

A STUDY OF THE RELATIONSHIP BETWEEN  
COLLEGE EDUCATION AND POLICE PERFORMANCE IN  
THE BALTIMORE, MARYLAND POLICE DEPARTMENT

by

James C. Finnigan

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Adviser

*Jack A Foster*

Date

*20 Feb 75*

Dean of Graduate School

*John Lund*

Date

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## ABSTRACT

A STUDY OF THE RELATIONSHIP BETWEEN  
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The purpose of this research is to determine what relationship exists between higher education and performance ratings for police. An Ex-Post Facto design utilizing performance evaluations from the personnel files of the Baltimore Police Department is the basis of this study.

Two groups were selected for study. The first consisted of all police agents hired by the Baltimore Police Department since the Police Agent Program's inception in October of 1969. The second group consisted of a random sample of police officers proportionately drawn from the academy classes attended by the agents. All police agents hold a college degree of some type and, in addition, have completed the required sixteen-week academy training program. All police officers have varying degrees of education (high school or above) and they too have completed the required academy training. Agents were compared to the officer sample on twenty-three traits identified in the performance evaluation instrument. Multivariate analysis was used to determine if the original relationship between formal education and performance evaluations would hold when other variables were controlled.

Agents consistently received higher performance ratings than officers with only a high school education. The observed relationship between agents and officers was not affected by age, military service, race or I.Q. Although age was not found to be a significant factor in the performance rating differential between the agent and officer group, it was found significant within the two groups. Younger agents tend to receive higher performance ratings than older agents; but older officers receive higher performance ratings than younger officers.

Military service may not be as dependable an indicator of performance as is usually thought. Non-military agents score higher on several items than their cohorts with military service and non-military experienced officers are rated higher on a number of items when compared to police officers with military service. It would seem any broad generalizations that military service is an absolute attribute to police service might be suspect.

There is a general tendency for white agents to receive higher ratings than black agents; however, conclusions concerning race, when applied to agents, must be qualified due to the small number of black agents. The problem of small samples did not exist in the officer category. Data indicated black officers are consistently given higher performance ratings than white officers.

The extraneous variable of I.Q. was found not to be significant when agents and officers were compared; however, like age, it does have an effect within the agent and officer groups. Both agents and officers with higher I.Q.'s tend to receive higher ratings when

compared with their peers; however, the items on which the higher ratings are received are not the same for both groups.

Agents with criminal justice degrees did not receive significantly better ratings than social science, business or other degree holders; but when criminal justice majors were excluded, social science degree holders were rated higher than either business or other type degree holders.

provided by Major Len Rowlett, Personnel Division, Baltimore Police Department and Sergeant Douglas G. Coster, College Graduate Coordinator, Baltimore Police Department, Baltimore, Maryland, is sincerely appreciated. For without their help this study would not have been possible.

And, to the numerous unnamed participants in this research, I am also grateful.

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CHAPTER I

STATEMENT OF PROBLEM

In America, August Vollmer is generally credited with identifying the need for increased training and education of police. Convinced the principal problem in policing was inefficiency caused by ignorance, he initiated the first formal in-service police training school in 1908 at Berkeley, California.<sup>1</sup> It was also Vollmer's idea to tie education and training together by letting the police department train the officer and the university educate him--thus eliminating duplication.<sup>2</sup> However, it was not until the 1930's that formalized police training programs began to gain wide acceptance. State Police organizations and the Federal Bureau of Investigation, along with several educational institutions such as the Southern Police Institute at the University of Louisville and Northwestern University Traffic Institute are credited with increasing the acceptance of formal training.<sup>3</sup>

The historically low level of police training/education must of necessity be put in a time frame for more complete understanding. As police training increased, so did entrance requirements. Many civil service commissions during the period immediately preceding

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<sup>1</sup>Allen Z. Gammage, Police Training in the United States (Springfield, Illinois: Charles C. Thomas, 1963), p. 6.

<sup>2</sup>Ibid., p. 61.

<sup>3</sup>Institute of Government Research and Service, Report to the Ohio Board of Regents, Police Education and Training in Ohio (Kent, Ohio: Department of Political Science, Kent State University, 1968), p. 17.

