A Behavior Problems Q-Sort Test

by
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I. THE PROBLEM

Statement of the Problem. It is the purpose of this study to develop a simple and rapid objective test which can be used to discriminate between cases where personal characteristics, as evidenced by an individual's opinions, may show a need for court attention and a declaration of wardship as a preliminary step toward further careful study and treatment in an individual case to enhance the safety of the general
In dealing with behavior problem cases of young people, probation officers have too often had to evaluate these on several non-objective bases. The arresting officer's report, information already known about the minor if he or she is a resident of the area, policies established by the juvenile court or probation department and the prior experience and judgment of intake officers have all been used. On these bases minors are "informal probation," and as more formal handling, with evaluations depend such decisions as whether or not to take the case into court, ask for a clinical study or handle it on an informal basis. While in some instances and certain offices, these methods may be fairly adequate, in the main the lack of objectivity—particularly in estimating the minor's basic degree of maladjustment and need for further study and treatment, plus his potential for success or further failure—is obvious.

I. THE PROBLEM

Statement of the problem. It is the purpose of this study to develop a simple and rapid objective test which can be used to discriminate between cases where personal characteristics, as evidenced by an individual's opinions, may show a need for court attention and a declaration of wardship as a preliminary step toward further careful study and treatment in an individual case to enhance the safety of the general public and the child's own future.
public and the child's own future. Such a test would also perform an alternate function, that of screening out those cases where more cursory handling might well suffice.

**Importance of the study.** There are several reasons why such a test would be most useful. First, clinical facilities in probation departments are either nonexistent or generally so overloaded as to need careful screening of referrals to keep them available for serious problems.

Second, the present law, in California allows probation departments to place minors on "informal probation," and as more formal handling, with a court appearance, increases the time, effort and paperwork involved.

Third, court orders characteristically follow probation officer's recommendations, the judge assuming that the unlimited definition. Yet there is often little proof of loyalty, morality, social significance, and the like. As used in this context, a pervasive urge on the part of those in the field to "protect" juveniles from "getting a court record." The urge is commendable, where discretion is used, but it often departs from reality. In many cases it leads to a court order, regardless of the underlying need expressed in the symptomatology of the offense.

Fourth, a juvenile in this day and age may have moved many times and be little known in any one area. His "record" cannot be determined at intake, and may not be available at all.

Fifth, there is attention of authorities and, either because of their offenses or a pervasive urge on the part of those in the field to "protect" juveniles from "getting a court record." The urge is commendable, where discretion is used, but it often departs from reality. In many cases it leads to court order, regardless of the underlying need expressed in the symptomatology of the offense.

practices which are unfair to youngsters as well as to society. Sixth, certain offenses seem to arouse prejudices which almost invariably condemn a youngster to a commitment to a State School, regardless of the underlying need expressed in the symptomatology of the offense.

**Hard-core delinquent.** As used in this study, this term is used while State Schools are as good as they can be under today's circumstances, they are decidedly not places for an unsophisticated youngster to get maximum help. Seventh, there needs to be much more knowledge of the individual and his personal characteristics available than is usually contraindicated. Other terms have been used for these individuals such as "constitutional delinquent" and "confirmed delinquent." However, found in case files. Clinical facilities will not be developed adequately until substantial evidence is forthcoming as to the need for them.

Eighth, workloads in probation are heavy and increasing, which accentuates the negative factors in the several points given above.

II. DEFINITION OF TERMS USED

**Delinquent population.** The label "delinquent" has an almost unlimited definition. It has been defined variously on bases of legality, morality, social significance, and the like. As used in this study, it is a generic term to describe those youngsters whose failure to comply with the rules and laws of society has brought them to the attention of authorities and, either because of their offenses or recidivism, more than mere admonishment and release to parents is to follow. To this extent, perhaps, they are a select group inasmuch as thousands of juveniles who have been arrested are not included. However, they constitute the group for which the term *delinquent* is most appropriate,
as the others are not to be held to answer for their mistakes. It is this group that a reasonable citizen would consider makes up the delinquent population in a community.

**Hard-core delinquent.** As used in this study, this term is used to characterize the individual whose underlying problems are of such magnitude or duration, or both, that success on a release status is contra-indicated. Other terms have been used for these individuals such as "constitutional delinquent" and "confirmed delinquent." However, such terms carry a connotation of inevitability which is unwarranted. Many of these hard-core delinquents will be helped to become responsible citizens. Many will fail. In either case, they will need a period of custody before release.

For the others, the more complete type of investigation is a matter of policy, and policy cited a matter of wisdom. These are the cases where serious maladjustment or anti-social tendencies giving cause for undue alarm. His lack of mature judgment or consideration for the rights of others is in question, but treatment in a custodial situation can be determined as necessary later after supervision on a release status has been given a chance. "Accidental delinquent" has been used to describe this type. Actually, it is seldom that a youngster is apprehended for delinquent behaviour resulting entirely by accident. Traffic cases may include such a definition, but these are not ordinarily accorded a delinquent status unless other factors in the offense justify this. We
Probation intake process. After an arrest has been made and a decision arrived at by law enforcement authorities that an admonishment and release to parents is unjustified, cases of minors are immediately turned over to the probation officer. A quick investigation follows for two purposes. First, is there a need for detention of the minor? Second, should a petition be filed for court action? Hard and fast deadlines are set for both decisions, allowing only hours rather than days to arrive at these exceedingly important conclusions. After these first decisions, more time is available for a more complete investigation and the writing of a probation report for those cases going to court. For the others, the more complete type of investigation is a matter of policy, and policy often a matter of workload. Even in those cases going to court, many investigations tend to be perfunctory. State School administrators, who receive copies of probation reports when youngsters are committed to their care, have long decried the scarcity of information contained in many of them. They are definitely less concerned with details of offenses than they are in basic facts about the individual, his home, his school record and his attitudes. It is at the point of probation intake that subsequent courses of action are determined. Waste is imperative.
Juvenile Hall. This is a facility run by the probation department for the temporary detention of those under eighteen arrested by law enforcement officers. The name "Detention Home" is also used. Probation intake officers may have their desks here rather than in the main office of the department. The testing in this study has been done both in juvenile halls and probation offices during, or soon following, the intake process.

