INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

- 1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
- 2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
- 3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again beginning below the first row and continuing on until complete.
- 4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
- 5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International

300 North Zeeb Road Ann Arbor, Michigan 48106 USA St. John's Road, Tyler's Green High Wycombe, Bucks, England HP10 8HR

77-12,739

HORSTMAN, Preston Lee, Jr., 1943-ASSESSING THE CALIFORNIA PSYCHOLOGICAL INVENTORY FOR PREDICTING POLICE PERFORMANCE.

The University of Oklahoma, Ph.D., 1976 Psychology, industrial

Xerox University Microfilms, Ann Arbor, Michigan 48106

THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

ASSESSING THE CALIFORNIA PSYCHOLOGICAL INVENTORY FOR PREDICTING POLICE PERFORMANCE

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

Ву

Preston L. Horstman Norman, Oklahoma 1976

ASSESSING THE CALIFORNIA PSYCHOLOGICAL INVENTORY FOR PREDICTING POLICE PERFORMANCE

A DISSERTATION

APPROVED FOR THE DEPARTMENT OF PSYCHOLOGY

APPROVED BY

Acknowledgements

I am grateful to the members of my advisory committee, Dr. N. Jack Kanak, Dr. W. Alan Nicewander, Dr. Thomas M. Miller, and foremost, my major professor, Dr. Paul D. Jacobs, whose signature I feel is an honor to have on my dissertation. All my committee members have shown a great deal of patience and forebearance in helping me complete the task from afar. My thanks goes out to them all for giving much more than I could have asked.

Dr. Jacobs deserves the utmost in credit for genuinely caring and putting his unwarranted personal effort into helping me complete my work. His professionalism and teaching in the truest sense of the word have made the time I worked under him a real adventure, and a rewarding one at that. I will not forget the times nor the lessons for they have become a part of me.

A special note of thanks goes to Dr. James S. Hillgren, whom I feel fortunate to call a collegue and a friend. My gratitude is his for being instrumental in helping me to complete this task.

My most heartfelt thanks goes to my wife, Dee Ann, who sacrificed and endured hardships unwincingly to help. To her my undying love.

TABLE OF CONTENTS

	Page
Manuscript to be submitted for publication	
INTRODUCTION	1
METHOD	8
RESULTS	10
DISCUSSION	11
REFERENCES	13
APPENDIX A Critical Factors in Law Enforcement Selection .	16

LIST OF TABLES

Tab1e		Page
1.	Step-wise Multiple Regression of CPI Standard Scale Scores and Performance.	15

Assessing the California Psychological Inventory for Predicting

Police Performance

Preston L. Horstman

University of Oklahoma

Abstract

Forty police recruits were tested with the California Psychological Inventory at their point of entry into the police academy. At a point in time two years after their graduation from the academy performance evaluations were collected and analyzed via a step-wise multiple regression. A prediction equation was derived which used 17 of the 18 scales of the CPI to predict performance. The multiple correlation coefficient was .61 with 37% of the variance in the performance evaluations explained by the CPI scales. The highest simple correlation with the performance evaluation was the scale: Well-being (Wb), with .40. The performance evaluation was also analyzed using the scales of the CPI to provide a trait description of those scoring higher on the performance evaluation.

Assessing the California Psychological Inventory for Predicting Police Performance

Preston L. Horstman University of Oklahoma

Since 1970 the role of Industrial/Organizational Psychologists has heavily focused on the validation of selection systems for employers. With the advent of the 1964 Civil Rights Act, what previously had been an activity which had to be justified in terms of hard dollars and cents to skeptical employers became a necessity to avoid the costs of lengthy court battles. In 1970 the Supreme Court heard the case of Griggs v. Duke Power Company, and issued a ruling of significant impact to industry. The Court declared that employment tests which have a discriminatory impact on racial groups are unlawful if the tests are not "job-related." The cases which followed have further enlarged upon and clarified the ways discrimination can be defined in selection systems, the proof necessary to show it, and the evidence necessary to establish "job-relatedness."

Millions of dollars in damages and attorneys fees have changed hands in employment discrimination cases since the most recent civil

rights act was enacted in 1964. Additionally, a great many employment selection systems have been ruled illegal and enjoined by the courts, or made inoperative with consent decrees and hiring quotas. Industry has felt the impact of the enforcement of civil rights deeply in its personnel operations, and in its pocketbook. Professionally developed and validated selection systems have moved from the realm of niceties to that of necessities. Industries without validated systems were served notice in the public press and the court record that the systems would have to be validated, or the employers would have to resort to chance hiring unaided by testing.

Early in its existence, the Equal Employment Opportunity

Commission, the independent Federal agency established to enforce

Title VII of the 1964 Civil Rights Act, chose the American Psychological

Association's guidelines (Standards for educational and psychological

tests) as the model for validation of selection tests. EEOC's action

clearly laid the task of validating selection tests at the doorstep of

Industrial Psychology and its practitioners. The ethical standards

that once had been known only to psychologists as a somewhat obscure

professional publication thus moved in a short time to virtually the

law of the land applying to anyone who employed more than 15 persons.

The 1972 Amendments to the Civil Rights Act of 1964 brought state and local governments under its requirements. Until that time the area of law enforcement selection had seen little professional activity or validation. The primary testing instruments for police selection had traditionally been verbal ability intelligence tests. Case law, however, has established repeatedly that intelligence tests tend to

be culturally biased, have discriminatory impact, and bear at best marginal job-relatedness insufficient for legal use (Griggs v. Duke Power Company, Penn v. Stumpf, Castro v. Beecher, Chance v. Board of Examiners, Commonwealth of Pennsylvania et. al. v. O'Neil, Afro American Patrolmen's League v. Duck, Jones v. New York City Human Resources Administration, Pennsylvania v. Glickman, Harper v. Kloster).

Others having determined discriminatory impact ordered hiring quotas affecting the entire selection system in addition to the testing itself (Boston Chapter, NAACP, Inc. v. Beecher; Bridgeport Guardians, Inc. v. Bridgeport Civil Service Commission; Vulcan Society v. Civil Service Commission; NAACP v. Allen; United States v. City of Chicago; NAACP v. Civil Service Commission of San Francisco; United States v. Milwaukee).

Other common entry level assessment instruments such as the International Personnel Management Association (IPMA) Police Test have been found to correlate with verbal ability intelligence tests and as such have been ruled against by the courts (League of United Latin American Citizens v. City of Santa Ana, and Gosa v. Phelps). After adverse impact against any protected class has been established by the plaintiffs the burden of proof shifts to the defense to demonstrate the validity of the element of the system which is responsible for the impact. The courts have shown a tendency to prefer criterion related predictive validity, in which pre-employment data has been correlated with later performance. However, they have accepted construct (test conforms to established theory) or content validity (test items congruent with job needs) with a thorough job analysis if the size of the

adverse impact is not exceptionally large or if a strong affirmative action program is in effect and showing good results.

Many of the employment discrimination cases have dealt with police since requirements of the Civil Rights Act of 1964 were extended to governmental employers in 1972 by the amendments of that year. Few police cases were heard before 1972 although it was possible through earlier Civil Rights legislation and several Constitutional Amendments. Even though there has been heavy litigation in the police sector in recent years the courts have not overlooked their responsibility for public safety. However, neither have they overlooked their responsibility to protect the public's rights. Though the courts have shown a great deal of reluctance to seriously impede police agencies' selection systems in most instances, the attention that has been shown has had the positive effect of increasing the volume of professional selection studies in the police arena. The additional activity has pushed law enforcement selection more toward the professional status it deserves.

Police selection systems are perhaps the most thorough and rigorous of any in the public sector. The testing portion of the process is actually a very small though critical element of the system. Usually established as a successive hurdle process in which each component serves to eliminate applicants from further consideration, the initial testing phase controls who will be processed further in the system. Some systems (those under civil service) have two separate testing hurdles. The civil service components almost exclusively use intelligence tests for screening applicants for most governmental positions. Additionally most police agencies also have screening tests in

the form of modified intelligence tests. Though some other abilities are also tapped in police-specific tests, such as the IPMA's element on memory of faces and associated information, the primary components tend to be intelligence oriented and culturally biased (<u>L.U.L.A.C.</u> v. Santa Ana).

Perhaps due to the difficulty of assessment, the more basic personality attributes that underlie critical functioning styles exemplifying quality law enforcement personnel have not been thoroughly researched. Attempts have been made, but seldom have there been professional, in-depth personality studies done, particularly in a predictive mode.

After the initial testing phase has taken place, the applicants who pass are interviewed to check for basic qualifications and any other information which would disqualify them under hiring standards such as height, weight, vision, education, and admitted criminal record. The initial interview serves as the final hurdle before the "soft-cuts" come into play. The "soft-cuts" are characterized by being judgmental in nature rather than the earlier hard and fast rules which frequently have their basis in law or local civil service rules.

The judgmental phase is by far the most lengthy of the process and consumes from three weeks in simple cases to three months in the more complex. During the judgmental phase the case is picked up by an investigator who does a thorough and extensive background investigation checking the applicant's driving and criminal arrest record, character and secondary references, school record, military record, current and previous neighbors, credit record, previous employers, and any

questionable areas which may surface during the investigation. In some agencies an applicant is likely to undergo testing to assess his mental stability and a few agencies engage in more than a cursory examination in which indications of pathology are sought.

During the judgmental phase, a polygraph examination is frequently given to check the applicant's truthfulness on the information listed on the personal history statement which serves as the basis for the background investigation. Frequently a minimal investigation is conducted in the form of record checks on the applicant's family and close friends even though the information is seldom used to disqualify anyone.

An oral review board is frequently the final step in the selection process. It usually follows the physical examination though it may be held earlier if some serious negative indications are found that do not meet the criteria for <u>de facto</u> disqualification. Such indications might be in the form of negative former employer references, connection with organized crime, recurrent, but uncharged acts of brutality. The oral board is used to review the information developed, assess the applicant's ability to communicate effectively, and test the applicant's responses under appropriate stress. The board frequently tried to gain some insight as to the candidate's attitudes which may come into play on the job such as overt prejudices, sensitivity to legal limitations, appropriate and inappropriate use of force, judgment, ability to take orders, and inherent sense of right and wrong. The oral board has the prerogative in most police agencies to legally reject a candidate for unsuitability, though their decisions must be documented.

The employment process for selecting police officers is quite thorough and essentially negative in character. The system works to exclude all those who do not appear to be nearly perfect candidates for the job. The positive approach of selecting those who have a higher probability of succeeding has not yet reached a level of technical feasibility for police. Though both approaches could be faulted if one were used to the exclusion of the other a synthesis of the two bears much hope for improving the system.

In order to develop a method of predicting success in police work an analysis of the components which must blend to produce a successful officer is necessary. An officer must learn a myriad of laws which govern people's behavior in our society in order to create the conditions in which people can live together in relative harmony. police trainee must also learn hundreds of methods and procedures to be relatively safe, safeguard the rights of suspects, conform to the requirements of law, and carry out the police role effectively. In order to learn these things the trainee officer must have the ability to absorb the material in written and oral form while in the training academy. The best predictor of the ability to learn is perhaps the intelligence test measuring verbal ability. On the other hand, intelligence cannot be weighted too highly due to the fact that more than a few highly intelligent and educated persons do not possess the ability to handle evolving situations which require much more common sense than intelligence. Such an individual would fail miserably as a police officer. A measure of common sense would be invaluable in selecting officers, however, a reliable assessment instrument for common sense

is not available or at least identifiable at this point in time.

Withstanding the pressures and stresses of being a police officer is another critical factor for which an assessment instrument has not been found. The ability to visually recognize a "suspicious" circumstance quickly is another. The ability to be visually and audibly observant while attending to other tasks, such as driving a patrol car may be another critical factor in effective police functioning. The ability to effectively interact with other officers, the public, and criminals both in and out of custody may be another. Some of the factors are heavily psychomotor though very little if any psychomotor testing is done in most police selection systems. Other critical factors lie in the basic psychological attributes possessed in varying degrees by all persons. The discovery of the attributes which are critical to the effective functioning of police officers and the way in which they fit together to maximize their effects is the intent of this study.

Method

Subjects

The subjects were forty applicants to a metropolitan police agency who had passed the final hurdle to become police officers and were about to enter the academy for training. Their ages ranged from 21 to 31 with the age of 23 as the median and 23.8 as the mean. The group was composed of 32 caucasians and eight minorities. Thirty-five were males, and five were females. The selection process guaranteed that all were physically well and able. None possessed overt symptoms

of serious behavioral or personality problems.

