The purpose of this study was to frame the outlines of an interpersonal theory derived from exploratory research among adolescent reading failures. The theory postulates that adolescent reading failure syndrome results from and is maintained by conscious elements of choice manifested in the adolescent's perception preferences. The affective readiness for failure in reading tasks is, therefore, a deeply seated psychological generator of the reading failure disturbance showing extreme resistance to modification through traditional remedial reading school practices, but worthy of as vigorous an exploration as has been undertaken into the more familiar cognitive parameters of successful reading performance. The subjects, 180 seventh, eighth, ninth, and tenth grade Black male students, were evaluated through personal interviews, questionnaires, and observation over an 80-week period by the researcher. Results indicate that adolescent reading failure is accompanied by perception preferences for retreat into one of three views of the world depending upon the interpersonal and intrapersonal pressures of the moment. Such preferences are characterized by: (1) unsocialized aggression, reflecting overt and covert hostile disobedience, quarrelsomeness, physical and verbal aggressiveness, vengefulness, and destructiveness; (2) social approval anxiety, reflecting continuous anxiety, unrealistic fears, immaturity, self-consciousness, inhibition and frustration; or (3) unsocialized withdrawal, reflecting seclusiveness, detachment, sensitivity, shyness, and a flagging desire to form close personal relationships. (Author/HMV)
AN AFFECTIVE-PERCEPTION PSYCHOLOGY
OF ADOLESCENT READING FAILURE

By

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PREFACE

Nationwide dropout statistics reveal that, as Jennings reported, while most non-readers do quit their secondary school education before graduation, some do not and a majority of poor readers who do drop out of school actually have the mental capacity to read above the sixth grade level, yet almost none of these ever achieve this.\footnote{F. G. Jennings, \textit{This is Reading} (New York: Bureau of Publications, Teacher's College, Columbia University, 1965), p. 172.}

Regardless of the amount of social adjustment, sympathetic counseling and understanding provided these youngsters, the school fails to meet its educative objectives when there is failure to \textit{learn to read} and failure to \textit{read to learn}.

Many of these youngsters who enter secondary school with serious reading problems have long personal history and experience of failure in reading tasks. Jennings refers to these youngsters as having been "written-off" years before their secondary school years have begun.\footnote{Ibid., pp. 173-174.} These "write-offs" will be referred to in this study as "non-readers" who possess both potential for independent reading ability.
(as evidenced in minimal reading skills which they possess),
and the potential for a life of dependence upon those who,
with generosity, may both read to and for them.
Chapter 1

INTRODUCTION

Modern-day reading specialists in the secondary schools are becoming polarized along two broad fronts: the behavioristic and the humanistic. The forces which are at work behind this divergence are partially imposed by the institution of American secondary education, and partially imposed by the nature of the secondary teacher and student themselves. The bipolarity which is characteristic of secondary reading instruction today is a mute reflection of a far more widespread disparity in twentieth-century life. Burton observed this phenomenon and said that Scientific Man in producing the atomic bomb, is now, under attack as blindly mechanistic, as failing to pose the proper life-questions, as indifferent to man's inner self, and generally failing to provide for a satisfying life. Humanistic Man focuses on life-questions with ever increasing subjectivity, with a persuasive case for the uniqueness of all persons, and with pursuit of answers to the "meaning" of the individual life.¹

The traditional irrelevance of secondary school curricula (largely composed of reading activities) for students who either do not read at all, or who are so arrested in reading skill development as to be functionally illiterate is a universal shadow of despair and anxiety among secondary teachers in all content areas. Behaviorists and humanists have attempted to establish a sufficient base of research for the formulation of an educational theory enabling the elimination of the causes for "non-reading" adolescents. However, many of those who have suspended judgement concerning the determinant and ultimate causes of the condition have discovered sufficient evidence in the actual treatment of secondary "non-readers" to formulate a position midway between extreme behavioristic and humanistic poles, an interpersonal theory. One by one, those traditional excuses of schoolmen for failures in reading achievement focusing on alleged personal inadequacy for reading tasks, e.g., economic status, intelligence, native language, physiological impairments, family mobility, and culture have fallen by the weight of the reading teacher's personal experience and research showing the positive effect of reconstructive interpersonal programs for secondary "non-readers." This experience and research milieu (coming largely from reading practitioners themselves) has established that much can be done to change the student's "non-reading" predisposition if two conditions prevail during treatment: the teacher's
relative absence of fear of the student's personality, and a deep understanding of the human condition of which the student and the teacher are both parts and products. These two conditions precedent focus on the construct: interpersonal perception is a function of intrapersonal perception. That is, how one perceives his person-to-person (interpersonal) relationships is significantly determined by the characteristics of one's (intrapersonal) perceptions of oneself. For purposes of this investigation exploration will be focused on a limited area of inquiry restricted to the "non-reader's" perceptions of himself as the recipient or producer of two forms of pressure: personality and environmental. Although there are unlimited possibilities for inquiry into the "non-reader's" personality structure, it is believed that the most relevant data is that which sheds light on the conscious perception of the "non-reader" concerning forces both within himself and those outside him producing anxiety and discomfort.

Possessing such knowledge about the "non-reader's" perceptions enables the reading teacher to understand more accurately which of these perceptions may have influenced or facilitated development of a "non-reading" disposition and which may be susceptible to modification in reconstructive efforts toward reading success.
PURPOSE OF THE STUDY

The purpose of this study was to frame the outline of a theory of dynamic individual psychology and then to indicate areas of application for the interdisciplinary oriented reading practitioner.

Among those investigations which are of paramount importance to practitioners faced with understanding reading-failure syndrome among adolescents is analysis of the deviant case. This approach has hitherto been greatly overlooked and underworked by reading researchers. Deviant case analysis offers notable advantages over the traditional and classical mode embodied in analysis of cases trending toward the central grouping and centering on the mean. First, deviant case analysis, is advantageous by permitting the exploitation of the entire parameter of theoretical notions of affective and cognitive behaviors, and second, deviant case analysis supplies the researcher with gross behavioral features in a readily identifiable and categorical form for the purpose of further analytical and theoretical permutations.

The deviant case study modality provides a useful means of bridging the gulf of misunderstanding and suspicion which exists between, on the one hand, reading technology, and on the other, psycho-therapeutic analysis. The use of the deviant case study accomplishes this through providing the gross features for study and rehabilitation through the use of a broad understanding that adolescent reading failure
etiology is preceded by interactions of conscious and non-con- 
cscious elements of choice. And it makes possible a facili-
tation of understanding selected features of intrapersonal 
and interpersonal perception preferences which have been 
previously considered indistinguishably obscure, remote and 
unmeasureable dimensions, or as generally irrelevant to the 
understanding of reading failure.

The following constructs should be thought of by the 
reader as assumptions which underlie the position presented:

1. Perceptions are cathected (invested and being 
   invested with psychic energy).

2. Perceptions in this sense include the reader himself, 
in whole or in part, and the things which he perceives 
outside himself, including interpersonal transactions.

3. Values associated with the cathectic perception 
   range from hyper- to hypo-intensity.

4. All perceptions are cognitively reducible to a 
   limited set of relationships which are symbolized 
   by the reader and stored in long-term memory.

The range of complicated personality characteristics 
which develop in accordance with these operating protocols 
during the course of individual maturation form the contextual 
environment of subsequent adolescent reading failure syndrome.

Though the validity of these constructs may be 
argued, there is very little disagreement that a sufficiently 
radical exploration of this syndrome has been clearly lacking
in the relatively unpromulgated genre of reading failure syndrome among deviant case adolescents.

This is not intended to infer that all reading-failure syndrome occurring in adolescents may not have significant primary components at a biochemical or physiological level. The point is that the evidence of primary disturbance at this level is meager as a determining factor in the non-reading behavior, and incomplete, at best. The present state of research-based evidence in this field requires, at the very least, substantive operational explanations of the "how's" and the "why's" of this disturbance, not merely that the disturbance exists. Preoccupation with proofs that the disturbance exists, indeed, has led to an indefensible complacency on the part of those who find experimentally-based descriptions of the cognitive symptoms of reading difficulty more "manageable." It should be pointed out that such researchers have great difficulty assembling stable and replicable evidence regarding so-called cognitive dimensions and attributes and that corroborative investigations in the literature, are simply not available. Even the psychological literature relating to the phenomenon of reading-failure syndrome in adolescents provide only disparate observations in various settings which are only partially corroborated, and are often disconfirmed in significant respects when practitioners attempt to apply the findings and conclusions in the field. Therefore, reports of psychological malfunctions
as observed in experimentally controlled situations, even though carefully obtained, are difficult to coordinate into a consistent picture of the attributes in a manner which leads to development of an integrated model of the mechanisms of mediation in the perceptual process which give rise to and which nurture the continuance of the syndrome.

In the void which exists and in the absence of a viable theoretical model, the reading researcher tends to be consistently preoccupied with inquiries into the derivative attributes of the reading process as reflected in those cases near the central trend of the typical distribution of the typical classroom. This research milieu has, therefore, produced insufficient research energy in the study of other more deeply seated psychological generators of the disturbance which show extreme resistance to modification and alteration through the use of traditional school practice and reading instruction but which are, nonetheless, worthy of increasing awareness and vigorous exploration.

The expectation was that perception preference patterns would emerge in the form of relationships among the following five perception variables, as measured in one group of "non-reading" adolescents:

1. **Machiavellianism**: The degree of belief in the manipulability of objects and others\(^1\) (Appendix C, page 132).

2. **School Sentiment**: The degree of favorable attitude toward school in general and toward several dimensions of school\(^1\) (Appendix G, page 158):

3. **Personality Needs Perception**: The degree of perception as to personality needs in relation to objects and others\(^2\) (Appendix D, page 135).

4. **Environmental Force Perception**: The degree of perception as to the forces from the environment directed upon the person\(^3\) (Appendix E, page 143).

5. **Affective Readiness Stages**: The degree of emotional development and sophistication observed in subject's interaction with objects and others\(^4\) (Appendix I, page 171).

**LIMITATIONS OF THE STUDY**

The investigation was limited in the following ways. First the instruments were administered in the same order\(^5\) to all subjects, rendering a serial effect possible. Second,

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\(^3\) Ibid.

\(^4\) H. Hobbs, "Sequential Interrelated Variables of Affective Teaching in Secondary Reading" (unpublished graduate study, University of California, Santa Cruz, 1972), pp. 1-104.

\(^5\) Machiavellianism--School Sentiment--Personality Perception--Environmental Perception--Affective Development.
the investigation was limited to a single school district, the characteristics of which are described in Chapter 3. A third limitation arising from the sampling procedures within the school district is discussed in the same chapter.

As the thrust of this investigation was to establish the dimensions of personality as measured by various self-reporting test instruments, a further limitation was theoretically possible because responses from the environmental context of perception may have been influenced by the personality characteristics of the "non-reading" subject and may therefore actually have been projections rather than objective descriptions.
Chapter 2

REVIEW OF RELATED RESEARCH

CONCEPTS OF THE EDUCATIONAL PROCESS

Throughout the history of American reading instruction many persons involved in its various aspects have been searching for better ways to conduct its process. From the earliest days of hornbooks, blue-back spellers, and hickory rods the dialogue among educators has moved to and fro between the mandates of the "Three R's" and the suppleness of "discovery learning" as alternative means to achieve a more durable and informed reading citizen. Generally, four conceptions of the educational process have emerged from the literature of this period: fundamentalism, developmentalism, holism, and behaviorism.

Fundamentalism

At around the turn of the century, "fundamentalism" had gained widespread attention advocating that the process of education consisted of learning certain basic subjects which had been designed to develop "faculties of the mind" and to exercise certain intellectual processes.¹ Mathematics

---

was important to learn because its discipline aided reasoning; knowledge of Latin aided in the problem solving abilities of the student; and study of great literature assisted in the development of the student's aesthetic appreciation. The researcher should add that this approach worked well for certain homogeneous groupings of persons who were able to devote a large quantity of energy and leisure time to study and contemplation. However, very few citizens were fortunate enough to experience these delights in their lifetimes, and the "self-made" man pointed out that his reasoning and problem-solving skills had been developed by other more relevant means in the world of work as had even the farmer and the industrialist who were not in need of well-developed aesthetic appreciation skills in order to survive in their adventures.

Developmentalism

A vast tide of "developmentalism" swept across the nation in order to counter critics of the public school program. Advocates for this view of education readily acknowledged that reasoning, problem-solving, and aesthetic values were important aspects in the process of education but insisted that there were other and better ways of achieving these outcomes. These included concepts of "mental abilities," "developmental stages," "capacity," and "readiness." As a result the process of education was conceived
of as one which would facilitate and expand, to an individual's fullest capacity, one's inherent style of acquiring information and knowledge. But, some children still did not learn to read well, and some failed to learn to read at all. For an answer to this dilemma standardized tests were administered throughout the nation. The evaluation of the problem led to sources of the difficulty "diagnosed" as internal inadequacy including deficiencies in "mental ability," "capacity to learn," and "aptitude." Special programs were immediately implemented for these "non-reading" failures in the public school system. Psychiatrists used such terms as "anxiety reduction," "repression," and "defense mechanism" to explain their hapless failure in learning to read. Behaviorists spoke of the importance of "environment" and the dynamics of "reward" and "punishment." Very little attention was given to the developmentalist approach itself, which required, as did its forerunner, the fundamentalist approach, that students conform to a standard package of performance which was predetermined by teachers who may have, indeed, had little knowledge of the adequacy or relevance of such objectives to the individual learner.

Holism

Beginning in the mid-forties a new emphasis appeared in order to rectify the shortcomings of both the fundamentalist

and developmentalist regimes. This was the "holistic" view which placed primary attention on the "whole child."\textsuperscript{1} Thus the purpose of education became the molding of the child's personality, of nurturing his skills of socialization, and generally strengthening his psychological well-being in addition to fostering development of the child's cognitive abilities. The researcher concluded that the intended outcome was not only a citizen who read well and was thereby well informed but a citizen who was "well-rounded," "creative," and "fully functioning."

The effects of two world conflicts, a fluctuating national economy, and the fast pace of American life led to further changes in the course or direction of reading instruction. As the concern for individuality and mental-health with emphasis on reasoning, developmental stages, and natural aptitudes had seemingly failed to produce the desired outcomes in the desired period of time, new concerns became overriding. Allen estimated that one out of every four students, and 10,000,000 children and adults with severe reading disability existed in the United States by 1969.\textsuperscript{2}

\begin{itemize}
  \item \textsuperscript{1}Wolman, pp. 184-189.
\end{itemize}
Behaviorism

In the late 1950's great emphasis had begun to develop toward a view of education oriented around behaviorist models of stimulus-response as an explanation for all learning behavior from lower-order animals to man and as a model upon which better instruction should be based. This approach assumed the form of this hypothesis: How people behave is a direct result of the forces externally exerted upon them. In the researcher's view, such a perspective has progressively harmful effects upon students, schools, family and society, individual perceptions not being subject to direct manipulation. The ultimate control and direction of behavior then, lies within the personality organization of the behaver himself, and not superficially in the external forces which are exerted upon him.

TOWARD AN INTERPERSONAL THEORY

Like electricity, reading exists; it can be observed and also experienced; reading teachers may even believe that they can teach young children to read; reading teachers may believe they measure competence in reading; but are they really talking about reading behaviors, of which there are many? ¹ Perhaps all reading behaviors are determined by perceptions of

personal needs and external forces. Viewed in this way, behavior may be thought of as a production of forces "inside" the person and forces "outside" the person. By "inside" forces we mean the needs, wants, anxieties, interests, and feelings of guilt among those which could be mentioned. "Outside" forces are thought of as requirements of school and society, rewards, dangers, threats, and the expectations of other persons. Lindgren theorized that to some extent "internal" forces are the "mirror images of external ones." 1

In 1956 a group of university examiners and Benjamin Bloom published a scheme for classifying learning behavior according to certain kinds of learning outcomes which these writers intended would focus attention on the relative ease with which school programs could be made accountable by objective evaluation. These learning behaviors were called the **cognitive domain** and were arbitrarily limited to six levels of behavior: knowledge, comprehension, application, analysis, synthesis, and evaluation. 2 Not until 1964, was there an extension of the classification which included the **affective domain** and its five types of behavior: receiving, responding, valuing, organization, characterization by a


value.\(^1\) With these two classification schemes bringing widespread attention to systematic description of learning outcomes a third classification soon appeared, the psycho-motor domain in which behaviors were classified under five major areas: perception, set, guided response, mechanism, complex overt response.\(^2\) For the first time, then, learning behavior had been sharply and distinctly separated into logically identifiable subject matter and "departmentalized" in much the same fashion as has been the case with content area subjects in the school curriculum.

Briefly, the subject matter of the cognitive domain was to deal with intellectual abilities such as analyzing a sentence into its component parts, or memorization abilities with such abstractions as phonic generalizations or spelling rules and their applications in the reading and writing behaviors learned in the classroom. The proper subject matter of the affective domain was thought to be development of attitudes, values, and emotional states promoting student motivation and interest in the preservation of such ideals as democratic processes of government. The model subject matter of the psychomotor domain was described as behavior which was largely concerned with physical skills such as learning to


use a typewriter, drive an automobile, or to swim the breast-stroke.