World War II began requiring a high school education for entrance into police service. It should also be noted that a high school education prior to the second world war was an above average education. However, over the years these educational standards have failed to keep pace with technological advances and social problems as well as general public education; thus police departments that once employed only individuals with an above average education were now employing persons with educational levels lower than that of other human services personnel.

Although there has been a historical trend toward improvement in both the education and training of police, the importance of police training and education was not publicly stressed until publication of the Wickersham Commission Report in 1931. The need for intensive and professional police training was again stressed in the President's Crime Commission Report in 1967. The basic idea in both reports was to make "better" police through better education and training. Pace, Stinchcomb and Stiles contend that the ultimate success of any training and education program is the degree to which it improves the competency of the personnel.<sup>4</sup> Mooney asserts the quality of police service will not significantly improve until higher education requirements are established for all personnel.<sup>5</sup>

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<sup>4</sup>Denny F. Pace, James D. Stinchcomb, and Jimmie C. Stiles, Law Enforcement Training and the Community College: Alternatives for Affiliation (Washington, D.C.: American Association of Junior Colleges, 1970), p. 21.

<sup>5</sup>William Mooney, Distinction Between Training and Education, selected presentations from the 1970 Conference of Law Enforcement Education, Jacksonville, Fla., Feb. 1970 (Washington, D.C.: Law Enforcement Assistance Administration, Department of Justice, 1970), p. 3.



The idea of making the police more competent raises the question of what method should be utilized in improving police competency. The President's Commission on Law Enforcement and Administration of Justice recommended that two years of college be established as the minimum educational requirement for police service. The Commission also recommended that a baccalaureate degree be required of all administering personnel. The strong emphasis on the value of higher education seemed grounded in the belief that a liberal education was required if police were to escape the rigid conservatism that seemed to characterize police thinking in the 1960's. The Commission sensed that facistic trends rising out of confrontations between police and citizens would further alienate the two. The Commission urged a more liberal education policy in the hope that such a trend might be turned away.<sup>6</sup>

The Commission also urged more and better pre-service and in-service training be given to police. Although there were notable exceptions, the low level of competence in police service seemed to the Commission to peril its effectiveness. More intensive training of recruits was urged as well as continuing education and training of those already in police service.<sup>7</sup> Clearly, the concern of the Commission here was over the level of competence of police personnel to do the complex tasks of law enforcement.

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<sup>6</sup>The President's Commission on Law Enforcement and Administration of Justice, The Challenge of Crime in a Free Society (Washington, D.C.: U.S. Government Printing Office, 1967), p. 107.

<sup>7</sup>Ibid., pp. 112-113.

Thus, in the 1960's there was strong emphasis upon both training and education of police--but for different reasons. While the Commission frequently urged a closer relationship between police training and higher education, it did not recommend a merging of the two. With the passage of the Law Enforcement Assistance Act in 1964, Congress authorized the President to grant money to institutions of higher education for the purpose of establishing programs in technical education for police. By 1970 there were some 500 such academic programs established in the United States; and by 1974 this number had risen to more than 700. However, nowhere was the role of technical education clearly defined vis-a-vis either the liberal education concept or police training that the President's Commission had in mind.

Technical education became a curious mixture of both liberal education and job training. It is common to find "skills" type courses (e.g. crime investigation; report writing; accident investigation; criminalistics; etc.) in the typical community or technical college curriculum. Many of these courses deal with materials traditionally handled in the police academy. The curriculum also contains an element of liberal education that includes courses in the behavioral and social sciences.

The point here is that technical education is not necessarily what the Commission had in mind, and it has not on the whole been accepted by police administrators as appropriate preparation for police service. Generally, graduates of college technical education programs are still required to complete all elements of the basic recruit training program of a police academy.

Another interesting development is the granting of college credit for some components of training academy curricula. Many major cities have expanded their recruit training programs to include such subjects as psychology, sociology, race relations, and political science. It is not uncommon for these non-technical subjects to be taught by college instructors or even be taken on the college campus as a regular college course. This is also a curious mixture of higher education and basic training.

Although there might appear to be a marriage in the making between higher education and the training academy, this is far from the case. In recent years, the emphasis upon higher education has come in for sharp criticism. The value of higher education is yet to be demonstrated, notwithstanding the much heralded development of technical education programs at colleges and universities throughout the country.

