3.05	9	3.00	4	3.00	27	3.00
12	25	3.03	11	3.00	11	3.00	30	3.00
13	29	3.00	25	3.00	30	2.33	9	3.00
14	22	3.00	30	2.67	19	2.20	11	3.00
15	17	2.97	27	2.67	21	2.00	15	2.67
16	27	2.95	22	2.50	16	2.00	3	2.67
17	2	2.93	20	2.40	20	2.00	5	2.67
18	4	2.92	29	2.33	27	2.00	17	2.00
19	1	2.92	5	2.25	28	2.00	20	2.00
20	19	2.88	1	2.00	29	2.00	29	1.50
21	15	2.85	17	1.50	17	1.33	10	1.00
22	30	2.67	14	1.00	18	1.00	18	0.00
23	16	2.66	19	1.00	1	1.00	7	0.00
24	6	2.56	21	0.00	10	1.00	12	0.00
25	24	2.50	18	0.00	7	0.00	25	0.00
26	13	2.45	6	0.00	2	0.00	2	0.00
27	21	2.43	24	0.00	6	0.00	24	0.00
28	28	2.36	28	0.00	13	0.00	13	0.00
29	20	2.33	7	0.00	22	0.00	22	0.00
30	18	2.14	13	0.00	24	0.00	6	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	7	3.93	2	5.00	9	5.00	14	5.00
2	13	3.60	6	4.33	18	4.00	3	5.00
3	27	3.48	12	4.33	7	3.83	10	5.00
4	25	3.35	7	3.83	23	3.50	30	4.00
5	14	3.33	13	3.60	13	3.40	15	3.50
6	3	3.28	17	3.33	20	3.00	7	3.33
7	12	3.26	15	3.00	26	3.00	21	3.33
8	11	3.19	28	3.00	3	3.00	5	3.00
9	2	3.13	11	2.67	24	3.00	2	3.00
10	6	3.11	25	2.67	25	2.75	25	3.00
11	16	2.93	1	2.60	28	2.60	13	3.00
12	9	2.90	26	2.00	12	2.50	24	3.00
13	30	2.87	23	2.00	11	2.50	12	2.33
14	17	2.85	30	1.80	6	2.40	1	2.00
15	10	2.81	19	1.75	19	2.33	4	2.00
16	26	2.80	4	1.50	2	2.00	18	2.00
17	28	2.80	21	1.50	27	2.00	17	2.00
18	23	2.74	27	1.00	21	2.00	28	2.00
19	8	2.73	24	1.00	4	2.00	20	2.00
20	21	2.72	5	1.00	17	2.00	16	2.00
21	15	2.68	22	1.00	15	1.67	2	1.00
22	4	2.62	18	0.00	29	1.50	22	1.00
23	24	2.48	3	0.00	22	1.33	9	1.00
24	5	2.48	9	0.00	1	1.20	19	0.00
25	29	2.44	10	0.00	30	1.00	8	0.00
26	19	2.40	16	0.00	16	0.00	26	0.00
27	1	2.32	20	0.00	5	0.00	27	0.00
28	18	2.24	14	0.00	10	0.00	11	0.00
29	20	2.24	29	0.00	14	0.00	29	0.00
30	22	1.91	8	0.00	8	0.00	23	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	2	4.21	30	5.00	3	4.50	19	5.00
2	3	4.01	11	4.50	11	4.00	2	5.00
3	10	3.97	14	4.50	10	4.00	3	5.00
4	8	3.91	3	4.33	21	3.75	1	4.50
5	1	3.80	8	4.00	1	3.67	14	4.50
6	11	3.77	4	4.00	20	3.50	10	4.50
7	4	3.59	23	3.67	2	3.33	12	4.00
8	14	3.57	24	3.67	15	3.33	9	4.00
9	9	3.40	29	3.50	28	3.20	8	4.00
10	12	3.39	9	3.50	8	3.17	4	4.00
11	21	3.36	28	3.33	26	3.13	23	3.50
12	28	3.25	21	3.25	4	3.00	26	3.33
13	29	3.21	6	3.00	7	3.00	28	3.33
14	26	3.19	2	3.00	14	3.00	17	3.00
15	20	3.12	26	2.83	6	3.00	29	3.00
16	5	3.05	17	2.60	19	3.00	6	3.00
17	15	3.03	20	2.50	17	3.00	21	2.67
18	30	3.03	10	2.50	29	2.33	18	2.50
19	6	2.98	12	2.50	23	2.25	15	2.00
20	27	2.83	1	2.50	12	2.00	27	2.00
21	23	2.81	16	2.00	18	2.00	22	2.00
22	7	2.75	13	2.00	9	2.00	11	1.00
23	17	2.72	15	2.00	22	2.00	24	1.00
24	24	2.53	5	0.00	24	1.67	16	0.00
25	25	2.44	25	0.00	16	1.00	25	0.00
26	19	2.17	19	0.00	25	0.00	5	0.00
27	18	2.09	18	0.00	27	0.00	20	0.00
28	22	1.96	7	0.00	13	0.00	13	0.00
29	16	1.93	22	0.00	5	0.00	7	0.00
30	13	1.60	27	0.00	30	0.00	30	0.00

Table A-18

Utah State University 1966-67:
Rank Mean Choice Intensity Scores of
Response-Items by Category