Popham advanced the original intent of these classifications still further in 1972 when he suggested to educational evaluators that this collection of behaviors encompassed all the learning categories necessary for them to be able to determine and detect omissions and overemphases of reading and other educational programs of the schools.¹

The implications of this evaluation hierarchy have spread into every public and private educational program which receives federal support of any kind. Federal support for educational programs has increased phenomenally during the past fifteen years and has become a multimillion dollar "business" funding basic research, development, and demonstration projects ranging in size from less than a thousand to over a million dollars. The Office of Education has made it mandatory that each project within which federal monies are expended be conducted as economically as possible; thus all projects need to be managed in an efficient and business-like manner.² The taxonomies of the cognitive, affective, and psychomotor domains provided a means which appeared


"efficient and businesslike" for evaluation of federally sponsored and supported programs in education and industry. This hierarchy has indeed become the predominant criterion for evaluation of program effectiveness used not only by federal evaluators, but by their counterparts at the state level. School districts, building principals, and publishers of standardized achievement tests have fallen into line, as well. The "solution" to the present problems of running an "efficient and businesslike" program has ignored the question, "Where is the learner in this process?" Behavioral theorists, such as Skinner, reply, "What we do and hence however we perceive it, the fact remains that it is the environment which acts upon the perceiving person, not the perceiving person who acts upon the environment."¹ The frailty of such a view of learning behavior has not, however, prevented its current vogue in reading education where reading specialists, school psychologists, teachers at both elementary, and secondary schools, parents, and students have found preoccupation with cognition inadequate. It can be seen, therefore, that Popham's charge concerning the importance of detection of omissions and overemphases in say, reading programs, contains an implied but unspoken device: since evaluation has been departmentalized into cognitive, affective, and psychomotor domains, be sure to evaluate programs

in terms of only measurable and specific skills which are learned. The cognitive domain, as thus described, fits neatly and efficiently into the category of measurable and specific skill learning. Thus, concerns have become highly focused upon behavior of a cognitive type, and progressively less focused upon the behaver and the affective determiners of his individual learning and intellectual adjustment. Which is to say, there is probably an overemphasizing of the evaluation of learning behaviors as an outcome while at the same time an omitting of the evaluation of behavers' learning as a function of their individual perceptions. "Non-reading" adolescents are definitely an outcome, and their further evaluation may or may not lead to reconstruction of basic reading ability. However, reconstructive efforts which evaluate the "non-reading" adolescent in terms of his learning and non-learning behavior as a function of his individual perception of experience may be viewed as open-ended and may be contrasted with alternatives which seek to produce people with set patterns of behavior, ready to respond in ways predetermined by persons other than the behaver. Open-ended evaluation also provides a means of relating to human needs which is opposed to indoctrination, rigid habit patterns and inculcation. Studies in social psychology emphasize the ultimate significance of classroom social climate, social organization, group dynamics, and teacher-student interaction. Learning to read involves constant interaction
between teacher and student perception and expectancies. Outcomes as measured by achievement depend more upon the patterns of perception than upon actual methods of instruction or materials used.¹ The purpose of reconstructive reading education, therefore, must rest firmly on the assumptions that behavior is a function of perceptions, that man is self-actualizing, and that his primary need is to maintain and to enhance his self-organization, believing as he perceives, and as Bills found, capable of initiating action and directing that action in accord with his perception of how he can best enhance himself.²

**Significance of Affective Reaction in Learning**

Such terms as "cognitive" and "affective" have undergone considerable modification since they were introduced in the taxonomies alluded to above. Patterson, for example, showed that cognitive behavior is a part of all purposive and goal-directed acts, while the other aspects of behavior are affective strivings, feelings, and emotions.³ But Thorne's


view of education represents what has become a familiar position in education in recent years, that is, its purpose is the inculcation of cognitive skills specifically related to reasoning and to memory, while feelings and emotions are to be suppressed because they interfere with and are disruptive of the learning process.¹ And now, after many years, reading educators and many others have come to recognize in varying degrees that attitudes and feelings are not only facilitators of motivation but are prepotent to learning so that inattention or casual disregard of affective factors in the reading situation may substantially add to interference and subvert normal learning behavior. Brown takes the view that expression of affect in the classroom is a legitimate and valuable outcome in and of itself.²

Affective reactions are considered by frustration theorists as adequate insofar as they are progressive rather than retrogressive in their implications.³ Responses, therefore, which tend to bind the non-reader to the past unduly or which interfere with reactions in later situations are less adequate than those which leave him free to meet

¹F. C. Thorne, How to be Psychologically Healthy (Brandon, Vt.: Clinical Psychology Co., 1966), pp. 4-5.
new reading situations as they occur. **Retrogressive** responses in a frustrating situation thereby make for inappropriate reactions in later situations. **Progressive** behavior, however, aids the natural development of the individual limited only by his own potential and the environmental demands placed upon him. For others, affect has gained increasing interest because of its potential use as a tool of manipulation. Glasser, in this vein, maintained that affect is most appropriately used in the classroom as a means of gaining student interest and to aid in the acquisition of cognitive skills.\(^1\) The relationship of personality to such uses is ignored, however.

Piaget proposed that human personality evolves from a composite of intellectual and affective functions and from the dynamic interactions which result. The purposes of the intellectual processes are to provide, therefore, organization and integration of cognitive and affective dimensions of the personality.\(^2\) Using affect, therefore, as a means of gaining student interest and acquisition of cognitive skills is in reality a use of personality variables, and should be so identified.

The Berlyne investigations concluded that persons


are motivated to exert effort in order to gain understanding of their environment.\(^1\) Kretch and Crutchfield reported further evidence interrelating affect and cognition in the Russian studies which revealed that the autonomic nervous system, when highly stimulated, caused the person to become highly attentive and vigilant to his environment.\(^2\) In an earlier work, Kretch and Crutchfield described personality needs, emotions, and the rigidity of cognitive structure related to the learning situation. Under the stress of greatly perceived need, cognitive organization involving a goal object becomes simplified and isolated from all other objects and events in the person's field of experience.\(^3\)

In the case of an adolescent "non-reader," therefore, the immediately perceived barrier of decoding groups of letters into sensible sound strings become a more dominant object, attention becoming centered on this as a barrier, the result being a narrow, rigid, and isolated organization. The stronger the tension is, the more thwarting the emotional tone of the reading situation will tend to be.


Festinger studied this barrier phenomenon related to cognitive reorganization as an outgrowth of emotional stress and concluded that when a person's cognitive world has contradictory information about himself, he feels uncomfortable and strives to reduce the contradiction in various ways, and these may have marked motivational outcomes, one of which might well be a refusal to learn to read.

Fernald's early studies of reading failure disclosed observations that the mere mention of reading and of writing will often send given adolescents into a paroxysm of fear or rage, or arouse a sullen, negative response. Fernald correlated school as the first group experience for these children, with negative emotions about the situation which became connected through conditioning with the group, with group members, and with group activities. Such youngsters, therefore, tend to progressively withdraw from group associations while assuming a fearful or antagonistic attitude toward school and the various dimensions of its demands upon him, reading tasks being only one such dimension. For lack of effective means in coping with the pressures of the school environment compensation outcomes often result in dramatically affecting personality structure and expression.

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Personality Reactions

Monroe and Backus delineated such personality reactions in the five reading failure prototypes they investigated: Aggression, withdrawal, compensation, defeat, and hypertension. Described briefly these were:

1. **Aggression:** The student assumes a position of hateful opposition toward reading, toward teachers, toward school and its various dimensions and interrelationships.

2. **Withdrawal:** The student withdraws from what he perceives as an unpleasant and thwarting environment, often through actual physical escape in truancy, and usually through mental withdrawal to some personal activity, as in daydreaming and the pursuit of fantasy experience.

3. **Compensation:** The student compensates for his reading failure by success in other activities. Sometimes these activities enable the youngster to maintain his self-respect in spite of failure in reading; often, however, the student begins to seek attention and satisfaction in disruptive tactics.

4. **Defeat:** After repeated failure the student may perceive that he cannot succeed. He may develop an air of utter hopelessness and apathy, becoming so certain of failure he is beaten before he begins again.

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5. **Hypertension:** When the student finds no solution to his reading and adjustment problems, a prolonged period of tension may result in a firmly established pattern of worry and general dread which may sequentially give rise to deleterious personality traits.

Wilson formulated an adjustment hypothesis related to personal *meaning-concentration* activities. This helps to explain why there appears to be "failure-readiness" for reading tasks in certain types of students and, perhaps, at certain times in all students. In the contrasting of Wilson's two extreme personality types, extroverts and introverts, additional parameters are brought into focus for better understanding the role of personality structure in facilitation and/or obstruction of learning to read and reading to learn. An extrovert tends to recoil from a page of print because it strikes him as meaningless; its meaning-concentration is too low. But, for him, athletics, disruptive behavior, or social interaction may be high in meaning-concentration. The introvert, vis-a-vis the extrovert, tends to recoil from mere physical activity because it strikes him as meaningless; he wants to use his energies in what are for him, high meaning-concentration areas such as reading, using dictionaries, thinking, and general intellectual

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pursuits. These two extremes are, perhaps, oversimplified for purposes of contrast, but the obvious perceptual thread of internal organization influencing readers and "non-readers" warrants increased attention and investigation.

Student Perceived Cause-Effect

Heckhausen and Weiner identified four specific dimensions perceived by the student for his success or failure in learning situations. Two causes were perceived by students as having to do with external and environmental factors: luck and the ease or difficulty of a task. The remaining two causes were perceived by students as having to do with internal and personal factors: ability and effort.¹ Such findings are highly significant because of the emphasis attributed to the ultimate source of success or failure in reading performance, individual perceptions of: self-need and environmental pressure. Rotter posited that the student's motivation to achieve a given task increases when he perceives that his success and his improved performance has come from his own inner resources.² When the student does not perceive


that he has achieved or can achieve increasing power to deal with his personal and environmental pressures by virtue of reading skills he is being taught and related tasks, he apparently disengages from the learning process by progressively reducing efforts and involvement in cognitive outcomes planned by his reading teachers and the school.

The Coopersmith and Feldman study found that attempts to limit or exclude affect from the learning situation had significant and profound effects upon student cognition.¹

Though there has been national recognition of Gates' study showing that as high as seventy-five percent of students with severe reading disabilities showed personality maladjustments,² acknowledgement alone, has been insufficient for effectively dealing with the secondary "non-readers" Williamson described as hostile, defensive, or autistic and withdrawn.³ Bell, Lewis, and Anderson found secondary "non-readers" experienced gross frustration arising from doing poorly in reading skills and that this frustration was


manifested in three patterns of adjustment: aggressive tendencies, passivity, and negativism in dealing with authority figures.\(^1\) These findings suggest that these "non-readers" may have been unable to control or to inhibit their frustrations beyond minimal levels. That there was still frustration present after many years of repeated failure signifies a persistent desire to learn to read which was strongly imprinted in the personality structure. Would such a desire eventually lead to reconstruction of basic reading skill when conditions were perceived as being right by the individual involved? Longitudinal follow-up studies might reveal a surprising answer. Much of present reading research into the effectiveness of various instructional methods in the classroom is often pointless. Spache reported that such comparative research tends to ignore the fact that the dynamic practices of the teacher and the kinds of teacher-pupil interactions and perceptions promoted are the most important determinants of student reading achievement.\(^2\)

The need for a theoretical tool which would account for such personality features has been well established in the literature since the publication of James' Principles


of Psychology, in 1890,\(^1\) and particularly within the past ten years since Coopersmith's study of self-esteem development.\(^2\)

**Humanistic Self-Perception**

Contemporary personality theory has much to offer the reading practitioner in an understanding of the "non-reader's" self as a collection of functions of the personality. Most of these functions have generally been thought of as existing beneath the level of conscious awareness; however, within legitimate reading research parameters, much data has been collected which suggests that a person's consciously held ideas, beliefs, and values exert a profound influence on his behavior. In the perception studies of Blum,\(^3\) Chodorkoff,\(^4\) and Erickson,\(^5\) recognition thresholds of individuals were either raised or reduced as a function of anxiety arousing stimuli when care was taken to ask subjects if the stimulus was anxiety provoking and if characteristic

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anxiety response modes were considered in relation to the individual's self-perceptions. Rogers defined the self as a structure of well organized perceptions of one's own characteristics and abilities, relationships to others and to the environment, the qualities and values associated with experiences and objects, positive or negative goals and ideals, and in general, an organized picture, existing in awareness as foreground or background of past, present, and future.\(^1\) Such perceptions, according to Snygg\(^2\) and Combs\(^3\) can be obtained reliably solely on the basis of the individual's self-report through responses to given statements and specific answers to questions asked by a reading teacher. It is obvious that great care is required in the construction of questions and in the interpretation of responses in order to prevent examiner bias from creeping in and to be certain of the consistency of response. Knowledge of the "non-readers'" self-perceptions is an appropriate place to begin in reconstructive efforts. In summary, it has been reported above that self-theorists suggest knowledge of the individual's


self-perceptions and those he maintains regarding his environment will significantly increase the predictability of his behavior inasmuch as the totality of these perceptions, cognitions, and affective states serve him as a personal reference frame for past, present, and future experience. Therefore, the individual behaves in a manner congruent with the kind of person he believes himself to be, and the person he perceives others as believing him to be.

Mead proposed a significant sequence of behavior in his concept of "I," where the "I" gives a sense of freedom and individual initiative. That is to say, one makes an effort to live up to expectations of the "I" by attempting to make one's behavior consistent with the "I" expectations, as one perceives it. But, neither the individual's perceptions of self nor his world-view are static. Both change and both are continually acting and reacting. Murphy described this human potentiality in this way:

Affection and trust, belief in the unrealized potentials of other human beings, calls into existence not only what is wanting to bud, but what could never otherwise be; and others responding in their turn, lift those who reached out to them to a plane which they themselves could never have defined.

In reconstructive efforts with adolescent "non-readers" we are clearly dealing with much more than basic reading skill cognitions and are very much in need of concepts such as those suggested by Laing, \(^1\) which would explain both the interaction and inter-experience between and within individuals, the relationships which exist between and within them at a given moment, and their roles in the outcome or system which is thus created.

Adlerian personality constructs are sufficiently relevant to encompass the protocols of adjustment which appear to be well established as appropriate pathways for reconstructive strategies in "non-reading adolescents." Adler believed strongly that inner causation was the primary source of all human behavior. \(^2\) It is clear that Adler originated the precept that it is not the child's experiences alone which dictate his actions but his conclusions drawn from that experience. \(^3\) Formulations of perceptions begin very early in one's life and these conclusions may persist throughout later life becoming very resistant to modification or direct manipulation by others. The cognition


theorists Gardner, Kagan, and Witkin, reported that even very young children, when coming to school for the first time, having already begun to exhibit individual strategies for coping with:

a. Problems arising from the child's internal personality needs, and
b. Problems arising from external demands of the environment.

These investigators referred to the child's typical approach to such problems as his "cognitive style," meaning that such patterns were directly associated with the child's personality organization. Cognitive style should therefore be viewed as a relatively stable preference for a certain mode of perceptual ordering of the external world which is then directly related to one's own sense of himself as a person. What this says to the reading practitioner is therefore, that there is present in all individuals and consequently in adolescent "non-readers" an overriding dominion of affective perceptual experience with which one must somehow become familiar if he is to work reconstructive

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strategies suited to the student's needs. In striving to achieve a balance between affective and cognitive emphasis in an age of accountability preoccupations, teachers may yet learn to conceive of the school as a communication center where both student and teacher receive information and feeling, and learn to organize and evaluate it. Such an environment worthy of study and analysis may further penetrate with understanding the human affective and cognitive processes. However, many reading researchers have come to think solving the problems of "non-readers" in secondary schools was to bring the elementary school's programs into a greater degree of accountability, a procedure which lies exclusively within the domain of that which can be directly and objectively calculated and manipulated. Adler's individual psychology should turn researchers' attention toward another dimension and another kind of reality: toward the recalcitrant and often ambiguous facts of our human nature and its imperatives. That is why this researcher believes that the further development of knowledge of the individual "non-reader's" perception characteristics is a fruitful endeavor for all those who are concerned with reconstruction and restoration efforts. Can teachers of reading afford to fling themselves into the spectacular visions of an improved reading technology at the elementary and secondary levels of tomorrow without keeping an eye on the human nature which will still be very much with them, and which is supposed to be the recipient of
those illusory marvels? Yankelovich and Barrett succinctly remarked:

What shall it profit Man if he gains the whole world, technologically speaking, but enters that glittering future impoverished and stunted in his individual experience.1

THE INSTRUMENTS

The Jesness Inventory: Screening Instrument

This instrument of 155 items was developed as part of a five-year research study by Carl Jesness,2 and is a measure designed for use in the classification and treatment of children and adolescents.

The Jesness Inventory consists of forced-choice true-false items providing scores on eleven personality characteristics from among seven sub-scales. The development of this instrument was a consequence of the apparent lack of an available structured test which was sensitive yet stable enough to provide a reliable measure of adolescent personality types which were associated with "non-reading" behavior.

The Asocial Index provided by this instrument correlates the proportion of subjects scoring at or above asocial levels and the probability of an individual at any given

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score being positively identified as an adjudicated delinquent prior to his eighteenth birthday. This index was used as a portion of the screening data the researcher gathered in selecting his sample from the school population. It was believed that if an individual subject met the specified "non-reading" criterion described in Chapter 3, the investigation would yield the most meaningful implications and findings if those subjects who were identified by the Jesness Inventory as having probably less than a sixty percent chance of social success in later life, were screened out of the sample. Though an investigation would be warranted on those excluded by this percentage probability, such an undertaking was clearly outside the scope of this study.

The Machiavellianism Scale: The Mach

This scale of twenty items was developed by Christie and Geis and was selected because of its design to meter the degree to which an individual perceives other persons as manipulable. Although high scoring Machs have not been found to predominantly manipulate others in their life transactions, this scale has been shown to be an accurate predictor of manipulative behavior toward others under experimental conditions.


2Ibid.
Machiavellianism has been found to be independent of intelligence, socioeconomic status, level of education, and marital status. It does not measure pathological personality disorders.

In the present exploratory study it was predicted that high scores on the Mach Scale, as indicators of a perception of others as objects to be manipulated rather than as persons, would describe a low degree or lack of social interest. Therefore, high scores on the Mach Scale would be associated with externality on the dimensions of the Personality Needs-Perception and Environmental Force-Perception Indexes. Most of the items in the Mach Scale were extracted directly from Machiavelli's, The Prince, by Christie and Geis.¹

Belief in the manipulability of others, coupled with the predictive validity of the Mach Scale established on behavioral criterions, would seem to indicate quite strongly that the "non-reader" as an adolescent has acquired a desire for power and superiority over others and a cynicism implicit in the Machiavellian view, whether or not, their life styles actually include manipulations of others or not. Authoritarian desires were found by Christie² to be inversely related to Machiavelli's reporting that the authoritarian

²Ibid.
believes that man should be good, whereas high scoring Machs believe that since man is no good, advantage should be taken of him.

In summary, it was held that Machiavellianism would be predictive of externality to the extent it correlated with the Needs-Force dimensions; that it would reflect a low degree of social interest—reflected in perceptions of striving for power and superiority over others; and that high scores would reflect a meaningful relationship to the "non-reading" behavior in the individual's phenomenological universe.