Materials

California Psychological Inventory (Gough, 1964) test booklets, manual answer sheets, and standard scoring templates were used to gather the preliminary data. A Univac 1100 computer utilizing the Statistical package for the social sciences, (SPSS) was used for data analysis via punched cards. The performance evaluations were validated and factor analyzed prior to use as criterion measures.

Procedure

On the first day of academy classes 51 newly appointed police candidates were given the California Psychological Inventory as part of their enrollment procedure. After all candidates had finished, the instruments were collected, scored, and the scale values converted to standard scores. Two years after their graduation from the police academy, performance evaluations were obtained on the 40 who were still employed by the agency and were assigned to patrol duties. The performance evaluation was composed of nine scales derived by factor analysis from quality performance statements generated by in-service officers. The officers were then rated by choosing the statement which fit the officer being rated for each scale. The 18 CPI standard scale scores from each officer who had taken the inventory two years earlier were entered into a stepwise multiple regression using their performance evaluation as the criterion measures.

The data were analyzed by means of the SPSS (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1970) computer subroutine, REGRESSION, to develop a least squares prediction equation and determine how the

scales fit together to predict performance.

Results

The highest correlation with performance was found in the Well-being scale of the CPI. The correlation of the single scale with performance was .41, significant at the .01 level. Two other scales approached significance at the .05 level, Responsibility (.29) and Self control (.28). Three others clustered just below: Achievement via independence (.24), Achievement via conformance (.23), and Tolerance (.22).

The variable entered on the first step of the multiple regression was Well-being as the highest correlation with performance. It was seen to account for approximately 17% of the variance in the performance measures. The second step included the Capacity for status scale and resulted in an increase of the multiple correlation to .45 with the percent of variance accounted reaching .21. The third scale entered was Femininity which pushed the multiple r to .47 and the r^2 to .22. The fourth scale entered was Flexibility raising the multiple correlation to .49, and the percent of variance accounted for to .24. The fifth scale was Psychological-mindedness $(r=.51, r^2=.26)$. The sixth was Communality $(r=.53, r^2=.28)$; the seventh, Achievement via independence $(r=.55, r^2=.30)$; the eighth, Sociability $(r=.57, r^2=.32)$; the ninth, Intellectual efficiency $(r=.58, r^2=.33)$; the tenth, Good impression $(r=.586, r^2=.34)$; the eleventh, Self acceptance $(r=.59, r^2=.35)$; the twelfth, Tolerance $(r=.60, r^2=.36)$; the thirteenth,

Responsibility (r=.60, r^2 =.36); the fourteenth, Socialization (r=.60, r^2 =.36); the fifteenth, Achievement via conformance (r=.60, r^2 =.36); the sixteenth, Social presence (r=.60, r^2 =.37); and the seventeenth, Self control (r=.61, r^2 =.37).

Insert Table 1 about here

The Dominance scale of the CPI was left out when the equation reached its maximum multiple correlation. The scale failed to meet the for r^2 change of .001 necessary for inclusion. The final equation was found to possess a standard error of 45.75. a multiple correlation of .61 with the performance rating, and explain 37% of the variance encountered in the performance evaluation ratings.

The form of the final equation was: Performance rating = 472.82 + 2.40Wb - 4.03Cs - .57Fe - 1.84Fx + 1.50Py - 2.30Cm + 1.23Ai + 1.42Sy +.87Ie - .86Gi - .96Sa - 1.10To + .49Re - .33So + .43Ac + .41Sp + .38Sc.

Discussion

The CPI has indicated some potential value in estimating future performance of police officers. Additionally, it has yielded insight into the characteristics of officers that influence the ratings they are given by their supervisors. A correlational analysis indicated higher rated officers had a greater sense of well-being, accepted the responsibility of their jobs well, and had a higher degree of self control. Additionally they preferred to function and achieve recognition

independently and had the initiative to keep active on their jobs and stay within the guidelines they were given. They also tended to show patience in their dealings with the public and were more accepting and non-judgemental about divergent attitudes, beliefs and viewpoints.

The description given by the composite correlations for highly rated officers appears to be the ideal officer. Such results supports the validation of the performance rating itself, and indicates that the CPI can be an effective assessment instrument. It further indicates the items are present in the scales to construct a special purpose new scale for predicting police officer performance.

The prediction equation generated from step-wise multiple regression achieved a multiple correlation higher than that usually found in police selection studies, however, due to the lack of cross validation it cannot be taken as significant. The Wherryestimate for cross validation indicates the multiple r derived from the full equation may not be significantly different from zero in the population. In point of fact the Well-being scale was the only independent variable which achieved a significant F in the equation. All the other scales were entered by the computer program as a result of their contribution to the r^2 of a minimum of .001.

The need for a valid, broad spectrum psychological assessment instrument for the selection of police officers is not diminished. The lack of sufficient sample size for cross validation is a recurrent problem, but the pressing need for a valid instrument for police service requires that the study continue. The California Psychological Inventory with its 18 scales may yet provide the answer under careful scrutiny using larger N sizes.

REFERENCES

- Afro American Patrolmen's League v. Duck, (C.A. 6, 1974).
- American Psychological Association, Standards for educational and psychological tests. Washington: Author, 1974
- Boston Chapter, NAACP, Inc. v. Beecher, (D. Mass., 1974).
- Bridgeport Guardians, Inc. v. Bridgeport Civil Service Commission, (C.A. 2, 1973).
- Castro v. Beecher, (C.A. 1, 1972).
- Chance v. Board of Examiners, (C.A. 2, 1972)
- Commonwealth of Pennsylvania, et. al. v. O'Neil, (D.C. Pa., 1972)
- Gough, H. G. Manual for the California Psychological Inventory. Palo Alto: Consulting Psychologists Press, 1964.
- Gosa v. Phelps, (D.C. Ala., 1976).
- Griggs v. Duke Power Company, (401 U.S. 424, 1971)
- Harper v. Kloster, (C.A. 4, 1973)
- Jones v. New York City Human Resources Administration, (S.D. N.Y., 1975).
- League of United Latin American Citizens v. City of Santa Ana, (D.C. Cal., 1976)
- NAACP v. Allen, (C.A. 5, 1974)
- NAACP v. Civil Service Commission of San Francisco, (D.C. N.D., Cal., 1974)
- Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., & Bent, D.H.

 Statistical package for the social sciences. New York; McGrawHill, 1970.
- Penn v. Stumpf, (N.D. Cal., 1970).

Pennsylvania v. Glickman, (W.D. Pa., 1974).

United States v. Chicago, (D.C. III., 1976).

United States y. Milwaukee, (D.C. Wi., 1975).

Vulcan Society v. Civil Service Commission, (C.A. 2, 1973).

Table 1

Step-wise Multiple Regression of CPI Standard Scale Scores and Performance
Summary Table

Step	Scale	Multiple r	r^2	r^2 change
1	Well-being (Wb)	.41	.17	.17
2	Capacity for status (Cs)	. 45	.21	.04
3	Femininity (Fe)	.47	.22	.01
4	Flexibility (Fx)	.49	. 24	.02
5	Psychological-mindedness (Py)	,51	.26	.02
6	Communality (Cm)	.53	.28	.02
7	Achievement via Independence	(Ai).55	.30	.02
8	Sociability (Sy)	.57	.32	.02
9	Intellectual efficiency (Ie)	.58	.33	.01
10	Good impression (Gi)	.586	. 34	.01
11	Self-acceptance (Sa)	.59	. 35	.01
12	Tolerance (To)	.60	.36	.01
13	Responsibility (Re)	.602	.362	.002
14	Socialization (So)	.6024	.363	.001
15	Achievement via conformance ((Ac) .603	. 364	.001
16	Social presence (Sp)	.604	. 365	.001
17	Self-control (Sc)	.605	.366	.001

APPENDIX A

CRITICAL FACTORS IN LAW ENFORCEMENT SELECTION

Critical Factors in Law Enforcement Selection Preston L. Horstman University of Oklahoma

Abstract

The selection of law enforcement officers is an extremely important task that has received little attention in the past. The police officer on the street is charged with making split-second decisions which may mean life or death to himself or citizens he has sworn to protect. Though law enforcement selection systems are extremely thorough they operate in a negative direction, excluding those persons they feel unlikely to do well. Little or no attention is placed on determining which individuals are likely to function effectively due to a lack of validated assessment instruments. The courts have forced validation of instruments in use, but further research is needed to develop and validate positive assessment instruments to explore the psychological attributes that may yield more effectively functioning police officers.

Critical Factors in Law Enforcement Selection Preston L. Horstman University of Oklahoma

Though the selection of police officers might seem on the surface to be on a par of importance with any other employee selection problem, on the level of criticality it is one of the most important employee selection decisions possible. The police officer essentially holds the lives of citizens in the palm of his hand. The decisions he must make while for all practical purposes working alone impact directly on the public's freedom and right to be secure in their persons and property. A poor decision could run the gamut from simply causing an inconvenience to the citizen to actually taking a person's life.

Nonprofessional activities engaged in by any single officer reflect negatively on his agency and all other police officers in general. Actions on the part of a single officer have frequently been responsible for the resignation of chiefs of police, grand jury investigations, total destruction of community relations programs, civil suits amounting to millions of dollars and loss of life to citizens. In no other profession is it more true than in law enforcement that we are "our brother's keeper." Those officers who ignore

their fellow officers' misdeeds invite the traumatic effects of public distrust and outrage when a scandal or a major error of judgement breaks into the news.

Although it is impossible to always make correct selection decisions a greater control over the selection process can be achieved by using scientific methods developed in the field of industrial psychology. In the past systems for police selection evolved and were relatively effective. The methods in most instances were not scientifically based and as such were doomed to defeat when challenged in discrimination suits brought about by the 1964 Civil Rights Act, as amended in 1972. Although the public sector of the work force knew they would be soon forced to use the same standards for discrimination-free selection as private industry very few agencies took the initiative to "put their house in order." Perhaps a reason for the reluctance of agencies to engage in scientific selection research was that their present system seemed to be working well, and they intended no discrimination.

The landmark Supreme Court decision of <u>Griggs</u> v. <u>Duke Power Co.</u>
very squarely addresses the issue of intent. In paragraph 15 of the
decision written by Chief Justice Burger it says

... but good intent or absence of discriminatory intent does not redeem employment procedures or testing mechanisms that operate as "built in headwinds" for minority groups and are unrelated to measuring job capability.

Some public employers have taken the path of least resistance and simply dropped whatever selection criteria that have been challenged. Unfortunately due to the interpretation the Courts and EEOC have made it

is impossible to drop enough standards to preclude challenge and still make selection decisions in any other way than the establishment of a quota system. The Equal Employment Opportunity Commission in its 1970 revised rules and regulations entitled <u>Guidelines on Employee</u> Selection Procedures, stated:

The terms "test" includes all formal, scored, quantified or standardized techniques of assessing job suitability including, in addition to the above [paper and pencil testing], specific qualifying or disqualifying personal history or background requirements, specific education or work history requirements, scored interviews, biographical information blanks, interviewers' rating scales, scored application forms, etc.

The focal point of any discrimination suit has been found to be the consequences of a selection system rather than its a priori intent. If the plaintiff is a member of a protected class under Title VII it is only necessary to show that hiring practices have put members of that protected class on the payroll in a significantly lower proportion than their incidence in the general population. If that fact can be established then the burden of proof shifts to the defense who must prove the selection system and all elements therefrom have been professionally validated as being job related. At the beginning of this decade fewer than one tenth of one percent of the police agencies in the U.S. could provide that proof.

Challenges to police department selection practices have increased even more rapidly than challenges to other organizations. Several reasons for this may be surmised. First, the police department is an accessible avenue of upward mobility for minority and disadvantaged individuals. The formal entrance requirements will usually not exclude minorities; hence more may take the entrance

tests. (Failing them . . . several people failing may file suit)

The police officer's position is also an occupational position which is highly visible to minorities; one with which they may come into contact on a daily basis. Further, the job as viewed by outsiders unfamiliar with the intricasies involved doesn't appear that demanding. The "macho" aspects of the police officer position undeniably make the position more appealing to economically and educationally deprived individuals. The respect and power the police officer position has in many communities similarly makes the position more desirable.

Court decisions concerning employment naturally have an effect upon selection practices generally, but the special requirements and responsibilities of the police role mean that those judicial decisions on police department selection standards and practices have a particularly significant impact. Thus until recently police departments' selection practices were rarely questioned, for example, physical requirements were rarely questioned. This disparity is still extant, although is increasing rapidly. This is illustrated by the permissibility of polygraph tests only for law enforcement selection in several states. The difference in standards for police and other employers makes it difficult to interpret the applicability of case law and precedents without considerable qualification. A summary of the most relevant principles will be presented herein, as well as a more detailed discussion of those cases considered to be of major import for police selection standards.