III. ORGANIZATION OF THE REMAINDER OF THE THESIS

Literature in the field of delinquency and corrections, psychological testing and personality factors will be reviewed. Studies have been made of delinquents on many occasions, and the Q-sort technique used in a few, but these will be shown to be useful in the present study only as points of reference. The technique here is not the usual application of it, although the basic concept is the same.

Methods and materials used will be given, as well as problems encountered in developing the materials and the rationale underlying methods. Statistical methods of evaluation will be given, as well as a summarization of the problem, the study, the results and some indicated avenues for further investigation by this method. Conclusions resulting from the study will complete the thesis.

Sheldon and Eleanor Glueck have contributed many volumes to the literature in this field. Their work in the 1930's and 40's consisted

CHAPTER IX

REVIEW OF THE LITERATURE

Few fields have been as potent as that of delinquency in producing volumes of written words in its name. A vast proportion has been in the nature of individual opinions about delinquency based on more or less actual contact with it. Some studies have been made, often more in the nature of statistical reports on the magnitude of the problem as an entity rather than on the individuals comprising it. Only a relatively few objective studies as to the nature of the phenomenon or methods for its control exist. Some of the best of these, which encompass much of the basic research in the field, are twenty or more years old. Later studies tend to be attempts to determine underlying personality factors based on one or another of the current theories. The study made and reported herein will be objective and empirical in nature, with personality factors only apparent as possible by-products for further investigation. Personality tests have not as yet been developed to a degree of validity and reliability to do the differentiating type of job attempted here. The Q-sort technique is not such a test per se. 2

I. LITERATURE DIRECTLY FROM THE CORRECTIONAL FIELD

Sheldon and Eleanor Glueck have contributed many volumes to the literature in this field. Their work in the 1930's and 40's consisted

largely of reporting on a series of follow up studies of delinquents handled in the Baker Guidance Clinic in Boston. The net result was a rather hopeless view that most delinquents were foredoomed to failure. By 1950, their work had become more specifically oriented to causative factors. One of their charts is reproduced by Smith. This contrasts the effects of parental strictness as seen in delinquents and nondelinquents, and represents the kind of basic research which would be most helpful. However, much of what appeared in their book at that time proved to be controversial. Some of their "findings" verged on opinions poorly supported by evidence, and this disturbed a number of critics. Their more recent studies have been attempts to evolve prediction tables for success or failure on parole and probation. These have not been entirely acceptable yet, but are being improved as time goes on. Similar attempts are being made by others. The results are inconclusive.


7 Ibid.
Still, the Gluecks have been by far the most articulate of those dealing with correctional work in recent years on anything approaching a research basis.

One of the best total view texts ever produced for workers in the field by a practitioner is long since out of print. Helen Pigeon, then employed by the National Probation Association, wrote it in 1942. In it, she calls attention to the paucity of clinical services, the great need for research and the development of tests, the pressure for haste in probation work and the cursory approach often taken. No like book has been provided since, although many recent articles attest to the same needs and practices. These appear consistently in the literature of the National Council on Crime and Delinquency and in "Federal Probation," published quarterly by the Federal Bureau of Prisons, Washington, D.C. These two sources produce articles drawn from leaders in the field and constitute its principal current literature.

Another basically solid work is that of Cyril Burt. The Young Delinquent, published in 1925, is more objective and modern than most works published since. Burt's work gave a foundation for follow up by the field which never took place. His treatment of causative factors and areas of disturbance evidenced in delinquents,

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statistically supported and carefully documented, have not been improved upon nor expanded since. Only Thorsten Sellin, of Philadelphia, has produced similar objective material in the correctional field. These two, Burt in England and Sellin in this country, stand virtually alone in basic field research. Sellin's short report for The American Law Institute lead to the development of the Youth Correction Authority concept, adopted in this State in 1941 and in several others since that time. Its impetus has faded.

John Ellington devoted a chapter in his book, Protecting Our Children from Criminal Careers, published in 1948 after he had completed several years of work for the American Law Institute in promoting Youth Authority programs in many states with small success, to a look at "Psychological Clues to Delinquency." This amounted simply to a reiteration of what was already well known.

The Yearbooks formerly published by the National Probation and Parole Association, particularly those for 1947, 1948 and 1950, contain numerous articles describing delinquents and suggesting methods of evaluating their maladjustments. David Rappaport, Director of Research


10 Thorsten Sellin, The Criminality of Youth, American Law Institute, Philadelphia, 1940, passim.

for the Menninger Clinic, described certain aspects of personality encountered and the use of the Wechsler, Rorschach and projective tests by the Clinic in 1947.\textsuperscript{12} Leon Thomas Stern, in the 1948 Yearbook, gave the results of a statistical study made in Pennsylvania which were in direct opposition to those of the Gluecks heretofore mentioned.\textsuperscript{13} These were so optimistic, in fact, that no one in the field would place particular confidence in them. He also gave much too much credit to the Glueck's prediction tables of twenty years earlier. In the 1950 Yearbook, an entire section was devoted to "Psychological Study of Personality Deviations."\textsuperscript{14} However, only one article was not devoted to either psychopaths or sex offenders, a rather inconspicuous element in the total problem of delinquency. The one article of general application was a dissertation on projective tests, admittedly in a stage of infancy in the field of tests at this time.

All of the foregoing, with the exception of the work of Burt and Sellin, contributed little beyond calling attention to the accepted


\textsuperscript{14} National Probation and Parole Association Yearbook, 1950, \textit{Advances in Understanding the Offender}, Section VI, pp. 179-203.
facts that parents, the home background, the community and peer groups were potent factors in developing delinquent tendencies in youth.

II. LITERATURE FROM THE FIELD OF PSYCHOLOGY

In attempting to come to grips with personality characteristics evidenced by anti-social behavior, the general literature in the field for the past ten years was reviewed via the Psychological Abstracts. In addition, those journal reports dealing with tests of delinquents and with applications of the Q-sort technique were reviewed.