**Personality Needs-Perception**

This 150 item instrument was designed to measure the subject's perception of his own personality needs. Need refers to an unstable or disturbed equilibrium in behavior. Handy suggested that "behavior" should be viewed as greatly more than just the aspects of the person: the interaction between the person and the environment. As such, "behavior" is found throughout all adjustive behavior and is typically accompanied by increased tension and protracted activity.¹

The behavior concerned may focus on aspects of achievement of a goal object or on the avoidance of some object or situation. The implications for understanding the proximate cause of reading failure in adolescents seem profound here. Needs, therefore, may be viewed as organizational tendencies in the

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individual which would appear to give unity and direction to his behavior. Murray originally defined "need" as a force (the psychochemical nature of which is unknown) in the brain region, a force which organizes perception, apperception, intellection, conation, and action in such a way as to transform in a certain direction an existing, unsatisfying situation.¹

The presumed biological and operant aspects of psychogenic needs have never been given serious investigation by reading researchers or anyone else. Murray has referred to need as "a nonobservable construct or intervening variable which belongs . . . to a category of disposition concepts. It is a state, in short, that is characterized by the tendency to actions of a certain kind."² In Murray's reference, two significant aspects are observed. First, needs are functional in character, identified with the goals that an interaction serves for the individual. In this view, a listing of needs is basically a taxonomy of objectives that individuals characteristically strive to achieve for themselves. Constructs of this kind refer to entities which are not, in themselves, directly observable but may be inferred from observations of an interaction. So that the second aspect

of a need is that it is revealed in the modes of behavior utilized by the individual. A listing of needs is a taxonomy of interaction processes. It may be said then that needs may therefore be identified as a taxonomic classification of the characteristic responses or spontaneous behaviors manifested by individuals in their life transactions.

**Environmental Force-Perception**

This 150 item instrument was designed to measure the subject's perception of forces bearing on him from the environment. The concept of environmental force-perception provides an external situational counterpart to the internalized personality needs. In the ultimate sense, environmental force-perception, refers to the phenomenological world of the person, the unique and subjectively private perception each person has of the events in which he takes part. The interpretations of experience may be quite different from individual to individual, as they usually are, but only the detached observer can describe the situational climate, the permissible roles and relationships, the sanctions, while the participant only responds in action and reaction.

The concept of environmental force-perception includes conditions which represent impediments to a need as well as those that are likely to facilitate its expression. These conditions, which establish what is commonly referred to as the atmosphere or climate of a given situation, are to be found in the structure created or tolerated by others.
Therefore, it may be said that environmental force-perception is reflected in a taxonomic classification of characteristic behaviors manifested by individuals in their mutual interpersonal transaction and institutional transactions. Combs found that in order to understand the behavior of people one must understand how things seem to them.\textsuperscript{1}

Of the various indirect sources from which estimates of characteristic interactions have been attempted--autobiographical data, interviews, projective tests, aptitude and achievement tests, inventories of attitudes and values--the simplest area for inquiry are the preferences which the adolescent "non-reader" himself, expresses in response alternatives to verbal descriptions of various possible actions and reactions for which he has personal preference.

Chapter 3

METHODS AND PROCEDURES

This chapter includes detailed descriptions of the group of subjects, of the procedures through which the subjects were selected and the data collected, and of the instruments used. In the data analysis section, each general expectation of the exploration is listed and followed by the statistical method(s) by which it was tested.

SUBJECTS

An original group of 180 subjects provided data for analyses in the study. The subjects ranging in age from twelve to sixteen years, were seventh, eighth, ninth, and tenth grade male students interviewed and observed from 1969 to 1974. Of the original 180 subjects identified as adolescent "non-readers" data from seventy-three subjects were not included in the analyses, owing to either the obvious faking of responses or to the fact that the screening scales had not been completed in the allotted time for administration. Of the 107 subjects who completed the screening scales, twenty-nine subjects, randomly selected, were closely reevaluated through personal interviews, additional scales, and observation by the researcher.
The Population

Fresno, California is a medium-sized city of approximately 200,000 residents, located in the geographic center of the San Joaquin Valley midway between San Francisco and Los Angeles. Fourteen junior high schools and seven high schools serve its secondary education needs. The junior and senior high schools employed in this study serve the underdeveloped quadrant of the city, a section of high population density, of low socioeconomic conditions, and historically, the oldest part of the city. The cultural composition of the junior high and senior high school student body within which the study was conducted was approximately 3 percent Chicano and 97 percent Black, whose ninth grade mean reading grade equivalents over the six-year period 1969 through 1973, as measured by the Comprehensive Test of Basic Skills achievement test were: Reading Vocabulary, 6.4; Reading Comprehension, 6.0. Results of the Lorge-Thorndike Intelligence Tests, Multi-Level Edition, Form 1, Level G, indicated a median verbal percentile of 4.66 for the years 1969 through 1972, with a median raw score for this period of 82.8.

Selection of the Group of Subjects

In the absence of an efficiently workable arrangement by which all (N=600) students enrolled could participate in the exploratory study, an alternate means of selecting subjects, which would yield a definable and representative group of adolescent "non-readers" was devised. Inasmuch as
a course in reading was a curricular requirement of all students, and owing to the interest in the study expressed by members of the school faculty and the administration, it was decided that students enrolled in reading classes would constitute the group from which a sample would be drawn. For purposes of this exploratory study, "non-readers" were identified on the basis of the following selection criterion: cases in which standardized test reading performance (expressed as reading age in years and months) fell below chronological age were further sifted to identify those cases in which reading performance (expressed as reading age in years and months) fell below both chronological age and mental age.

It was decided that students so identified would constitute the "non-reading" group to whom the instruments of this investigation would be administered. Although this method of subject selection was not totally randomized due to the exclusion of students previously assigned to Special Education classes, it allowed for maximum possible inclusion otherwise.

**DATA COLLECTION PROCEDURES**

The Jesness Inventory (Appendix B, page 123) and the Informal Interest Inventory (Appendix F, page 153) were orally administered by the researcher in an individual preliminary screening conference. During subsequent interviews additional instruments were administered in the sequence as follows:
Interview | Instrument Administered
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First | Machiavellianism Scale
Second | Personality Needs-Perception Index
Third | Environmental Force-Perception Index
Fourth | School Sentiment Index

Twenty-nine subjects were assigned to a self-contained core curriculum classroom through program changes where they were observed over a thirty-week period for a duration of three and one-half hours daily. The subjects' behavioral characteristics were recorded along a continuum constructed by the researcher, The Sequential Inter-Related Variables of Affective Teaching (Appendix I, page 171).

The interviews and observations were conducted over a period of eighty weeks beginning in September, 1970 and extending through January, 1974.

In order to control the potential interaction of the instructions and information given the subjects on the one hand and their affective mind set in responding to the instruments on the other, a number of standardized oral instructions were given at each interview. Apart from the mechanical details, these instructions included: (1) informing the subject that the study was being conducted under the auspices of the university; (2) assuring subject that the researcher was legally responsible for maintaining confidentiality and that the evaluation of individual students would never be released to anyone; (3) informing subjects that results in percentage terms and relationships among variables would be
discussed in the core curriculum class and related, when appropriate, to the course content; (4) asking subjects to listen carefully to the statements which would be read to them, as they would ordinarily be read only one time; and (5) informing the subjects that the instruments were measures of personal belief, that there were no "right" or "wrong" answers, and that no matter how they answered, their answers would in no way affect their grades or citizenship marks.

Achievement and intelligence test data were assembled from the school records for the individuals in the study.

The Jesness Inventory

The Jesness Inventory consists of 155 forced choice true-false items, designed to measure the reactions of youngsters to a wide range of content. This measure was developed in a five-year research program on delinquency.\(^1\) A brief definition of each scale follows:

1. **Social Maladjustment:** Refers to a set of attitudes associated with inadequate or disturbed socialization, as defined by the extent to which an individual shares attitudes of persons who demonstrate inability to meet environmental demands in socially approved ways.

2. **Value Orientation:** Refers to a tendency to share attitudes and opinions characteristic of persons in lower socioeconomic classes.

3. **Immaturity:** Reflect the tendency to display attitudes and perceptions of self and others which are usual for persons of a younger age than the subject.

4. **Autism:** Reflects the tendency, in thinking and perceiving, to distort reality according to one's personal desires or needs.

5. **Alienation:** Refers to the presence of distrust and estrangement in a person's attitude toward others, especially toward those representing authority.

6. **Manifest Aggression:** Reflects an awareness of unpleasant feelings, especially of anger and frustration, a tendency to react readily with emotion, and perceived discomfort concerning the presence and control of these feelings.

7. **Withdrawal:** Involves a perceived lack of satisfaction with self and others and a tendency toward isolation from others.

8. **Social Anxiety:** Refers to perceived emotional discomfort associated with interpersonal relationships.

9. **Repression:** Reflects the exclusion from consciousness, or conscious awareness of feelings and emotions which the individual normally would be expected to experience, or his failure to label these emotions.
10. **Denial**: Indicates reluctance to acknowledge unpleasant events or aspects of reality often encountered in daily living.

11. **Asocial**: Refers to a generalized disposition to resolve problems of social and personal adjustment in ways ordinarily regarded as showing a disregard for social customs or rules.

**Machiavellianism Scale**

A version of the Mach Scale which had been developed and adopted for use with secondary students was employed in this study. This twenty item version uses a five point response format, ranging from strongly agree, to uncertain or either way, to strongly disagree, a 5-3-1 scoring system yielded a possible range in scores from 20 to 100.

Reliability estimates have been reported to fall typically in the 70's and 80's.¹

**Personality Need-Perception and Environmental Force-Perception Indexes**

The personality-needs and the environmental force dimension measures summarized here are derived from the Syracuse Indexes originally developed by the Examiner's

Office of the University of Chicago.  

There are two tests, each consisting of 150 items in a self-reporting form. Because of the nature of the subjects of this investigation (adolescent non-readers), an individual oral administration was carried out, with the examiner recording subject responses.

Response options provided are: "strongly like or agree," "not sure, either way," and "strongly dislike or disagree."

The basic format: 150 items distributed among thirty scales of five items each. The personality-needs scales parallel those of environmental force, one corresponding to behavioral manifestations of the needs variables, the other to environmental forces likely to facilitate or impede their expression.

The five items of each scale are distributed throughout the entire set of 150 items from the same scale being separated by twenty-nine others from the remaining scales. The direction of the responses on each scale have been varied among the options. Each item receives a score of one to five as keyed, twenty-five being the maximum for any one scale. Norms were unnecessary, as the response pattern was individually interpreted through the item-analysis technique.

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<tr>
<th>CLASSIFICATION PROTOCOL</th>
<th>DESCRIPTION</th>
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<td>2. Achievement:</td>
<td>Surmounting obstacles and attaining a successful conclusion in order to prove one's worth, striving for success through personal effort.</td>
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<tr>
<td>3. Adaptability--Defensiveness:</td>
<td>Accepting criticism, advice, or humiliation publicly versus resistance to suggestion, guidance, direction or advice, concealment or justification of failure.</td>
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<td>4. Affiliation:</td>
<td>Gregariousness, group-centered, friendly, participatory associations with others versus social detachment, social independence, self-isolation, or unsociableness.</td>
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<td>CLASSIFICATION PROTOCOL</td>
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<tr>
<td>5. Aggression--</td>
<td>Indifference or disregard for the feeling of others as manifested in hostility, either overt or covert, direct or indirect, <strong>versus</strong> the denial or inhibition of such impulses.</td>
</tr>
<tr>
<td>Blame Avoidance:</td>
<td></td>
</tr>
<tr>
<td>6. Change:</td>
<td>Variable or flexible <strong>versus</strong> repetition and routine.</td>
</tr>
<tr>
<td>7. Conjunctivity--</td>
<td>Organized, purposeful, or planned activity patterns <strong>versus</strong> uncoordinated, disorganized, diffuse, or self-indulgent behavior.</td>
</tr>
<tr>
<td>Disjunctivity:</td>
<td></td>
</tr>
<tr>
<td>8. Counteraction:</td>
<td>Persistent striving to overcome difficult, frustrating, humiliating, or embarrassing experiences and failures <strong>versus</strong> avoidance or hasty withdrawal from tasks or situations that might result in such outcomes.</td>
</tr>
<tr>
<td>9. Deference:</td>
<td>Respect for authority, submission to the opinions and preferences of others perceived as superior <strong>versus</strong> non-compliance, insubordination, rebelliousness, resistance or defiance.</td>
</tr>
<tr>
<td>CLASSIFICATION PROTOCOL</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10. Dominance:</td>
<td>Ascendancy over others by means of assertive or manipulative control versus nonintervention, forbearance, acceptance, permissiveness, humility, or meekness.</td>
</tr>
<tr>
<td>11. Ego Achievement:</td>
<td>Self-dramatizing, idealistic social action, active or fantasied realization of dominance, power, or influence achieved through sociopolitical activities in the name of reform.</td>
</tr>
<tr>
<td>12. Emotionality:</td>
<td>Intense open emotional expression versus stolidness, restraint, control, or constriction.</td>
</tr>
<tr>
<td>14. Exhibitionism:</td>
<td>Self-display and attention-seeking versus shyness, embarrassment, self-consciousness, or withdrawal from situations in which the attention of others might be attracted.</td>
</tr>
<tr>
<td>CLASSIFICATION PROTOCOL</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>15. Fantasied Achievement:</td>
<td>Daydreams of success in achieving extraordinary public recognition, narcissistic aspirations for fame, personal distinction, or power.</td>
</tr>
<tr>
<td>16. Harm Avoidance:</td>
<td>Fearfulness, avoidance, withdrawal, or excessive caution in situations that might result in physical pain, injury, illness, or death versus careless indifference to danger, challenging or provocative disregard for personal safety, thrill-seeking, boldness, venturesomeness, or temerity.</td>
</tr>
<tr>
<td>17. Humanities, Social Science:</td>
<td>The symbolic manipulation of social objects or artifacts through empirical analysis, reflection, discussion, and criticism.</td>
</tr>
<tr>
<td>18. Impulsiveness:</td>
<td>Rash, impulsive, spontaneous, or impetuous behavior versus care, caution, or reflectiveness.</td>
</tr>
<tr>
<td>CLASSIFICATION PROTOCOL</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>20. Nurturance:</td>
<td>Supporting others by providing love, assistance, or protection <em>versus</em> disassociation from others, indifference, withholding support, friendship or affection.</td>
</tr>
<tr>
<td>21. Objectivity:</td>
<td>Detached, nonmagical, unprejudiced, impersonal thinking <em>versus</em> autistic, irrational, paranoid, or otherwise egocentric perceptions and beliefs-superstition.</td>
</tr>
<tr>
<td>22. Order-Disorder:</td>
<td>Compulsive organization of the immediate physical environment, manifested in a preoccupation with neatness, orderliness, arrangement, and meticulous attention to detail <em>versus</em> habitual disorder, confusion, or carelessness.</td>
</tr>
<tr>
<td>23. Play--Work:</td>
<td>Pleasure-seeking, sustained pursuit of amusement and entertainment <em>versus</em> persistently purposeful, serious, task-oriented behavior.</td>
</tr>
<tr>
<td>CLASSIFICATION PROTOCOL</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>24. Practicalness:</td>
<td>Useful, tangibly productive, businesslike applications of skill or experience in manual arts, social affairs, or commercial activities versus a speculative, theoretical, whimsical, or indifferent attitude toward practical affairs.</td>
</tr>
<tr>
<td>25. Reflectiveness:</td>
<td>Contemplation, introspection, preoccupation with private psychological, spiritual, esthetic, or metaphysical experience.</td>
</tr>
<tr>
<td>26. Science:</td>
<td>The symbolic manipulation of physical objects through empirical analysis, reflection, discussion, and criticism.</td>
</tr>
<tr>
<td>27. Sensuality:</td>
<td>Sensory stimulation and gratification, hedonism, preoccupation with aesthetic experience versus austerity, self-denial, abstinence, frugality, self-abnegation.</td>
</tr>
<tr>
<td>CLASSIFICATION PROTOCOL</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>28. Sexuality: Erotic heterosexual interest or activity <strong>versus</strong> the restraint, denial, or inhibition of such impulses.</td>
<td></td>
</tr>
<tr>
<td>29. Supplication-Autonomy: Dependence on others for love, assistance, and protection <strong>versus</strong> detachment, independence, or self-reliance.</td>
<td></td>
</tr>
<tr>
<td>30. Understanding: Detached, intellectual, problem-solving analysis, theorizing, or abstraction as ends in themselves.</td>
<td></td>
</tr>
</tbody>
</table>

**Informal Interest Inventory:**

*Screening Instrument*

This questionnaire (see appendix) enabled the researcher to: (1) obtain the full names and addresses of those subjects selected for the study; (2) obtain descriptive personal data on personal interests and activities to be used as indicators and checks on the validity of the instruments; and (3) assess the subject's reactions to an interview setting in which personal questions were asked.
ANALYSES OF THE DATA

The hypotheses of the investigation are presented in their null form, each followed by the statistical method(s) with which it was tested. All tests were two-tailed, and the probability level required for significance was .10 in all cases, owing to the exploratory nature of the investigation.

I. There is no significant correlational relationship among scores on the Mach Scale, Personality Needs-Perception Index, Environmental Force-Perception Index, or the Jesness Inventory, when analyzed as relationships between pairs of variables.