	Categories							
BLOT NO. 1	0		1		2		3	
Rank	R[a]	$\bar{X}$[b]	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	18	3.98	16	4.25	27	4.50	8	5.00
2	13	3.94	28	4.00	5	4.40	24	5.00
3	16	3.88	4	4.00	19	4.06	20	5.00
4	19	3.85	19	3.97	7	4.00	30	5.00
5	27	3.74	13	3.87	17	4.00	10	4.50
6	7	3.67	9	3.75	3	4.00	6	4.38
7	6	3.60	7	3.63	13	3.92	1	4.33
8	23	3.59	18	3.62	18	3.91	19	4.30
9	17	3.57	2	3.54	25	3.62	18	4.14
10	9	3.36	29	3.44	23	3.57	9	4.00
11	4	3.35	27	3.43	9	3.50	27	3.67
12	29	3.35	5	3.40	1	3.44	7	3.60
13	22	3.34	23	3.36	14	3.25	13	3.50
14	25	3.33	25	3.30	6	3.20	29	3.50
15	20	3.25	6	3.30	29	3.10	25	3.43
16	5	3.20	8	3.20	8	3.00	2	3.29
17	14	3.14	26	3.00	28	3.00	22	3.20
18	8	3.11	17	3.00	22	3.00	12	3.17
19	15	3.08	14	3.00	12	2.85	11	3.00
20	2	3.03	3	3.00	2	2.33	23	3.00
21	12	2.91	12	2.92	11	2.33	17	3.00
22	11	2.86	30	2.75	4	2.00	15	3.00
23	28	2.78	22	2.69	24	1.33	14	2.40
24	1	2.74	11	2.50	26	1.00	5	2.33
25	3	2.73	24	2.25	10	0.00	28	2.25
26	30	2.50	1	2.17	16	0.00	26	2.00
27	24	2.43	15	1.00	20	0.00	3	1.00
28	26	2.38	10	0.00	21	0.00	21	0.00
29	10	2.17	21	0.00	15	0.00	4	0.00
30	21	2.14	20	0.00	30	0.00	16	0.00

[a] R = response-item number.
[b] $\bar{X}$ = mean choice intensity score.

(Table continued on next page.)

	Categories							
BLOT NO. 2	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	3.99	3	3.86	3	4.40	25	4.67
2	1	3.75	10	3.75	21	4.09	18	4.50
3	10	3.72	18	3.67	22	4.00	8	4.13
4	2	3.61	17	3.44	29	4.00	17	4.00
5	14	3.58	26	3.29	16	3.78	20	4.00
6	16	3.55	14	3.29	4	3.75	28	4.00
7	20	3.54	7	3.25	18	3.67	11	4.00
8	17	3.46	21	3.20	26	3.56	16	4.00
9	21	3.31	20	3.18	20	3.40	7	4.00
10	30	3.28	4	3.17	11	3.40	10	4.00
11	26	3.14	29	3.17	30	3.25	14	4.00
12	8	3.12	30	3.08	10	3.14	15	3.71
13	19	3.09	16	3.71	14	3.00	3	3.63
14	18	3.05	15	3.06	24	3.00	12	3.60
15	12	2.96	9	3.00	7	3.00	9	3.50
16	15	2.95	2	3.00	6	3.00	26	3.33
17	13	2.93	12	3.00	15	2.86	5	3.25
18	6	2.90	24	2.88	9	2.83	24	3.00
19	4	2.89	5	2.75	17	2.75	30	3.00
20	29	2.74	19	2.67	5	2.67	27	3.00
21	9	2.72	28	2.67	13	2.50	13	3.00
22	11	2.66	6	2.53	12	2.50	22	2.75
23	28	2.64	8	2.50	25	2.43	23	2.50
24	7	2.62	11	2.50	28	2.43	2	2.50
25	22	2.61	13	2.50	23	2.33	21	2.50
26	24	2.56	27	2.50	8	1.89	4	2.00
27	5	2.41	25	2.40	1	1.00	29	2.00
28	23	2.18	23	2.38	2	0.00	6	2.00
29	25	2.15	1	2.33	19	0.00	1	2.00
30	27	1.94	22	2.15	27	0.00	19	0.00

(Table continued on next page.)