It is precisely because of the continuing police education controversy this research was undertaken. If police officers have become more expert through education, this expertise should be reflected in their overall job performance. The purpose of this study is to examine the effect of higher education on the performance of Baltimore police officers.

## CHAPTER II

## REVIEW OF LITERATURE

Research on the impact of higher education on police performance has been scant. There have been some surveys done on attitudes toward education among police and police administrators, but little research on how education relates to job competence.

In a survey reported by Tenney only 11 of 120 respondents felt education had benefited them in their police service. Their comments indicated a lack of promotional incentives based on college work and the use of seniority as the only criteria for advancement.<sup>8</sup>

In 1968 an International Association of Chiefs of Police survey polled 239 police chiefs in U.S. cities ranging in size from 25,000 to 1,000,000 in an attempt to gain some insight into their attitude toward police education. Thirty-five percent of the respondents felt patrolmen should be required to have no more education than high school. Only fifteen percent indicated four years of college as a requirement. There does, however, appear to be a belief that as responsibility increases, education should parallel the increase. For example, sixty-seven percent of the chiefs felt a chief should have four years of college while only fifteen percent indicated high school was sufficient.

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<sup>8</sup> Charles W. Tenney, Jr., Higher Education Programs in Law Enforcement and Criminal Justice (Washington, D.C.: U.S. Government Printing office, 1971), p. 62.

Twenty-four percent disagreed with the President's Commission recommendation that all police should have a baccalaureate degree.<sup>9</sup>

In 1969 the I.A.C.P. published Police and their Opinions, a nationwide survey of 4000 police officers at all occupation levels-- patrolmen, juvenile officers, detectives, etc. In one question, although semantics may have played some part, only thirty-eight percent of the officers agreed with a statement, "The best officers generally have more education." It was noted that the reasoning behind those who favor higher education in law enforcement seems to lie elsewhere than simply improved job performance.<sup>10</sup>

It would seem obvious there is some lack of recognition of the value of higher education among police themselves. Some of the reasons behind this could be an absence of clearly defined goals and philosophy, or lack of validation that higher education can supply the talent or that it can do so more efficiently than other means.

James Holzman, former sheriff of Multnomath County, Oregon, who long required a bachelors degree for appointment, was disappointed with the program. He indicated the requirements of the job are emotional stability, intellectual honesty, intelligence and physical capacity; adding a college degree is no guarantee that its possessor has any of these talents.<sup>11</sup>

Another disenchanted figure is Jerry V. Wilson, formerly Chief of Police, Washington, D.C. who indicated, "The unconditional requirement

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<sup>9</sup>Ibid., p. 87.

<sup>10</sup>Ibid., p. 88

<sup>11</sup>Ibid., p. 62.

of a college education as a prerequisite for appointment to a police force or for advancement to a higher position is not a sensible policy for a large city police department." <sup>12</sup>

The "go to college" phenomenon which has seized our country has been extended to the field of law enforcement; but it is supported by little, if any, documentation other than the obvious raising of the educational level of individuals in the field.

#### Higher Education and Performance of Police

In a study reported in the Journal of Criminal Law, Criminology and Police Science dealing with authoritarianism of police, the data indicated college student police officers are significantly less authoritarian than non-college-educated officers, and also less authoritarian than college students in other fields. <sup>13</sup>

Raymond Witte, Director of Evening Division of Loyola University of New Orleans, reported on an experiment conducted on an anonymous police department in which college-educated officers were matched with officers having less education. After a six-month period, the data indicated the college people had higher morale, less time off and responded to calls faster than their colleagues with less education. <sup>14</sup>

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<sup>12</sup>Editorial, Criminal Justice News Letter, (Paramus, N. J.), Vol. 2, No. 1, Jan. 11, 1971, p. 3.

<sup>13</sup>Alexander Smith, et al. "Authoritarianism in Police College Students and Non-Police College Students." Journal of Criminal Law, Criminology and Police Science, Vol. 59, 3 (Sept. 1968), 443.

<sup>14</sup>Raymond P. Witte, "The Dumb Cop." Police Chief, Jan. 1969, pp. 37-8.