Pearson Product-Moment Correlation Coefficients were computed for the combinational pairs and variables, as below:

A. Mach Scale vs. Jesness Inventory sub-scales
B. Mach Scale vs. Personality Need-Perception Index Sub-Scales
C. Mach Scale vs. Environmental Force-Perception Sub-Scales
D. Jesness Inventory vs. Personality Need-Perception Sub-Scales
E. Jesness Inventory vs. Environmental Force-Perception Sub-Scales

II. Through factor analyses there is no significant reduction to fewer hypothetical factors from among the grouped protocols and scale variables for the group of subjects in this study. The thirty perception protocols of the Needs-Force indexes were grouped under seven categories recommended
for statistical analyses in Stern's cluster and factor matrices.¹

I. Personal Dignity
   Abasement-Assurance
   Dominance-Tolerance
   Objectivity-Projectivity
   Conjunctivity-Disjunctivity
   Counteraction

II. Intellectual Climate
   Humanities
   Science
   Reflectiveness
   Understanding
   Fantasied Achievement
   Sensuality-Puritanism
   Ego Achievement
   Exhibitionism
   Change-Sameness
   Nurturance
   Narcissism
   Aggression-Blame Avoidance

III. Achievement Standards
   Counteraction
   Energy-Passivity
   Achievement
   Emotionality-Placidity
   Ego Achievement
   Change-Sameness
   Abasement-Assurance
   Understanding
   Adaptability-Defensiveness
   Play-Work
   Conjunctivity-Disjunctivity
   Fantasied Achievement
   Exhibitionism
   Practicalness-Impracticalness

IV. Closeness
   Affiliation
   Supplication-Autonomy
   Aggression-Blame Avoidance
   Harm Avoidance-Risktaking
   Nurturance
   Exhibitionism
   Play-Work
   Adaptability-Defensiveness

¹Stern, pp. 36-63.
V. Impulse Control
Work-Play
Prudishness-Sexuality
Blame Avoidance-Aggression
Deliberation-Impulsiveness
Placidity-Emotionality
Inferiority Avoidance-Counteraction
Harm Avoidance-Risktaking

VI. Orderliness
Order-Disorder
Narcissism
Adaptability-Defensiveness
Conjunctivity-Disjunctivity
Harm Avoidance-Risktaking
Deference-Restiveness
Practicalness-Impracticalness
Change-Sameness
Impulsiveness-Deliberation
Aggression-Blame Avoidance
Sensuality-Puritanism

VII. Group Life
Practicalness-Impracticalness
Nurturance
Affiliation
Supplication-Autonomy
Exhibitionism
Play-Work
Adaptability-Defensiveness
Narcissism
Dominance-Tolerance
Energy-Passivity
Achievement
Conjunctivity-Disjunctivity
Chapter 4

RESULTS

In this chapter each hypothesis is restated, the results of the analyses presented, and a statement of the disposition of the hypothesis made.

Hypothesis I. There is no significant correlational relationship among scores on the Mach Scale, Personality Needs-Perception Index, Environmental Force-Perception Index, and the Jesness Inventory, when analyzed as relationships between pairs of variables.

The findings reported in Tables 1 through 6 reveal that of the fifty-one correlations between pairs of variables, seventeen were significantly different from zero. Hypothesis I, therefore, was rejected in seventeen relationships and not rejected in thirty-four. Details of these findings follow.

Table 1 (page 84) shows that scores on the grouped Needs-Force Perception protocols correlated significantly with each other in Group Life, Closeness, and Intellectual Climate. A non-significant relationship was found in Order, Impulse Control, Achievement Standards, and Personal Dignity.

As is shown in Table 2 (page 85), there were no significant relationships found among the Mach Scale and the
Jesness Inventory subscales of Value Orientation, Immaturity, Autism, Alienation, Manifest Aggression, Withdrawal, Social Anxiety, Repression, Denial, and the Asocial Index.

Tables 3 and 4 (pages 86 and 87) reveal the findings that there were no significant relationships found among the Mach Scale and the Needs-Force grouped protocols of Group Life, Order, Impulse Control, Closeness, Achievement Standards, Personal Dignity, and Intellectual Climate.

Table 5 (page 88) shows significant relationships were found between Jesness Inventory subscales and Personality Needs-Perception protocols as follows:

**Positive Correlation**
- Intellectual Climate/Immaturity
- Impulse Control/Social Anxiety

**Negative Correlation**
- Impulse Control/Immaturity
- Group Life/Autism
- Achievement Standards/Denial

Table 6 (page 89) reveals significant relationships were found between the Jesness Inventory subscales and Environmental Force-Perception protocols as follows:

**Positive Correlation**
- Personal Dignity/Value Orientation
- Impulse Control/Alienation
- Achievement Standards/Manifest Aggression
- Orderliness/Repression
- Intellectual Climate/Withdrawal
- Intellectual Climate/Asocial Index
Negative Correlation
Closeness/Alienation
Intellectual Climate/Social Anxiety
Group Life/Asocial Index
Achievement Standards/Asocial Index

Tables 7 through 32 (pages 90-115) show the findings related to the raw scores, frequency distribution, proportions, means, standard deviations, medians, and range on test instruments used in this study. These unrefined findings showed no significant trends.

Tables 33 and 34 (pages 116 and 117) summarize for the reader those findings reported in Tables 7 through 32, and include entries showing the total possible point units obtainable on each instrument and the actually obtained percentage expressed as a percentage of possible point units.

Table 35 (page 118) summarizes the findings related to raw scores obtained in the study from responses to the School Sentiment Index subscales, from which no significance was produced.

Hypothesis II. Through factor analysis there is no significant reduction to fewer hypothetical factors from among the grouped protocols and scale variables for the group of subjects in this study.

The findings in Table 36 (page 119) show the Intercorrelation Matrix for the variables used in the factor analysis as follows:
Factor Analysis
Positive Correlation
Group Life--Needs/Closeness--Needs
Intellectual Climate--Needs/Closeness--Needs
Intellectual Climate--Needs/Intellectual Climate--Force

Factor Analysis
Negative Correlation
Group Life--Needs/Impulse Control--Needs
Impulse Control--Needs/Closeness--Needs
Impulse Control--Needs/Intellectual Climate--Needs

Table 37 (page 120) reveals that five undefined hypothetical factors were found when the data were submitted to the computerized test for a factor matrix using principal factor with iterations procedures. The five factors accounted for 70.5 percent of the total variance. Hypothesis II, therefore, was rejected because the twenty-six variables had been significantly reduced to five undefined factors of hypothetical communality.

Table 38 (page 121) shows that, following the Varimax rotation, the computerized factor matrix provided a further reduction from the five undefined hypothetical factors found before rotation to three after rotation, correlations were:

Varimax
Positive Correlation
Factor I/Impulse Control--Needs
Factor I/Closeness--Needs
Factor I/Intellectual Climate--Needs

Factor II/Intellectual Climate--Force
Factor III/Impulse Control--Needs
Factor III/Intellectual Climate--Force
Varimax
Negative Correlation
Factor II/Closeness--Needs

Table 39 (page 122) reveals that following the Varimax rotation, the computerized factor matrix for the three hypothetical factors accounted for 75.0 percent of the total variance.

SUMMARY OF STATISTICAL ANALYSES

Using the principal factor iteration procedure, adequate convergence of the number of significant factors and of the communalities of the twenty-six variables was judged to have occurred after eleven iterations. From this there were five apparently significant hypothetical and undefined factors accounting for 70.5 percent of the variance. Following a Varimax rotation the five factors reduced to three which accounted for 75.0 percent of the total variance. The 25.0 percent associated with uniqueness cannot all be attributed to error as some interaction among the other variables is suggested by the performance of the subjects on the remaining fifteen variable dimensions. And it is also evident that these dimensions are not artifacts attributable to the parallel nature of the Needs-Force instruments, or that both sets of responses were obtained from the same subjects, since each of the Needs-Force instrument contributes variance only to its own set of grouped perception protocols.
Chapter 5

SUMMARY, CONCLUSIONS, INTERPRETATIONS
AND RECOMMENDATIONS

In this chapter the total study is drawn together. The study is summarized up to and including the findings. General conclusions are drawn, interpretations are made, and recommendations are given for further research.

SUMMARY

The purpose of this study was to frame the outline of a theory of dynamic individual perception psychology and then to indicate areas of application for the interdisciplinary oriented reading practitioner. The deviant case study modality was employed because of its utility and ease, making possible a facilitation in understanding selected features of the adolescent "non-reader's" intrapersonal and interpersonal perception preferences which may contribute to and propel development and nurturance of the reading failure syndrome into his later life.

The expectation was that perception preference patterns would emerge in the form of relationships among the following parameters: (1) Machiavellianism, a twenty item
measure of the degree of belief in the manipulability of others as objects; (2) School Sentiment Index, a seventy-three item measure of the degree of favorable attitude toward school in general and toward several dimensions of the school; (3) Personality Needs Perception Index, a 150 item measure of the degree of perception preference related to personality needs in relation to objects and others; (4) Environmental Force Perception Index, a 150 item measure of the degree of perception preference related to environmental forces impinging upon the person; (5) Affective Readiness Stages, an observation format assessing the degree of emotional development and sophistication observed in the subjects' interaction with objects and others.

The subjects in the study were 180 seventh, eighth, ninth, and tenth grade male students interviewed and observed from 1969 to 1974. Of the original 180 subjects, seventy-three were not included in the analyses, owing to either the obvious faking of responses or to the fact that the screening scales had not been completed in the allotted time for administration. Of the 107 subjects, twenty-nine subjects were randomly selected and closely evaluated through personal interviews, additional scales, and observation over an eighty-week period by the researcher.

Findings

In the summary of the findings, a restatement of the null hypotheses and their disposition is made.
Hypothesis I. There is no significant correlational relationship among scores on the Mach Scale, Personality Needs-Perception Index, Environmental Force-Perception Index, and the Jesness Inventory subscales, when analyzed as relationships between pairs of variables.

Pearson Product-Moment correlation coefficients were computed for all fifty-one combinational pairs of the instrument scales used in the study.

Hypothesis I was rejected in seventeen relationships, and not rejected in thirty-four relationships.

Hypothesis II. Through factor analysis there is no significant reduction to fewer hypothetical factors from among the grouped protocols and scale variables for the group of subjects in this study.

Factor analyses before rotation provided a reduction to five factors accounting for 70.5 percent of the total variance. After the Varimax rotation, a final reduction to three factors was obtained and these final three factors accounted for 75 percent of the total variance.

Hypothesis II, therefore, was rejected, as a significant reduction to three hypothetical factors was obtained.

CONCLUSIONS AND INTERPRETATIONS

For the population of "non-reading" adolescents of which the group studied is representative, the results of the study support the following conclusions:
1. Of the fifty-one variable pairs submitted to correlational analysis seventeen pairs were observed to differ significantly from zero. While the thirty-four remaining pairs of relationships differed from zero, they were not of sufficient magnitude to be useful for predictive purposes. The powerful statistical test of factor analysis provided an extraction of three factors from the correlational data. This factor-analytic procedure takes the variance defined by intercorrelations among the set of measures and allocates this variance in terms of fewer underlying hypothetical variables, referred to as factors. The interpretation of what these factors mean is a matter of subjective evaluation of the factor matrix and the variables tending to load highest on each factor.

The study used a number of different measurements, all presumed to be relevant in one way or another to the subject's perception of his personality needs of the environmental forces impinging upon him. These included: Group Life--Needs; Impulse Control--Needs; Closeness--Needs; Intellectual Climate--Needs; Intellectual Climate--Force; Social Maladjustment; Immaturity; Autism; Alienation; Social Anxiety; and the Asocial Index. These measures were highly correlated among themselves. That is, they were reflecting to some degree the same underlying trait or aspect as perception behavior. These eleven measures tended to cluster about one another, suggesting some unique trait or aspect
of the perception behavior which was being assessed. That is, these measures seemed to be assessing the same thing. In terms of the different clusters, it was concluded that there were actually only three, rather than eleven, different traits or aspects of behavior being measured relative to this group of measures. Therefore, these clusters were taken as the basis for defining what appeared to be the basic variables underlying the eleven different measurements employed in the exploratory study. In describing such behavior, this enables a reduction from eleven to three measurements and lends itself in a more economical way to characterize the behaviors being studied.

2. Factor analysis provides a method for determining upon the basis of relations among a relatively large number of variables, what fewer, more basic and unique variables may underlie this larger number of variables.

The mathematical procedure involved in factor analysis begins with what we know about the correlations among the variables measured in the study. The procedure then undertook the mathematical definition of how the variance among these variables was defined in terms of a set of fewer hypothetical variables further defined in the factor matrix.

Through such analyses, the researcher determined that the three factors extracted from the data were defined as:

Factor I. Unsocialized Aggression
Factor II. Social Approval Anxiety
Factor III. Unsocialized Withdrawal
Factor I. Unsocialized Aggression

This factor reflects a perception preference characterized by overt and covert hostile disobedience, quarrelsome, physical and verbal aggressiveness, vengefulness, and destructiveness.

Factor II. Approval Anxiety

This factor reflects a perception preference characterized by continuous anxiety, unrealistic fears, immaturity, self-consciousness, inhibition, frustration, and apprehension of new or unfamiliar situations.

Factor III. Unsocialized Withdrawal

This factor reflects a perception preference characterized by seclusiveness, detachment, sensitivity, shyness, timidity, and general inability to form close interpersonal relationships.

3. The directionality of the three factors support the formulations discussed in Chapter 2 regarding the adjustment patterns of "non-readers" in recent years, e.g., aggressive tendencies, or passivity, or negativism in dealing with authority figures. While the present exploratory investigation does support previous observations by practitioners and researchers, an unexpected extension of those observations has been extracted from present data: for those subjects studied in the present investigation, aggressive tendencies, and passivity, and negativism in dealing with authority
figures may have been perception preference options available in awareness and on demand to the adolescent "non-reader" and may, therefore, be functions of personality influenced directly through interpersonal relationships with others.

This conclusion, therefore, suggests that, indeed, a rationality is operational in reading failure syndrome but one which is masked behind a surface defense of affective irrationality.

RECOMMENDATIONS FOR FURTHER RESEARCH

Additional exploratory investigations of adolescent "non-reading" perceptions are warranted by the findings and conclusions of the present study.

Questions suggested for further research are:

1. Are perception preferences for (a) Unsocialized Aggression; (b) Approval Anxiety; and (c) Unsocialized Withdrawal fixed and stabilized during adolescence?

2. Are perception preferences for (a) Unsocialized Aggression; (b) Approval Anxiety; and (c) Unsocialized Withdrawal present in normalized populations of average to above average adolescent readers?

3. To what measurable extent does the reading practitioner's knowledge of adolescent "non-reader" perception preferences influence or facilitate reconstruction of basic reading skill and desire to read independently?
IMPLICATIONS

Affective irrationality, it must be added, would be a highly successful defense for an adolescent as it would be for anyone else who would prefer to avoid tasks directed by others. In the case of adolescent "non-readers," defense against "persons," perhaps, becomes a projection to defense against what these "persons" value. For "persons," read teachers, reading teachers, remedial reading teachers. For what these "persons" value, read cognitive skills, obedience, excellence of performance. Where there is interpersonal discord, for whatever reason, therefore, one would expect adolescent "non-readers" to protect their self-esteem by using their available defenses. The school milieu has not traditionally equipped itself for dealing humanistically with "non-reading," adolescents who are sophisticates in triple-defiance options. However, the school as an institution may have benefited greatly from those reading practitioners and others who, by their own preferences, have purveyed a necessary humanism in their student contacts.

The study was predominantly of an exploratory nature and should be viewed as the first in a series of research steps focusing on the development and use by reading practitioners of interdisciplinary instruments and measures which reliably assess affective perception preferences consciously held by "non-reading" adolescents.
It is apparent that research efforts must be directed toward the increasingly accurate and rapid measurement of perception preferences in order to test or to reconstruct the rationality and extent of conscious choice present among "non-reading" adolescents. Crucial to this process is the emergence of affective methodological tools which are both valid measures of perception preferences and which are convenient in preparation, application, and interpretation by reading practitioners within the classroom setting. This goal is one toward which the permutations of the present study provided only tentative guidelines.

Evidence for the validity of the existence of an affective rationality of choice in adolescent "non-reading" failure syndrome was general, tentative, and cautiously promising in the present study.

The study was intended neither to promote clinical definitions of normal personality functions nor to yield findings which might be utilized for diagnosis of individual cases of personality disorder in the clinical milieu. The scales employed were designed as affective research instruments for use with small groups of subjects which would be of value in the reading practitioner's classroom.

Those affective measures yielding significant data in the study were: The Jesness Inventory; The Personality Needs Perception Index; and The Environmental Force Perception Index. These measures, and others which are being presently
perfected, offer a previously hidden key to the threshold of understanding through which reading practitioners, teachers, counselors, and school psychologists will, in time, pass with an easy grace.

Designations of the three hypothetical factors of highest commonality found in the population of the present study, e.g., unsocialized aggression, social approval anxiety, and unsocialized withdrawal, were necessarily judgemental, arrived at by the researcher through analysis and interpretation of the data as required by the powerful statistical tool of factor analytic inquiry.

Given these qualifications, the findings of the study could be applied, in conjunction with the research directions recommended in the previous section, by qualified reading specialists, teachers, counselors, and school psychologists who are familiar with and who can function comfortably within an interdisciplinary orientation. Under these conditions, the affective scales employed in this study might be appropriately applied as aides in the broad and tentative identification of small groupings of students who would constructively benefit from affective emphasis in programs designed to redirect a "non-reading" rationality toward an acquisition of independent reading ability.

Reading education and education in reading can be nothing more nor less than the changes made in human beings by their experience.
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BIBLIOGRAPHY

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Unpublished Works

Harris, A. "The Effective Teacher of Reading." Address at the Fourteenth Annual Convention, International Reading Association, Kansas City, Missouri, May 1, 1969.


Hobbs, H. "Accounting for Individual Differences in the Reading Process Affect." Unpublished graduate study, California State University, Fresno, 1971.