W. S. Stephenson, originator of the Q-sort concept, produced his *The Study of Behavior* in 1953. Since that time, many versions of the technique have been used for many purposes. However, the basic sorting of statements into a priority of preferences by the subject, Stephenson's method, is the primary technique. Variations occur mainly in the number of priorities assigned, generally from five to seven or more and running from least to most preferred. This was held to simply a true-false dichotomy in the present study. Nearly all investigators have been principally concerned with attempts to establish personality profiles of one sort or another. The present study only attempts to differentiate two types of delinquents, leaving the study of isolating personality factors to more elaborate and theory-oriented investigations.

When youngsters fall into the hands of the law, they are often

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incapable of concentrating long on abstract problems. Their attention spans simply do not permit them to ponder minute classifications of their preferences regarding statements in which their main problem of the moment is overlooked. To insist on such a procedure would result in a collapse of rapport and a hurried and meaningless sorting aimed at getting the thing done. For this obvious reason, the process was kept both short and simple.

As for the general acceptance of the technique in the field of psychology, Cronbach evaluates it as, "One method of considerable value when properly used." He continues with a report on a study by Hartman in 1949, using 42 variables in connection with the Thematic Apperception Test, which failed to produce a valid differentiation between delinquent and dependent boys. Other projective tests likewise failed to evaluate personality components. Elsewhere in his book he describes the Q-sort method and states that some of the more elaborate applications of it are open to serious criticism—that properly designed statements, however, have unquestionable value for systematically comparing complex descriptions. Hilgard calls it, "a promising method for the study of self-perception." He also states that the method makes possible determination of persistent traits as

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perceived by individuals and how these traits cluster. He believes
self-perception and self-evaluation techniques will have increasing
utility for psychological studies. 18

In searching for factors to investigate in the dynamics of
delinquency, Kimball Young was found to have given an excellent
summation of these. Many of the statements developed for this study
involving aggression, rejection, roles, status, resistance to authority,
conflicts, peer group relationships and frustrations were evolved from
the material in Young's chapter on "The Personality of the Juvenile
Delinquent." 19

Three tests were also utilized in the development of items—the
Minnesota Multiphasic Personality Inventory, 20 hereafter referred to
as the M.M.P.I.; Stogdill's Behavior Cards; 21 the "Camp Elliott
Inventory of Personal Opinion." 22 As Hathaway, one of the authors of
the M.M.P.I., had himself been involved in its use for the study of

18 Hildgard, op. cit., p. 492.

19 Kimball Young, Personality and Problems of Adjustment,

20 Starke Hathaway and J. C. McKinley, the Minnesota
Multiphasic Personality Inventory, The Psychological Corporation,
New York, 1942.

21 Ralph M. Stogdill, Behavior Cards, The Psychological

22 Camp Elliott Inventory of Personal Opinion, In process of
development at Department of Corrections Medical Facility, Vacaville,
California.
delinquents, his work in this connection with the aid of Elio D. Monachesi was reviewed.23 A critique of their work by Warren T. Norman was found in the Fifth Mental Measurements Yearbook as well. The last consisted of a test-retest study of the reliability of delinquent's scores on the M.M.P.I. as found in the original study. Correlations over a time span of from three days to one year found them dropping from .93 to .46, with a median of .76—a rather rapid reduction and a questionable correlation.24 This was rather less a study of delinquency and more an evaluation of the M.M.P.I. as a test. Taken together, there was no great evidence that delinquency personality factors had been unearthed.

Cronbach, in evaluating the M.M.P.I. for various uses, made a significant statement that, "the face-valid items carry almost all of the discriminating power." 25 As this was assumed to be exactly the case in developing items for the present study, and as the three-day correlation in the Hathaway-Monachesi study of .93 gave further useful evidence of this, both the choice of items and their wording were acknowledged to be of utmost importance. Items in the three tests more


25 Lee J. Cronbach, op. cit., p. 484.
listed were reviewed with this in mind. Their content was of interest for coverage of pertinent material, but the wording required careful consideration. This investigator did not attempt it alone, as will be described later.

Journal articles relating to delinquency were reviewed in addition to the M.M.P.I. studies of Hathaway. Austin Jones, in a study conducted in the Central State Hospital in Indiana, used a nine-point distribution with the Q-sort. The only significant result for the present study was his finding that forced choices produced a loss of information and that a free choice technique was superior.

Peter Briggs and Robert Wirt gave a report on a Q-sort study using 115 items on a forced nine-point distribution in comparing delinquency status in connection with an M.M.P.I. pattern. They found, unsurprisingly, that the concept of "delinquency" was inadequately agreed upon, although the experiment did separate delinquents from non-delinquents. Their conclusion was that the Q-sort technique was useful if used with caution, as various "types" on the M.M.P.I. were, in part, poorly correlated with the Q-sorts. Neurotics, for example, were more apt to be delinquents than non-delinquents, but for some other types the


profiles developed were not as certain. Apparently, the investigators
placed great trust in the M.M.P.I. and psychiatric terminology,
however, there is insufficient evidence to support either. 27

Allen Edwards and Paul Horst used the Q-sort to determine
whether it would measure actual traits or simply lead the subjects to
select statements that were more socially desirable. They found a
tendency for the subjects to describe themselves on the latter basis. 28
Edwards again reported similar findings two years later. 29 This,
again, would seem to point up the necessity for care in developing
items.

Goodling and Guthrie attempted a study of thirty-two students
to determine whether the Q-sort technique would differentiate between
the "real" and "ideal" selves of the individuals. Results were not
significant. Their conclusion was that they would not consider it a
simple device for describing what people were like. 30

27 Peter F. Briggs and Robert D. Wirt, "Intra-Q Deck

28 Allen L. Edwards and Paul Horst, "Social Desirability as a
Variable in Q-Technique Studies," Educational and Psychological


30 Richard Goodling and George M. Guthrie, "Some Practical
Considerations in Q-sort Item Selection," Journal of Consulting
Psychology, 3: 70-72, 1956.
Hilden used the technique in an attempt to determine its reliability by comparing the consistency among twenty alternate forms of fifty items each chosen at random. A high overall correlation was found, significant at a .10 level.\(^{31}\) An attempt to utilize it as a group technique was made by Jackson and Bidwell. They concluded that it could be adapted to group application, but in their attempt it had proved to be too lengthy a process, taking from two to three hours.\(^{32}\) They found no independent "types." Reznikoff and Toomey reported favorably on an attempt to determine the degree as well as the fact of maladjustment by use of the Q-sort on schizophrenic patients in a project for the Navy. Results were satisfactory, but with an "N" of only 25, this would indicate only a favorable trend.\(^{33}\) Janet Taylor's report on use of selected items from the M.M.P.I. for an "Anxiety Scale" was reviewed. This proved to be both