Usual Selection Systems

Although the depth of the components vary the usual selection system for police officers generally followed the below listed procedures. Several states (Florida, California, Texas, Oregon, Montana and others) have formalized portions of the procedure by publishing guidelines complete with forms. Changes in the procedure usually occur as a result of economic constraints (reduction of the process) or an administrator's personal contact with another agency and consequent integration of the newly learned procedure into the home agency's system (increasing the process or modification). The consequent inbreeding of methods and procedures has had a standardizing influence on police selection evidenced by relatively few significant departures from the norm.

Commonly the first step in the selection process is a civil service examination. Most civil service examinations are administered to groups of applicants applying for many positions within a jurisdiction. Commonly they are not much more than verbal ability intelligence tests in many cases unstandardized, and nearly all unvalidated. The tests are used to screen out those with low intelligence, but usually offer little more in-depth data.

On the applicant's first visit to the police agency's own

personnel operation he is usually given a preliminary interview to ascertain whether he violates any of the more apparent selection standards such as height, weight, education, citizenship, criminal record, etc. If deficits are found he will be immediately advised and the process terminated for his case. If he passes, the next step will probably be more testing, again most likely unvalidated, though possessing greater face validity than that seen previously in the civil service setting. At this point it is likely that all remaining paper and pencil testing will occur including psychological testing if the agency uses it. At the completion of any testing the applicant will receive a bundle of forms he must fill out and return, including a very detailed biographical data instrument usually called a Personal History Statement (PHS). Only in a small number of cases has the PHS been developed as a scorable assessment instrument, though the potential exists. Fingerprints are taken, and record checks are instituted through the FBI, the state bureau of investigation, and all cities where the applicant has resided.

The fourth phase begins when the forms are returned by the applicant. The intermediate assignment of completing the forms in some cases acts as a de-selection point as some applicants fail to complete the forms due to their length and difficulty. The background investigation begins, and a medical and polygraph examination is scheduled when the forms are returned.

The background investigation is usually the largest time consumer of the process, and is done in a variety of methods from the data returned on the PHS. Not only are references and previous

employment checked, but also secondary sources developed from those checked earlier are questioned. As much as possible is checked on a face to face basis by a background investigator with the remainder checked by phone and correspondence. Some agencies send background investigators all over the country to check sources first hand. Many of those who are unable to travel so widely rely on the cooperation of other law enforcement agencies, specifically other background investigators who frequently go out of their way to help in an investigation. Every possible source is checked during the course of an investigation including former landlords, credit bureaus, former teachers and counselors, former neighbors, employers, supervisors, and fellow workers. A thorough background investigation will usually not run less than 40 man-hours in length. That duration coupled with waiting time for a free investigator may encompass from 30 to 50% of the total processing time for an applicant.

If all has gone well, and all the successive hurdles have been negotiated the applicant's case file which may contain as much as 100-150 pages is ready for a final decision. In some cases an interview panel of police officers is routinely set where the applicant must respond to questions to test his response to stress, and determine how well he can communicate. The panel may make the final selection decision, or the recommendation may be passed to a higher authority who ultimately will decide.

If an applicant is hired he is scheduled for when he should report to the police academy for from a week to a year's training.

Though it has been recommended that a final hiring decision be

delayed until the completion of training, it in fact never works out that way. The academy in most agencies does serve as a minor selection hurdle, but more as a successive hurdle, than in conjunction with the more formal personnel process occuring before entry to the academy. Most agencies for one reason or another do not deselect anyone from the academy, but pass everyone except the infrequent person who is grossly inept and exhibits hardly any learning at all. More agencies appear, however, to be moving toward a greater role for the academy in selection as a means of offsetting a broadening of selection standards for the sake of affirmative action. These actions may in fact result in a more appropriate selection decision based on ability rather than judgement of moral, financial and other more superficial indirect indicators.

Another method used by some agencies as a tool for both selection and training is the field training officer concept. The field training officer (FTO) is for all intents and purposes an extension of the training academy to finish the job the academy began. The FTO is a specially selected and trained experienced officer who works with trainees fresh from the academy to reinforce the learning introduced at the academy and check the trainee for his ability to properly implement his knowledge. The better FTO programs have standardized checklists containing standards of performance expected of trainees so that the FTO's judgements of competency are not without a solid defensible foundation.

The FTO programs have not, however, been without their share of failures when instituted in agencies. Though the programs

have a great number of advantages they have an equal number of problems if the critical elements are not addressed properly. The first
critical element deals with the selection of the FTO. He should be
motivated to take on the task because of his own interests, and not
for any monetary reward that might be offered. In fact, those agencies who have tried to motivate officers to become FTO's through
monetary incentives have found themselves up to their ears in officers who wanted the extra money and cared little about performing
the function. Such programs are very nearly doomed to failure.

Individually, returning to the critical issue of FTO selection, the FTO should support the concepts, goals and procedures espoused by the academy. He should also be well familiar with all aspects of the training in order to avoid counterconditioning the trainee. It is a well known fact that the first partner the trainee rides with on the street has a tremendous shaping influence on the trainee, and can undo all the work of the academy within a very short period of time. The practice of controlling the influence of the first partner of the trainee is similar in concept to the approach espoused by B.F. Skinner in which he very eloquently argued that behavior is always controlled and shaped by the environment and that it is just good sense to exercise control over the contingencies to reach our goals (1971). Trainee contingency management could well be considered a figurative synonym for the function of the FTO.

The FTO program is also susceptible to sabotage from jealous supervisors. There must be a clear understanding that the FTO's primary responsibility is to the trainee and the academy. Loose

supervision is desirable during the period when the FTO has a trainee, and the supervisor should refrain from splitting the pair, or giving irrelevant or nonessential assignments to them that might disrupt the training process and not permit a valid evaluation of the trainee's potential.

At the conclusion of the field training the FTO should be able to make a valid, defensible evaluation of the applicant/trainee's ability as a police officer. All the critical performance requirements should have been trained for, demonstrated by the FTO, and performed by the trainee in at least an acceptable manner. Such training and evaluation through the FTO program over a period of not less than 20 working days should provide an optimum condition for the valid selection of police officers. Such a system, however, with proper controls as alluded to in the previous discussion is rare in police agencies. Most FTO programs operate with compromise in some of the critical areas, and therefore not at an optimum level.

These compromises illustrate a very crucial point regarding police management in general. It is extremely uncommon that a police manager would have reached that position without coming up from the ranks one step at a time from the lowest operational rank in the agency, usually patrolman. Only at the chief's position is there any significant mobility in the police field. Having come from the ranks it is unlikely that the individual was originally selected for his potential at any other position than as a patrol officer. Although there has been a tremendous number of in-service police officers enrolled in college programs since the inception of the Federally-backed

Law Enforcement Education Program (LEEP) almost all have been in the newly created Law Enforcement or Criminal Justice degree programs where ex-police officers with degrees teach present officers. Truly modern management, and higher level behavioral sciences have only a negligible part in the aforementioned programs. The number of institutions that offer an upper level behavioral science course for direct application to law enforcement can be counted on one hand. Therefore in-breeding increases, and the disciplines that can offer the most to police are neglected.

In all honesty it must be acknowledged that the effects of the present law enforcement and criminal justice programs have been very beneficial to the profession, and are responsible for the most significant positive changes ever encountered in law enforcement since the Middle Ages. Also the LEEP program has encouraged some in-service officers to get advanced degrees in areas not so closely associated with the traditional law enforcement curriculum but still having application, such as psychology, management, and computer technology. The law enforcement establishment, however, has been slow in using these individuals.

Another factor that has inhibited the integration of advanced concepts into the law enforcement arena has been the existence almost universally in law enforcement agencies of distrust for those outside of their occupational group. The paranoid distrust almost approaches a pathological level in some agencies. The phenomenon is a result of the socialization process which operates in all police agencies beginning at the time of recruitment. The drive for peer

approval and acceptance is particularly high at the time a person embarks on a new career and this need for affiliation (Gilmer, 1971) shapes behavior and consequently mental processes into patterns that are expected to enhance the chances for being accepted.

During training certain attitudes, expectations, and behavior patterns are shaped, but are relatively unstable until solidified by experience. During the recruit's first exposure to field duty his partner holds the most powerful influence in existence for shaping his attitudes and behavior. Under the high stress and anxiety of those first critical days much of the foundation for the rest of his law enforcement career is laid. Months of training at the academy can be nullified by a few minutes with his first experienced partner under the stress of confrontation and seemingly dangerous situations.

The end of a shift, laughing at "war stories" and seemingly being accepted by experienced officers may be likened to negative reinforcement, with the abrupt decrease in stress and anxiety as the offset of the aversive stimuli. The cyclical quality of the negative reinforcer day after day may in time create a "stress freak" who may seek out confrontation and stressful situations in order to get the pleasurable feelings from the release of tensions. These behaviors may subside in time, or continue to mount until the officer goes too far, and is dismissed for unprofessional behavior. Many merely adapt to the situation by learning the precise limits of how far they can go, and what specific things they must avoid doing, or getting caught at, and thus continue a deviant behavior pattern only modifying it to keep from getting caught.

In a more subdued fashion the rewards of stress reduction impact on a recruit to shape his behavior into that necessary to survive and gain peer support. As Mike Roberts, staff psychologist for the San Jose Police Department, has said,

Police officers start out thinking there are good people, cops and assholes, and the cop's job is to get the assholes off the street. Later he begins to think there are cops, very few good people, and mostly assholes and the major part of his job is to get as many assholes behind bars as he can while he covers his ass. Finally he begins to see the world as just cops and assholes and his major job is to survive.

After many years of service police officers begin to think in the terms Mike specifies, though at many different levels of internalization, mostly not as severe as he has indicated. Through experience he has learned that people are frequently not as they appear, and there are always people who hate cops for one reason or another, and are devious enough to try to appear as supporters in order to get damaging information. Then there are those who are less dangerous, though as undesirable as the others who talk of good intentions until they get what they want, then don't hesitate to publicize damaging information to further their own ambitions. A third category of undesirables is seen as the individual or company who is attracted to police only because of the federal funds that can be gleaned through LEAA grants, but have no cares at all for the welfare of the agency or the officers and attempt to do as little as possible once the funding is secured. Police officers learn through experience that examples of all three of these "troublemakers" are not uncommon and must be guarded against. The results of their work may

be seen almost daily in newspapers, magazines and the media.

The police agency that has not felt the direct effects of at least one of the three categories of "scoundrels" is rare. With this knowledge in mind there is little wonder that police agencies and their personnel develop a strong, and perhaps healthy distrust of outsiders who want to help them. As the socialization continues a very strong feeling of we-them/inside-outside may develop as Mike Roberts has so eloquently noted. That feeling may result in many of the almost paranoid behavior patterns seen and noted in police.

Under those circumstances it can be easily understood why many police agencies are extremely reluctant to bring outsiders into their midst even for the best of reasons. Particularly psychologists are seen as threatening due to their expected ability to "psych them out."

Although the trend is changing the factor of salary has had a negative effect on the employment of psychologists in police agencies. Traditionally police officers have been underpaid. As late as 1970 the average starting salary of police officers in the U.S. was less than \$500 per month. Civilian employees of police agencies have traditionally made less than police officers which has been rationalized by the fact that they need not take the risk police officers do, and therefore should not be paid as much. Even today police agencies start sworn employees almost universally as patrol officers, and higher ranking officials have all "paid their dues" as patrolmen before gaining their higher position. A psychologist coming into a police agency must generally be paid much more than a patrolman, but almost never has police experience, and is a "civilian." The trend

of hiring civilians at a higher pay grade than police officers can hardly be expected to set well with experienced police officers who have "paid their dues" and earned their position and pay grade with sacrifice and many times blood. More highly paid civilians are frequently seen as taking advantage of the agency, and being paid more than their worth as compared to a police officer. This attitude to-highly paid civilians will in time change, but for now it must be recognized that it exists.

To be maximally effective and accepted in a police agency a psychologist must "pay his dues" along side them in a patrol car at least for a time, and be willing to ride frequently to keep touch and credibility.

In summary it should be noted that as the selection system shapes the form of the individual who is interjected into the police environment, the socialization process for police recruits exerts an extremely powerful shaping influence toward producing the final product. It is unknown how many police recruits deselect themselves during the socialization process due to the pressures of the process itself rather than of the work, but it is well known that the first year to two years of the job possesses the highest attrition rate found before retirement. The socialization process should be seen as being on a par with the selection system in shaping the individual who ultimately enters professional police service, and vastly more powerful than the training process if a controlled Field Training Officer concept is not utilized.