APPENDIX A

STATISTICAL TABLES
Table 1

Correlation Coefficients Between Grouped Needs and Force Perception Protocols

<table>
<thead>
<tr>
<th>Grouped Protocols</th>
<th>Pearson's Intercorrelation $r$</th>
<th>(29 Cases) Probability</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Life</td>
<td>.6208</td>
<td>.0006</td>
<td>4.1144</td>
</tr>
<tr>
<td>Order</td>
<td>.2847</td>
<td>.1309</td>
<td>1.5431</td>
</tr>
<tr>
<td>Impulse Control</td>
<td>.2961</td>
<td>.1153</td>
<td>1.6108</td>
</tr>
<tr>
<td>Closeness</td>
<td>.5955</td>
<td>.0009</td>
<td>3.8159</td>
</tr>
<tr>
<td>Achievement Standards</td>
<td>-.1869</td>
<td>.6672</td>
<td>-.9888</td>
</tr>
<tr>
<td>Personal Dignity</td>
<td>.1767</td>
<td>.6382</td>
<td>.9328</td>
</tr>
<tr>
<td>Intellectual Climate</td>
<td>.3782</td>
<td>.0408</td>
<td>2.1229</td>
</tr>
</tbody>
</table>

For 28 d.f., correlation coefficient (two-tailed) significant at: .01 = .463
.05 = .361
.10 = .306
<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pearson's $r$</th>
<th>t</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Orientation</td>
<td>0.0083</td>
<td>0.0430</td>
<td>0.9649</td>
</tr>
<tr>
<td>Immaturity</td>
<td>-0.2156</td>
<td>-1.1472</td>
<td>0.2604</td>
</tr>
<tr>
<td>Autism</td>
<td>-0.2264</td>
<td>-1.2077</td>
<td>0.2360</td>
</tr>
<tr>
<td>Alienation</td>
<td>-0.1511</td>
<td>-0.7941</td>
<td>0.5603</td>
</tr>
<tr>
<td>Manifest Aggression</td>
<td>-0.0167</td>
<td>-0.0866</td>
<td>0.9292</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>-0.0908</td>
<td>-0.4739</td>
<td>0.6422</td>
</tr>
<tr>
<td>Social Anxiety</td>
<td>0.0108</td>
<td>0.0559</td>
<td>0.9547</td>
</tr>
<tr>
<td>Repression</td>
<td>-0.0653</td>
<td>-0.3399</td>
<td>0.7358</td>
</tr>
<tr>
<td>Denial</td>
<td>-0.0219</td>
<td>-0.1139</td>
<td>0.9062</td>
</tr>
<tr>
<td>Asocial Index</td>
<td>0.1649</td>
<td>0.8688</td>
<td>0.6032</td>
</tr>
</tbody>
</table>

For 28 d.f., correlation coefficient (two-tailed) significant at: 0.01 = 0.463
0.05 = 0.361
0.10 = 0.306
<table>
<thead>
<tr>
<th>Grouped Protocol</th>
<th>Pearson's r</th>
<th>t</th>
<th>(29 Cases) Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Life</td>
<td>.1821</td>
<td>.9623</td>
<td>.6536</td>
</tr>
<tr>
<td>Order</td>
<td>-0.0686</td>
<td>-0.3572</td>
<td>.7238</td>
</tr>
<tr>
<td>Impulse Control</td>
<td>.0062</td>
<td>.0321</td>
<td>.9733</td>
</tr>
<tr>
<td>Closeness</td>
<td>-0.0762</td>
<td>-0.3971</td>
<td>.6964</td>
</tr>
<tr>
<td>Achievement Standards</td>
<td>-0.0489</td>
<td>-0.2544</td>
<td>.7965</td>
</tr>
<tr>
<td>Personal Dignity</td>
<td>-0.0078</td>
<td>-0.406</td>
<td>.9668</td>
</tr>
<tr>
<td>Intellectual Climate</td>
<td>-0.0370</td>
<td>-0.1925</td>
<td>.8429</td>
</tr>
</tbody>
</table>

For 28 d.f., correlation coefficient (two-tailed) significant at:  
.01 = .463  
.05 = .361  
.10 = .306
Table 4

Mach Scale Intercorrelations with Environmental Force Perception Grouped Protocols

<table>
<thead>
<tr>
<th>Grouped Protocol</th>
<th>Pearson's r</th>
<th>t</th>
<th>(29 Cases) Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Life</td>
<td>.1325</td>
<td>.6944</td>
<td>.5001</td>
</tr>
<tr>
<td>Order</td>
<td>.2476</td>
<td>1.3276</td>
<td>.1927</td>
</tr>
<tr>
<td>Impulse Control</td>
<td>.2745</td>
<td>1.4835</td>
<td>.1462</td>
</tr>
<tr>
<td>Closeness</td>
<td>-.01537</td>
<td>-.08082</td>
<td>.5686</td>
</tr>
<tr>
<td>Achievement Standards</td>
<td>-.01127</td>
<td>-.05896</td>
<td>.5670</td>
</tr>
<tr>
<td>Personal Dignity</td>
<td>.2409</td>
<td>1.2900</td>
<td>.2056</td>
</tr>
<tr>
<td>Intellectual Climate</td>
<td>.0150</td>
<td>.0781</td>
<td>.9363</td>
</tr>
</tbody>
</table>

For 28 d.f., correlation coefficient (two-tailed) significant at: .01 = .463
.05 = .361
.10 = .306
### Table 5

**Jesness Subscale Intercorrelations with the Personality Needs Perception Grouped Protocols, Pearson’s r**

<table>
<thead>
<tr>
<th>Group Life</th>
<th>Order</th>
<th>Imp Cntrl</th>
<th>Closeness</th>
<th>Achievement</th>
<th>Stds</th>
<th>Pers Dig</th>
<th>Int Cl</th>
</tr>
</thead>
<tbody>
<tr>
<td>VO</td>
<td>-0.0107</td>
<td>-0.0287</td>
<td>0.0083</td>
<td>0.1376</td>
<td>-0.1273</td>
<td>-0.1952</td>
<td>-0.1691</td>
</tr>
<tr>
<td>IMM</td>
<td>0.0183</td>
<td>0.1444</td>
<td>-0.3492</td>
<td>0.0771</td>
<td>-0.2268</td>
<td>0.2768</td>
<td>0.3299</td>
</tr>
<tr>
<td>AU</td>
<td>-0.3427</td>
<td>-0.1505</td>
<td>0.3207</td>
<td>-0.1831</td>
<td>0.1345</td>
<td>0.2408</td>
<td>-0.4087</td>
</tr>
<tr>
<td>AL</td>
<td>0.0912</td>
<td>-0.0334</td>
<td>0.2061</td>
<td>0.0739</td>
<td>-0.2399</td>
<td>-0.0175</td>
<td>-0.0781</td>
</tr>
<tr>
<td>MA</td>
<td>0.0863</td>
<td>0.0897</td>
<td>0.2503</td>
<td>0.1134</td>
<td>-0.0761</td>
<td>-0.0971</td>
<td>-0.1218</td>
</tr>
<tr>
<td>WD</td>
<td>-0.1804</td>
<td>0.1150</td>
<td>0.2189</td>
<td>0.0743</td>
<td>0.0204</td>
<td>-0.1685</td>
<td>0.0002</td>
</tr>
<tr>
<td>SA</td>
<td>-0.0356</td>
<td>0.1231</td>
<td>0.3390</td>
<td>-0.0971</td>
<td>-0.3532</td>
<td>0.2258</td>
<td>-0.1569</td>
</tr>
<tr>
<td>REP</td>
<td>0.1213</td>
<td>-0.0303</td>
<td>-0.1675</td>
<td>0.0686</td>
<td>-0.0904</td>
<td>0.1528</td>
<td>0.0602</td>
</tr>
<tr>
<td>DEN</td>
<td>-0.1646</td>
<td>0.1058</td>
<td>-0.0302</td>
<td>-0.0166</td>
<td>-0.3143</td>
<td>-0.0456</td>
<td>0.0318</td>
</tr>
<tr>
<td>ASOC INDX</td>
<td>-0.2875</td>
<td>0.0200</td>
<td>0.0280</td>
<td>0.0302</td>
<td>0.3231</td>
<td>-0.1744</td>
<td>0.2535</td>
</tr>
</tbody>
</table>

For 28 d.f., correlation coefficient (two-tailed) significant at:  
- .01 = .463  
- .05 = .361  
- .10 = .306
Table 6

Jesness Subscales Intercorrelations with Environmental Force Perception Grouped Protocols, Pearson's r

<table>
<thead>
<tr>
<th>Group</th>
<th>Life</th>
<th>Order</th>
<th>Imp Cntrl</th>
<th>Closeness</th>
<th>Achievement Stds</th>
<th>Pers Dig</th>
<th>Int Cl</th>
</tr>
</thead>
<tbody>
<tr>
<td>VO</td>
<td>-0.0300</td>
<td>0.2135</td>
<td>0.2328</td>
<td>-0.0841</td>
<td>-0.1891</td>
<td>0.3563</td>
<td>-0.0257</td>
</tr>
<tr>
<td>IMM</td>
<td>-0.3181</td>
<td>-0.0672</td>
<td>-0.0963</td>
<td>0.2344</td>
<td>-0.0187</td>
<td>-0.0523</td>
<td>-0.1787</td>
</tr>
<tr>
<td>AU</td>
<td>-0.2204</td>
<td>-0.2420</td>
<td>-0.1899</td>
<td>-0.2171</td>
<td>-0.2159</td>
<td>0.1650</td>
<td>-0.1929</td>
</tr>
<tr>
<td>AL</td>
<td>-0.0217</td>
<td>0.2339</td>
<td>0.3406</td>
<td>-0.3318</td>
<td>0.0977</td>
<td>0.0132</td>
<td>-0.1590</td>
</tr>
<tr>
<td>MA</td>
<td>-0.0904</td>
<td>0.0630</td>
<td>0.0998</td>
<td>0.1300</td>
<td>1.384</td>
<td>0.0033</td>
<td>-0.2501</td>
</tr>
<tr>
<td>WD</td>
<td>0.0299</td>
<td>0.0970</td>
<td>0.1097</td>
<td>-0.2100</td>
<td>-0.1291</td>
<td>0.0773</td>
<td>0.3778</td>
</tr>
<tr>
<td>SA</td>
<td>0.1159</td>
<td>0.2025</td>
<td>0.0208</td>
<td>-0.3042</td>
<td>0.0830</td>
<td>-0.0873</td>
<td>0.3876</td>
</tr>
<tr>
<td>REP</td>
<td>-0.1084</td>
<td>0.3251</td>
<td>0.0617</td>
<td>0.2879</td>
<td>-0.0092</td>
<td>0.1705</td>
<td>-0.1435</td>
</tr>
<tr>
<td>DEN</td>
<td>0.1554</td>
<td>-0.0481</td>
<td>-0.1646</td>
<td>-0.0539</td>
<td>0.0889</td>
<td>-0.0680</td>
<td>0.1011</td>
</tr>
<tr>
<td>ASOC INDX</td>
<td>-0.3584</td>
<td>-0.2194</td>
<td>-0.0247</td>
<td>0.1282</td>
<td>-0.3339</td>
<td>-0.0580</td>
<td>0.3164</td>
</tr>
</tbody>
</table>

For 28 d.f., correlation coefficient (two-tailed) significant at:  .01 = .463  
.05 = .361  
.10 = .306
Table 7
Basic Descriptive Statistics for the Personality Needs Perception Grouped Protocols:
GROUP LIFE--NEEDS

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>288.0-271.5</td>
<td>5</td>
<td>.1724</td>
</tr>
<tr>
<td>271.5-255.0</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>255.0-238.5</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>238.5-222.0</td>
<td>6</td>
<td>.2069</td>
</tr>
<tr>
<td>222.0-205.5</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>205.5-189.0</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>189.0-172.5</td>
<td>5</td>
<td>.1724</td>
</tr>
<tr>
<td>172.5-156.0</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>156.0-139.5</td>
<td>2</td>
<td>.0690</td>
</tr>
<tr>
<td>139.5-123.0</td>
<td>4</td>
<td>.1379</td>
</tr>
</tbody>
</table>

Mean Value 206.1724
Standard Deviation 52.0721
Median 202.7500
Range 165.0000
N 29
Table 8

Basic Descriptive Statistics for the Environmental Force Perception Grouped Protocols:
GROUP LIFE--FORCE

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>275.0-262.2</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>262.2-249.4</td>
<td>2</td>
<td>.0690</td>
</tr>
<tr>
<td>249.4-236.6</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>236.6-223.8</td>
<td>5</td>
<td>.1724</td>
</tr>
<tr>
<td>223.8-211.0</td>
<td>7</td>
<td>.2414</td>
</tr>
<tr>
<td>211.0-198.2</td>
<td>5</td>
<td>.1724</td>
</tr>
<tr>
<td>198.2-185.4</td>
<td>1</td>
<td>.0345</td>
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<tr>
<td>185.4-172.6</td>
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<td>.0345</td>
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<tr>
<td>172.6-159.8</td>
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<td>.0345</td>
</tr>
<tr>
<td>159.8-147.0</td>
<td>3</td>
<td>.1034</td>
</tr>
</tbody>
</table>

Mean Value: 214.2069
Standard Deviation: 31.3225
Median: 217.4000
Range: 128.0000
N: 29
Table 9
Basic Descriptive Statistics for the Personality Needs Perception Grouped Protocols:
ORDER--NEEDS

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>264.0-249.5</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>249.5-235.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>235.0-220.5</td>
<td>2</td>
<td>.0690</td>
</tr>
<tr>
<td>220.5-206.0</td>
<td>2</td>
<td>.0690</td>
</tr>
<tr>
<td>206.0-191.5</td>
<td>2</td>
<td>.0690</td>
</tr>
<tr>
<td>191.5-177.0</td>
<td>6</td>
<td>.2069</td>
</tr>
<tr>
<td>177.0-162.5</td>
<td>9</td>
<td>.3103</td>
</tr>
<tr>
<td>162.5-148.0</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>148.0-133.5</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>133.5-119.0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Mean Value: 189.4483
Standard Deviation: 36.0125
Median: 189.0833
Range: 145.0000
N: 29
Table 10

Basic Descriptive Statistics for the Environmental Force Perception Grouped Protocols:
ORDER--FORCE

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>264.0-250.2</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>250.2-236.4</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>236.4-222.6</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>222.6-208.8</td>
<td>6</td>
<td>.2069</td>
</tr>
<tr>
<td>208.8-195.0</td>
<td>6</td>
<td>.2069</td>
</tr>
<tr>
<td>195.0-181.2</td>
<td>7</td>
<td>.2414</td>
</tr>
<tr>
<td>181.2-167.4</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>167.4-153.6</td>
<td>2</td>
<td>.0690</td>
</tr>
<tr>
<td>153.6-139.8</td>
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<td>.0345</td>
</tr>
<tr>
<td>139.8-126.0</td>
<td>1</td>
<td>.0345</td>
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Mean Value 195.1379
Standard Deviation 27.9179
Median 196.1500
Range 138.0000
N 29
Table 11

Basic Descriptive Statistics for the Personality Needs Perception Grouped Protocols: IMPULSE CONTROL--NEEDS

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>210.0-196.5</td>
<td>1</td>
<td>0.0345</td>
</tr>
<tr>
<td>196.5-183.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>183.0-169.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>169.5-156.0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>156.0-142.5</td>
<td>1</td>
<td>0.0345</td>
</tr>
<tr>
<td>142.5-129.0</td>
<td>5</td>
<td>0.1724</td>
</tr>
<tr>
<td>129.0-115.5</td>
<td>4</td>
<td>0.1379</td>
</tr>
<tr>
<td>115.5-102.0</td>
<td>7</td>
<td>0.2414</td>
</tr>
<tr>
<td>102.0-88.5</td>
<td>4</td>
<td>0.1379</td>
</tr>
<tr>
<td>88.5-75.0</td>
<td>7</td>
<td>0.2414</td>
</tr>
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</table>

Mean Value 111.3793
Standard Deviation 28.6436
Median 108.7500
Range 135.0000
N 29
Table 12
Basic Descriptive Statistics for the Environmental Force Perception Grouped Protocols:
IMPULSE CONTROL--FORCE

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>158.0-150.8</td>
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<td>.0690</td>
</tr>
<tr>
<td>150.8-143.6</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>143.6-136.4</td>
<td>2</td>
<td>.0690</td>
</tr>
<tr>
<td>136.4-129.2</td>
<td>6</td>
<td>.2069</td>
</tr>
<tr>
<td>129.2-122.0</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>122.0-114.8</td>
<td>7</td>
<td>.2414</td>
</tr>
<tr>
<td>114.8-107.6</td>
<td>4</td>
<td>.1379</td>
</tr>
<tr>
<td>107.6-100.4</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>100.4-93.2</td>
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<td>0</td>
</tr>
<tr>
<td>93.2-86.0</td>
<td>3</td>
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</table>

Mean Value          123.8966
Standard Deviation  19.0382
Median              121.4857
Range               72.0000
N                   29
Table 13
Basic Descriptive Statistics for the Personality Needs Perception Grouped Protocols:
CLOSINESS--NEEDS

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>194.9-179.8</td>
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<td>0</td>
</tr>
<tr>
<td>179.8-164.7</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>164.7-149.6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>149.6-134.5</td>
<td>4</td>
<td>.1379</td>
</tr>
<tr>
<td>134.5-119.4</td>
<td>9</td>
<td>.3103</td>
</tr>
<tr>
<td>119.4-104.3</td>
<td>4</td>
<td>.1379</td>
</tr>
<tr>
<td>104.3-89.2</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>89.2-74.1</td>
<td>3</td>
<td>.1034</td>
</tr>
<tr>
<td>74.1-59.0</td>
<td>2</td>
<td>.0690</td>
</tr>
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</table>

Mean Value 124.1379
Standard Deviation 32.6712
Median 123.5944
Range 151.0000
N 29
Table 14

Basic Descriptive Statistics for the Environmental Force Perception Grouped Protocols:
CLOSENESS--FORCE

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>191.0-178.0</td>
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</tr>
<tr>
<td>178.0-165.0</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>165.0-152.0</td>
<td>5</td>
<td>.1724</td>
</tr>
<tr>
<td>152.0-139.0</td>
<td>4</td>
<td>.1379</td>
</tr>
<tr>
<td>139.0-126.0</td>
<td>6</td>
<td>.2069</td>
</tr>
<tr>
<td>126.0-113.0</td>
<td>6</td>
<td>.2069</td>
</tr>
<tr>
<td>113.0-100.0</td>
<td>2</td>
<td>.0690</td>
</tr>
<tr>
<td>100.0- 87.0</td>
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<td>87.0- 74.0</td>
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<td>0</td>
</tr>
<tr>
<td>74.0- 61.0</td>
<td>1</td>
<td>.0345</td>
</tr>
</tbody>
</table>

Mean Value 131.4138  
Standard Deviation 27.9279  
Median 131.4167  
Range 130.0000  
N 29
Table 15

Basic Descriptive Statistics for the Personality Needs Perception Grouped Protocols:
ACHIEVEMENT STANDARDS--NEEDS

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>290.0-278.4</td>
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<td>.0345</td>
</tr>
<tr>
<td>278.4-266.8</td>
<td>1</td>
<td>.0345</td>
</tr>
<tr>
<td>266.8-255.2</td>
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Mean Value 244.4483
Standard Deviation 24.4023
Median 249.4000
Range 116.0000
N 29
Table 16
Basic Descriptive Statistics for the Environmental Force Perception Protocols:
ACHIEVEMENT STANDARDS--FORCE

<table>
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<th>Proportion</th>
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Mean Value: 252.6552
Standard Deviation: 15.0126
Median: 253.2667
Range: 56.0000
N: 29
Table 17