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theoretical and qualified to a degree which made it useless in the present study for help in item selection.\textsuperscript{34} A study by Tiffany, Peterson and Quay was interesting principally because it described the difficulty of establishing "traits" found in delinquency. They found behavior a better indicator than psychopathy, neuroticism, inadequacy, and the like. They used 68 items on 3 by 5 cards, with a five degree distribution of selections on 103 delinquent males in an institution. They found no independent "types." There were no single factors isolable. Overlapping of factors resulted only in establishing that one pervasive emotion—concern over home and school—was common to the group. They felt that with a less homogeneous population, some better results might be achieved, but their effort left no optimism for the continued search for specific traits in delinquency.\textsuperscript{35}

An interesting fact in the above study is that failure of an experiment can often be as meaningful and useful to the field as success. Both may contribute to a better understanding of problems, and this report is a prime example.

Wittenborn reviewed the status of the Q-sort method up to 1961 in the Psychological Bulletin. This is a comprehensive coverage of its development. It is not surprising that the results have evolved no patterns to a degree which made it useless in the present study for help in item selection.\textsuperscript{34} Janet Taylor, "The Relationship of Anxiety to the Conditioned Eyelid Response," Journal of Experimental Psychology, 41: 81-92, 1951.\textsuperscript{35} T. L. Tiffany, D. R. Peterson and H. C. Quay, "Types and Traits in the Study of Juvenile Delinquency," Journal of Experimental Psychology, 17 (1): 19-24, 1961.
development and use by many investigators. His conclusion was that the method can contribute to broad studies of personality and related social problems. He also noted a growing acceptance of the method. The sum total of the review of literature indicates that the Q-sort, as a technique, is well regarded if carefully used. Also, the delinquency is a very complex phenomenon, probably better adapted to study as a whole than by attempts to split it into its many facets—at least in our present stage of developing personality tests. These two conclusions underlie the empirical approach in the present study by use of the Q-sort to differentiate between two patterns of perception of the self and the environment in two overall types of delinquents differing from each other in degree far more than in kind.

III. LIMITATIONS OF PREVIOUS STUDIES

Very possibly, the attempts of previous studies to do too much have led to scattered and widely variable applications of Stephenson's Q-sort technique. As the review of literature indicates, elaborate studies, with wide ranges of distributions in selections, have been used to attempt to establish personality components found in individuals ranging from the mentally ill to the institutionalized delinquent. It is not surprising that the results have evolved no patterns for a basis of understanding maladjustment factors. It should appeal to him.

It should appeal to him, to see it as he sees it. The method should appeal to him. 

already know that institutionalized delinquents can range from essentially normal youngsters to those suffering from advanced forms of mental illnesses. It is one thing to separate delinquents into types with common feelings and conflicts and quite another to establish common personality factors characteristic of them. Probably the latter can be partially accomplished now. As time goes on, research will permit us to go more deeply into specific characteristics. A total explanation of delinquency on such a basis, however, comes up against an inescapable reality. Delinquency comes from many causes and is displayed in many ways. It is, and will probably remain, a highly individualistic phenomenon. Moreover, its definition is still in doubt. Hence, it would appear that a much more hopeful and realistic approach to understanding it might come from utilizing a useful technique in attempting to establish the degree of maladjustment evidenced in delinquents rather than a molecular approach which assumes abnormalities from one view or characteristic deviations from another. Surely, we must allow that a child's community has sometimes "deviated" rather than the child. He may respond to this quite normally and be delinquent as a result.

To establish the degree of a youngster's reaction to his world evidenced by delinquent behavior is possible. The technique with most appeal would seem to be one which sought to see that world with him, to see it as he sees it. The method should appeal to him. It should be within his intellectual as well as his emotional grasp.
The need to align it with one or another theory of personality is removed. That may come later, as, indeed, the approach to theory seems to be developing in psychology now.

The treatment of delinquency may well depend, indeed does depend, on understanding more than its degree. However, the matter of degree is obviously an element to be considered. To date, the field where delinquents are handled, and, hopefully, treated, has either produced little basic research on the problems or has failed to report it. To have to go back to Cyril Burt, William Healy and the early studies of Sellin, or even to rely on the single observable efforts of the Gluecks, in recent years, is shameful. Studies should have proliferated during the last twenty years and seem rather to have diminished instead. Much current field literature, as has been noted, consists of personal opinions expressed by individuals. Reiteration of already accepted verities become more monotonous than illuminating. Research is a present need eclipsing all others. Money, buildings and personnel are secondary. They can well represent waste as well as progress. Perhaps the greatest limitation of previous studies is their virtually complete absence.

5. The subject's reaction to authority in the home, school or community.

6. The actual degree of parental concern with the subject's problems.
CHAPTER III

MATERIALS USED AND GROUPS STUDIED

I. DEVELOPMENT OF MATERIALS

For the purpose of bringing to bear all possible knowledge and experience in developing materials for this project, a consulting group was organized. This group was composed of eight persons with long experience in juvenile work in the fields of probation, law enforcement and leisure time teenage activities. After reviewing the literature, this investigator felt justified in establishing the method to be used, and asked the group to concentrate on the selection and wording of items. The following guidelines were established to keep the group focused on the areas to be clarified. As specifically as possible, we wanted to bring to light:

1. The subject's view of himself.
2. The subject's view of his family.
3. The subject's view of the community he lives in.
4. Evidence of hostility, aggression, hostility or dependence.
5. The subject's reaction to authority in the home, school or community.
6. The actual degree of parental concern with the subject's problems.
7. The subject's peer group relationships.