What Makes a Good Police Officer

Police officers as a group conform to the normal distribution in the aspect of quality of performance. The greatest number cluster within one standard deviation of the mean on a conceptual measure of "quality." The "good" officers may be defined as those who fall into the area is excess of one standard deviation above the mean, and the few really excellent officers can be defined as those over two standard deviations above the mean. The best police officers share certain qualitative traits. They are very interested and involved with their jobs, and see themselves in the context of their role in a democratic society. They tend to see themselves in a service role, but are quite aware that they are the individuals the public can count on in emergencies. They know that there are times when they must make decisions quickly and act decisively in order to carry out their roles in the best possible way. They also realize they will be criticized for their right decisions as well as their wrong decisions out of the context of the environment in which they were made, and they accept that. They also know the pride and importance they feel when they've really helped someone and the feeling above all when someone thanks them sincerely for being there. They're at work every day because they want to be there, and they take pride

in their uniform and their patrol cars. They also feel shame very deeply when a cop anywhere goes bad.

Sometimes they feel sorry when they have to put someone behind bars, but they do it because they must. They also feel a pang of hurt more for the public than themselves when someone guilty of a terrible crime is turned free to do it again. They are hardened enough to go unabashed to a scene where they know they'll find bodies torn asunder, but sensitive enough to come close to crying when they find its a child. They live in a world of conflict and violence, and have accepted the fact that they may themselves at any time be the ultimate victim of unpredictable violence and a part of a bloody scene some other officer must investigate. Yet they go on confident that they can handle just about whatever comes along. They have learned not to think about what they know to be the truth - that any person can be killed no matter how sharp he may be - it just takes time and planning and someone who wants to do it, and they know they've made enough enemies doing their job.

The traits of a good police officer might well sound like a boy scout, but one that has been tempered by reality and death and frustration. Unfortunately the traits that make a good police officer are extremely difficult to assess reliably and validly. The discipline which has the most potential for doing the job, however, is psychology.

There are basically three ways of approaching assessing for these traits: clinically with a psychologist utilizing an interview, and interpreted psychological testing; with situational tests developed to elicit a range of responses which may be witnessed and explored, and discussed with a psychologist; and psychological testing with standardized broad scope paper and pencil inventories. All three alternatives have pro's and con's, but a more thorough analysis may yield the answers so badly needed.

The first alternative, the clinical approach, carries with it a very large advantage in that it allows the full use of a trained clinical psychologist who can bring all his expertise to bear on the issues, and may turn up danger signs outside of what might be uncovered in the other approaches. An additional benefit would accrue in that the psychologist involved in selection assessment would also be available knowledgably to the department to apply his expertise to other problems as may be needed.

Unfortunately the disadvantages of the clinical approach are just as great as the advantages. Clinical tests used by the psychologist by and large were almost assuredly validated on primarily caucasian hospitalized patients and as such would be vulnerable to impeachment in a court of law should their use be challenged by a minority applicant as is so common today. Secondly, judgements by the psychologist would be based in subjective estimates of probabilities for the traits or maladies identified. That type of evidence submitted in court would be an invitation for abuse of the psychologist on the witness stand by the opposing attorney. It would be expected that after cross-examination any testimony presented by the psychologist during the course of the trial would be of no use, or negatively impact on the defense of the actions of the department in denying employment to the minority member in question. As if these problems were not

enough, an additional concern is that of continuity. If the applicant volume is such to require less than a full-time psychologist a problem of inter-assessor reliability enters the question. If one is used solely it is likely the whole system will change when a new one is brought on board. If more than one is used consistently inter-assessor reliability can be increased, but again replacements may change the system making comparability difficult or impossible.

The second alternative also bears many advantages. Situational testing has the greatest opportunity to assess the response of applicants in critical situations that have been identified by practitioners. Content validity approaches the upper limits. Unless the choices of response are discreet, however, as in a multiple choice test, a rather elaborate system of categorizing and rating elicited responses is required. As the possible responses increase, the number of raters must increase proportionally in order to control for variability and bias. As the number of raters increase so does the cost of the method. The issue of who should do the rating of the elicited responses is serious. If police officers do the rating a rather large cadre of them will be needed to allow for days off, vacations, and other pressing problems. Additionally rather extensive training will be absolutely necessary to assure valid ratings. Some method for continued in-service training of the assessors must be made in order to keep inter-rater reliability high. To cover for retirements, resignations, and transfers an initial training system must be developed and offered frequently. The costs may be seen as escalating for the situational testing method.

Additionally there is a problem of maintaining the validity of the situations over time. The situations seen as highly valid at one point in time may be totally invalid with a shift of departmental emphasis, or operational methods. As such they must be periodically re-assessed, and modified, and response choices must be re-established and scaled.

Another aspect of situational testing is also of great importance. The situations and their incorporated responses must be assessed and assessable as inate and non-trainable responses, part of an individual's basic character or psycho-physiological response repertoire. Assessment based on trainable traits, qualitites or abilities is useless from a practical standpoint, and indefensible legally. For example one element of a police applicant assessment system used in Texas (Smith, 1974) deals with the understanding of police FM radio communications. The ability to understand radio transmissions is, however, a learned ability that comes after a number of hours exposure to an activated police radio with an experienced companion to decipher the more difficult receptions. Such an assessment although critical for success is learned by every trainee with very little instruction. Therefore its use as an entrance-level assessment element is inappropriate, and possibly discriminatory to protected class applicants who might never have been exposed to police radios before. Also it should be recognized that a specially developed test would require a great deal of time in operation before enough subjects could be tested and assessed for ultimate field

performance level in order to validate its use. Situational testing is therefore seen as impractical unless many restrictions and compromises are made.

The third method involves the use of commercially available self-report psychological inventories. Such testing instruments are relatively easy to administer, can be scored by a clerk, take only a small amount of time, and can readily be used as data for a statistical validity study. As the accumulated number of subjects increases more sophisticated methods of analysis may be used to ascertain many other esoteric connections to later behavior on a statistical basis. Later item analysis and factor analysis may yield new scales of great importance to law enforcement such as the probability of becoming a disciplinary case, engaging in excessive or unnecessary violence, success in working with kids, administrative ability, and others. Scales indicative of personality disorder, and other measures of mental stability may also be used and validated.

The disadvantages of using standardized psychological inventories revolve primarily around their initial inflexibility. The testing instruments contain only a discrete number of items and should be administered as a whole instrument due to the fact that standardization has occured with all items in context thus making the validity of using only the items in a subscale questionable. The existence of equivalent forms of the inventory may increase its applicability somewhat, although the problem of inflexibility still remains. With the constant addition of subjects to the data base,

however, a considerable degree of flexibility can be developed. A commercial inventory also possesses the opportunity of continued study and increase knowledge of its utility through its use by many practitioners in the same field.

Research on Personality Inventories

Regrettably, few systematic studies have been conducted to assess the validity and practicality of the use of standardized psychological inventories in police selection, although more are being conducted as legal challenges mount. An early study by Humm on the worth of the Humm-Wadsworth Temperament Scale (Humm & Humm, 1950) in predicting police performance found a correlation of .72 between an officer's predicted success rating and resignation and promotion. These reported results are misleading however as the authors treat predictions based upon a whole battery of selection tests as due to the Humm-Wadsworth Scale alone. The study has not been replicated and the Scale is rarely used by clinicians as it has proved invalid in other situations.

The most commonly used psychological tests for police were reported to be the Minnesota Multiphasic Personality Inventory (MMPI) and the Rorschach Ink Blot. The 1971 study by Grencik, Snibbe, & Montgomery found these measures to be used by 69 and 29 percent of the cities in their survey. Gottesman (1969) collected MMPI profiles on 203 applicants who had successfully passed all of the selection hurdles for an urban police department from 1966-1969 and 100 MMPI profiles from a group of non-disables (no physical or psychiatric

disabilities) war veterans to use as a "peer normal" comparison group. Gottesman then compared these sets of profiles with profiles from two other groups, a group of 89 Cincinnati police recruits reported by Mills, McDevitt, & Tonkin (1964) and the MMPI normal standardization group as reported by Dahlstrom & Welsh (1960). The police applicant group's mean profile differed significantly from the MMPI normal group profile on the F, K, Hy, Pd, Pa, Ma, and Si scales, with the greatest difference being elevated F and K scores on the applicant group profiles. Mills! group also had elevated F and K scores and differed significantly from the MMPI normal group on the same scales, plus the L scale. The similarity of profiles across two geographically distinct applicant groups led Gottesman to conclude that a "fake desirable" response set was shown by both applicant groups, which could lead to higher rejection rates than warranted. Gottesman suggested a solution would be the creation of a "peer normal" group, which would be more similar in age, marital status, education, and socioeconomic status to potential police applicant groups than the MMPI normal group.

Blum (1964) reported an unpublished study of 87 police recruits hired by a major metropolitan police force in 1956 and 1957. The recruits were administered a number of psychological, physical, and agility examinations which were later correlated with a number of job performance criteria. Results from this study indicate that the number of "exceptionally serious misconduct charges" against the officers was significantly correlated with the following MMPI scales: Sc, .47; F, .42; Pt, .40; Pa, .34; and Ma, .32. Blum felt the MMPI could be used to reject applicants who became the subjects of serious

misconduct charges, however these results should be seen as only indicative due to the large number of criteria and predictors used by Blum, his failure to cross-validate, and his failure to give significance levels.

Police officers are often accused of being authoritarian but neither the California F Scale (Adnorno, Frenkel-Brunswick, Levinson & Sanford, 1950) nor the Dogmatism Scale (Rokeach, 1960) have been proven to be very useful as predictive performance measures for law enforcement. Blum (1964) reported the F scale to be correlated only in the low twenties with misconduct charges, number of total days lost and with the number of public commendations. The F scale was also not revealed as being significantly related to police chief ratings and buddy ratings of efficiency (Bass, Karstendick, McCullough, & Pruitt, 1954).

Sentence completion blanks were used by Spencer & Nichols (1971) to predict departmental performance ratings and to identify men who failed to qualify for appointment because of unfavorable background information. Analysis of sentence completion blanks correlated .18 and .24 with performance ratings and failure to qualify for appointment, respectively (no p's given). Morman, Hankey, Heywood, & Kennedy (1965) used a measure of interpersonal style, the TAV, to predict police officer performance ratings. Morman found, however, that the major predictor of supervisory rankings and ratings was the applicants' age and previous police experience rather than the personality.

The Baehr, Furcon & Froemel (1968) and Furcon, Froemel, Franczk, & Baehr (1971) studies provide the most comprehensive

analysis of the use of psychological tests for predicting police performance, stated Heckman, Groner, Dunnette, and Johnson (1972) in their own intensive review of police officer selection. The Baehr et. al. study investigated the predictive ability of seven measures on four categories of constructs; motivation, intellectual skill, aptitude and behavior. Motivation was assessed by the Personal History Index and the Work Interest Inventory; intellectual skill measures included the Nonverbal Reasoning test, the Closure Speed test, the Closure Flexibility test, the Perceptual Speed test, and the Understanding Communication test. The Test of Social Insight, the AC Test of Creative Ability, and the CREE Questionnaire measured creative and social aptitude. Behaviorial measures used were the Temperament Comparator, the Edwards Personal Preference Schedule, the Press Test, the Behavior Inventory, the Arrow Dot Test, the Hand Test and the Maudsley Personality Inventory. The test battery was administered to two separate groups of Chicago police officers. Test performance differences according to race were also considered; the black officer group was consistently more predictable than the subgroup of white officers.

Baehr's resultant prediction equations were utilized in the follow-up Furcon et. al. study. The primary criterion measure Furcon used was paired comparison ratings, but the study also included such criteria as overall department ratings, awards and commendations, disciplinary actions, Internal Investigation Division complaints, and number of arrests, and absences. The two most stable measures were revealed to be the paired comparison and departmental ratings, and the least stable was disciplinary actions.

Furcon advised police administrators to consider using separate equations and cut off scores for black and white subgroups as the correlation between actual and predicted performance was higher for the separately developed equations than for the combined equation for the group as a whole. Further, Furcon noted that blacks had significantly more internal affairs complaints lodged against them and more disciplinary actions than whites. It is noteworthy that dispite the significant differences there was an overlap between the black and white distribution of from 85 to 90 percent.

Nine stable subgroupings of officers were observed; the differences being on dimensions of tenure and performance. These identified groupings were:

- 1) newcomers with excellent performance;
- 2) newcomers with good performance;
- 3) newcomers with poor performance;
- 4) established patrolmen with excellent performance;
- 5) established patrolmen with poor performance and disciplinary actions;
- 6) established patrolmen with conflicting ratings and general disciplinary problems;
- 7) old-timers with excellent performance;
- 8) old-timers with good performance; and
- 9) a general or basic patrolman performance measure.