BLOT NO. 3	Categories 0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	1	4.45	1	4.50	25	5.00	4	5.00
2	8	3.92	2	4.17	1	4.62	10	5.00
3	4	3.70	3	4.00	4	4.25	1	4.50
4	15	3.64	7	3.75	13	4.00	2	4.33
5	27	3.62	6	3.71	27	3.92	23	4.00
6	6	3.61	27	3.58	17	3.80	30	4.00
7	9	3.59	18	3.55	20	3.80	7	4.00
8	13	3.54	13	3.53	12	3.75	21	3.67
9	20	3.56	26	3.50	8	3.71	15	3.67
10	2	3.43	21	3.44	6	3.63	27	3.50
11	18	3.30	9	3.38	7	3.50	3	3.50
12	3	3.29	30	3.33	9	3.43	18	3.50
13	28	3.25	8	3.31	3	3.33	6	3.43
14	5	3.23	28	3.30	11	3.33	8	3.33
15	25	3.13	15	3.29	28	3.33	20	3.00
16	30	3.01	17	3.15	29	3.33	13	3.00
17	11	3.00	19	3.00	22	3.20	12	3.00
18	19	3.00	22	3.00	14	3.17	11	3.00
19	7	2.97	14	3.00	5	3.00	25	3.00
20	16	2.96	29	2.86	30	2.90	24	3.00
21	21	2.89	11	2.86	21	2.80	28	3.00
22	29	2.87	4	2.83	18	2.64	16	3.00
23	12	2.77	5	2.83	26	2.50	9	2.80
24	22	2.71	20	2.80	10	2.20	22	2.75
25	14	2.70	16	2.80	24	2.00	29	2.75
26	26	2.63	25	2.67	19	2.00	17	2.67
27	17	2.62	12	2.50	23	1.50	14	2.50
28	23	2.52	10	2.40	15	1.00	5	2.00
29	10	2.37	23	2.20	2	0.00	19	0.00
30	24	2.33	24	2.20	16	0.00	26	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 4	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	4.20	18	4.25	4	4.83	1	5.00
2	2	4.00	3	4.00	3	4.64	19	5.00
3	1	3.94	20	3.82	10	4.17	21	4.25
4	5	3.73	1	3.73	2	4.00	27	4.00
5	21	3.68	6	3.67	1	4.00	3	4.00
6	4	3.64	21	3.63	21	3.92	5	3.78
7	10	3.36	15	3.57	5	3.88	16	3.50
8	9	3.32	4	3.55	11	3.80	23	3.50
9	15	3.30	19	3.50	16	3.75	12	3.40
10	20	3.29	10	3.33	15	3.58	11	3.33
11	11	3.27	9	3.27	29	3.50	26	3.20
12	6	3.17	5	3.27	20	3.50	8	3.20
13	18	3.02	12	3.25	8	3.38	22	3.00
14	19	3.00	22	2.94	23	3.29	15	3.00
15	14	2.93	11	2.83	12	3.20	30	3.00
16	16	2.81	14	2.75	9	3.13	20	2.83
17	8	2.73	27	2.75	27	3.00	9	2.80
18	13	2.58	8	2.71	19	3.00	18	2.80
19	12	2.58	28	2.67	14	3.00	29	2.67
20	22	2.48	16	2.50	30	2.85	14	2.67
21	26	2.45	17	2.40	18	2.83	6	2.50
22	17	2.39	13	2.29	22	2.60	7	2.00
23	7	2.37	7	2.25	17	2.50	17	2.00
24	30	2.34	23	2.20	25	2.38	25	1.60
25	29	2.27	30	2.06	6	2.00	28	1.50
26	28	2.25	29	2.00	26	2.00	13	1.00
27	23	2.20	26	1.78	13	2.00	2	0.00
28	27	1.95	25	1.75	28	2.00	10	0.00
29	24	1.94	24	1.43	24	1.00	4	0.00
30	25	1.84	2	0.00	7	0.00	24	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 5	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	3	5.00	1	4.69	14	5.00	14	5.00
2	1	4.59	25	3.61	1	4.81	3	5.00
3	2	4.13	14	3.50	8	3.80	1	4.80
4	25	3.51	7	3.50	7	3.80	29	4.00
5	13	3.46	20	3.33	13	3.78	11	4.00
6	29	3.42	13	3.30	29	3.57	25	3.82
7	7	3.40	30	3.24	17	3.25	5	3.63
8	30	3.25	24	3.17	5	3.21	24	3.50
9	14	3.24	23	3.05	25	3.20	4	3.50
10	8	3.18	18	3.00	23	3.17	7	3.43
11	23	3.15	5	2.86	30	3.13	8	3.33
12	9	3.14	17	2.75	18	3.09	30	3.30
13	5	3.02	15	2.71	6	3.00	23	3.29
14	28	3.00	21	2.67	22	3.00	19	3.29
15	4	3.00	29	3.67	28	3.00	13	3.17
16	26	2.89	8	2.57	16	3.00	15	3.00
17	18	3.86	28	2.50	15	2.80	9	3.00
18	22	2.79	9	2.50	10	2.80	18	3.00
19	15	2.77	12	2.46	19	2.50	20	2.67
20	6	2.70	6	2.43	20	2.44	10	2.67
21	20	2.59	19	2.18	12	.233	6	2.00
22	12	2.56	10	2.14	11	2.00	12	2.00
23	10	2.41	26	2.00	26	2.00	12	2.00
24	16	2.41	27	2.00	9	2.00	16	1.75
25	24	2.34	11	1.50	24	2.00	17	1.00
26	17	2.26	16	1.50	21	1.33	22	1.00
27	11	2.22	4	1.00	2	0.00	2	0.00
28	21	2.09	22	1.00	3	0.00	28	0.00
29	19	2.05	3	0.00	4	0.00	26	0.00
30	27	1.77	2	0.00	27	0.00	27	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 6	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	4	4.16	8	4.25	28	4.50	6	5.00
2	13	3.88	4	4.11	4	4.47	4	4.63
3	2	3.73	10	4.00	20	4.00	1	4.25
4	1	3.71	15	3.60	19	4.00	8	4.00
5	6	3.70	29	3.50	23	3.92	30	4.00
6	5	3.60	13	3.50	15	3.89	14	4.00
7	23	3.51	7	3.50	9	3.80	12	3.83
8	19	3.44	22	3.50	3	3.57	7	3.80
9	24	3.40	28	3.50	22	3.50	9	3.75
10	14	3.37	23	3.35	14	3.50	3	3.67
11	8	3.33	19	3.33	1	3.38	10	3.67
12	3	3.32	14	3.30	30	3.36	28	3.67
13	12	3.28	5	3.29	11	3.33	2	3.50
14	15	3.23	12	2.27	18	3.33	5	3.50