Basic Descriptive Statistics for the Personality Needs Perception Grouped Protocols:
PERSONAL DIGNITY--NEEDS

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<td>87.4-79.6</td>
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Mean Value          90.2759
Standard Deviation  16.7138
Median              88.1800
Range               78.0000
N                   29
Table 18
Basic Descriptive Statistics for the Environmental Force Perception Grouped Protocols:
PERSONAL DIGNITY--FORCE

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<td>107.4-100.2</td>
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<td>100.2-93.0</td>
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<td>93.0-85.8</td>
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Mean Value 97.6897
Standard Deviation 15.1825
Median 98.2000
Range 72.0000
N 29
Table 19

Basic Descriptive Statistics for the Personality Needs Perception Grouped Protocols:
INTELLECTUAL CLIMATE--NEEDS

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<td>151.3-131.2</td>
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Mean Value 204.1034
Standard Deviation 53.4144
Median 203.3773
Range 201.0000
N 29
Table 20
Basic Descriptive Statistics for the Environmental Force Perception Grouped Protocols:
INTELLECTUAL CLIMATE--FORCE

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<td>220.3-205.4</td>
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<td>205.4-190.5</td>
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<td>190.5-175.6</td>
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<td>175.6-160.7</td>
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<td>160.7-145.8</td>
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<td>145.8-130.9</td>
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Mean Value 188.5172
Standard Deviation 40.4436
Median 187.3071
Range 149.0000
N 29
Table 21

Basic Descriptive Statistics for the Mach Scale

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<td>44.8-40.0</td>
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Mean Value 61.8621
Standard Deviation 12.8166
Median 58.8571
Range 48.0000
N 29
Table 22

Basic Descriptive Statistics for the Jesness Inventory Subscale: SOCIAL MALADJUSTMENT

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<td>34.4-32.2</td>
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<td>32.2-30.0</td>
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Mean Value 31.5862
Standard Deviation 5.8890
Median 31.5400
Range 41.0000
N 29
Table 23

Basic Descriptive Statistics for the Jesness Inventory Subscale: VALUE ORIENTATION

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<td>26.3-24.4</td>
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<td>24.4-22.5</td>
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<td>22.5-20.6</td>
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<td>20.6-18.7</td>
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<td>18.7-16.8</td>
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<td>14.9-13.0</td>
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Mean Value       22.4828
Standard Deviation 5.3627
Median            22.8167
Range             19.0000
N                 29
Table 24
Basic Descriptive Statistics for the Jesness Inventory Subscale: IMMATURE

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<td>21.4-20.0</td>
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<td>20.0-18.6</td>
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<tr>
<td>17.2-15.8</td>
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<td>14.4-13.0</td>
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Mean Value: 20.2759
Standard Deviation: 3.2171
Median: 20.1750
Range: 14.0000
N: 29
Table 25

Basic Descriptive Statistics for the Jesness Inventory Subscale: AUTISM

<table>
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<th>Frequency</th>
<th>Proportion</th>
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<td>15.2-13.6</td>
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<td>13.6-12.0</td>
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Mean Value          12.0690
Standard Deviation  4.1570
Median              12.3429
Range               16.0000
N                    29
Table 26

Basic Descriptive Statistics for the Jesness Inventory Subscale: ALIENATION

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<th>Frequency</th>
<th>Proportion</th>
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<tr>
<td>18.2-17.0</td>
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<td>.1379</td>
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<tr>
<td>17.0-15.8</td>
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<tr>
<td>15.8-14.6</td>
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Mean Value 17.2759
Standard Deviation 3.8163
Median 17.4500
Range 12.0000
N 29
Table 27
Basic Descriptive Statistics for the Jesness Inventory Subscale: MANIFEST AGGRESSION

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<td>21.2-19.5</td>
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<td>12.7-11.0</td>
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Mean Value: 19.7931
Standard Deviation: 5.1574
Median: 19.7833
Range: 17.0000
N: 29
Table 28

Basic Descriptive Statistics for the Jesness Inventory Subscale: WITHDRAWAL

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<th>Frequency</th>
<th>Proportion</th>
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<tr>
<td>13.1-12.0</td>
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Mean Value 17.0690
Standard Deviation 3.3051
Median 16.2900
Range 11.0000
N 29
Table 29

Basic Descriptive Statistics for the Jesness Inventory Subscale: SOCIAL ANXIETY

<table>
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<th>Frequency</th>
<th>Proportion</th>
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<td>18.4-17.0</td>
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<td>15.6-14.2</td>
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</tr>
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<td>14.2-12.8</td>
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<td>.0690</td>
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<tr>
<td>12.8-11.4</td>
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<td>.0345</td>
</tr>
<tr>
<td>11.4-10.0</td>
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<td>.1374</td>
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Mean Value: 16.8966
Standard Deviation: 4.0386
Median: 17.1750
Range: 14.0000
N: 29
Table 30
Basic Descriptive Statistics for the Jesness Inventory Subscale: REPRESSION

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
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<tbody>
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<td>12.0-11.0</td>
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<td>11.0-10.0</td>
<td>4</td>
<td>0.1379</td>
</tr>
<tr>
<td>10.0- 9.0</td>
<td>2</td>
<td>0.0690</td>
</tr>
<tr>
<td>9.0- 8.0</td>
<td>3</td>
<td>0.1034</td>
</tr>
<tr>
<td>8.0- 7.0</td>
<td>4</td>
<td>0.1379</td>
</tr>
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<td>7.0- 6.0</td>
<td>4</td>
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<td>6.0- 5.0</td>
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<td>0.1034</td>
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<tr>
<td>5.0- 4.0</td>
<td>5</td>
<td>0.1724</td>
</tr>
<tr>
<td>4.0- 3.0</td>
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<tr>
<td>3.0- 2.0</td>
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Mean Value 6.7931
Standard Deviation 2.5964
Median 7.1250
Range 10.0000
N 29
Table 31
Basic Descriptive Statistics for the Jesness Inventory Subscale: DENIAL

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
<th>Frequency</th>
<th>Proportion</th>
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<tbody>
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<td>20.0-19.0</td>
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<td>19.0-18.0</td>
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<td>.1034</td>
</tr>
<tr>
<td>17.0-16.0</td>
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<td>.1379</td>
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<tr>
<td>16.0-15.0</td>
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<td>15.0-14.0</td>
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<td>14.0-13.0</td>
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<td>13.0-12.0</td>
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<td>11.0-10.0</td>
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<td>.0690</td>
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Mean Value 15.3793
Standard Deviation 2.8587
Median 15.8750
Range 10.0000
N 29
Table 32
Basic Descriptive Statistics for the Jesness Inventory Combined Subscale:
ASOCIAL INDEX

<table>
<thead>
<tr>
<th>Raw Score Interval</th>
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<td>29.0-26.0</td>
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<td>26.0-23.0</td>
<td>1</td>
<td>.0345</td>
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<td>23.0-20.0</td>
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<td>.2759</td>
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<tr>
<td>20.0-17.0</td>
<td>3</td>
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<td>17.0-14.0</td>
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<tr>
<td>5.0-2.0</td>
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Mean Value: 17.6552
Standard Deviation: 7.5132
Median: 19.0000
Range: 32.0000
N: 29
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<th>Range</th>
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<th>Mean % of Possible</th>
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<tr>
<td>01 Group Life--Needs</td>
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<td>02 Group Life--Force</td>
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<td>03 Order--Needs</td>
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<td>04 Order--Force</td>
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<td>28</td>
<td>196</td>
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<td>131</td>
<td>130</td>
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<td>187</td>
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Table 34

Means, Standard Deviations, Medians, and Ranges of Distributions of Scale Variables for the 29 Subjects, to Nearest Whole Number

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Md</th>
<th>Range</th>
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<td>32</td>
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<td>12</td>
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<td>Response Total Possible</td>
<td>% Response to Favorable Statements</td>
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</table>
Table 36

Intercorrelation Matrix of Selected Variables Used in Factor Analysis

<table>
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<tr>
<th>Variable Code</th>
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<th>5</th>
<th>7</th>
<th>13</th>
<th>14</th>
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<tr>
<td>1 = Group Life--Needs</td>
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<tr>
<td>5 = Impulse Control--Needs</td>
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<td>-0.41032</td>
<td>-0.08660</td>
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<td>7 = Closeness--Needs</td>
<td>1.0</td>
<td></td>
<td>0.47980</td>
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<td>13 = Intellectual Climate--Needs</td>
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<td>-0.71296</td>
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<tr>
<td>14 = Intellectual Climate--Force</td>
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<td></td>
<td>1.0</td>
</tr>
</tbody>
</table>

For 28 d.f., correlation coefficient (two-tailed) significant at: 0.01 = 0.463
0.05 = 0.361
0.10 = 0.306

Variable Code:
1 = Group Life--Needs
5 = Impulse Control--Needs
7 = Closeness--Needs
13 = Intellectual Climate--Needs
14 = Intellectual Climate--Force
Table 37
Factor Matrix Using Principal Factor With Iterations Before Varimax Rotation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Communality</th>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% of Var</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Group Life--Needs</td>
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</table>

For 28 d.f., correlation coefficient (two-tailed) significant at:  
- .01 = .463  
- .05 = .361  
- .10 = .306
Table 38

Factor Matrix Using Principal Factor With Iterations After Varimax Rotation

<table>
<thead>
<tr>
<th>Factors:</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
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<tr>
<td>Variable:</td>
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<tr>
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<td>.41918</td>
</tr>
</tbody>
</table>

For 28 d.f., correlation coefficient (two-tailed) significant at: .01 = .463, .05 = .361, .10 = .306

F1 = Factor 1, Unsocialized Aggression
F2 = Social Approval Anxiety
F3 = Unsocialized Withdrawal
<table>
<thead>
<tr>
<th>Variable</th>
<th>Communality</th>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% of Var</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
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</table>

$F_1 = \text{Factor 1, Unsocialized Aggression}$

$F_2 = \text{Factor 2, Social Approval Anxiety}$

$F_3 = \text{Factor 3, Unsocialized Withdrawal}$
APPENDIX B

THE JESNESS INVENTORY
1. When you're in trouble, it's best to keep quiet about it.
2. It makes me nervous to sit still very long.
3. I get into a lot of fights.
4. I worry too much about doing the right things.
5. I always like to hang around with the same bunch of friends.
6. I am smarter than most boys I know.
7. It makes me mad that some crooks get off free.
8. My feelings get hurt easily when I am scolded or criticized.
9. Most police will try to help you.
10. Sometimes I feel like I want to beat up on somebody.
11. When somebody orders me to do something I usually feel like doing just the opposite.
12. Most people will cheat a little in order to make some money.
13. A person never knows when he will get mad, or have trouble.
14. If the police don't like you, they will try to get you for anything.
15. A person is better off if he doesn't trust people.
16. Sometimes I wish I could quit school.
17. Sometimes I feel like I don't really have a home.
18. People always seem to favor a certain boy or girl ahead of the others.
19. I never lie.
20. Most police are pretty dumb.
21. I worry about what other people think of me.
22. A person like me fights first and asks questions later.
23. I have very strange and funny thoughts in my mind.
24. It's hard to have fun unless you're with your buddies.
25. I get nervous when I ask someone to do me a favor.
26. If I could, I'd just as soon quit school right now.
27. Sometimes it's fun to steal something.
28. I notice my heart beats very fast when people keep asking me questions.
29. When I get really mad, I'll do just about anything.
30. Women seem more friendly and happy than men.
31. It is easy for me to talk to strangers.
32. Police stick their noses into a lot of things that are none of their business.
33. A lot of fathers don't seem to care if they hurt your feelings.
34. I am secretly afraid of a lot of things.
35. I hardly ever get a fair break.
36. Others seem to do things easier than I can.
37. I seem to "blow up" a lot over little things that really don't matter very much.
38. Only a baby cries when he is hurt.
39. Most adults are really very nice.
40. Winning a fight is about the best fun there is.
41. A lot of strange things happen to me.
42. I have all the friends I need.
43. I get a kick out of getting some people angry and all shook up.
44. Nowadays they make it a big crime to get into a little mischief.

45. It would be fun to work in a carnival or playland.

46. My father is too busy to worry much about me, or spend much time with me.

47. Sometimes I feel dizzy for no reason.

48. Sometimes people treat grown boys and girls like they were babies.

49. It makes me feel bad to be bawled out or criticized.

50. When things go wrong, there isn't much you can do about it.

51. If someone in your family gets into trouble it's better for you to stick together than to tell the police.

52. I can't seem to keep my mind on anything.

53. It always seems like something bad happens when I try to be good.

54. Most men are bossy and mean.

55. I don't care if people like me or not.

56. It seems like wherever I am I'd rather be somewhere else.

57. Once in a while I get angry.

58. I think that someone who is fourteen years old is old enough to smoke.

59. Most parents seem to be too strict.

60. If somebody does something mean to me, I try to get back at them.

61. You can hardly ever believe what parents tell you.

62. I have a real mean streak in me.

63. I don't think I will ever be a success or amount to much.

64. Police usually treat you dirty.
65. Most of the time I can't seem to find anything to do.
66. It's hard for me to show people how I feel about them.
67. I often feel lonesome and sad.
68. I don't mind it when I'm teased and made fun of.
69. Nothing much ever happens.
70. A lot of times I do things that my folks tell me I shouldn't do.
71. It's fun to get the police to chase you.
72. A lot of people say bad things about me behind my back.
73. I wish I wasn't so shy and bashful.
74. It seems like people keep expecting me to get into some kind of trouble.
75. I like everyone I know.
76. Other people are happier than I am.
77. If I could only have a car at home, things would be all right.
78. I really don't have very many problems to worry about.
79. Being called a sissy is about the worst thing I know.
80. When I'm alone I hear strange things.
81. If a bunch of you are in trouble, you should stick together on a story.
82. I have a lot of headaches.
83. Teachers always have favorites who can get away with anything.
84. Every day is full of things that keep me interested.
85. I would rather be alone than with others.
86. I can't seem to take much kidding or teasing.
87. I don't seem to care enough about what happens to me.
88. I never get mad at anybody.
89. I keep wishing something exciting would happen.
90. Policemen and judges will tell you one thing and do another.
91. It is hard for me to talk to my parents about my troubles.
92. I am liked by everybody who knows me.
93. It seems easier for me to act bad than to show my good feelings.
94. Too many people like to act big and tough.
95. I am always nice to everyone.
96. It takes someone pretty smart to get ahead of me.
97. Talking over your troubles with an older person seems like "kid stuff."
98. It doesn't seem wrong to steal from crooked store owners.
99. I would never back down from a fight.
100. I have a lot of bad things on my mind that people don't know about.
101. I will do a lot of crazy things if somebody dares me.
102. Having to talk in front of the class makes me afraid.
103. Parents are always nagging and picking on young people.
104. Some day I would like to drive a race car.
105. I sit and daydream more than I should.
106. I feel sick to my stomach every once in a while.
107. At home I am punished too much for things I don't do.
108. My life at home is always happy.
109. At night when I have nothing to do I like to go out and find a little excitement.
110. A lot of women seem bossy and mean.
111. Nobody seems to understand me or how I feel.
112. Most people get into trouble because of bad luck.
113. I am always kind.
114. Talking with my parents is just as easy as talking with others my own age.
115. Sometimes I don't like school.
116. If you want to get ahead, you can't worry too much about the other guy.
117. At times I feel like blowing up over little things.
118. I don't mind lying if I'm in trouble.
119. A boy who won't fight is just no good.
120. To get along all right nowadays, a person has to be pretty tough.
121. I worry most of the time.
122. If you're not in with the gang, you may be in for some real trouble.
123. I really think I'm better looking than most others my age.
124. My mind is full of bad thoughts.
125. When you're in trouble, nobody much cares to help you.
126. Sometimes when my folks tell me not to do something, I go ahead and do it anyway.
127. It's best not to think about your problems.
128. I hardly ever feel excited or thrilled.
129. When something bad happens, I almost always blame myself instead of the other person.
130. The people who run things are usually against me.
131. I have too much trouble making up my mind.
132. Most people who act so perfect are just putting on a big front.

133. When luck is against you, there isn't much you can do about it.

134. I get tired easily.

135. I think my mother should be stricter than she is about a lot of things.

136. I like to read and study.

137. I feel alone even when there are other people around me.

138. I'm good at out-smarting others.

139. I always hate it when I have to ask someone for a favor.

140. I often have trouble getting my breath.

141. I worry about how well I'm doing in school.

142. For my size, I'm really pretty tough.

143. People hardly ever give me a fair chance.

144. I like to daydream more than anything else.

145. The only way to really settle anything is to fight it out.

146. I am nervous.

147. Stealing isn't so bad if it's from a rich person.

148. My parents seem to think I might end up being a bum.

149. Things don't seem real to me.

150. I am afraid of the dark.

151. Families argue too much.

152. Sometimes it seems like I'd rather get into trouble, instead of trying to stay away from it.

153. I think there is something wrong with my mind.
154. I get angry very quickly.
155. When I get into trouble, it's usually my own fault.
APPENDIX C

THE MACHIAVELLIANISM SCALE
1. Never tell anyone why you do something unless it will help you.