The last subgroup remained after the other groups had been identified. Such a classification of police officers could be potentially valuable because it provides information that could be used to individualize selection. One might hypothetically be able to develop characteristic patterns of predictors to determine which men would only make fair newcomers, but who might potentially make excellent established patrolmen. Furcon reported that the subgroupings were remarkably stable with the only significant changes over a

three-year time period occurring in the good and poor newcomer performance groups, where arrests, awards, and performance ratings increased for the poor group, apparently as a result of more experience.

Baehr and Furcon's work, because of thorough and comprehensive approach to the problem of selection, has shed a great deal of light upon the personality factors relevant to successful police performance. Their work illustrates the problems that can be encountered in attempting to generalize from concurrent studies to predictive studies, and clearly demonstrates the need for cross-validation of predictive measures. For these reasons, it is a very significant step in attempting to establish a set of personality predictors and indicates the potential utility of using these measures in future studies. It is interesting to note, however, that to this point in time, eight years later, only a very small number of agencies have pursued the Baehr-Furcon methodology, or test instruments.

In the only study reported to replicate in any fashion the previous work of Baehr et. al. and Furcon et. al. (1968, 1971) the following statement was made regarding psychological testing:

The need for accurate information on the issue is critical. Few professions are so charged with pressures and individual responsibilities as is the police profession and the ability to cope with these stresses should be a top priority in both selection and evaluation of performance.

Although complexities of the job demand a high level of psychological wellbeing, few studies have explored the relation between performance on the job and suitable corresponding personality

patterns. Even less research has been directed toward developing selection standards beyond routine physical requirements. This inattention to the psychological fitness of officers has exacted an expensive and largely avoidable toll in two areas of importance to every police agency: monetary costs, and selection and retention of valuable personnel.

The comprehensive study dealing with 500 deputies of the Los Angeles County Sheriff's Department was reported in a 600-page document published over the signature of the Sheriff, Peter J. Pitchess. The relevant chapters were authored by (not noted in the report) Snibbe and Grencik. Five commercially available paper and pencil tests were used to collect data, and then compared to five measures of proficiency. The testing instruments were: 16PF, I-E Scale, Press Test, CREE Questionnaire, and the Personal History Index. The last three tests were also used in the Baehr, Froemel, and Furcon 1968 Chicago study.

The criterion measures were: Paired comparison ratings divided into three proficiency levels, Annual performance evaluation,
Auto accidents, commendations received, and disciplinary actions divided into none and one or more categories. The 16PF discriminated on all criterion measures, although the collapsing of scores into groups may have artificially enhanced its power. Additionally the 16PF was the only instrument that found relevant measurable differences between the three racial groups (white, black and Mexican-American), and a small difference on the age variable. Only the Personal History Index of the three tests from the Chicago battery

showed any discrimination potential, though all three were significant in the Chicago study.

The rest of the huge study delt with medical and physical fitness factors, and stress. The document contains an appendix of over 150 pages, and was conducted over a three-year period (1970-73).

Two separate 10 and 20 year predictive studies for sheriff's deputies and police in Los Angeles County were reported in 1972 (Snibbe, Azen, Montgomery, March, & Grencik). The ten-year study used 619 male police officers hired between 1947 and 1950. Ninety-five of the number completed MMPI's, Kuder Preference Record, and the Guilford-Martin Temperament Inventory as well as the Civil Service tests and biographical inquiry forms completed by the remainder of the subjects.

Criterion variables were: (a) tenure as of April, 1958; (b) preventable accident record; and (c) job performance by a special author developed form. High job performance measures were indicative of a high civil service test score (<97th percentile), high sentence completion score (<84th percentile), high weighted average for civil service interview and test (<73rd percentile), high academy rating (≤80%), and being six feet tall or taller. In a statistical comparison of high and low performers high rated officers achieved low scores on the General Activity scale on the Guilford-Martin, and scales 9 and 1 on the MMPI (Hypomania and Hypochondriasis). Additionally tall officers, those with high sentence completion scores, and those with a "promotional" background such as public relations, insurance, or real estate tended to score in the highest range.

Regarding those found to be high auto accident risks, two scales on the MMPI and Kuder Preference Record were significant.

Those possessing high scores on the MMPI scale 9, or the Kuder Social Service scale had a greater number of accidents than did those scoring low on the MMPI scale 2, or the Kuder mechanical scale.

Tenure appeared to be related primarily to high civil service scores individually, or as a composite. The results obtained, however, are only marginally useful due to their being derived from chi-square contingency tables with their inability to express interdependency of variabilities or combine factors for greater power.

The twenty-year study used the 95 individuals who had done the psychological tests upon entry. Some variables were collapsed or deleted in order to use discriminant analysis. Upon analysis seven of the significant predictors from the ten-year study carried significance through the 20-year study. The civil service written test total, and the mechanical score on the Kuder were found to be indicative of an officer's being promoted, and his age at entry and mechanical score were significantly related to his remaining in patrol duty for 20 years.

The accumulated and averaged supervisors ratings were predictive at a 67% reliability from the Kuder mechanical scores. An officer's auto accident record was predictable by scale 9 of the MMPI at a 64% reliability level. Low scores on the Guilford-Martin General Activity scale were seen to predict employment through the 20-year period with a 59% reliability. No predictors were found for on-the-job injury.

It is apparent that the personality structure of an individual is responsible for his ambitions, his drive, his tenacity, his adherence to priniciples, and a myriad of other variables which define the path he takes through life. There is no evidence for a "police personality" as such, however, it can easily be observed that there are some common predispositions in police of a very basic quality. The multitude of different kinds of individuals who do well in police work argue against any one way to succeed. There are, however, certain qualities which make an officer more prone to succeed. The ones that are operative in any agency may be subject to discussion. A prediction equation that works well for one agency may achieve but mediocre results in another. Our objective is to determine what works where, and to choose one instrument that is broad enough in scope to be applicable in many locations. Most attempts have been inconclusive but a few have had promising results.

The California Psychological Inventory

The California Psychological Inventory is a 480-item, true-false questionnaire yielding 18 standard scales predicting practical, meaningful personality characteristics (Gough, 1964). The CPI was originally validated on "normals" rather than pathological individuals, and focuses on positive personality characteristics rather than the negative. The 18 scales are: Dominance (Do); Capacity for status (Cs), measuring ambition; Sociability (Sy), estimating the degree to which a person exhibits extrovertism; Social Presence (Sp), measuring poise and cleverness; Self-Acceptance (Sa), assessing the sense of personal worth; Well-Being (Wb), appraising the degree to which the subject minimizes worries and complaints; Responsibility (Re); Socialization (So), estimating social maturity; Self-Control (Sc); Tolerance (To); Good Impression (Gi); Communality (Cm), measuring the level at which a common response pattern is present; Achievement via Conformance (Ac); Achievement via Independence (Ai); Intellectual Efficiency (Ie), estimating the value placed on intellect; Psychological-Mindedness (Py), assessing the degree to which the subject is responsive to the needs of others; Flexibility (Fx), Gough's rigidity scale scored in reverse; and Femininity (Fe).

The CPI has been repeatedly validated, and is in common usuage as a predictive instrument, a diagnostic tool, and a research personality measurement device. Gough (1966) has also developed a social maturity analysis of CPI scale values which may be valuable as a selection device for police candidates, after validation has been done.

Vingoe and Antonoff (1968) investigated the personality characteristics of good judges of others using 66 college freshmen women who judged the level of six personality variables on their peers. The CPI scores of the best judges (N=11) indicated that as a group their mean scale scores were significantly higher than the poor judges' (N=10) on two of the three scales examined. The Well-Being and Tolerance scales showed significance at the .05 and .025 levels respectively, but the Intellectual Efficiency scale scores were nonsignificantly different.

Dyer, Monson, and Van Drimmelen (1971) found a complex system of intercorrelations between age, educational level, administrative position, and CPI scores using a stratified random sample of registered nurses in Veterans Administration Hospitals (N=1018). Interactions between age, education and administrative level produced varied resultant scale deviations. Supervisors in general were shown to have higher profiles. Education tended to increase the general profile, with specific positive effects on the tolerance and flexibility scales. Age generalizations were confounded by increased educational preparation and the greater likelihood of an administrative position.

Grupp, Ramseyer, and Richardson (1968) investigated the effects of age on four CPI scales: Good Impression (Gi), Self-Acceptance (Sa), SelfControl (Sc), and Socialization (So). Using a total n of 283 subjects they found significance (.05) on three of the four scales (Gi, Sc, and So) across age. In general they found an elevation of scale values on the three until approximately age 40 when decline began.

Query (1966) demonstrated that potentially successful and unsuccessful groups of seminary students could be differentiated on the basis of CPI scores. The successful students exhibited significantly (.01, .05, .01) higher mean scores on three scales: Capacity for status, Tolerance, and Flexibility (Cs, To, Fx). The unsuccessful group possessed significantly higher scores on the Sociability and SelfAcceptance scales (Sy and Sa, .01 level).

Horstman (1973) compared CPI scores of police recruits taken on their first day in the training academy to their performance ratings one year later. Stepwise multiple regression was used to develop an equation to predict their performance rating from the CPI scales. The entry of the first variable (Ai) yielded an r of .57. With the entry of four additional variables (Cm- .64, Cs.69, Ac.78, and Py.81), the multiple correlation reached .81, explaining 66% of the variance in the sample.

These tests have not always proven to be successful predictive instruments however as Hogan (1970) discovered in his

investigation of the correlation between the CPI scales and general police office suitability. Three recruit groups were used in the study, a fall, winter and spring group. Almost half of the 18 separate scales (Do, Cs, So, Sa, Ac, Ai, Ie, Fe) were significantly related to performance predictions, with a multiple correlation of .61 for the fall group; yet only the Ie scale correlated significantly for the winter group and no scales were related highly for the spring group.

Flynn and Peterson (1972) espoused the use of step-wise multiple regression in police selection, and noted:

This technique allows us to gain insight into how the relevant predictors, taken singly and together in all possible combinations, contribute to the final outcome, prediction of performance scores on the criterion.

The Step-Wise Multiple Regression Analysis is an extremely powerful and useful technique appropriate for analysis of selection factors utilized by Police Departments. As many as five selection factors can be included in any Attempt to predict successful police candidates. The procedure can reveal factors that are not providing useful information in final selection, and can point out additional factors that might be more beneficial in efficiently selecting the best personnel.

It is suggested that there is a need to better scrutinize avaiable predictors in order to generate relevant variables that are uncorrelated with each other, and positively correlated with the predicted criterion behavior. If this is accomplished, the accuracy and efficiency of selection procedures can be significantly improved by isolating meaningful predictors and avoiding duplication. It might be noted that the use of correlated predictors for selection is a clear redundancy, since correlated measures, to a large extent, measure the same behavior.

... The technique offers the advantage of changing the analyses of data that is typically collected for the purposes of selection. The technique does not require that

new information be collected, but simply that information available for applicants be analyzed in a different and more powerful manner. Additionally, the technique offers the advantages of (1) being objective and resistant to bias, (2) compensatory and fair to all applicants, (3) realistic regarding the nature of human behavior as we know it, (4) defensible as a selection device established in a systematic manner, and (5) potentially capable of aiding in the ultimate recognition of what types of behavior directly contribute to successful personnel job performance.

Police Selection Standards and the Courts

The following narrative is a chronological overview of case law as it has evolved from discrimination suits against police agencies. If the effects of the 1964 Civil Rights Act, the 1972 amendments to the Act, and case law on discrimination were to be succinctly summarized its conceptual thrust might be condensed into two basic issues.

First, the Act and the evolving case law has pointedly required employers to conduct their personnel matters (selection, promotion, benefits, transfer, etc.) in a professional manner utilizing to the fullest all the professional expertise a well-trained industrial psychologist possesses. The utilization has been in the areas of: validation of tests used in selection, background investigations, educational requirements, physical abilities, and all other employment procedures used in the process, job assignment by ability, training for the job tasks, job analysis, performance evaluation, supervisory practices, disciplinary measures, promotion processes, and career ladders.

Second, as the law implies persons should be treated fairly disregarding race, color, religion, sex, age, and national origin. Case law has evolved substantially defining what can be

interpreted as fair, and what will be accepted by the courts operationally to meet the ambiguous standards set out in the Act.