15	9	3.21	1	3.26	13	3.33	19	3.50
16	30	3.13	21	3.08	8	3.20	15	3.40
17	10	3.10	11	3.00	21	3.00	23	3.38
18	28	3.00	9	3.00	12	3.00	22	3.33
19	29	3.00	17	2.93	2	3.00	16	3.20
20	11	3.97	3	2.88	16	2.86	26	3.00
21	7	3.87	30	2.57	27	2.75	17	3.00
22	22	2.81	6	2.50	25	2.56	18	3.00
23	21	2.75	16	2.33	10	2.56	29	3.00
24	18	2.64	26	2.13	17	2.50	25	3.00
25	17	2.64	24	2.00	26	2.20	21	2.50
26	26	2.45	2	2.00	6	2.00	11	2.50
27	16	2.41	18	1.83	7	1.00	27	2.00
28	20	2.39	20	1.80	24	0.00	13	2.00
29	27	2.36	27	1.67	29	0.00	20	2.00
30	25	1.86	25	1.50	5	0.00	24	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 7	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	23	4.02	25	4.00	1	4.60	10	5.00
2	1	3.98	26	3.82	25	4.33	25	4.67
3	26	3.91	1	3.77	26	4.20	2	4.50
4	2	3.88	23	3.73	12	4.10	22	4.50
5	3	3.67	2	3.67	18	4.00	13	4.33
6	24	3.62	24	3.59	24	3.82	1	4.22
7	18	3.70	18	3.39	8	3.80	5	4.00
8	12	3.59	12	3.38	7	3.67	8	4.00
9	25	3.50	9	3.33	9	3.63	23	4.00
10	8	3.46	20	3.25	21	3.60	21	4.00
11	20	3.27	7	3.22	2	3.50	18	3.80
12	22	3.20	27	3.13	28	3.50	24	3.75
13	7	3.19	14	3.08	30	3.40	29	3.67
14	28	3.10	6	3.00	29	3.40	27	3.67
15	27	3.07	22	3.00	27	3.38	12	3.57
16	4	3.00	8	3.00	20	3.29	30	3.50
17	5	2.99	28	3.00	6	3.14	11	3.50
18	17	2.95	30	2.88	5	3.14	28	3.25
19	29	2.93	17	2.67	14	3.13	9	3.25
20	30	2.91	5	2.67	10	3.00	26	3.20
21	9	2.89	10	2.60	23	2.80	20	2.83
22	13	2.88	4	2.57	15	2.67	14	2.80
23	21	2.88	15	2.56	4	2.50	15	2.67
24	16	2.75	29	2.46	11	2.00	19	2.67
25	10	2.71	21	2.33	13	2.00	7	2.60
26	15	2.67	19	2.29	19	1.50	6	2.00
27	14	2.56	11	2.25	17	0.00	4	2.00
28	19	2.43	13	1.88	3	0.00	16	1.00
29	6	2.43	3	0.00	22	0.00	3	0.00
30	11	2.32	16	0.00	16	0.00	17	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 8	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	23	4.49	1	5.00	18	5.00	14	5.00
2	9	3.78	23	4.35	23	4.67	2	4.50
3	3	3.58	14	4.00	9	4.00	4	4.50
4	26	3.54	27	4.00	26	4.00	23	4.40
5	11	3.36	11	3.67	27	4.00	27	4.00
6	8	3.35	9	3.67	8	3.57	7	4.00
7	5	3.24	22	3.67	14	3.50	28	3.75
8	27	3.23	5	3.60	4	3.50	16	3.75
9	12	3.19	13	3.50	12	3.50	5	3.67
10	15	3.17	2	3.50	2	3.50	9	3.50
11	7	3.17	28	3.50	11	3.50	12	3.50
12	14	3.16	19	3.45	15	3.33	8	3.50
13	2	3.10	26	3.33	5	3.25	3	3.40
14	22	3.09	17	3.18	17	3.20	29	3.25
15	25	3.06	3	3.15	30	3.14	20	3.20
16	4	3.00	12	3.08	16	3.00	25	3.20
17	19	2.94	15	3.05	22	3.00	17	3.14
18	10	2.93	21	3.00	3	3.00	15	3.10
19	28	2.87	4	3.00	25	3.00	21	3.00
20	16	2.81	2[illegible]	2.88	19	3.00	11	3.00
21	17	2.78	10	2.88	10	2.75	30	3.00
22	1	2.78	8	2.69	29	2.25	22	3.00
23	29	2.65	30	2.44	20	2.22	19	2.80
24	13	2.64	20	2.43	21	2.00	26	2.75
25	6	2.64	16	2.07	6	1.00	10	2.50
26	30	2.61	7	2.00	28	1.00	1	2.00
27	24	2.60	6	2.00	24	0.00	18	0.00
28	18	2.56	29	1.86	13	0.00	6	0.00
29	21	2.48	18	1.33	7	0.00	13	0.00
30	20	2.43	24	0.00	1	0.00	24	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 9	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	7	4.04	7	4.14	26	4.33	1	4.33
2	13	3.61	9	4.00	7	4.33	3	4.25
3	3	3.60	18	4.00	14	4.20	13	4.20
4	27	3.45	12	3.64	13	4.13	20	4.00
5	9	3.41	13	3.59	3	4.00	30	4.00
6	12	3.26	16	3.50	25	3.88	11	3.67
7	25	3.26	11	3.43	9	3.83	7	3.67
8	11	3.24	3	3.43	5	3.75	27	3.67
9	14	3.21	6	3.42	2	3.63	12	3.60
10	26	3.20	17	3.36	12	3.60	15	3.50
11	2	3.11	25	3.18	4	3.50	25	3.43
12	17	3.07	15	3.00	17	3.45	6	3.40
13	6	3.00	2	3.00	28	3.40	24	3.29
14	30	3.00	14	3.88	11	3.29	14	3.25
15	28	2.87	24	2.75	23	3.00	9	3.25
16	15	3.82	21	2.73	15	3.00	17	3.11
17	10	2.82	26	2.67	10	3.00	23	3.00
18	8	2.75	27	2.67	27	2.80	21	3.00
19	21	2.74	8	2.67	18	2.80	26	3.00
20	16	2.74	30	2.63	29	2.67	4	3.00
21	29	2.72	19	2.57	30	2.60	2	3.00
22	24	2.71	5	2.50	1	2.60	19	2.67
23	4	2.69	28	2.36	6	2.50	29	2.50
24	1	2.58	22	2.27	24	2.50	28	2.40
25	19	2.43	20	2.25	21	2.44	18	2.00
26	20	2.35	10	2.25	19	2.20	16	2.00
27	18	2.31	29	2.10	22	2.20	5	2.00
28	23	2.30	1	2.08	20	1.00	22	1.00
29	5	2.25	23	1.83	8	1.00	10	0.00
30	22	2.02	4	1.50	16	0.00	8	0.00