8. Any meaningful material the group felt was useful. The two test kits were given to administrators, both police and
After originating or selecting two hundred items from the
probation, in the counties of San Joaquin, Merced, Stanislaus, Madera
three tests used as examples, these were reworded for maximum
and Fresno. The police department, that of Merced City, was used,
comprehension by delinquent juveniles. This, it was felt, would make
the test too lengthy to administer. Two members of the group had had
in delinquent work and either under supervision by probation or parole
experience with the Camp Elliott test which consisted of three
officers or auditing processing for such supervision, would be given
hundred and fifty-one items, and opposed it on two grounds. First,
the test by workers familiar with the subject's background. The tester
staff members simply could not devote the necessary time. Second,
was used to answer the fourteen questions on the scoring sheet and fill
subjects became bored and careless. The two hundred items were
in the information requested. When each subject had sorted the cards,
reduced to one hundred. (See Exhibit A, Appendix A.)

Test kits were then made up consisting of 3 by 5 cards, numbered on the scoring sheets and mailed to the investigator for
which held cards marked "Yes, the statement is true" and "No, the
statement is false." Subjects were then to be seated alone at a
desk, given the one hundred cards and asked to place them in piles
in front of the standards according to the subject's belief in the
truth or falsity of each statement. An "Administraton Sheet,"

In the five counties which constitute the large, central
district of California, juveniles are processed in the six departments
matters. In law enforcement, many minor offenders coming to an
containing instructions to be given, and a supply of "Scoring Sheets"
completed the kit. (See Exhibits B and C, Appendix A.)

These cases are, by the definition used in this study, not delinquents
II. AGENCIES INVOLVED AND TEST ADMINISTRATION

The ten test kits were given to administrators, both police and
probation, in the counties of San Joaquin, Merced, Stanislaus, Madera
and Fresno. One police department, that of Merced City, was used.
The administrators agreed that twenty-five juveniles recently involved
in delinquent acts and either under supervision by probation or parole
officers or awaiting processing for such supervision, would be given
the test by workers familiar with the subject's background. The tester
already on probation are referred to the probation department automat-
ically upon arrest. The second type are also referred. These are in
the information requested. When each subject had sorted the cards,
the tester would then enter the card numbers under the "Yes" or "No"
headsings on the scoring sheets and mail them to the investigator for
background is indicated. These referrals constitute the truly delin-
quent population of a community, and are the cases considered here.

III. SUBJECTS TESTED

In the five counties, which constitute the large, central
valley of California, juveniles are processed in the six departments
cooperating in the test by workers who are specialists in juvenile
matters. In law enforcement, many minor offenders coming to an
are to be from fifteen to the eighteenth birthday. Girls cases
agency's attention for the first time are simply talked to by the
would be included if the department believed they constituted genuine
juvenile officers, with their parents present, and are then released
with only a warning that a second offense will be treated differently.
These cases are, by the definition used in this study, not delinquents
poor judgment or immaturity.
in the accepted sense of the term. The officers know that in a majority of cases the one brush with the law sees an end to a youngster's depredations. This judgment must reside in the juvenile law classification of each subject as a hard-core or fringe type of delinquent enforcement department. Otherwise, probation departments and the courts, on the basis of subjective estimates by the workers concerned, courts would be flooded with unnecessary and largely meaningless work. This proved to be fallible. Workers in the juvenile field are loath and the stigma of "having a record" might do more harm than good.

However, two other types of cases are handled differently at this delinquent stage regardless of definitions or background. Few counties parolees from the California Youth Authority and juveniles punished only a handful of such cases each, although many others had already on probation are referred to the probation department automatically upon arrest. The second type are also referred. These are those past and present behavior was such that no release under cases where the offense or pattern of behavior is such that the supervision was to be recommended. While such hesitations to label a juvenile officers believe a further investigation into the child's minor with a disappearing case may be commendable from a purely background is indicated. These referrals constitute the truly delinquent population of a community, and are the ones considered here.

The juvenile bureau tested only those to be referred, and probation necessary to develop a set of criteria for the classification. This those recently referred even though some of them had been so processed was done on the basis of the background information. The specific before. Thus, the subjects of this study would include both those with

lengthy records and obvious problems of maladjustment and those whose

1. The home and community background.
status in this respect was as yet undetermined. Ages of those tested
2. Subject's view of himself according to officer's belief, were to be from fifteen to the eighteenth birthday. Girls cases
3. Evidence of hostility or aggression.
could be included if the department believed they constituted genuine
4. Type of companions.
cases of delinquency rather than the more usual (for girls) sexual
5. Apparent drive for independence.
involvements which seemed to be less problems of delinquency than of
6. Subject's reaction toward authority.
poor judgment or immaturity.
IV. CRITERIA USED AND THEIR DEVELOPMENT

It had been the intention of this investigator to establish the classification of each subject as a hard-core or fringe type of delinquent on the basis of subjective estimates by the workers concerned. This proved to be fallible. Workers in the juvenile field are loath to "stigmatize" their subjects by referring to them as hard-core delinquents regardless of definitions or background. Two counties produced only a handful of such cases each, although many others had long records of previous offenses and their officers believed that their past and present behavior was such that no release under supervision was to be recommended. While such hesitation to label a minor with a disparaging term may be commendable from a purely philosophical viewpoint, it is hardly realistic for purposes of establishing validity of a test such as the one proposed. It became necessary to develop a set of criteria for the classification. This was done on the basis of the background information. The specific items utilized were:

1. The home and community background.
2. Subjective estimate of officer.
3. Subject's view of himself according to officer's belief.
4. Subject's apparent anxiety level.
5. Evidences of hostility or aggression.
6. Apparent degree of maturity and judgment.
7. Type of companions.
8. Acceptance of responsibility for his acts by subject.
11. Subject's reaction toward authority.
12. Subject's apparent sensitivity level.
13. Home with both natural parents present.
14. Officer's recommendation for or against release.
15. Present and past behavior.
16. Subject's apparent view of the family constellation.

These criteria were given negative and positive values. When ten or more of the sixteen items were negative, a classification of "hard-core" was given. This might appear to leave many classifications to chance as they fell close to the cut-off point. This was not the case. Only six such cases had to be discarded. The rest clustered definitely at the extremes. More cases had to be discarded because of the paucity of information. Staff turnover in the probation departments was very high, and newer officers could not produce definite information. In the Fresno office, the "senior" worker had been on the job just six months. Case files were utilized here.