The first significant police case on discrimination to be decided by the courts was Penn v. Stumpf decided in 1970. The case was filed under the 1870 and 1871 Civil Rights acts and was brought as a class action for Blacks and Spanish-Surnamed individuals against the City of Oakland, California. It challenged the mental ability entrance examination of the police department on the grounds it was culturally biased against non-whites. The plaintiffs established that adverse impacts on the protected classes had resulted from the use of the test thus shifting the burden of the test's validity to the defense. Unable to show empirically the test was job-related the case was decided in favor of the plaintiff and an injunction was granted against the use of the test.

Coming soon thereafter was the Supreme Court landmark case of Griggs v. Duke Power Company. As noted earlier the Griggs Case was responsible for establishing a number of precedents including the operational definitions for: ability tests, professionally developed, intended or used, and discrimination. The meaning of "ability tests" was broadened to mean any employment practice. "Professionally developed" was established to mean empirically job-related. "Intended or used" was interpreted to refer to the consequences of the use of a selection practice rather than pre-conceived intent to discriminate. "Discrimination"

was defined as adverse or disproportionate impact on a protected class. Whenever a lower percentage of minority group members than caucasians pass any part of a selection practice then that practice is said to have adverse impact, and to "discriminate."

The text of the Griggs decision noted in regard to Title VII of the Civil Rights Act:

The Act proscribes not only overt discrimination but also practices which are fair in form, but discriminatory in operation. The touchstone is business necessity. If an employment practice which operates to exclude Negroes cannot be shown to be related to job performance, the practice is prohibited.

In 1971 also the case of Allen et. al. v. City of Mobile was decided on police personnel practices. The case was filed under Title VII, and the 1866 and 1871 Civil Rights Act as a class action suit involving Blacks. The plaintiffs alledged discrimination in regard to the duty assignment, (Blacks were assigned to work in all Black communities only and only to perform certain functions), written promotional examination, monthly personal supervisory rating (service rating), and promotional rating. The court ruled against the City of Mobile on the issue of duty assignment but for the City after it was established the promotional exam was job-related, even though adverse impact was established by the plaintiffs. The court also judged the monthly service rating as non-discriminatory, though it abolished the use of the special promotional rating due to its judged "room for error."

In 1972 the case of Commonwealth of Pennsylvania et. al.

v. O'Neil was decided on the side of plaintiffs who brought a

class action suit alledging discrimination in the written examination and background investigation for the position of policeman. The basis for the suit was the 1866 Civil Rights Act.

Adverse impact was established for blacks on both elements by the plaintiffs, and the defense was unable to establish validity.

Another case in 1972 (Morrow v. Crisler) delt with the entry level aptitude test routinely given to applicants for the Mississippi Highway Patrol. This class action suit dealing with blacks was filed under the 1866 and 1871 Civil Rights Act. Adverse impact on blacks was established by the plaintiffs. The defense was unable to prove validity and the judgement was awarded to the plaintiffs. Attorney fees were awarded to the plaintiffs and an injunction against hiring or swearing in present trainees was instituted until an acceptable affirmative action plan could be submitted to the court.

Castro v. Beecher was heard in the First Circuit Court of Appeals, and was decided in 1972. The suit alledged discrimination against Blacks and Spanish-Surnamed (standing for Spanish-Surnamed denied) individuals applying for police officer positions with the Massachusetts State Civil Service Commission. Challenges were directed toward the Civil Service examination, the high school education requirement, the required swimming test, and the height requirement. The high school educational

requirement was endorsed by the court, and the plaintiffs were unable to establish adverse impact on either the height or the swimming requirements. Adverse impact however, was established for the civil service test. Validity was not established by the defense and the court mandated a new job-related test be developed according to EEOC standards before any additions could be made to the current list of eligibles. The case was officially awarded to the defense though the new test requirement was imposed.

NAACP v. Allen was decided by the Fifth Circuit Court of Appeals in 1974. The class action suit was filed under the 1871 Civil Rights Act and the 14th Amendment alledging discrimination against blacks by the entire selection process and personnel system of the Alabama Department of Public Safety (Highway Patrol). The plaintiffs established adverse impact and the defense was unable to prove validity. The court ordered the defendants to hire on a one-to-one ratio, black and white until 25% each of the trooper force and supportive personnel is black.

Scheafer v. Tannian (1974) involved alledged discrimination against women by the Detroit Police Department. A class action suit, it challenged Detroit's use of separate entrance requirements, less frequent testing of women applicants, maintenance of separate hiring lists for males and females the practice of restricting women's employment in DPD to the Womens or Childrens bureau, and separate promotion lists for males and

females. The plaintiffs allegations of adverse impact were sustained. The defense was unable to establish the validity of the practice. The court held against Detroit on all counts, and directed the city to cease and decist its discriminatory personnel practices. The court also imposed a one female to one male hiring ratio to help alleviate the past pattern of discrimination. The city was also required to promote 19 women to the rank of sergeant over the next four promotion periods.

In the 1973 case of the <u>Bridgeport Guardians</u> v. <u>Bridgeport Civil Service Commission</u> challenges against the entrance examination were upheld by the Second District Court of Appeals as discriminatory against blacks. Validity of the test was not proven and the judgement was given to the plaintiff. Additionally the promotional system was modified by the court by reducing the time in grade requirement to allow 50 to be hired minorities to compete for the promotions one year after being hired. The life of the list was also reduced.

The Shield Club, an organization composed principally of black Cleveland police officers brought civil suit against the City of Cleveland in a class action suit representing blacks and Hispanics. The plaintiffs established adverse impact on the entrance examination, sergeant exam, supervisory exam, and the awarding of seniority points for promotion. Although some content validity was established for the sergeant examination a low (.20) reliability caused the court to order the Civil Service Commission to immediately revise all test (entrance and promotion) and

establish job-relatedness as per EEOC guidelines. Seniority

points were found to be non-job-related although time-in-grade

was allowed to stand. The current lists were approved, however,

for limited use until new exams could be constructed and validated.

The City of Cleveland was sued in Afro-American Patrolmens

League v. Duck and found guilty of past discrimination against

blacks by means of non-job-related entrance examination and the

discrimination perpetrated by reason of a five-year time-in-grade

requirement before being eligible for promotion and seniority

points being added. The case was awarded to the plaintiffs.

In NAACP v. CSC of San Francisco the plaintiffs alleged racial discrimination in the use of written tests on the seniority system of the San Francisco Police Department. They established that the general aptitude test used as the entrance examination for police officers had an adverse impact by a ratio of 5 to 1, whites to minorities passing the test. The police department was shown to be composed of only 9% minority individuals while the city's population reflected 43% minority. The promotional examinations were also attacked on the grounds they were not job-related and exhibited a 3 to 1 pass rate on whites and non-whites respectively.

The defendants were unable to show job-relatedness on any of their examinations, and were enjoined from using entry-level or promotional (sergeant) exams. They were additionally ordered by the court to establish two lists of qualified candidates for hiring and promotion, one for minorities, and the other for

non-minorities, and to hire on a 3 to 2 ratio, and promote on a 1 to 1 ratio from these lists.

Murgia v. Massachusetts Board of Retirement (D.C. Mass. 1974), was filed under the Age Discrimination Act of 1967 alleging violation by the State of Massachusetts through requiring mandatory retirement at age 50 in the State Police. The court held for the plaintiff due to the fact that adequate medical screening was not only available but required for officers when they attained certain ages, therefore representing a better method of determining ability than any arbitrary age rule.

The Supreme Court in its review of the case, however, reversed the decision (Massachusetts Board of Retirement, et al. v. Murgia, 74-1044, June 25, 1976) due to its having been filed under the Fourteenth Amendment, due process. The court ruled that states have the right to set rational retirement ages for police due to their potential impact on citizens and the fact that in general functioning does decrease with age.

Cortez v. Rosen (N.D. Cal. 1975) was the first police applicant discrimination case to address the technical aspects of differential validity and compliance to EEOC guidelines. IPMA's Police Officer Al examination was validated for Santa Clara County, California with only one cut score for whites and minorities. The plaintiffs alleged there should be a different cut score for minorities and produced Dr. William Ennis from the EEOC as a witness. Dr. Ennis espoused the Thorndike definition of test fairness, but admitted there were other models, and additionally that

the EEOC guidelines didn't specifically name the Thorndike method. Defense argued the use of the Cleary model to be as appropriate and produced witnesses to the fact. The court found for the defense in that they had done as much as could be expected.

Granting seniority credit to New York policewomen who were previously the object of police department discrimination in hiring and who were discharged under the New York law mandating layoffs on the basis of "last hired, first fired" was held not to violate Title VII by the Second Circuit Court of Appeals in Acha The Second Circuit Court noted that from 1964 to 1969 v. Beame. only two examinations for the job of policewoman were given while many more were given for patrolman. One result of the past discrimination was that in June 1975, when New York City laid off 4,000 police officers, 73.5 percent of the females were discharged compared to only 23.9 percent of the males. The court clarified its rulings stating that in this case "the decision does not invalidate or alter portions of the seniority system. It merely puts the female police officers in their rightful place in it." Relief was allowed, however, limited to only those females who could show that their lack of seniority was the result of past discrimination.

Preliminary relief was granted in <u>Reed v. Lucas</u> to those challenging the hiring and promotional systems of the Wayne County Sheriff's Department for using nonvalidated tests and other non-job-related criteria. The Court found "the present promotional tests and qualifications in all probability contain

some elements which cause them to operate differentially on black and white applicants." The Court enjoined all promotions to Detective and Deputy Inspector ranks except as follows:

One out of every two persons promoted to detective and to deputy inspector must be a member of the black race. Within that framework the only modification of the present rules [CSC's] for use of the eligibility lists will be the provision that a black person on the current eligibility list may be appointed to detective or deputy inspector even though there may be a white person higher up the appropriate list at the time of the promotion. Should the percentage of blacks in either rank reach the percentage of blacks in the population of Wayne County before resolution of this suit on the merits, then the ratio shall be reduced to one black for every three whites promoted to either rank.

The remedy was occasioned in order to prevent complainants from suffering irreparable harm because of the low turnover within the Department.

and sex bias charges on the grounds that the department wasn't covered by the 1972 amendments to Title VII and that since the U.S. allegedly discriminated in its employment the equitable defense of "unclean hands" was relevant. The defendants in U.S. v. City of Milwaukee also requested dismissal since Title VII "is unconstitutionally vague because of a lack of standards." These contentions were all rejected. The court's review of the legislative history of the 1972 amendments which extended coverage of the 1964 Civil Rights Act led the court to declare "the City of Milwaukee is both a 'person' and an 'employer' within the meaning of Title VII and therefore is subject to its provisions", and that the expanded coverage "is firmly embodied in the principles of the Fourteenth Amendment."

Following the denial of motion to dismiss, interim relief was ordered by the court. Pending final determination of sex and race bias claims against the recruiting and hiring practices of the Milwaukee police and fire department, the court ordered that two Black applicants be appointed for every three White applicants to police aide and patrol officers. Five female officers were to be hired by October 1 and another five by January 5, 1976.

Testing and other selection procedures of the Santa Ana police and fire departments were found to unlawfully discriminate against Mexican-Americans in League of United Latin American
Citizens
v. The City of Santa Ana, 1976. The court found that a "height requirement constituted a substantial barrier" to the recruitment and employment of Mexican-Americans within the police and fire departments, but was not job-related. The high school education requirement was found to be valid for the police, but not the fire department.

Commenting on the plaintiff's contention that the defendant's test validation had serious flaws relating to the adequacy of the sample and protection against supervisorial bias in the ratings, the court noted the validity study was inappropriate. "This court, therefore, cannot assume that because there is a relationship between test performance and current job performance for persons with job experience that a similar relationship obtains for applicants without job experience." The decision stated that the failure of the study, which was conducted by the Selection

Consulting Center, to control for the "crucial variable" of experience "in and of itself undermines the validation claim." The court reasoned that concurrent validation studies were appropriate only if the sample of experienced employees was representative of the minority groups included in the applicant population.

vent biased supervisory ratings, the plan was changed. The Court viewed the methodology employed as "the study examined the ratings for bias, found strong evidence of bias, and then proceeded to use the biased results." The court determined that even if adverse impact had not been demonstrated, and the plaintiffs had the burden to evidence the test's lack of validity, the firefighter test would still have been found invalid. The other, older test used by police and fire department prior to 1973, had not been validated and was also found to be discriminatory. Recruitment policies were also decreed to be discriminatory. Plaintiffs were adjudged to be entitled to back pay and a preferential hiring order to be decided at a later date.

The U.S. Court of Appeals for the Sixth Circuit recently upheld the validity of hieght requirements for police officers in Smith v. Troyan, A5'5", 136 pound Black woman who was rejected as a police applicant in East Cleveland, Ohio, filed the class action charging that women were discriminated against by a city requirement that police be at least 5'8"; weight at least 150 pounds. The height requirement screened out 95 percent of the

women but only 45 percent of the men. The weight requirement screened out another four percent of otherwise eligible women.