(Table continued on next page.)

	Categories							
BLOT NO. 10	0		1		2		3	
Rank	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$	R	$\bar{X}$
1	13	3.92	1	4.00	22	5.00	4	4.57
2	2	3.84	29	4.00	2	4.50	2	4.50
3	3	3.80	3	3.86	14	4.50	8	4.13
4	8	3.78	6	3.75	1	4.25	27	4.00
5	7	3.73	10	3.70	3	4.00	5	4.00
6	10	3.70	8	3.65	10	4.00	29	4.00
7	4	3.68	4	3.53	30	4.00	1	3.75
8	1	3.62	16	3.50	11	3.78	3	3.67
9	5	3.61	11	3.50	24	3.67	26	3.60
10	11	3.58	28	3.44	8	3.67	14	3.57
11	6	3.32	26	3.29	4	3.57	23	3.50
12	29	3.31	15	3.28	29	3.57	21	3.50
13	21	3.29	14	3.25	25	3.50	15	3.50
14	26	3.25	21	3.21	23	3.44	9	3.50
15	27	3.23	2	3.10	26	3.38	24	3.40
16	28	3.21	17	3.07	21	3.36	11	3.25
17	14	3.18	5	3.00	6	3.20	28	3.14
18	15	3.16	23	3.00	28	3.20	7	3.00
19	12	3.13	30	2.91	9	3.00	10	3.00
20	30	3.07	22	2.67	15	3.00	20	3.00
21	23	2.92	20	2.67	5	3.00	18	2.67
22	9	2.87	12	2.67	17	2.89	6	2.67
23	19	2.79	25	2.33	16	2.50	30	2.33
24	16	2.75	24	2.33	20	2.33	17	1.67
25	17	2.71	19	2.00	12	2.00	13	1.50
26	20	2.71	18	1.55	18	2.00	19	1.00
27	24	2.65	27	1.50	27	2.00	16	1.00
28	18	2.25	13	1.00	19	1.50	22	1.00
29	22	2.15	7	1.00	13	0.00	25	0.00
30	25	1.63	9	1.00	7	0.00	12	0.00

Appendix B

Answer Sheet[1]

NAME _____ AGE: _____
Last First Middle SEX: _____

SCHOOL _____ DATE OF TEST _____

Blot #1	Blot #2	Blot #3	Blot #4	Blot #5
1 _____	31 _____	61 _____	91 _____	121 _____
2 _____	32 _____	62 _____	92 _____	122 _____
3 _____	33 _____	63 _____	93 _____	123 _____
4 _____	34 _____	64 _____	94 _____	124 _____
5 _____	35 _____	65 _____	95 _____	125 _____
6 _____	36 _____	66 _____	96 _____	126 _____
7 _____	37 _____	67 _____	97 _____	127 _____
8 _____	38 _____	68 _____	98 _____	128 _____
9 _____	39 _____	69 _____	99 _____	129 _____
10 _____	40 _____	70 _____	100 _____	130 _____
11 _____	41 _____	71 _____	101 _____	131 _____
12 _____	42 _____	72 _____	102 _____	132 _____
13 _____	43 _____	73 _____	103 _____	133 _____
14 _____	44 _____	74 _____	104 _____	134 _____
15 _____	45 _____	75 _____	105 _____	135 _____
16 _____	46 _____	76 _____	106 _____	136 _____
17 _____	47 _____	77 _____	107 _____	137 _____
18 _____	48 _____	78 _____	108 _____	138 _____
19 _____	49 _____	79 _____	109 _____	139 _____
20 _____	50 _____	80 _____	110 _____	140 _____
21 _____	51 _____	81 _____	111 _____	141 _____
22 _____	52 _____	82 _____	112 _____	142 _____
23 _____	53 _____	83 _____	113 _____	143 _____
24 _____	54 _____	84 _____	114 _____	144 _____
25 _____	55 _____	85 _____	115 _____	145 _____
26 _____	56 _____	86 _____	116 _____	146 _____
27 _____	57 _____	87 _____	117 _____	147 _____
28 _____	58 _____	88 _____	118 _____	148 _____
29 _____	59 _____	89 _____	119 _____	149 _____
30 _____	60 _____	90 _____	120 _____	150 _____

Blot #6	Blot #7	Blot #8	Blot #9	Blot #10
151_____	181_____	211_____	241_____	271_____
152_____	182_____	212_____	242_____	272_____
153_____	183_____	213_____	243_____	273_____
154_____	184_____	214_____	244_____	274_____
155_____	185_____	215_____	245_____	275_____
156_____	186_____	216_____	246_____	276_____
157_____	187_____	217_____	247_____	277_____
158_____	188_____	218_____	248_____	278_____
159_____	189_____	219_____	249_____	279_____
160_____	190_____	220_____	250_____	280_____
161_____	191_____	221_____	251_____	281_____
162_____	192_____	222_____	252_____	282_____
163_____	193_____	223_____	253_____	283_____
164_____	194_____	224_____	254_____	284_____
165_____	195_____	225_____	255_____	285_____
166_____	196_____	226_____	256_____	286_____
167_____	197_____	227_____	257_____	287_____
168_____	198_____	228_____	258_____	288_____
169_____	199_____	229_____	259_____	289_____
170_____	200_____	230_____	260_____	290_____
171_____	201_____	231_____	261_____	291_____
172_____	202_____	232_____	262_____	292_____
173_____	203_____	233_____	263_____	293_____
174_____	204_____	234_____	264_____	294_____
175_____	205_____	235_____	265_____	295_____
176_____	206_____	236_____	266_____	296_____
177_____	207_____	237_____	267_____	297_____
178_____	208_____	238_____	268_____	298_____
179_____	209_____	239_____	269_____	299_____
180_____	210_____	240_____	270_____	300_____

[1]Original answer sheet was single page printed on both sides.