The 1972 Rand Corporation Study of the New York City Police Department revealed men with at least one year of college education performed at a higher level than non-college officers, advancing through Civil Service promotion and receiving fewer civilian complaints than average. The men who obtained college degrees, either before or after appointment, exhibited even better performance. The study further indicated, that generally, the older more educated officer received fewer civilian complaints than younger less educated officers.<sup>15</sup> These results are similar to the Chicago Police Psychological Adjustment Study which tends to indicate the highest rated group of tenured officers were those who had higher levels of education.<sup>16</sup>

David Patrick Geary, former Chief of Police in Ventura, California, instituted a four-year college degree requirement for police applicants in 1966. In a survey published in the Police Chief Geary stated his college-educated officers had fewer personnel complaints and a lower rate of personnel turnover while the city experienced a lower crime rate.<sup>17</sup>

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<sup>15</sup>Bernard Cohen and Jan Claiken, Police Background Characteristics and Performance, Report to the National Institute of Law Enforcement and Criminal Justice, New York, N. Y., August, 1972 (New York: The New York City Rand Institute, 1972), pp. 73-6.

<sup>16</sup>Melany E. Baehr, John E. Furcon and Ernest C. Froemel, Psychological Assessment of Patrolmen Qualifications in Relation to Field Performance, Report to the Office of Law Enforcement Assistance, U.S. Department of Justice, Chicago, Ill., Nov. 1968 (Washington, D.C.: U.S. Government Printing Office, 1968), p. 119.

<sup>17</sup>David Patrick Geary, "College Educated Cops, Three Years Later," Police Chief, August, 1970, pp. 59-62.

The National Advisory Commission on Criminal Justice Standards and Goals articulated the desirability of hiring college-educated police. They indicated the need for police officers who are intelligent, articulate, mature and knowledgeable about social and political conditions. The need is apparent due to essential tasks which include social control, in a period of increasing social turmoil, preservation of constitutional guarantees and exercise of the broadest range of discretion in situations involving life and death decisions. The place to find these people is on the college and university campus.<sup>18</sup>

#### Evaluation of Police Performance

Although there does seem to be a slight trend to hire educated people in the police field, the job performance evaluation of all police including those with college education poses a problem. Performance evaluation, one of the newer tools in police agencies, is certainly one of the most controversial issues in personnel management.<sup>19</sup>

Generally stated, the objectives of the evaluation process can be reduced to three major types. The first serves as a base for pay increases, promotions, demotions, transfers or disciplinary actions. Secondly, it may be used for improving the individual employee's performance, by pointing out strong or weak points, or identifying

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<sup>18</sup> National Advisory Commission on Criminal Justice Standards and Goals, Police, Law Enforcement Assistance Administration, U.S. Department of Justice, Washington, D.C.: U.S. Government Printing Office, 1973, p. 370.

<sup>19</sup> O. W. Wilson and Ray Clinton McClaren, Police Administration (New York: McGraw-Hill, 1972), p. 273.



training and/or experience needs. Lastly, performance evaluations may be used for research in the evaluation of training or testing programs.<sup>20</sup>

While types of rating systems are numerous, they generally take one of three approaches in their evaluation scheme. The first approach deals with job-oriented traits that can be easily identified and recorded, such as production figures, quantity produced, or quality of work habits. The second is persons-or group-oriented, and rates on inferred traits such as personal relations, courage, adaptability, etc. The third approach is promotion-oriented and deals with inferred traits such as leadership, economy in management, etc. This last approach is used to identify those who are deserving of or are likely to succeed if promoted.<sup>21</sup>

In an attempt to accomplish one or more of the approaches, numerous forms have appeared; however, the majority of evaluation systems can be categorized into one or a combination of the following:

Graphic Rating Scales The rater indicates by a mark at a point along a graduated high - low line the degree of the particular quality or trait possessed by the person being rated.

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<sup>20</sup>Lyle Knowles and Joseph C. DeLadurantey, "Performance Evaluation," Journal of Police Science and Administration, 2-1 (March, 1974), p. 29.

<sup>21</sup>David E. Balch, "Performance Rating Systems - Suggestions for the Police," Journal of Police Science and Administration, 2-1 (March, 1974), p. 40.