The U.S. District Court for Northern Ohio had previously determined that both requirements discriminated against women.

The City appealed, maintaining that both requirements must be sustained if they bear a rational relationship to a legitimate state objective.

The Sixth Circuit accepted the rational support standard, but concluded that only the height requirement is valid. The court accepted the City's view that "taller police officers have a psychological advantage in effecting arrests and giving emergency aid. Weight in itself, however, is a poor predictor of fitness, the court finds." Writing for the court, Judge Pick found the weight requirement neither rationally related to physical strength nor to any psychological advantage. The court noted that other tests to determine a police applicant's strength were used.

At the District Court level prime facie evidence establishing the AGCT's discriminatory impact on Blacks taking the test was found. Evidence presented in Smith v. East Cleveland revealed that 22% of the Blacks taking the AGCT in 1973 received a raw score over a 100, while 71% of the Whites made similar scores. The discriminatory impact of the AGCT as evidenced by the disparity in test performance was lent further weight as only 12% of the department's officers were Black in a city with a population 60% Black. The City's argument centered on their positive

affirmative action efforts and the high number of Blacks hired since 1968; however the City said in their defense that the City's Civil Service Commission had been unable to obtain another examination which did not also have a discriminatory effect. The District Court's finding that the plaintiffs had made a prima facie showing of discrimination noted that most of the Black applicants had been hired since 1968 because of the 20% veteran's preference. The City was unable to demonstrate that the AGCT was job-related; further the District Court rejected the City's contention that law enforcement applicants must be screened on the basis of such "vague traits (of) general intelligence, language skills and ability to reason" as measured by the AGCT. The court expressed doubt as to whether a jobrelated, nondiscriminatory written examination had ever been developed for police applicants.

The U.S. Court of Appeals for the Sixth Circuit on the question of the discriminatory impact of the AGCT held that the "plaintiff failed to demonstrate prima facie that the test is unlawfully discriminatory" and did not reach the question as to whether or not the AGCT was job-related. The Court held that the disproportionate impact of intelligence tests in the hiring rather than in the test results themselves is the reason for invalidating general ability or intelligence exams.

The court reasoned that a showing that Blacks did not fare as well as Whites taking the AGCT, a "subtest" in the hiring process, was not sufficient to require the defendants to prove the AGCT's job-relatedness. "Carried to its logical extreme,

such a criterion would require the elimination of individual questions marked by poorer performance by a racial group, on the ground that such a question was a 'subtest' of the 'subtest'."

Judges Weick and Celebrezze joined in the opinion, which is likely to be appealed.

Quota hiring and economic sanctions were remedies deemed necessary by a U.S. District Court in <u>U.S.</u> v. <u>City of Chicago</u> to end racial and sexual bias discerned in hiring and promotions within the Chicago Police Department. U.S. District Court Judge Prentice Marshall ordered the Chicago Police Department to meet a hiring standard of 42% black and Spanish-surnamed males, 16% females and 42% other males. All Chicago's revenue-sharing funds, currently totaling \$95 million, will continue to be withheld until the Police Department implements hiring and promotion guidelines to correct racial and sexual imbalance.

The lengthy, complicated litigation was summarized in the 64-page opinion, which consolidated the numerous related cases and motions for consideration. Illustrative of the complexity of the situation is the Office of Revenue Sharing's position—is a defendant in several of the individual cases and the plaintiff in others. Judge Marshall notes that part of the delay in reaching the decision was occasioned by the wish to let "the remedy come from the parties rather than the Court." The ruling came, the decision stated, only after the court despaired of the City's producing the promised new, unisex method of selecting police officers. Doubtless "...the arrogant, contumacious refusal

by the City defendants to honor their interim hiring agreements and our order approving it..." did not help the City's case.

Discrimination against women was found in the preliminary injunction in the Department's entry, employment, assignments and promotion standards. Judge Marshall declared that the City defendants had not validated or justified the discriminatory treatment and that the defendants' conduct since the injunction has "excerbated the situation." A previously announced, but not applied, height requirement of 5'4", was not specifically included in the injunctions, but the decision's comments regarding the height standard clearly did not favor it. The height requirement was declared to "fall within the scope of the decree's general prohibition of discrimination against women, absent a persuasive showing of job-relatedness which has not been made."

The conclusions expressed in the court's earlier injunction relating to racial discrimination in employment by the Chicago Police Department were reaffirmed. Additional observations were also noted by the court relating to the selection of patrol officers and the promotion to sergeant and lieutenant by the Department. There was no challenge made of the promotions to captain's rank or the selection of command personnel.

Various statistical comparisons were examined to determine whether there was <u>prima facie</u> evidence of discrimination; most notable was the present racial profile of "83% white, 16% black and 1% Hispanic, following a 1970 patrolman examination which black applicants failed at a rate of 77%, Hispanics 70% and

whites 42%, and the 1971 examination which...blacks failed at a rate of 67%, Hispanics 68% and whites 33%." The defendant's argument that other law enforcement agencies used similar entry tests was denied by Judge Marshall, who noted that as time passed those tests were being declared invalid. He acridly added that "while the general practice in a trade or industry may be relevant to prove a standard of care, it has never, to our knowledge, been a defense to a charge of discrimination that everyone does it." Expert testimony was not sufficiently convincing to demonstrate the job-relatedness of the patrolman's examination.

Defendants neither provided substantial support for the content and use of the Department's background investigations, nor challenged preliminary findings as to the disproportionate racial impact. The decision noted that black candidates were disqualified at a rate 40% greater than white applicants, greater by 2 to 1 by "arrest record" and 3 to 1 by "negative employment record." The precise bases for disqualification were not provided as requested, and "accordingly, the injunction with respect to the use of the results of the background investigations will be made permanent."

The defendants did contest the findings of the preliminary injunction relating to 1973 sergeant's examination. Adverse impact had been established partially because "the practical success rate of whites versus blacks and Hispanics was 7.07% to 2.23% or 3 to 1."

The defense's contention that the burden of proof was not shifted to them under <u>Griggs</u> and <u>Albemarle</u> because this was a promotion test was not legally justified, particularly as the 1968, 1970, and 1971 patrolman examinations had been found to be discriminatory.

Expert testimony was the primary method of defense employed. Dr. Pounian had testified at length during the preliminary injunction hearing as to the content and concurrent validation studies which supported the examination. The Court found that "while other experts similarly testified in support of the examination, their testimony was based entirely on Pounian's; they were experts approving an expert." The Court's decision also declared it "had misgivings as to the substance of the content and concurrent validity studies; additionally it was "made clear that we had misgivings about the credibility of the testimony given with respect to the studies." The Court found it noteworthy that Dr. Pounian's testimony during the preliminary injunction hearing changed twice while he was on the stand and his counsel had sought to change it a third time after the hearing. "Nothing was done during the trial on the merits to bolster Pounian's credibility or that of his studies."

Dr. Phil Ash testified for the defendants during the trial on merits. Dr. Ash found the sergeant's exam to be content valid because the CSC's job analysis was "thorough and professional. The specification of tasks into six 'exam' categories was correct...match between the content of the job and the content

of the test was a close one." Dr. Ash found that the test's content validity met APA standards and EEOC Guidelines. Dr. Ash performed his own concurrent validity study which showed the test to be practically significant. He also found nearly identical regression equations for blacks and whites, "in his opinion, establish(ing) that the examination was not biased against blacks." Judge Marshall praised Dr. Ash's credentials and knowledge, but on important issues "certain of the opinions which Dr. Ash expressed here were at sharp variance with opinions he had recently expressed in other similar cases." This conflicting testimony, cross-examination revealed, occurred when he testified for the plaintiffs in Morrow v. Crisler and in Douglas v. Hampton concerning the appropriateness of paper and pencil tests and content validity.

The efficiency rating procedure used in validating the 1973 sergeant's exam was released from injunction, but the subjectivity of the ratings did "not enhance their value for test validation purposes." The preliminary injunction against utilization of the 1973 sergeants examination and subsequent roster was thus made permanent.

Clear prima facie evidence of discrimination as a result of the promotion examination for lieutenants was not established.

Judge Marshall remarked upon the sharply conflicting testimony for the expert witnesses,

Of course, the experts were called: Dr. Thelma Hunt for the plaintiffs, Dr. Pounian for the City defendants and Dr. John Wick of Northwestern University by stipulation for the McNamara defendants. Dr. Hunt insisted that the 1970 examination had an adverse racial impact; Drs. Pounian and Wick were just as insistent that it did not. Chi Square analyses, which show the probabilities that the pass-fail ratios were the result of chance as opposed to other factors, were computed by Dr. Hunt (1 to 8) and Dr. Pounian (1 to 5). Dr. Wick testified that neither was significant. Dr. Hunt's Chi Square ratio for promotions was 1 to 5; Dr. Pounian's 1 to 2. In Dr. Wick's judgement these computations were consuive that there was no indication of racial impact.

Despite these differences "the burden of persuasion of discrimination remained with the plaintiffs and they have failed to carry it." The lieutenants examination was thereby found acceptable.

There was reported to be over 10,000 pages of testimony during the trial, not counting the numerous briefs, depositions, appeals, and orders. While the case has yet to be completely resolved, it will certainly be cited from until all appeals are decided.

Davis v. Washington, (1976) a recent Supreme Court case, dealt with the verbal abilities entrance examination for the Washington, D.C. Metropolitan Police Department and upheld the content validity of the test as lawful. It should be noted, however, that the case was not filed under Title VII, but rather the Fifth Amendment alleging violation of due process. As such the standards applicable were less stringent.

In Officers for Justice et. al. v. Civil Service Commission of San Francisco, (1975) a class action for Asians, women, and Spanish-surnamed persons the judge agreed with the District Court's verdict in Smith v. E. Cleveland and ruled the department's 5'6" height requirement null and void due to its discriminatory

impact and lack of proof of its empirical validity. The decision also cited a previous case, <u>Hardy v. Stumpf</u> (37 Cal. App. 3d 958, 112 Cal. Rptr. 739 (1st Dist. 1974)), an Oakland height case ruling against a height standard. <u>The Officers for Justice</u> case is a good example of cases that have been lost that could have been upheld had a competent psychologist familiar with the character of police involvements been utilized earlier in the game to validate the standard.

Additionally the Officers for Justice case dealt with a new physical agility test that had been researched, designed, and put into operation a few weeks earlier. Due to the adverse impact against women and the small numbers of raters used in the validation the court ruled it was inadequate, but allowed its continued use for men, throwing out two of the subtests for women. The decision also cited Robinson v. Lorillard Corp. 444F. 2d 791, 798 (4th Cir. 1971); which declared that whenever any adverse impact is found on a selection measure that the company must seek alternative methods that do not adversely impact.

Analysis of recent Supreme Court decisions reveals an increasingly conservative pattern which may change the legal selection standards for police. Further court decisions will be necessary to ascertain the new standards, but examination of the court's most recent opinions concerning police selection standards in Smith v. Troyan(sub. nom. Smith v. East Cleveland) and Washington v. Davis indicates standards involving validation studies may not be as rigorously applied as they have been by

other courts. The Court declined to review the lower court decision in the aforementioned <u>Smith</u>, thereby affirming it. However, the Supreme Court allowed nearly two hours for oral arguments for <u>Washington</u> v. <u>Davis</u> instead of the usual 30 minutes; this was quite unusual and attested to the importance the Court had attached to the case. As both cases were decided on constitutional grounds, rather than the more stringent Title VII standards, future cases are needed to settle many questions, but Washington v. Davis is the precedent currently.

A number of states are under consent decrees from federal courts or the Justice Department to modify their selection systems into line with EEOC standards with quota standards or hiring halted until it is done. Many of these are unknown to the general public due to their not receiving the notoriety some of the court cases have generated. Sixteen states are currently affected by consent decrees including; Michigan, Maryland, Virginia, Mississippi, Alabama, and Massachusetts. Actions are currently pending in several other states such as South Carolina and New York.

Overview

The effective selection of police officers has become an issue of concern only in the last five years largely due to court challenges of standards for selection brought about as a result of the implications of Title VII of the Civil Rights Act of 1964, and its 1972 amendments which broadened its application into the public sector. While there is no question that there has been an under-representation of minorities in law enforcement, and some of the reasons for it have been the standards for selection, but the results of the challenges have been more serious than had been generally expected. They have resulted in seriously low morale in the officers, the cessation of many good officer selection mechanisms and an unnecessary worsening of police-minority relations. The standards were not dropped due to the fact they were ineffective, but rather because empirical evidence had not been generated by police management.