Appendix C

INSTRUCTIONS TO EXAMINEES

On the following pages of this booklet you will see a series of ten ink blots. These blots really do not represent anything in particular. However, people do see certain things in the blots; and different people see different things. You are to look at the blot and then at a list of possible things to be seen. You will notice that the things you might see are arranged in groups of three and are numbered. Within each group of three you are to do two things: First, choose the one of the three items which you think is most clearly represented by the blot or by some part of the blot. Second, we are interested in how enthusiastic you feel about your choice. Therefore, after you have selected the response that you think is most clearly represented by the blot or some part of the blot, we want you to indicate the enthusiasm of your choice by reference to the following scale:

5. Very good choice
4. Good choice
3. Neutral (Neither good nor poor)
2. Poor choice
1. Very poor choice

Put the scale number which best represents your choice enthusiasm in the space provided immediately after the response you have selected.

Proceed to the next group of three items and follow the same directions. Do this for all ten groups of three referring to each blot. Remember, you are to select only one out of each triad of responses. When you turn to a new blot, you will follow the same directions as above, which are:

1. Select the one response from each group of three items that you think is best represented by the blot or some part of the blot.

2. Note the number of your choice.

3. Indicate the intensity of your choice enthusiasm by reference to the following scale: 5-very good choice, 4-good choice, 3-neutral, 2-poor choice, 1-very poor choice. Put the number best representing your level of choice enthusiasm opposite that number of the response you have chosen on the answer sheet.

4. Continue on to the next group of three and follow the same procedure.

Make no marks of any kind in the booklet. The examiner will tell you when to stop working and turn to the next blot. He will announce the number which corresponds to that blot. Be sure that you are marking in the proper place on the answer sheet.

There are no right or wrong answers to this test. Be sure to make one choice from each group of three items. If you see none of the three things listed select the one most like what you do see and indicate the intensity of your choice enthusiasm. If you see more than one, select the one that is best represented. Work as rapidly as you can and do not spend too much time on any one group; your first impressions will probably be best in a test like this.

Appendix D

INSTRUCTIONS TO EXAMINERS
TO EXAMINERS: PLEASE READ DIRECTIONS AS GIVEN BELOW

First hand out answer sheets, test directions, and test booklets in that order.

Say to students: "Please do not open test booklets until you are told; nor make any marks on the answer sheet. Let me explain something about the test you are going to take. The large influx of students into our colleges has necessitated mass personality testing. The test you are about to take is designed to give the counseling staffs at your institution significant information about you. This information will be used by the College to help you. We hope that you will co-operate with us by responding as truthfully as possible. Remember that the information that you give us is extremely important. The results will be kept completely confidential.

"Now turn to the sheet marked "Instructions to the Examinees" and we will read this together.

"On the following pages of this booklet you will see a series of ten ink blots. These blots really do not represent anything in particular. However, people do see certain things in the blots. And different people see different things. You are to look at the blot and then at a list of possible things to be seen. You will notice that the things you might see are arranged in groups of three and are numbered. Within each group of three you are to do two things: First, choose the one of the three items which you think is most clearly represented by the blot or by some

part of the blot. Second, we are interested in how enthusiastic you feel about your choice. Therefore, after you have selected the response that you think is most clearly represented by the blot or some part of the blot, we want you to indicate the enthusiasm of your choice by reference to the following scale:

5. Very good choice
4. Good choice
3. Neutral (Neither good nor poor)
2. Poor choice
1. Very poor choice

"Put the scale number which best represents your choice enthusiasm in the space provided immediately after the response you have selected.

"Proceed to the next group of three items and follow the same directions. Do this for all ten groups of three referring to each blot. Remember, you are to select only one out of each triad of responses. When you turn to a new blot, you will follow the same directions as above, which are:

1. Select the one response from each group of three items that you think is best represented by the blot or some part of the blot.
2. Note the number of your choice.
3. Indicate the intensity of your choice enthusiasm by reference to the following scale: 5-very good choice, 4-good choice, 3-neutral, 2-poor choice, 1-very poor choice. Put the number best representing your level of choice enthusiasm opposite that number of the response you have chosen on the answer sheet.
4. Continue on to the next group of three and follow the same procedure.

"Make no marks of any kind in the booklet. The examiner will tell you when to stop working and turn to the next blot. He will announce the number which corresponds to that blot. Be sure that you are marking in the proper place on the answer sheet.

"There are no right or wrong answers to this test. Be sure to make one choice from each group of three items. If you see none of the three things listed select the one most like what you do see and indicate the intensity of your choice enthusiasm. If you see more than one, select the one that is best represented. Work as rapidly as you can and do not spend too much time on any one group; your first impressions will probably be best in a test like this.

"Let me add further, that for each blot, at the end of approximately two minutes, I will announce that you should be finishing up that particular blot. At the end of three minutes I will tell you to go ahead, you may go ahead to the next blot on your own, or go back to a previous blot and finish up.

"Now open your booklets and begin with Blot #1, starting with response 1. Remember you are to select only one response from each of the ten groups for a total of 10 per blot."

Notes to Examiner (not to be read to class):

(1) The two minute warning is necessary to encourage rapid response. After the first few blots students will show marked variance in speed. Therefore, keep a two minute warning and three minute move-to-next-blot schedule for the first two blots. Decrease this by 15 second intervals over the next four blots and hold at two minutes for the last four blots.

(2) When requesting S's to move on to the next blot, always indicate the response number which starts the blot (e.g. Blot #4, response #91).

(3) Walk among Ss occasionally, seeing that they are giving 10 responses per blot, with one response per triad. Some students will try to respond to every item within the triad. Emphasize occasionally at beginning the one-in-three pattern.

(4) Most important, see that they are not merely indicating which response was chosen, but are also indicating the appropriate choice enthusiasm scale number.

(5) Make certain students have completed all blots.

(6) Students, when done, may be excused.

Appendix E

Memo Defining Counselling Visit

TO: Counselors, dorm residents, and all other guidance personnel

FROM: Philip Langer, Ph.D.
Associate Professor of Psychology
Utah State University

SUBJECT: U.S. Office of Education Grant S-322

This fall a number of freshmen at your institution were tested as part of a U.S. Office of Education research project (S-322). The test instrument employed was the Structured-Objective Rorschach Test (SORT), a multiple-choice version of the Rorschach. We are seeking to determine if this test discriminates between those freshmen students who seek counselling help and those who remain in school and do not.