Check List or Probst Plan The probst check list utilizes a set of seven forms containing approximately 100 modes of behavior or characteristics which are considered objectively observable for each class of employee. The raters, usually three in number, check only those items observed. The rating is to determine whether the person rated does them (the behaviors) or how well he does them. The strongest objections to these rating systems usually arise from the use of predetermined weights or numerical scores.

Checklist/Graphic This system is a combination of the above rating systems and usually includes both personality traits and observed behavior. It attempts to combine the good points of each.

Narrative or Free Written Essay Narrative systems utilize written descriptions of the subject being rated. It has been generally found to be time consuming, failing in its coverage of necessary points and completely inappropriate for research; however, it has some value in identifying low performers in certain activities, if all other conditions are equal.

Paired Choice, Rank Order Techniques or Man-to-Man This system compares one individual with others who hold similar ranks or positions and a judgment is made who is best. The basic problem is, as the number of individuals rated increases, the number of judgments are increased by the exponential function of that number. For example, if two people are compared, only one judgment is needed; however, if six people are compared, fifteen judgments are necessary.

Forced Distribution or Order of Merit In this system usually two traits, job performance and promotability, are measured. The system uses a normal curve which may produce unfairness - if in fact all persons are average or above. In other words some persons must be rated at the bottom regardless of whether their performance is good or bad. There are special morale problems encountered with this technique if used in small groups or with professionals.

Critical Incident Report Under rather broad headings a good-bad record is kept with appropriate notations. Its greatest value is in the recording to justify the rating, but it is hard to implement and difficult to control.

Forced Choice A forced choice evaluation generally utilizes four statements, two positive and two negative. The rater then decides which statement is most like the ratee and which is most unlike him. There are variations of forced choice evaluations which use all positive statements. The forced choice system was adopted by the U.S. Army in 1948 and by several major police agencies since that time. It has proven value; however, it is an expensive, time-consuming process.

Peer Ratings are similar to the paired comparison and ranking of order systems. Each ratee is required to rank every other ratee in his particular group according to order of performance.

Utilization of these systems or forms may be accompanied by certain difficulties and problems which may lower the rating validity.

1. Halo effect. The tendency of the rater to evaluate the ratee by overall general impression, consciously or unconsciously, rather than by the characteristic or trait under consideration.
2. Problem of rater disinterest, negligence or incompetence.
3. Problem of leniency. This tendency produces lenient or high ratings for the ratee.
4. Problem of severity. A condition brought about by undue harshness in rating all employees.
5. Problem of rater emotional bias and/or subjectivity.
6. Problem of central tendency. Because of a desire to be liked or because of his incompetence, the rater rates almost everyone as average.
7. Problem of end effects. The opposite of central tendency problem is produced by the rater who feels no one is average. They are either good or poor, and he rates accordingly.
8. Problem of emphasis on particulars. This problem occurs when the rater places emphasis on incidental rather than broad behavior patterns of employees.
9. Problem of negative employee attitude.
10. Problem of psychological sets in evaluation mechanics. Motor effects are one example. This occurs when the rater rates or checks the same sequency of numbers, blanks or scores throughout the performance evaluation.

11. Problem of lack of counseling or interviews by supervision.
12. Problem of inadequacy in training of raters.
13. Problem of insufficient knowledge of the ratee's performance at time of rating.
14. Problem of using the periodic performance evaluation as a substitute for day-to-day field supervision.
15. Problem of contrast. This error arises from a comparison of the rater's own expectations and aspirations with those of the ratee.

In addition to this outline of problems and difficulties which may be introduced by the raters, there is the possibility the instrument design may actually incorporate errors to be later compounded by the raters. One last consideration is the lack of citizen input into the total evaluation process, regardless which system is utilized. There is no easy answer to this problem, but police agencies throughout the United States may soon be required to address this issue.<sup>22</sup>

#### Performance Evaluation Research

A number of research projects have been undertaken to determine the effectiveness and predictive validity of various types of rating

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<sup>22</sup> Harry Walker Hepner, Psychology Applied to Life and Work. (3rd ed.: New Jersey: Prentice-Hall, 1961), p. 328.

David E. Balch, "Performance Rating Systems - Suggestions for Police," Journal of Police Science and Administration, 2-1 (March, 1974), pp. 40-49.