It was also believed that a weighting of the results might be necessary if a preponderance of fringe to hard-core cases resulted. This, too, proved to be unnecessary. As the scoring sheets began to come in and were classified, the two types of cases proved to be nearly equal in number. When the return began to diminish to an occasional score, the numbers were cut off at sixty-seven cases of each class. Four per cent of the total return to date in the hard-core group have made this greater than the fringe group by that extent rather than smaller. Apparently a very large number of rather seriously disturbed juveniles are to be found in our communities.
CHAPTER IV

TECHNIQUE USED AND RESULTS

I. COMPILATION AND CHARTING OF SCORES

Charts were made for each agency and these were then transferred to a master chart for the project. No comparisons between agencies were contemplated. However, the equality of the two types of cases occurred in all of them. This contrasts with present State statistics which show that approximately 80,000 cases were referred to probation departments in the State in 1963 of which only 33,000 were processed for court action. In 1961, 60,000 were referred and 29,000 were taken into court. This emphasizes the obvious trend to use "informal probation" to cut down on court time, paperwork and formal supervision. The need for testing and for a more realistic approach to one of our major social problems is further verified. The second tendency noted in compiling the scores has been mentioned—the reluctance to classify delinquents as "hard-core" even when, in the officer's own view, past and present behavior was poor, associates were other delinquents and no release was contemplated. For this reason, it would appear that testers using this or any similar technique should receive some preparation via direct instruction. Classification of cases presupposes


38Ibid.
that those classifying them must face realistic facts. Otherwise the purpose of classification can be lost in a subjective evaluation where personal preferences, work pressures and a myriad of extraneous factors make testing only an academic exercise.

II. OVERALL RESULTS

The master chart of all scores gave a total of "Yes" answers for the hard-core group of 3206 (M=48.5), and for the fringe group 3165 (M=47.24). Item by item differences as high as 24 points occurred, although fifty-one items were either equal or within three points of each other, indicating that in the area of these items, at least, the two groups were far more alike than different. If true, this would make the isolating of personality factors very difficult. Characterized as personality types, individuals in both groups were variously described as both happy and depressed, anxious and secure, likeable and irritating, nervous and placid, leaders and followers, and the like. In background and behavior, however, they differed markedly, and in many items of this test based on perceptions of self and environment they differ enough to be measurable. Refinement of the test is now indicated to strengthen or replace items lacking in differentiation strength.

The overall results suggested several approaches to methods of contrasting the scores. First, the means of all scores could be given statistical treatment. However, as these were separated by only one
and a quarter points, no meaningful result at any significant level could follow. A second method would be to contrast all "Yes" answers in which one group surpassed the other in any degree, eliminating all equal scores. As the "Yes" and "No" answers were directly negatively correlated, comparisons based on either one would be equally significant. A third method would be to contrast only those scores in which one group surpassed the other by three or more points. The fourth method would be based on still greater selection of those items where distinct differences occurred. All of the last three were used.

III. RATIONALE FOR METHODS USED

This was the reasoning underlying the comparisons. The cases were taken at random in a short period of time from a wide area in the State. As a group, they represented those delinquents the public agencies would encounter at any given time. They constituted a representative sample of the delinquent population considered worthy of further investigation and processing. Within this population, it is widely recognized and accepted that a broad classification of likeness of the means of the two total scores. It would be done on the basis of personality tests presently available has proven to be nonproductive. An attempt to do this by an approach which would evaluate the individuals on the basis of their own values and judgments, like comparisons would be made on the basis of those scores in which the groups differed by three or more points. A third component, but to classify them broadly into two types, might be
effective. If so, it would be a most useful technique for the field within which such cases are handled and where early and important case decisions are mandatory.

The Critical Ratio, or t-Ratio method. Total scores and the significance levels in each of the comparisons are presented in the tables.

IV. STATISTICAL PROCEDURE

The Null Hypothesis. A null hypothesis was adopted to be rejected only if the results proved to be significant at or above a 95 per cent level. "Selection of items by subjects in a one-hundred card Q-sort test on a true-false basis will not differentiate between hard-core and fringe type delinquents in the general delinquent population."

The Critical Ratio Method. To determine whether to accept or reject the hypothesis, comparisons of the "Yes," or "True," answers given by sixty-seven subjects classified as hard-core delinquents would be statistically evaluated in comparison with like answers given by sixty-seven subjects classified as fringe type delinquents. This would not be done on a basis of all answers given, because of the likeness of the means of the two total scores. It would be done on the basis, first, of all scores in which one group surpassed the other in "Yes" answers. A second comparison would be made on the basis of those scores in which the first group failed to equal the second in "Yes" answers. Like comparisons would be made on the basis of those scores in which the groups differed by three or more points. A third
comparison, in the same pattern, would be made by selecting items in
which the scores were markedly different.

These comparisons would be statistically evaluated by use of
the Critical Ratio, or t-Ratio method. Total scores and the
significance levels in each of the comparisons are presented in the
tables of Appendix B. A Critical Ratio of 1.96, giving a significance
level of 5 per cent by chance is required for rejection of the null
hypothesis.

Although some tests, particularly in the vocational field,
resulting, this Q-sort should differentiate on no less than one-
quarter of the items to have validity. It is a short test, compared
with many others which should be further investigated.

First, it is apparent that teenagers—possibly only delinquent teens—
to most of those using this technique, and fewer items than this would
bring chance into the picture regardless of significance levels.

A rather striking number of them elicited almost total accord by the
subjects. This could indicate that selections were made which would
be socially approved, or that perceptions of the world and the self
for this age group or this type is rather universally to be expected.

Second, two individuals gave virtually no answers in the "True"
column or the selected items. These two were, apparently, seeing
things in a totally different than usual pattern. One was a boy who
had gone berserk in custody. He was acknowledged to be extremely
unstable, although not psychotic according to the belief of the lay
person who had responsibility for his care in the Juvenile Hall.
CHAPTER V

SUMMARY AND CONCLUSIONS

I. SUMMARY

The purpose for which this project was instituted has been fulfilled and the established standards have been met. The one-hundred item Q-sort test presented offers thirty-three items for differentiating between hard-core and fringe type delinquents at a level of significance of less than 0.05 by chance. The null hypothesis is therefore rejected.