To accomplish this task you will find along with this note a list of those students at your institution that were tested. We would like you to keep this list until June, 1966 and return it to us (or to a designated individual within your institution). During that period we would like you to indicate which of the students listed on the following sheets came in for counselling. In order to define the term "counselling situation" for the purposes of our study, we have set up the following set guidelines:

1. We will consider a counselling situation to be any meeting in which advice is sought. Indeed, anything but a direct request for information is to be considered a counselling situation. For example, suppose the student comes in requesting knowledge about the subjects needed to graduate with a degree in a certain area. If all he seeks is specific information, then it is not to be considered a counselling situation.

However, if in the course of the same meeting he begins to talk about his vocational objectives or whether he is fit for college, etc., we want this to count as a counselling situation.

2. We are not interested in the nature of the counselling situation; be it personal, academic, or vocational.

3. We are not interested in the time spent on the counselling situation. It can be fifteen minutes, or fifty minutes. We still count it as a counselling situation.

4. Will you please indicate by a check mark the number of counselling meetings up to the first three. In other words, you will indicate whether the student made one, two or three visits with you. After that it is not necessary to keep a record of the number of visits that the student made. Do not count a request for counselling as a counselling visit except if the student begins to discuss his problem, then it may be counted as a counselling visit.

5. If in doubt, view it as a counselling situation.

We know that these are crude indices of counselling, but we feel that they should be broad enough to include most students that are seeking help of some kind. Again, will you please maintain this record until June, 1966 and then forward this to the appropriate individual. We appreciate your help in this matter. The school will be apprised of the results of our study.

Appendix F

Memo Explaining IBM Data Sequence

TO: Freshmen Advisers

FROM: Philip Langer

SUBJECT: Student Scores on the Structured-Objective Rorschach Test (SORT)

Enclosed you will find scores for those freshmen students who took the SORT last Fall as part of U.S. Office of Education Grant S-322. Please excuse the delay, but a number of unforeseen difficulties held up the data processing.

The following example will help you read the scores. The scores for each student appear on the IBM sheet as follows:

```
1  DOE, Bob  11 89 158 22 27 78 34 16 35 38 15 53 118 64 161 19
1  DOE, Bob  11 41 47 39 38 46 46 43 49 41 43 45 53 48 48 47
1  DOE, Bob  11 2 3 2 2 3 2 3 3 5 1 1 1 1 3 3 3 3 2 2 2 3 3 3 3 3 3 2 3 3 3
```

(1) First of all, consider the scores in each line separately. Although each line is derived from the preceeding line, the numbers are frequently not placed directly one under the other.

(2) The number 1 before the name is a school coding. The numbers 11 and 21 directly after the name in each line and directly under each other represent a sex coding (male and female respectively).

(3) The first line consists of the raw scores for the fifteen factors, in this order: W, D, Dd, S, F, F-, M, FM, FC, CF, Fch, A, H, P, and O. Thus there are 15 numbers, and where the numbers appear to run together remember that no three digit number exceeds 299. This data is not likely to prove of much use to the adviser, but it would have been too expensive to remove from the data print.

(4) The second line consists of the same 15 factors given in standard scores. The order of the factors is the same, and no score exceeds two digits.

(5) The third line consists of the traits measured by the SORT. This line will be of the most value to you. There are 30 one digit numbers representing how the person compares to others with respect to these traits:

The order of the traits (and the factors used to determine them) are:

1. Theoretical--W
2. Practical--D
3. Pedontic--Dd
4. Induction--W:M
5. Deduction--D:M
6. Rigidity--S
7. Structuring--F
8. Concentration--F-:F (Reductives 9-13)
9. Low generalization--W less than 42
10. Perfectionism--Dd over 63
11. Poor control--F- over 57
12. High anxiety--Fch over 63
13. Compulsivity--S + F + D/3 over 57
14. Range--H:P::A
15. Human relationships--H
16. Popular--P
17. Original--O
18. Persistence--S
19. Agressive--F:M

20. Social responsibility--FC:M

21. Cooperation--CF:FC

22. Tact--FM::FC:M

23. Confidence--FM:M

24. Consistency of behavior--F::S:Fch

25. Anxiety--Fch

26. Moodiness--FM:F-::F:M

27. Activity potential--M

28. Impulsiveness--F-:F

29. Flexibility--M::FC:CF

30. Conformity--O:P

The numbers represent the following:

1. With the exception of 9-13, the numbers are as follows: 5 - high; 4 - above average; 3 - average; 2 - below average; and 1 - low.

2. For 9-13, 1 - no; and 5 - yes.

(6) To help you in interpreting these scores we have included a mimeographed sheet giving the interpretations as listed in the SORT manual. The norms for assigning high, low, etc. to each of these traits is based on the students tested last fall.

Appendix G

INTERPRETATION OF TEST RESULTS

Reference to the works of Beck, Klopfer and Kelley, Schafer, Rapaport, Gill and Schafer, Anderson and Anderson, and Bell provides a most extensive review of Rorschach interpretation of the traditional protocol. The following presentation is intended primarily to translate what the several attributes recorded on the worksheet are implied to represent, according to basic Rorschach theory.

Scores in Mental Functioning and Temperament factors are expressions of the degree of the factor relative to scores generally distributed in the population. That is, high scores and those above average do not imply a degree that is "good," "bad," "healthy," or "advantageous." A high score simply indicates that the examinee has made more responses than the typical individual to a particular variable. The evaluative interpretation (high or low) depends upon the nature of the factor and its contribution to the individual's life.

MENTAL FUNCTIONING

Intellectual level does not necessarily reflect intellectual performance. It is desirable to know such features as the type of approach to intellectual situations used, adaptability to the reasoning processes, flexibility of ideas, and ability to organize (structure) mental processes.