The fact the police management has been short-sighted in failing to develop the data to support their selection systems cannot be argued, but the fact is that most police managers have

had only marginal training in management techniques and most times none in the applicable areas of psychology. Throughout their socialization into the police role they have learned to be reactive rather than proactive. They have not had the training necessary to understand the concepts of validation much less to manage these activities being carried out.

The selection of police officers is a critical task. False positive errors (Type I) may in some instances actually spell the difference between life and death for a police officer or a citizen. The attributes which may make the difference are, however, difficult to define in terms of measurable constructs. A police officer holds the awesome power at his discretion to revoke at least temporarily a citizen's freedom, and with his everpresent sidearm to take human life if he chooses to do so. Although there are guidelines to specify his behavior under given conditions almost every police officer can exercise his discretion to take freedom and life without restraint if he can later justify his behavior. In any case if he cannot later justify his behavior the results are irreversible. Although this awesome power has been long recognized not until recently has there been much concerted effort on anyone's part to treat the selection of police officers with the care and expertise it deserves.

Oddly enough the recent increase in police selection studies has been done to open the selection process to more persons rather than to restrict it by eliminating those who have a

high potential of becoming a false positive. Presently pressures are being exerted by the Equal Employment Opportunities Commission (EEOC) and the Justice Department to decrease the false negatives in terms of protected classes. The effect without a great deal of professional study is logically the increase of false positives, the very ones who are more likely to act inappropriately and exact a high cost for his actions.

Developing a selection system for police is not easy. The police officer in our society is an accumulation of incongruencies. The expectations of the public whom he serves, and his own viewpoint of himself are much like a knight in shining armor. Project STAR (Smith, 1974), a recent in-depth study on the role of six elements of the criminal justice system, notes that public perception and police self-perception is a unique combination of everything good, coupled with the worst situations imaginable. The public has an idealized image of the police officer as the all-American ideal but on the other side of the coin recognize that he must be intimately involved with the worst elements of our society, and must show some of the most incriminating traits in himself in order to be effective. He is seen as the boy next door with all the goodness that can be in one person, helping kids and senior citizens, but also playing John Wayne in the gutters mingling with hoods, prostitutes, pimps, and all the other stereotypic undesirables on a day-to-day basis. The police officer himself holds similar views. However, after many years of service,

particularly if he has worked in vice, a cynicism pervades his viewpoint as he believes more and more that everything in the world is crooked, ugly, and unfair. He soon realizes there is no such thing as justice, the thing to which he has devoted his life. The results of this realization is shown by the extraordinary attrition rate increase at 3 years service. The divorce rate may also be an indication though other related factors are more directly involved. Peaks in attrition are generally found at 6 months to 1 year, 1-1/2 to 2 years, 3 years, and 5 years service.

In order for a police officer to be maximally effective over a significant period of time he must resist the tendency to become cynical, retain his ideals though they may be tempered with reality, and keep a focus on his role in society and for society.

The socialization of a new recruit into the police agency progresses similarly to any other work socialization with one exception: depth. A whole philosophical role and life style is built complete with value system during the first year and a half of service. The cognitive dissonance created by this profound shift in life values is obviously a large factor in the early attrition phenomenon. After about 2 years on the job a police officer begins to view all persons except his peers as "potential criminals" instead of the population he serves. His pattern of friendship has shifted by 11/2 to 2 years to a friendship sphere composed almost entirely of police. Another profound, but oft overlooked element of perception is in dealing with other elements of the criminal justice system. Frequently all the other elements are perceived as working against the police officer's goal of protecting society

from criminals. Frequently the police officer will see himself and his peers as the only ones interested in justice. After the frustrations of the job have accumulated sufficiently the resistance to corruption begins to deteriorate.

Every police officer is confronted with temptation to be like everyone else, crooked, many times during each day, and after a breakdown occurs broadening steps become easier and more frequent. The true story of <u>Serpico</u> illustrates a police agency rampant with that attitude.

Police management must be aware of these tendencies and guard against them. Not only does he need all the help he can get from the selection system in sending him officers who have a high potential for doing well, but also he needs their help in deselecting those persons who have a high potential for going bad.

The best bet for the police manager is the use of a competent police psychologist who can work toward developing the selection systems and measures he needs. Additionally the psychologist is needed to provide assistance through counseling officers who are having problems in their socialization or need help in deciding what they ought to do when confronted with temptation.

The answer to the first need, valid and useful selection systems, may lie in standardized psychological testing to fill in the gaps left in the presently existing systems. The research proposed as a part of this review is aimed at testing the hypothesis.

Perhaps the answer to the second is a psychologist either on staff or close at hand who knows the intricacies of police and is able to deal with the problem sensitively as one who is a part of them instead of apart from them. Proper preparatory work in the academy, and understanding intervention later may offer the greatest hope of managing the problem rather than ignoring it.

References

- Acha v. Beame (C.A. 2, 1976).
- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D.J., & Sanford, R.N. The authoritarian personality. New York: Harper, 1950.
- Afro-American Patrolmen's League v. Duck, 366 F. Supp. 1095 (N.D. Ohio, 1973).
- Albemarle Paper Co. v. Moody, 474 F. 2d. 134 (C.A. 4, 1973), Supreme Court 1976.
- Allen et. al. v. City of Mobile, 4 FEP 1290 (C.A. Ala., 1971)
- Avery, R.D., & Gordon, M.E. Final report: Validation of test instruments for the identification of successful and unsuccessful police patrol officers. Unpublished manuscript, University of Tennessee, Knoxville, dated January 31, 1975.
- Azen, S.P., Snibbe, H.M., & Montgomery, H.R. A longitudinal predictive study of success and performance of law enforcement officers. Journal of Applied Psychology, 1973, 57, 190192.
- Baehr, M.E., Furcon, J.E., & Froemel, E.C. Psychological assessment of patrolman qualifications in relation to field performance. U.S. Government Printing Office, LEAA Project No. 0046, 1968.
- Bass, B.M., Karstendick, B., McCullough, G., & Pruitt, K.C. Validity information exchange, no. 7024, Personnel Psychology, 1954, 17, 159-160.
- Blum, R.H. Police selection. Springfield, Illinois: Charles C. Thomas, 1964.
- Bridgeport Guardians v. Bridgeport & Civil Service Commission,
 (D.C. Conn. 1973), aff'd 497 F. 2d. 1113 (C.A. 2, 1974).

- Castro v. Beecher, 459 F. 2d. 725 (C.A. 1, 1972).
- Commonwealth of Pennsylvania et. al. v. O'Neil, (5EPD 8448).
- Danlstrom, W.G., & Welsh, G.S. An mmpi handbook: A guide to use in clinical practice and research. Minneapolis: University of Minnesota Press, 1960.
- Dyer, E.D., Monson, M.A., & Van Drimmelen, J.B. Do age, education, and Administrative position reflect in CPI scores? Proceedings of the Annual Convention of the American Psychological Association, 1971, 6, 473-474.
- Flynn, J.T., & Peterson, M. The use of regression analysis in police patrolman selection. <u>Journal of Criminal Law</u>, Criminology & Police Science, 1972, 63, 564-569.
- Furcon, J.E., Froemel, E.C., Franczak, R.G., & Baehr, M.E. A lonongitudinal study of psychological test predictors and
 assessments of patrolman field performance. Chicago:
 Industrial Relations Center, University of Chicago, 1971.
- Gavin, J.F., & Hamilton, J.W. Selecting police using assessment center methodology. <u>Journal of Police Science and Administration</u>, 1975, 3, 166-176.
- Gilmer, B. Von H., <u>Industrial and organizational psychology</u>. New York: McGraw-Hill, 1971.
- Gottesman, J. Personality patterns of urban police applicants as measured by the MMPI. Sept., 1969.
- Gough, H.G. Manual for the California Psychological Inventory.
 Palo Alto: Consulting Psychologists Press, 1964.
- Gough, H.G. Appraisal of social maturity by means of the CPI.

 Journal of Abnormal Psychology, 1966, 71, 189-195.
- Grencik, J., Snibbe, H., & Montgomery, H. Physiological fitness standards research project. LEAA Grant no. NI-70-042, Interim Report, June, 1971.
- Griggs v. Duke Power Company 401 U.S. 424 (1971).
- Grupp, S., Ramseyer, G., & Richardson, J. The effect of age on four scales of the California Psychological Inventory. Journal of General Psychology, 1968, 78, 183-187.
- Gynther, M.D. White norms and black MMPIs: A prescription for discrimination? Psychological Bulletin, 1972, 78, 386-402.

- Heckman, R.W., Groner, D.M., Dunnette, M.D., & Johnson, P.D.

 Development of psychiatric standards for police selection.

 Minneapolis: Personnel Decisions Inc., 1972.
- Hogan, R. A study of police effectiveness. The Experimental Publication System, Issue No. 6, 195c, 1970.
- Hogan, R. Personality characteristics of highly rated policemen. Personnel Psychology, 1971, 24, 679-686.
- Hogan, R., & Kurtines, W. Personological correlates of police effectiveness. Journal of Psychology, 1975, 9, 289-295.
- Hooke, J.F., & Krauss, H.H. Personality characteristics of successful police sergeant candidates. <u>Journal of Criminal</u> Law, Criminology and Police Science, 62, 1971, 104-106.
- League of United Latin American Citizens v. City of Santa Ana, (D.C. Cal.) 1976).
- Lefkowitz, J. Psychological attributes of policemen: A review of research and opinion. Journal of Social Issues, 31, 3-26.
- Mandel, K. The predictive validity of on-the-job performance of policemen from recruitment selection information. Dissertation Abstracts International, 1970, 31, 2996.
- Massachusetts Board of Retirement et. al. v. Murgia, 1976, Supreme Court, 74-1044.
- McDonough, L.B., & Monahan, J. The quality control of community caretakers: A study of mental health screening in a sheriff's department. Community Mental Health Journal, 1975, 11, 33-43.
- Mills, R.B., McDevitt, R.J., & Tonkin, S. Selection of metropolitan police officers. Paper presented at the American Psychological Association Convention, Los Angeles, California, 1964.
- Mills, R.B. Use of diagnostic small groups in police recruit selection and training. <u>Journal of Criminal Law, Criminology</u> & Police Science, 1969, 60, 238-241.
- Montgomery, H.R., Azen, S.P., & Earle, H.H. Predictors of resignation and performance. Unpublished manuscript, 1972, LEAA Grant No. 72-DF-09-0005.
- Morman, R.R., Hankey, R.O., Heywood, H., & Kennedy, P.K. Multiple relationships of tav selection system predictors to state traffic officer performance. Police, 1965, 41(6).

Morrow v. Crisler, (C.A. Miss., 1972).

· 1880年 - 1775年 1886年 1887年 1877年 1877年 1877年 1877年 1878年 1

- Morrow v. Dillard, (D.C. So. D. Miss., 1974) cert. denied (C. A. 5, 1974)
- Murphy, J.J. Current practices in the use of psychological testing by police agencies. <u>Journal of Criminal Law, Criminology</u> & Police Science, 1972, 63, 570-576.
- NAACP v. Allen, 493 F. 2d. 614 (C.A. 5, 1974).
- Penn V. Stumpf (N.D. Cal., 1970).
- Peterson, M. Guidelines for psychologists in police consultation.

 International Mental Health Research Newsletter, 1974,

 16, 5-7.
- Query, W.T. CPI factors and success of seminary students. Psychology Reports, 1966, 18, 655-666.
- Rokeach, M. The open and closed mind. New York: Basic Books, 1960.
- Schaefer v. Tannian, (E.D. Mich., 1974).
- Shield Club v. City of Cleveland, (N.C. Ohio, 1974).
- Skinner, B.F., Beyond freedom and dignity. New York: Knopf, 1971.
- Smith, C.P. Roles, tasks, and performance objectives: Project STAR.

 Marina Del Rey: American Justice Institute, 1974.
- Smith, R.E. Personal communication regarding the Fort Worth recruit assessment center technique. May, 1974.
- Smith V. Troyan (C.A. Ohio, 1976) sub nom Smith v. E. Cleveland.
- Spencer, G., & Nichols, R. A study of Chicago police recruits.

 Validation of selection procedures. The Police Chief,
 1971, 50-55.
- Symonds, M. Emotional hazards of policework. American Journal of Psychoanalysis, 1970, 30, 155-160.
- United States v. City of Chicago (C.A. III., 1976)
- Vingoe, F.J., & Antonoff, S.R. Personality characteristics of good judges of others. <u>Journal of Counseling Psychology</u>, 1968, 15, 91-93.
- Washington v. Davis, (Supreme Court, 1976).