Many factors appear which should be further investigated. First, it is apparent that teenagers—possibly only delinquent teenagers—feel very strongly, en masse, about certain of these statements. A rather striking number of them elicited almost total accord by the subjects in fluid subjects. This could indicate that selections were made which would be socially approved, or that perceptions of the world and the self for this age group or this type is rather universally to be expected.

Second, two individuals gave virtually no answers in the "True" columns on the selected items. These two were, apparently, seeing things in a totally different than usual pattern. One was a boy who had gone berserk in custody. He was acknowledged to be extremely unstable, although not psychotic according to the belief of the lay persons who had responsibility for his care in the Juvenile Hall.
The other was classified by his officer as not only a hard-core delinquent, but a psychopath. The inference is not being made that such a test has picked out these two types in some projective fashion. The result is simply being reported as an interesting phenomenon. Possibly the Q-sort technique could be developed to reach into such areas.

Third, use of this test on "normals" is indicated. Fourth, further refinements of the test are in order. It could be made selective over a wider range of items and a wider difference in scores. Some subjects, even though great care was used in word choice, expressed difficulty in grasping the meaning in certain items. In one county, for example, boys had to have the item (#96) "Some kids get away with things I couldn't because their fathers have drag" explained to them.

It would be useful to have the items evaluated by a widely distributed sample of teenagers. Also, there are indications that the method would lend itself to factor analysis studies. Apparently, in field theory terms, the life-space of delinquents is perceived by them in a measurable degree exemplified by their tendencies to react against people and objects. Karen Horney proposes a like concept. As a result of the experience with this project, this investigator believes that those administering even as simple a test as this should

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receive some personal instruction prior to testing in addition to the written instructions.

In further use of the test in the field, it would aid in scoring if the items answered "Yes" or "True" more frequently by hard-core delinquents could have a symbol for negative placed beside the number on the back of each item. A symbol for positive could be placed on those cards this group more frequently answered "No" or "False." The symbols should, of course, convey no meaning to subjects who might see them. As the cards were totaled, the scores of these positive and negative values would be significant as they approached or receded from the median, seventeen, of the thirty-three items.

II. CONCLUSIONS

This test, although it has produced significant results within the area for which it was projected, is only at a stage of development which might be termed "of interest." Possibilities for its use are obvious as are the limitations. Further development should include a much wider application, revisions as experience indicates, and several immediate refinements. No claim is made or justified that it is now ready for use in the field. What does appear to be rather well established is that the method will work to excellent purpose when further developed. The demonstration here given suggests that a convenient, simple and fast method exists which has potential for the field. Its use, for the present, should be experimental. Though confidence in its results may grow, it should
never be considered for use as a total testing program, but only as a screening device for possible future referral to such a program. It should, if its validity becomes established, produce evidence for making available more in the way of clinical facilities for the field.
BIBLIOGRAPHY

A. BOOKS


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A. BOOKS


B. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES,
AND OTHER ORGANIZATIONS

California State Welfare and Institutions Code. Sacramento: The

Delinquency and Probation in California. Sacramento: Bureau of

National Probation and Parole Association. Redirecting the


C. ESSAYS AND ARTICLES IN COLLECTIONS

Hathaway, Starke R., and Elio D. Monachesi. "Analysing and
Predicting Juvenile Delinquency With the M.M.P.I." Fifth Mental
Measurements Yearbook, Oscar Krisen Buros, Editor. Highland

Norman, Warren T. "Test-retest Reliability of the M.M.P.I." Fifth
Mental Measurements Yearbook, Oscar Krisen Buros, Editor.

D. PERIODICALS

Briggs, Peter F., and Robert D. Wirt. "Intra-Q Deck Relationships
as Influences and Realities in Personality Assessment." Journal

Edwards, Allen L. "Social Desirability and Q-sorts." Journal of

Edwards, Allen L., and Paul Horst. "Social Desirability as a
Variable in Q-Technique Studies." Educational and Psychological

"Camp Elliott Inventory of Personal Opinion," (Author not identified.)


E. UNPUBLISHED MATERIALS IN PAMPHLET FORM


"Camp Elliott Inventory of Personal Opinion," (Author not identified.) In process of development at Department of Corrections Medical Facility, Vacaville, California. (Mimeographed.)
EXHIBIT A

Questions to be answered:
"Yes" or "No"

1. I think, generally, people like me.
2. Adults get away with things all the time that they blame juveniles for doing.
3. Teenagers should be treated the same as adults and have the same privileges.
4. I think most people don't like me too well.
5. Sometimes I wonder if my mind is all right.
6. Adults nag at juveniles too much.
7. Most policemen try to do what they think is right.
8. School is fine. I like it.
9. School is necessary.
10. There should be more things for juveniles to do.
11. I get angry pretty often.
12. When I get angry, it's for a good reason.
13. People have to fight sometimes or else be called "chicken."
14. Everyone who won't fight.
15. By and large, my parents worry too much.
16. My father has a terrible temper.
17. I can't talk to my folks.
18. There is too much confusion around our home.
19. Brothers and sisters get all the breaks.
20. I have headaches often.
22. Sometimes, I'd like to leave home and make it on my own.
23. My folks are too strict.
24. Laws for juveniles are too tough.
25. Laws for juveniles are too easy.
26. Everybody blames juveniles for most of our crimes.
27. People pick on me a lot.
28. My father believes in punishing the "old-fashioned" way.
29. My folks take away privileges when they want me to mind better.
30. I dress a lot--snoopy dreams.
31. My parents don't care if I smoke, but school does.
32. My father is always questioning me about my friends.
33. My mother preaches at me too much.
34. I ought to be able to pick my own friends.
35. If I was a parent, I'd probably worry too.
36. I think as long as people will gamble anyway, the State ought to get some money out of it for taxes.
37. Teachers are too strict.
38. Teachers claim they want to help us, and I think they do.
39. Teachers aren't strict enough and we'd be better off if they were more strict.