2. Most people are good and kind.

3. The best way to get along with people is to tell them things that make them happy.

4. You should do something only when you are sure it is right.

5. It is smartest to believe that all people will be mean if they have a chance.

6. You should always be honest, no matter what.

7. Most people won't work hard unless you make them do it.

8. Sometimes you have to hurt other people to get what you want.

9. It is better to be ordinary and honest than to be famous and dishonest.

10. It is better to tell someone why you want him to help you than to make up a good story to get him to do it.

11. Successful people are mostly honest and good.

12. Anyone who completely trusts anyone else is asking for trouble.

13. A criminal is just like other people, except that he is stupid enough to get caught.

14. Most people are brave.

15. It is smart to be nice to important people, even if you don't really like them.

16. It is possible to be good in every way.

17. Most people cannot be easily fooled.

18. Sometimes you have to cheat a little to get what you want.
19. It is never right to tell a lie.
20. It hurts more to lose money than to lose a friend.
1. Taking the blame for something done by my friend.
2. Trying to do difficult things.
3. Hiding a failure from others.
4. Having other people let me alone.
5. Getting what is coming to me even if I have to fight for it.
6. Changing my likes and dislikes quite often.
7. Making plans for both work and play during the day.
8. Working twice as hard on a problem when I'm not sure I know the answer.
9. Seeing someone make fun of a person who deserves it.
10. Talking a group into doing something my way.
11. Being a newspaperman who crusades for a better town.
12. Listening to music that makes me feel very sad.
13. Participating in a very active sport.
14. Keeping in the background when I'm with noisy people.
15. Seeing how long I can go without food or sleep.
16. Diving off the high-dive at a swimming pool.
17. Learning about the cause of social and political problems.
18. Doing something crazy sometimes just for fun.
19. Thinking what I would do if I could live my life over.
20. Taking care of or feeding a stray dog or cat.
21. Being very careful on Friday the 13th.
22. Washing and polishing things like cars or furniture.
23. Making work go faster by thinking about fun I'll have later.
24. Being good at knitting, carpentry, or other skills.
25. Understanding myself better.
26. Studying plants and insects with a microscope.
27. Holding something very soft and warm against my skin.
28. Talking about how it feels to be in love.
29. Belonging to a group that wants to hear about my problems.
30. Thinking very hard about a problem.
31. Suffering for someone I love.
32. Working for someone who accepts only my best efforts.
33. Defending myself against criticism.
34. Going to the park with a crowd.
35. Shocking people by saying things they do not approve of.
36. Getting up and going to bed at the same times every day.
37. Planning a reading program for myself.
38. Having to do something over which I failed to do correctly.
39. Doing what people tell me to do the very best I can.
40. Having other people depend on me for ideas and opinions.
41. Being important in politics during a time of crisis.
42. Crying at a funeral or a wedding.
43. Avoiding work which requires a lot of concentration.
44. Wearing clothes which attract a lot of attention.
45. Thinking about what I could do that would make me famous.
46. Playing rough games in which someone might get hurt.
47. Reading editorials or watching TV news about social issues.
48. Controlling my emotions rather than acting without thought.
49. Trying out different ways to write my name.
50. Taking care of someone who is ill.
51. Carrying a good-luck charm like a four-leaf clover.
52. Marking my calendar for things I have to do.
53. Spending most of my extra money for fun things to do.
54. Learning how to repair a car, or a sewing machine.
55. Thinking about crime, drug addiction, or insanity.
56. Going to scientific exhibits.
57. Eating so much that I can't take another bite.
58. Reading about the love affairs of movie stars.
59. Working for someone who always tells me how to do things.
60. Finding the meaning of hard or unusual words.
61. Being polite no matter what happens.
62. Picking out a hard task for myself and doing it.
63. Admitting when I'm wrong.
64. Leading an active social life.
65. Doing something that might be criticized by others.
66. Rearranging the furniture in the place where I live.
67. Putting off something I don't feel like doing.
68. Having to work very hard for something I want.
69. Listening to a successful person tell of his success.
70. Getting my friends to do what I want to do.
71. Taking an active part in social and political changes.
72. Avoiding excitement or emotional tension.
73. Staying up all night when I'm doing something interesting.
74. Speaking at a group meeting.
75. Thinking that I would like to be President of the United States.
76. Crossing streets only at the corner and with the green light.
77. Studying the music of famous composers like Beethoven.
78. Being in a situation which requires quick decision or action.
79. Stopping to look at myself in a mirror each time I pass one.
80. Helping to collect money for poor and needy people.
81. Paying no attention to superstitions.
82. Keeping accurate records of the money I spend.
83. Dropping out of a group that spends most of its time playing around or having parties.
84. Helping direct United Givers or Red Cross fund drives.
85. Thinking about life on other planets.
86. Reading science articles about experiments and inventions.
87. Chewing on pencils, rubber bands, paper clips.
88. Talking about who is in love with whom.
89. Being alone a lot and free from family and friends.
90. Spending my time thinking about complicated problems and discussing them.
91. Figuring out how it was my fault for an argument.
92. Competing with others for a prize or a goal.
93. Being ready with an excuse when I am criticized.
94. Meeting a lot of people.
95. Arguing with a teacher.
96. Being the same in my behavior all the time.
97. Going to a party where everything is all planned out.
98. Doing a job under pressure.
99. Going along with a decision made by a supervisor or leader rather than starting an argument.
100. Organizing groups to vote in a certain way in elections.
101. Living a life that is full of adventure and drama.
102. Having someone for a friend who is very emotional.
103. Sleeping long hours every night to get lots of rest.
104. Playing music, dancing, or acting for a large group.
105. Working until I'm exhausted to see how much I can take.
106. Riding a fast and steep roller coaster.
107. Seeing how the problems of today compare with long ago.
108. Doing whatever I'm in the mood to do.
109. Daydreaming about what I would do if I could live any way I wanted.
110. Comforting someone who is feeling low.
111. Avoiding things that might bring bad luck.
112. Folding my clothes neatly before going to bed.
113. Getting as much as I can out of life even if I have to neglect or put off more serious things.
114. Learning how to make things like clothes or furniture.
115. Trying to figure out why people act the way they do.
116. Doing scientific experiments to test a theory.
117. Sleeping in a very soft bed.
118. Seeing love stories in the movies or on TV.
119. Having some of my family help me when I'm in trouble.
120. Working cross-word puzzles, figuring moves in checkers.
121. Admitting defeat.
122. Taking examinations and tests.
123. Being corrected when I'm in the wrong.
124. Belonging to a club.
125. Teasing someone who thinks he or she is the greatest.
126. Moving to a new neighborhood.
127. Finishing something I've started even if it is no longer fun.
128. Staying away from activities that I don't do well.
129. Following directions.
130. Being able to hypnotize people.
131. Being active in community or neighborhood affairs.
132. Going on an emotional binge.
133. Walking instead of riding wherever I go.
134. Doing something which will cause a disturbance.
135. Thinking about being a famous military hero.
136. Standing on the roof of a tall building.
137. Studying different types of governments and countries.
138. Doing things on the spur of the moment.
139. Having lots of time to take care of my hair, face, clothing.
140. Having people come to me with their problems.
141. Being extra careful after a black cat crosses in front of me.
142. Recopying notes in order to make them neat.
143. Finishing some work even though it means missing a party.
144. Working with tools, electrical equipment, appliances.
145. Thinking about what the end of the world might be like.
146. Studying the stars and planets and learning their names.
147. Listening to the rain on the roof, wind in the trees.
148. Listening to my friends talk about their love-life.
149. Having an older person who likes to give me guidance.
150. Being a philosopher, scientist, or teacher.
APPENDIX E

THE ENVIRONMENTAL FORCE PERCEPTION INDEX
1. Teachers are very interested in student ideas about school.

2. There is a lot of competition for grades in this school.

3. Grades are read out loud in class so that everybody knows who got the high and low marks.

4. There are very few clubs and student group activities to which students may belong.

5. School property is seldom damaged by students.

6. The students here come from many different kinds of homes.

7. Most classes are very well organized and planned so that progress is smooth from week to week.

8. Teachers often try to get students to speak up freely and openly in class.

9. Teachers go out of their way to make sure that students address them with respect.

10. In this school, there is a certain group of students who are always the leaders.

11. Most teachers are not very interested in what goes on at City Hall.

12. Students here are expected to have ideas and to do something about them.

13. Classroom discussions are often very exciting with a lot of student participation.

14. There is a lot of competition here for the student parts in plays.

15. In English classes, students are encouraged to be imaginative in what they write.

16. A great many students are involved in noon-time sports and athletic teams.
17. Many students and teachers are involved with outside activities in music, art, and writing.

18. In most cases, there is very little joking and laughing.

19. School dances are not held very often at this school.

20. Many 8th and 9th graders help new students get used to school life here.

21. No one needs to be afraid of expressing an opinion that is not popular in this school.

22. Students usually do not change seats in their classroom.

23. Students really get excited at an athletic contest.

24. It is important here to be a member in the right group.

25. Many students are interested in books and movies about psychological problems people have.

26. The school library is very well supplied with books and magazines about science.

27. Students sometimes get a chance to hear music in the cafeteria or at break.

28. There is a lot of dating among the students during the week nights.

29. Teachers here are genuinely concerned about how the students feel.

30. There is a lot of talk here about preparing for college.

31. You need permission to do anything around here.

32. Students manage to pass their classes even if they don't work hard during the year.

33. In PE classes, everyone has to do the same thing no matter how good or bad they are at it.

34. There is a lot of school spirit here.

35. In this school most people don't walk around with a "chip" on their shoulder looking for a fight.

36. Most courses are changed all around from year to year.
37. Teachers clearly explain what students can get out of their classes and why the courses are important.

38. When students think a teacher's decision is unfair, they try to get it changed.

39. Most students look up to their teachers and admire them.

40. Student elections produce a lot of interest and excitement.

41. The daily newspaper is not very often read by people around here.

42. When teachers are disciplining students the teachers are usually upset.

43. Students put a lot of energy into everything they do.

44. When students do a project or put on a show everybody knows about it.

45. What a person wants to do in later life is a favorite topic to discuss around here.

46. Class rivalry sometimes gets a little rough.

47. This school offers many opportunities for students to get to know or understand important works of art, music, and drama.

48. Students are always coming up with new styles and fads, or expressions.

49. Students here take a great deal of pride in their appearance.

50. There are collections for the needy at Christmas and at other times.

51. Everyone has the opportunity to get good marks here because the tests are marked very fairly.

52. Many teachers get very upset if students happen to be a little bit late for class.

53. There is a lot of student enthusiasm and support for big school events.

54. Students try hard to be good in sports, as a way to get recognition.
Many students enjoy reading and talking about science fiction.

When students get together they seldom talk about science.

There is practically no one here who would feel comfortable participating in modern dance or ballet.

Boys and girls seldom sit at separate tables in the school cafeteria.

Outside of class, most teachers are friendly and find the time to talk with students.

Quite often students will get together and talk about things like what they have learned in class.

Students are not usually kept waiting when the office sends for them.

Most teachers give a lot of homework.

Once you've made a mistake in this school, it is hard to live it down.

It is easy to make friends in this school because of the many things which are always going on.

Most students can easily keep out of trouble in this school.

Many of the students here have lived in different states.

A lot of students who get just passing grades at midterm really make an effort to earn a higher grade by the end of the semester.

Students are often expected to work at home on problems which they could not solve in class.

Students don't very often give opinions different from their teachers.

Students are expected to report any violation of rules and regulations to their teacher or to the principal.

There are some pretty strong feelings expressed here about political parties.

The way people feel around here is always pretty obvious.
73. Few students here would ever work or play to point of being completely worn out.

74. Teachers help students to develop skills in managing the work of other students.

75. Teachers here warn students to be "down to earth" in planning for the future.

76. Fire-drills are held regularly here.

77. Few students would be interested in an educational film about writers and poets.

78. Students frequently do things on the spur of the moment.

79. Looking and acting "right" is very important to teachers and students here.

80. Students seldom send their teachers cards or little gifts on special occasions.

81. The principal and the teachers are usually understanding if a student does something wrong and they will usually give you the benefit of the doubt.

82. Many teachers require students to recopy notes to make them neat.

83. There are lots of dances, parties, and other social activities here.

84. This school offers very few really practical courses.

85. Teachers here like students to use a lot of imagination when they write compositions.

86. Few students would be interested in hearing a talk by a famous scientist.

87. Few student lockers are decorated with pictures, decals, and so forth.

88. Many students here really love dancing.

89. The person who is always trying to "help out" is likely to be regarded as a nuisance.

90. Discussions on serious subjects are not held very often here.
91. The teachers very often make you feel like a little child.

92. Personality, "pull" and bluff get students through many courses.

93. Students are usually made to answer to the principal and the teacher when they have done something wrong.

94. Few students stay around after school for activities.

95. The desks are all cut up from knives and pencils.

96. This school has the same activities year after year.

97. Activities in most student organizations are carefully and clearly planned.

98. Students don't hesitate to express their complaints around here.

99. Students almost always wait to be called on before speaking in class.

100. There are several groups here, and if you're not in one, you're pretty much on your own.

101. Boy-girl relationships here are simple and rarely become really romantic things.

102. Students can get into very hot arguments here, and be the best of friends the next day.

103. There are so many things to do here that students are busy all the time.

104. Most students here would not like to dress-up for a dance or a costume party.

105. Most students are more concerned with the present than with the future.

106. Many students here drive cars.

107. Students seldom read books about political and social problems.

108. Teachers insist that much time be spent in planning activities before doing them.

109. Most students here enjoy such activities as dancing, skating, and tumbling.
110. Students often run errands or do other personal services for the teachers.

111. Students are sometimes punished without knowing the reason for it.

112. At this school, the motto seems to be "a place for everything and everything in its place."

113. Having a good time comes first with most students here.

114. No one here has much interest in history, music, and other such impractical courses.

115. There is little interest in modern art and music.

116. Few students are planning careers in science.

117. Little effort is made in the cafeteria to serve lunches which are good tasting and which look good to the eye.

118. Students here spend a lot of time talking about their boyfriends and girlfriends.

119. Students are encouraged to be on their own and to make up their own minds.

120. A lot of students like to play checkers, chess, and other games.

121. Students are made to take the blame for things whether they did them or not.

122. Not very many students try hard to get on the honor roll.

123. Students have to get up in front of the class to recite no matter how embarrassed they might be.

124. There are many parties or dances given at this school.

125. Lots of kids rip out pages and mark up their school books.

126. New ideas are always being tried out here.

127. Assignments are usually clear so everyone knows what to do.

128. When students do not like a school rule, they really work to get it changed.
129. Teachers refer to other teachers by their first names in the presence of students.

130. Student leaders at this school expect you to go along with what they say.

131. There is no real interest in current events here.

132. Most students don't get very excited about teacher's ideas.

133. Teachers here have little interest in what they are doing.

134. Students in this school like to draw attention to themselves.

135. Going to school here makes students more practical and realistic.

136. The school nurse tries to help you from getting sick.

137. Student groups seldom meet to discuss current social problems or issues.

138. Students often start things without thinking about where they may end.

139. Students who are not neatly dressed are likely to have this called to their attention.

140. There is a lot of interest here in projects for collecting packages of food and clothing to help others.

141. If a student thinks out a report carefully, teachers will give him a good mark, even if they don't agree with him.

142. Most teachers in this school like to have their chalkboards cleaned off after each lesson.

143. New jokes and funny stories get around the school in a hurry.

144. Students may not talk about how much money a family has or what they do for a living, but everyone knows "whose who."

145. Although many students may attend church here, there is little interest in the basic meaning of religion.
146. This school has very good science teachers.

147. Most of the teachers here try to decorate their classrooms so that the students will find them more pleasant to be in.

148. Boys and girls often get together between classes, during lunch hour, and so forth.

149. Most teachers prefer that students work out their own problems.

150. School spirit seems to be more important than learning at this school.
APPENDIX F

INFORMAL INTEREST INVENTORY
INFORMAL INTEREST INVENTORY

1. Name ___________________________ Date __________
   Address ___________________________ Phone ________
   Date of Birth ______________________ Age ________

   FAMILY

2. With whom do you live: (Check the one that applies)
   Father and Mother ______ Mother only ______ Father and Step-
   mother ______ Mother only ______ Father only ______ Guardian ______
   Mother and Stepfather ______ Other (whom) ______
   Parents divorced--Yes or No ______

3.

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</table>

4. Brothers and sisters: (a) Number ______ (b) Ages ______

5. What language is spoken in your home other than English?

6. Who else lives in your home other than your parents--brothers --sisters?

7. For what regular home duties are you responsible? ______

8. How do you get your spending money? ______________________
9. What school subjects do you: (List three choices for each)

Like best?    Like least?    Find easiest?    Find difficult?

________________________    ______________________    ______________________    ______________________

________________________    ______________________    ______________________    ______________________

10. Do you have a definite place to study at home?  Yes    No  
    If yes, where?    ______________________
    If no, where do you study outside of school?    ______________________

11. Are you doing as well in school as you think you can?  Yes    No    

12. Are you doing as well as your parents expect?  Yes    No    

13. Do you like to read?    ______________________

14. Do you read for pleasure during vacation times?    ______________________

15. Do you have a Public Library Card?    ______________________

16. Do you have a personal library of your own?    ______________________

17. In your opinion, what makes a book interesting?    ______________________

18. What type of reading do you prefer?  (Number answers according to your preference.)

Magazines    Novels    Short Stories    ______________________
Newspapers    Poetry    Other (Name)    ______________________
Comic Books    Plays    ______________________

19. What type of stories do you prefer to read?

Adventure    History    Sports    ______________________
Romantic    Western    Autos    ______________________
Mystery    Horror    Spy    ______________________
Science Fiction    Travel    War    ______________________
Fashion    Animal    Other (Name)    ______________________

20. Do you read Comic Books?  ____ What do you like about them?    ______________________

21. What magazines do you receive in your home?    ______________________

22. What newspapers do you read?    ______________________

23. What sections of the newspapers do you like best?

News Stories    Headlines    Advertisements    ______________________
Feature Stories    Pictures    Theatre    ______________________
Funnies    Editorials    Others (Name)    ______________________
Social News    Sports    ______________________
24. How often do you go to the movies? ________________

25. What type of movies do you like? (Number answers)

Adventure ___________ Drama ___________ Comedy ___________
Musicals ___________ War ___________ Murder ___________
Western ___________ Spy ___________ Science Fiction ___________
Cartoons ___________ Love ___________ Other (Name) ___________
Horror ___________

26. Do you have a TV set in your home? ________________

27. How many hours of the week do you devote to TV? ________________

28. Do you listen to the radio? ________________

29. What type of radio programs do you listen to? ________________

30. What kind of music do you like to listen to? ________________

Hobbies

31. What are your hobbies? List your favorite hobby first.

(1) ________________ (2) ________________ (3) ________________ (4) ________________

32. Which of the following sports would you prefer to participate in? Mark with a "P." Which would you prefer to watch? Mark with a "W."