Theoretical: Facility for thinking in broad, general, or abstract terms; facility for getting perspective, visualizing the overall picture, and seeing relationships between the parts.

Practical: Tendency for thinking or attacking problems on the basis of practical, concrete, or very definite details.

Pedantic: Preference for thinking and attacking problems from the standpoint of fine, minute details; tendency to be perfectionistic and to focus on precise, sometimes trivial details.

Induction: Facility for logical thinking based upon inferences from elements; utilization of their accumulative synthesis to lead to conclusions, principles, or generalizations; ability to organize details into a meaningful whole.

Deduction: Readiness to employ the logical approach in which established or speculative theories, principles, or generalizations are applied to data or details for the purpose of analyzing their relationships to one another (and to the principle probably involved). A balance between facilities for inductive and deductive thinking, especially when both are high, would point toward a mental adaptiveness of "efficiency" wherein such

intellectual potential as the individual has is the more effective because of versatility in logical processes.

Rigidity: Tendency toward the dogmatic or toward fixed ideas. Higher scores suggest an unwillingness to change a point of view in spite of evidence to the contrary; low scores suggest an uncritical acceptance of others' viewpoints.

Structuring: Facility for mental alertness and precision and exactitude in perception of reality. Occasionally this relates to a somewhat rigid and formalistic way of solving problems, but usually indicates an awareness of and conformity to the environment and its demands.

Concentration: Capacity for attending to the task at hand or for avoiding distractions from one's environment or from one's own extraneous thoughts.

REDUCTIVES

Factors that result in lowering intellectual performance below one's mental potential are called Reductives and are listed below.

Low Generalization: The Theoretical (W) factor rates so low that attention to principles, perspectives, or theoretical implications is difficult.

Perfectionism: The Pedantic (Dd) factor is so extremely high that thought is lost in a welter of preoccupation with minutiae.

Poor Control: The preponderance of "F-" in the Concentration factor is such that thought is not channeled readily into effective processes.

High Anxiety: The Anxiety (Fch) factor is so high that acceptance of one's own conclusions is difficult; as a result, the ability to "think a thing through" is impaired. Excessive worry and feelings of insecurity or incapacity may be dominant.

Compulsivity: A combination of the Structuring (F), Rigidity (S), and Pedantic (Dd) factors is of such magnitude that needless repetition, excessive exactness, and unreal conformity result in preventing the full mental processes from proceeding to a logical conclusion.

INTERESTS

These facets of behavior refer to the range of reactions to perceptual experience. Sensitivity to a variety of kinds of percepts implies a broader range of interests than does a paucity of percept types.

Range: Tendency of interests to be either expansive or to be narrow and confined.

Human Relationships: Disposition toward the perception of and attention to elements having human connotations.

RESPONSIVENESS

Two frames of reference are involved here. The first derives from the modality of responses, the second from the frequency of responses. It is assumed that responses to items most frequently seen by the majority of the normative group are indicative of conformity. Conversely, consistent selection of rarely observed items implies a disposition toward uniqueness.

Popular: Tendency to perceive the same features in the same way as others; to see things as other persons do; empathic tendencies.

Original: Disposition to perceive the unique, the different, and the non-conforming, perhaps even the eccentric; emphasis on individualism of actions.

TEMPERAMENT

The attributes listed under this heading relate largely to deep inner feeling, for which there often are compensations in outwardly observed behavior. Many of the compensations can become occupational advantages.

Persistence: The determination not to deviate from a set course. It may appear as doggedness or stick-to-itiveness. It can range from inability to stick to or complete a task along to the further extreme of stubbornness, defiance, or contentiousness.

Aggressiveness: The aspiration toward goals by means of well-accepted and morally developed procedures; willingness and desire to work; sense of a mature self-control with social conformity.

Social Responsibility: Willingness to subserve oneself, even though no personal gains are evident; energetic acceptance of one's obligations to himself, to his family, and to society.

Cooperation: Willingness to use a teamwork approach; sensitivity toward others in combination with appreciation and responsiveness in human relationships. Willingness to submerge one's immediate needs to the long-range interests of other persons in implied.

Tact: Control of impulses and biases; maturity expressed in the ability to maintain a stable relationship with superiors, peers, and inferiors. There is balance between inner impulses, conscious self-control, and demands of the social environment.

Confidence: Ego-strength, self-confidence, morale; inner feelings of prestige or personal worth, ranging from feelings of inferiority to

strong feelings of self-assurance. It implies ability to withstand stresses and strains and to maintain feelings of self-worth (prestige) in the face of adversity.

Consistency of Behavior: Predictability of actions; tendency for characteristic behavior patterns to be stable and well established.

Anxiety: Generalized apprehensiveness, uneasiness, or internal disquietude; self-concern and preoccupation with personal well-being, feelings, emotions, and sensations, resulting from a feeling of insecurity. A low anxiety score indicates composure; however, excessive composure, or almost complete absence of anxiety, may indicate a tendency to smother feelings to the point of seeming cold and insensitive. Anxiety may reflect itself in feelings of insecurity, expressions of inadequacy, or constriction of behavior; it may also reflect itself in erratic behavior.

Moodiness: Sharp fluctuations in mood, ranging from elation to depression. The intensity and duration of either phase may vary greatly.

Activity Potential: Control of emotional energy; energy endowment; capacity to follow through on a planned course of action; concentration of energies in a given direction, as opposed to dissipation of strength in non-productive channels.

Impulsiveness: Tendency to act upon impulse rather than on the basis of a considered plan; reflected in spur-of-the-moment decisions.

Flexibility: Adaptability; faculty for accepting and handling most life situations in a mature manner; capacity to adjust readily from one type of situation to another.

Conformity: Tendency to accept and be directed by the socially accepted codes, customs, and mores.