APPENDIX A
EXHIBIT A

Questions to be answered
"Yes" or "No"

1. I think, generally, people like me.
2. Adults get away with things all the time that they blame juveniles for doing.
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12. When I get angry, it's for a good reason.
13. People have to fight sometimes or else be called "chicken."
14. Anyone who won't fight is "chicken."
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16. My father has a terrible temper.
17. I can't talk to my folks.
18. There is too much confusion around our house.
19. Brothers and sisters get all the breaks.
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27. People pick on me a lot.
28. My father believes in punishing the "old-fashioned" way.
29. My folks take away privileges when they want me to mind better.
30. I dream a lot—scary dreams.
31. My parents don't care if I smoke, but school does.
32. My father is always questioning me about my friends.
33. My mother preaches at me too much.
34. I ought to be able to pick my own friends.
35. If I was a parent, I'd probably worry too.
36. I think as long as people will gamble anyway, the State ought to get some money out of it for taxes.
37. Teachers are too strict.
38. Teachers claim they want to help us, and I think they do.
39. Teachers aren't strict enough and we'd be better off if they were more strict.
40. I hate to have to get up in front of class.
41. Fellows can take a drink and still be good guys.
42. Girls can take a drink and still be perfectly good girls.
43. I think the names of juveniles who get in trouble should be put in the paper.
44. Probation officers really try to help juveniles.
45. Kids who always have the right answers in school give me a pain.
46. I'd like to get a job and get out of school.
47. Most girls don't like me.
48. Most fellows don't like me.
49. It's natural to try to get even with someone when they've earned it.
50. I go to the movies quite a lot.
51. I read a lot more than most. My mother thinks too much.
52. I watch T.V. a lot. I don't have anything else to do.
53. I like action on T.V. better than travel and stuff like that.
54. Most of my friends know what sex is all about, and have had it.
55. I think my home would be better off if someone got out of it.
56. I think my parents would be happier if I enlisted or got a job and quit costing them money.
57. I don't think good clothes have to be the very latest style.
58. Some kids have everything they want and they think this makes them better.
59. There are some kids at school who ought to be expelled.
60. No one should be expelled from school.
61. Being suspended from school only makes teenagers worse.
62. I seem to worry a lot.
63. I sometimes have trouble getting along with some kids my age.
64. People have accused me of things that weren't so.
65. If a person has enough money, he can get away with almost anything.
66. Sometimes I'm afraid of my mother.
67. Some kids would hurt a dog for fun. I feel sorry for both of them.
68. Once I was told somebody was out to get me.
69. When a teacher blames somebody for something they didn't do, they have a right to tell her off.
70. No one is better than anyone else, even if they do think so.
71. Sometimes I wonder if I was adopted.
72. I have trouble saying "no" when I'd be better off if I did.
73. I would say that most people are pleasant most of the time.
74. I do not have a (mother) (father) in my home.
75. I enjoy being with adults.
76. Fellows steal cars because people are stupid enough to leave keys in them. Even the police admit this.
77. Friends of mine have been suspended from school just because someone had it in for them.
78. Several friends of mine quit school and got good jobs.
79. I can well remember when somebody double-crossed me.
80. When I lie, it worries me to be like that.
81. The one thing I can't stand is to have someone make a wisecrack about me.
82. When you have enough real friends, you don't have to take anything from anybody.
83. I am worried about things at home.
84. When somebody bawls me out, I just let it go.
85. Some people delight in catching somebody doing something.
86. I don't have to worry about friends. I've always had friends.
87. I often wish I had an older person to talk to who could be trusted.
88. People get on my nerves.
89. I think at times I've been mad enough to really hurt somebody.
90. I've never cussed anybody out.
91. I'd like to live somewhere else.
92. I enjoy going to parties.
93. Juveniles need adult supervision when they are at parties.
94. Everyone speeds, but the police just watch the kids.
95. My folks don't set times for me to be home.
96. Some kids get away with things I couldn't because their fathers have drag.
97. People watch me as though I was up to something all the time.
98. If adults quit worrying about us it would be a better world.
99. If I want good advice, I ask my folks.
100. If I want good advice, I ask my best friends.
Seat subject at a table on which the "Yes" and "No" cards are set up in their holders.

Say to subject:

You are helping in an experiment. We are not even putting your name on this test, and it will make no difference in your case. We simply want to know what young people are thinking about the problems they face. Too often no one asks what you think, and this is your opportunity to speak up. Some of the questions may not have an answer in your particular case. You will be left alone to do this by yourself. If you want to ask me about anything, I will be here, but I will not keep your answers. They are being sent to a college.

As you look at each card, stack it up in front of the sign that says you believe it or the one that says you do not believe it. If you find any you can't answer, set those aside and we will go over them. They do not have to be kept in any particular order, just in the two piles you will make. When you are through, let me know.

Do you have any questions now before you start?
### EXHIBIT C

#### SCORING SHEET

<table>
<thead>
<tr>
<th>Rater</th>
<th>Location</th>
<th>Date</th>
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</table>

Subject's sex ___ Age ___ Behavior ________________________________

<table>
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<tr>
<th>Numbers of the cards answered &quot;Yes&quot;</th>
<th>Numbers of the cards answered &quot;No&quot;</th>
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Cards not answered, and reason ___________________________________

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As rater, and one conversant with subject's background, please answer the following by using the reverse side of this sheet.

1. As you see it, what is the home and community background?
2. Is this subject what you would term a "hard core" delinquent?
3. How do you think the subject sees himself or herself? (Eg. No good, etc.)
4. How mature does subject seem to be?
5. How does subject feel about home and family?
6. Is subject anxious--unduly so?
7. Is subject aggressive and hostile?
8. What are subject's companions like?
9. Does subject accept responsibility? (What excuses are used--if any?)
10. Does subject evidence a need for independence beyond the usual?
11. Are the parents really concerned?
12. What is the subject's reaction toward authority?
13. Is subject over-sensitive?
14. Would you recommend release on informal probation? (Your own belief.)

This is a statistical check of the validity of this test only. The case, as such, is not important. Your knowledge of it is important. Please feel free to add any details you wish on other sheets, if necessary.
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**APPENDIX B**

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Significance Level 95.22%

19 Items in Which Hard-Core Group Gave Fewer "Yes" Answers

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Mean 28.74 Mean 20.789
\( \alpha \) 9.884 \( \alpha \) 9.433
\( \alpha \) M 2.33 \( \alpha \) M 2.22

\( \alpha \) DM 3.515 C.R. 2.26

Significance Level 97.62%

TOTAL 33 ITEMS