Baseball ___________ Tennis ___________ Track ___________
Basketball ___________ Golf ___________ Hunting ___________
Bowling ___________ Skating ___________ Skiing ___________
Fishing ___________ Swimming ___________ Wrestling ___________
Volleyball ___________ Football ___________ Fencing ___________
Surfing ___________ Soccer ___________ Others ___________

33. Which of the following school activities would you prefer to join?

Student Government __ Band ___________ Others:
Cheerleaders ___________ Choir ___________ ___________
Debating ___________ Drama Group ___________ ___________
Newspaper ___________ Yearbook ___________ ___________
Literary Magazine ___________

34. To what teams do you belong? ________________

35. What musical instruments do you play? ________________

36. What states have you visited? ________________

37. Have you ever been outside of the United States? Where? ________________
38. What occupations have you considered for your life work?
   1st choice ____________ 2nd choice ____________
   3rd choice ____________ None ________________

39. What occupation do your parents prefer that you enter?

40. What type of employment have you held? ______________
    Present employment? ______________
    Hours per week? __________ Salary per week? __________
APPENDIX G

THE SCHOOL SENTIMENT INDEX
THE SCHOOL SENTIMENT INDEX

WRITE: TRUE or UNTRUE

1. Other students bother me when I'm trying to do my work.
2. My teachers always tell me when they like my work.
3. My teachers are interested in things I do outside of school.
4. Each morning I look forward to coming to school.
5. This school is like a jail.
6. In my classes we often get the chance to make decisions together.
7. I often feel rushed and nervous in school.
8. My teachers give me work that is too easy.
9. Other students often get me into trouble in school.
10. My teachers seldom tell me if my work is good or bad.
11. My teachers listen to what I have to say.
12. It is hard for me to stay happy in school.
13. I follow the rules in school.
14. There are many different kinds of different activities in school from which I can choose what I would like to do.
15. When I do something wrong at school I know I'll get a second chance.
16. My teachers give me work that is too hard.
17. I often must do what my friends want me to do.
18. My teachers try to make school interesting to me.
19. I try to do my best in school.
20. My teachers do not care about me.
21. School gives me a stomach ache.
22. The principal of my school is friendly toward the students.
23. I get as many chances to do special jobs in my classes as other students.
24. My teachers do not give me enough time to finish my work.
25. The students in my classes are not friendly to me.
26. In school I have to remember too many facts.
27. I like to do school work at home in the evenings.
28. My teachers do not understand me.
29. I often get headaches in school.
30. The principal's main job is to punish students.
31. My teachers treat me fairly.
32. My teachers make sure I understand what I am supposed to do.
33. I like working with other students in my classes.
34. I would rather learn a new game than play one I already know.
35. I'm afraid to tell my teacher when I don't understand something.
36. I feel good when I'm at school.
37. I get scared when I go to the office.
38. My teachers unfairly punish the whole class.
39. I get tired of hearing my teacher talk all the time.
40. School is a good place for making friends.
41. I wish I could have the same teachers next year.
42. I like trying to work difficult puzzles.
43. My teachers scare me.
44. I like to stay home from school.
45. When I have a problem on the school grounds at break or lunch time, I know I can find a nice teacher to help me.
46. I don't like most of the other students in my classes.
47. My teachers are not very friendly with the students.
48. The biggest reason I come to school is to learn.
49. My teachers are mean.
50. I'm embarrassed to be in the classes I'm in.
51. My teachers grade me fairly.
52. I think a new student could make friends easily in my classes.
53. I feel like my teachers don't like me when I do something wrong.
54. There are too many students in my classes.
55. My friends and I try hard to make a new student feel happy.
56. My teachers like some students better than others.
57. I feel unhappy if I don't learn something new in school every day.
58. When I do something wrong my teachers correct me without hurting my feelings.
59. I like school better than my friends do.
60. I have to share books with other students too often in school.
61. I know what my teachers expect of me.
62. My teachers are often too busy to help me when I need help.

63. I want to be a very good student.

64. My teachers don't care about the students.

65. I often feel lost at school.

66. My teachers usually explain things too slowly.

67. There's no privacy at school.

68. Other students often boss me around at school.

69. At school, other people really care about me.

70. I would rather get books for my birthday than clothes or toys.

71. I would rather eat lunch at home than at school.

72. My teachers boss the students around.

73. The students in my classes nearly always obey the teacher.

74. We change from one subject to another, too often in my classes.

75. I like my teachers.
ITEM ANALYSIS WORKSHEET FOR: THE SCHOOL SENTIMENT INDEX

NAME __________________________ DATE ____________ AGE ________
SCHOOL _________________________ INDEX ________

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ITEM ANALYSIS CALCULATION SHEET FOR
SCHOOL SENTIMENT INDEX

NAME __________________________ DATE _______ AGE ___

1. For each item marked "True" which has a + (positive) value, record a + in the column headed by the word "NET."

2. For each item marked "Untrue" having a + value, record a - (negative) in the column headed by the word "NET."

3. For each item marked "True" which has a negative value, record a - in the column headed by the word "NET."

4. For each item marked "Untrue" which has a - value, record a + in the column headed by the word "NET."

5. Total the positives (+). TOTAL _______

6. Total the negatives (-). TOTAL _______

7. Write the totals as a fraction: _______+ (positive) _______ - (negative)

8. Divide to find the Index.

9. Record the Index on the face of the SCHOOL SENTIMENT INDEX, and in this space: INDEX _______
APPENDIX H

STUDENT CHARACTERISTICS FOR CASE STUDY ANALYSIS
CONFIDENTIAL: STUDENT CHARACTERISTICS

(Please check one or more characteristics in each category.)

A. The student's work is generally
   1. prompt
   2. late
   3. incomplete
   4. thorough
   5. careless
   6. neat
   7. sloppy
   8. imaginative
   9. perfunctory

B. The student has difficulty doing assignments which are
   1. short, clear, routine
   2. long-range, with ample teacher direction
   3. long-range, with direction left to student
   4. to be written
   5. to be reported orally
   6. anything out of the ordinary
   7. to be done at home

C. During in-class working periods, the student generally
   1. applies himself consistently and efficiently
   2. applies himself consistently but not efficiently
   3. works well for short periods only
   4. needs to be "made" to stay at the job
   5. habitually disturbs his peers

D. School-work for this student seems to be
   1. an unpleasant necessity to be avoided or dispensed with quickly
   2. usually dull, only occasionally of interest
   3. a means to win teacher approval
   4. a means to win parental approval
   5. a means to win peer approval
   6. important as a means of self-improvement
   7. important as a means toward a long-range goal

E. In attempting to solve a learning problem, the student has difficulty
   1. perceiving the problem
2. developing problem solving strategies
3. organizing data
4. making generalizations
5. testing generalizations
6. remembering facts
7. remembering ideas
8. working with concrete examples
9. working with abstract examples

F. When faced with an "open-ended" situation where there are no "right" answers, the student
1. tends to panic and withdraw
2. becomes irritable and demands "the right answer."
3. remains calm but is unable to hypothesize
4. formulates hypotheses and devises means for testing them
5. makes wild guesses without knowing how to test them

G. In a well-defined situation where answers are either right or wrong, the student's thinking is generally
1. logical
2. illogical
3. accurate
4. erratic
5. hampered by anxiety
6. uneven (occasionally accurate, occasionally irrelevant)

H. The student reveals the extent of his curiosity by
1. doing only the work assigned
2. asking thoughtful questions
3. pursuing other sources of materials or experiences
4. relating the work at hand to other experiences
5. following through consistently on matters of individual interest

I. In class, the student relates to his peers with
1. enthusiasm
2. cooperation
3. leadership
4. confidence
5. apprehension
6. belligerance
7. laziness
8. withdrawal

J. When not in class, the student
1. exhibits considerable vitality
2. withdraws from association with others
3. assumes leadership role
4. is generous and cooperative
5. becomes aggressive
6. does not consider the needs of others
7. engages in personal interests and activities
8. doesn't know what to do

K. When not in class, the student is most often
1. with one or two close friends
2. with the same group of friends
3. with adults rather than peers
4. alone

L. The student's peers regard him with
1. respect
2. liking a desire for association
3. ridicule
4. suspicion
5. toleration
6. admiration
7. indifference

M. In school, the student's attitude toward his parents is
one of
1. pride and affection
2. hostility
3. submissiveness (strongly directed by parents)
4. embarrassment
5. alternate pride and rebellion

N. In his relationships with teachers, the student
1. constantly seeks teacher's companionship and
   reassurance
2. avoids being alone with teacher
3. consults teachers only in exceptional situations
4. relates naturally and easily with teachers
5. seeks attention of special staff (counselor, librarian, etc.)

O. In his attitudes toward the adult world, the student
1. is strongly motivated by adult approval
2. exhibits marked antipathy toward adults
3. seeks a behavior pattern which is clearly independent
   of adults
4. is strongly motivated by peers
5. is balanced in desires for adult and peer approval

P. In general, the student seems to relate best with adults
   who are
1. female
2. male
3. older
4. younger
5. calm
6. energetic
7. well-organized
8. creative
9. authoritarian
10. non-directive

Q. The student regards himself physically as
1. attractive
2. unattractive
3. underdeveloped
4. strong, energetic
5. well-developed
6. weak
7. apprehensive about future growth and development
8. confident about future growth and development

R. The student believes that his peers see him as
1. well-liked, a potential friend
2. disliked, one to be avoided whenever possible
3. someone not usually noticed
4. opinionated
5. gregarious
6. quarrelsome
7. intelligent
8. attractive
9. reliable
10. artistic

S. The student feels the teachers and other adults see him as
1. polite
2. withdrawn
3. silly
4. humorous
5. bright
6. dull
7. contrary
8. boisterous
9. nervous
10. confident

T. The student perceives his academic potential as
1. superior
2. adequate
3. limited to certain areas
4. restricted because of certain skill deficiencies
5. confusing and uncertain
6. irrelevant

Comments:
APPENDIX I

THE SEQUENTIAL INTERRELATED VARIABLES
OF AFFECTIVE TEACHING
SUMMARY: STUDENT PROTOTYPES

STAGE I:

Personality Characteristics: Manifest thinking in absolutes, either/or alternatives. Rarely original. Lean on rules and become highly insecure without them. Disturbed by liberal or innovative ideas which are seldom understood. Tend to make overgeneralizations from single observations. Not information seeker. Tend to stereotype. Tend to be unable to think way out of situations which results in negligible stress-tolerance capability.

Philosophic Development: Punishment-Obedience orientation. Physical consequences of action determine its goodness or badness regardless of the human meaning or value of these consequences. Avoidance of punishment and unquestioning deference to power are valued in their own right.

Thought Process: Association. The student's perception of the learning situation, his interpretation of its personal meaning to him, and his subsequent actions in dealing with it are determined by his willingness to attend to the patterns, structure and setting within which the cues to learning are presented and reinforced. The teacher's task is to provide an environment within which new perceptions may be associated with an accepting interaction.

Developmental Strategy: Attention. Before learning can begin, the student must have the ability to focus on and attend to appropriate cues and to selectively disregard inappropriate cues.

Readiness Task: Basal. The most primitive level within which student and teacher interact. Provide maximum gratification. Establish contact on student's own terms. Indirection.
STAGE II:

**Personality Characteristics:** Absolutism. See Stage I.

**Philosophic Development:** Instrumental Relativist Orientation. Right action consists of that which instrumentally satisfies the student's needs and only occasionally the needs of others. Human relations are viewed in terms similar to those of the marketplace. Elements of fairness, of reciprocity and equal sharing are present, but always interpreted in pragmatic way, i.e., "You scratch my back and I'll scratch yours!" with little loyalty, gratitude, or justice.

**Thought Process:** Comparison. Determining similarities and differences on basis of some criteria. Because the teacher's academic demands are minimal, the teacher's main goal is to make the student secure and successful within the learning environment thereby counteracting the previous mental, emotional, and physical set which has blocked the learning process.

**Developmental Strategy:** Response. The student must make a response in order to learn. Social contact and interaction become important sources for motivation.

**Readiness Task:** Acceptance. The second stage task level consists of acceptance tasks for both student and teacher. The teacher communicates complete acceptance of the student, and attempts to establish the beginnings of a personal relationship with him, though still on the student's own terms. Student now has the task of relating to the teacher as a social object and respond attentively to verbal interaction. Thus laying the groundwork for a close interpersonal relationship which will be the focus of a later level. Teacher sets minimal behavioral limits and usually work with the student on a one-to-one basis.
STAGE III:

Personality Characteristics: Negative Independence. Tend to dissociate from all authority. Tend toward ambivalence. Resist authority but at same time appear to need it. Tend to prefer situations where there is a hierarchy of authority and in such situations attempt to put themselves into some middle ground. Very low self-image giving rise to feelings of insecurity. Tend toward paranoia. Chip on shoulder. Fear of self-disclosure. Tend to rely on hatred of others to give themselves a sense of identity. Non-reflective. Compulsive rebel.

Philosophic Development: Interpersonal Concordance Orientation. ("Good-Boy," "Nice-Girl"). Good behavior is that which pleases or helps others and is approved by them. Much conformity to stereotypic roles. One earns approval by conforming to majority behavior.

Thought Process: Convergence-Divergence. Arriving at one pattern or one solution out of diverse elements using some criteria. The concept of order and routine is basic in an effective learning environment for all students but particularly so for students with non-conforming learning problems and whose erratic patterns of classroom functioning have contributed greatly to their inability or failure to learn. The teacher carefully evaluates the student's capacity for appropriate choice, presents him small realistically attainable units of work and attempts to remove extraneous stimuli.

Developmental Strategy: Order. In addition to noticing and doing, the student must also follow directions and develop order in his attending and responding behavior.

Readiness Task: Regulatory. Once the student feels accepted and is secure enough to form a limited relationship with the teacher he is ready to be held to regulation tasks. Teacher's task is to increase control and to gradually impose structure, routine, and definite limits in the learning situation. Although academic deficiencies are still completely accepted, the student is now held accountable for more regulated and appropriate behavior.
STAGE IV:

**Personality Characteristics:** Negative Independence. See Stage III.

**Philosophic Development:** Law-and-Order Orientation. Authority, fixed rules and the maintenance of the social order are valued. Right behavior consists of doing one's "duty," showing respect for authority and maintaining the social order for its own sake.

**Thought Process:** Induction. Using specific situations, objects, and ideas, the student arrives at generalizations, principles, rules. Through exploration of the physical parameters of the learning environment the student is allowed to discover the behavioral parameters necessary for the learning environment to function peacefully and efficiently.

**Developmental Strategy:** Exploration. The more sensitive the student is, the more he notices around him. The more he notices, the more he does, consequently learning more about his environment.

**Readiness Task:** Inquiry. It is the teacher's task to present or introduce learning by offering a rich variety of multi-sensory experiences. The student's task is to reach out and to explore. It is not the appropriateness for his chronological age or grade level, but the appeal for the exploratory activities to the student which is important. Concrete experience is utilized as the basis of instruction.

STAGE V:

**Personality Characteristics:** Socialization. Manifest socializers. Tend to want to be around others and to like others. Tend to find their identity in the group. Criticism and ostracism tend to constitute strong fears of punishment. Tend to use the threat of withdrawing affection. Can role-play quite well. Tend to function well only when they feel wanted by the group. Able to think reflectively about problems but tend to concentrate most of their energies on solving the problem of how to stay in the group. Little commitment to self-growth, cultivation. Lacking in persistent intellectual curiosity. Tend to show high degree of stress-tolerance.
Philosophic Development: Social-Contract Legalistic Orientation. Utilitarian overtones. Right action tends to be defined and thought of in terms of general individual rights and in terms of standards which have been critically examined or abstractly agreed upon by the group. There is a clear awareness of the importance of personal values and opinions and a corresponding emphasis on procedural rules of reaching consensus. Right is generally a matter of personal values which are supported by the group.

Thought Process: Deduction-Classifying-Categorizing. Starting with generalization and arriving at a specific. Establishing an arbitrary system of groupings on the basis of common characteristics. Valuing the trusting relationship with the teacher is evidence of significant adaptive development for the student who is now expected to generalize from this experience that the school does offer something of value and that the greater the magnitude of cooperation, the greater will be the student's reward and success.

Developmental Strategy: Social. Working and playing with other students and the teacher appropriately.

Readiness Task: Relationship. The teacher has the task of increasing his value as a social reinforcer and forming a genuine interpersonal relationship with the student. Implies more than mutual acceptance, for the relationship now becomes an important source of motivation. The student is concerned with gaining the teacher's respect and approval. The teacher expresses more personal concern and interest in the student and uses social approval and disapproval freely as a means of motivation and of control.

STAGE VI:

Personality Characteristics: Socialization. See Stage V.

Philosophic Development: Universal Ethical-Principle Orientation. Right is defined by conscience in accord with self-chosen ethical principles, which in turn are based on logical comprehensiveness, universality, and consistency. Abstract and ethical,
i.e., "golden rule." They are not concrete moral principles like "The Ten Commandments." Universal principles of justice, reciprocity and equality of human rights, respect for the dignity of human beings as individual persons all are evidence of this high level philosophic development.

**Thought Process:** Critical Thinking. This is a complex process involving analysis, weighing of components, and making a decision on the basis of thorough evaluation.

**Developmental Strategy:** Mastery. This category is focused on mastery of basic and complex intellectual and adaptive skills and acquisition of a fund of knowledge and information about the environment which will enable the student to function successfully within the limits of his ability.

**Readiness Task:** Proficiency. When the student is ready to deal with his academic deficiencies and to concentrate on a basic curriculum program, proficiency tasks are undertaken.

**STAGE VII:**

**Personality Characteristics:** Flexible. Tend to be tolerant, open-minded. Relate to others democratically. Information seekers. High curiosity to know. Slow to generalize on shaky evidence. Think reflectively. Are good problem solvers. Can role-play with great imagination. Tend to find it difficult to be anything else, even though they can see things as others see them. High degree of stress-tolerance.

**Philosophic Development:** Universal Ethical-Principle Orientation. See Stage VI.

**Thought Process:** Conceptualization. Arriving at a broad understanding. Concept formation in the student involves many of the processes described in the previous levels and stages and results in the enlargement of an understanding of the place the student has in the social interactions and the conventions which he will be called upon to cope with in a routine and non-crisis manner.
Developmental Strategy: Achievement. This level occupies the highest level on the developmental sequence. This is the enrichment level where self-motivation in learning is demonstrated and where the pursuit of intellectual and adaptive skills in depth is essential. Student takes pride in his accomplishment and increases in desire for self-improvement.

Readiness Task: Independent Performance. The student who is consistently self-motivated, achieving up to his intellectual potential, eager for new learning experiences, and socially well-integrated in the learning environment is functioning on the independent performance level. Student has completed all the tasks described in preceding levels and stages and is ready and in a position to devote his energies to efficient academic and social learning.
BIBLIOGRAPHY FOR APPENDIX I

1. Personality Characteristics


2. Philosophic Development


3. Thought Process


4. Developmental Strategy


5. Readiness Tasks