Lyle Knowles and Joseph C. DeLadurantey, "Performance Evaluation," Journal of Police Science and Administration, 2-1 (March, 1974), pp. 29-33.

Detroit Police Department, "Performance Evaluation Program Guidelines." Detroit, 1972, pp. 2-7.

Norman E. Stander, An Evaluative and Diagnostic Forced-Choice Rating, Ph.D. dissertation, (Ohio State University, 1960), p. 2.

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Detroit Police Department, "Performance Evaluation Program Guidelines." Detroit, 1972, pp. 2-7.

Norman E. Stander, An Evaluative and Diagnostic Forced-Choice Rating, Ph.D. dissertation, (Ohio State University, 1960), p. 2.

systems and techniques. In a research project conducted by Richard M. Blum one of the major conclusions indicates:

There is good evidence psychological tests can measure human characteristics, which are associated with various kinds of success and failures in work situations--including the performance of police duties; however, studies to date indicate no one test will be a sufficient predictive device, nor will any single job standard be a sufficient measure of performance.<sup>23</sup>

In a study reported by Balch a Peer Rating System was introduced at officer candidate school and other service schools during WWII. Records were maintained and follow-up research was instituted to determine success.

It was found a much higher degree of correlation between peer ratings and how the ratee graduated or succeeded than any other criterion used (written test, evaluation by superiors, oral boards, etc.). According to published results the ratings taken in the fourth month of a 14-month school at U.S. Army OCS had a predictability validity of +.91 for graduation and position in graduating class.

The Navy reported a validity of +.89 at its officer candidate school.<sup>24</sup>

In another study reported in the Journal of Police Science and Administration the U.S. Army conducted several extensive tests of rating systems at the command officers school in 1960. Seven different types of rating forms were used; five variations of the graphic scale and two of the forced choice. All results were recorded and tabulated until graduation, then correlated. Findings indicate a correlation of 10 ratings per ratee produced a predictive validity of

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<sup>23</sup>Blum, Richard M. (ed.), Police Selection, Charles C. Thomas, Springfield, Illinois, 1965, p. 134.

<sup>24</sup>David E. Balch, "Performance Rating Systems - Suggestions for the Police," Journal of Police Science and Administration, 2-1 (March, 1974), p. 46.

+ .85 as compared to a + .52 correlation for single ratings, for graduation and class position. Ratings spaced systematically were more accurate than those done at one setting. Research further indicated the changing of rating forms was not as significant as the changing of raters. The correlation between rating forms was  $\pm .10$  while the difference between raters was as high as  $\pm .60$ . Ratings of hard and easy raters showed the same degree of correlation, when interpreted for rank placement. In other words the ratees appeared in the same order, but either higher or lower on the scale depending on the rater's harshness or leniency. It should be noted the research was conducted in a closed environment with well-motivated raters; however, the findings are of sufficient importance to be reported.<sup>25</sup>

In a study of three unnamed police agencies using paired choice (Peer Rating), David Balch found that ratings by supervisors and peers were nearly identical. The study concluded the paired choice evaluation is capable of answering the administrators question of which person is performing the best job, and indicates the ratees are as capable of performing the evaluation rating process as their supervisors.<sup>26</sup>

The Ohio State Highway Patrol reports high validity and reliability in its forced choice performance evaluation. The instrument

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<sup>25</sup> Ibid., p. 44

<sup>26</sup> Ibid., pp. 46-49.

eliminates two of the major criticisms of evaluation ratings: rater bias is controlled by design and a part of the instrument is constructed to serve as a counseling device.<sup>27</sup>

### Summary

Some rather general conclusions can be drawn from the research and earlier description of errors in the various systems.

1. Based on organizational needs of efficiency and psychological needs of approval some form of evaluation tool is needed for the vast majority of police agencies.
2. It generally appears the type of performance evaluation to be used is not the issue, but rather how well it is administered and controlled. Frequent evaluations produce higher predictive validity than single ratings.
3. Some types of rating systems are obviously excluded for certain departments. For example, budgeting restrictions may eliminate the forced choice evaluation from smaller departments; also forced distribution systems may present morale problems to small departments or departments employing a great number of "professionals." To summarize, time and money are primary considerations when adopting any system of evaluation.
4. Some evidence exists that the differences between police departments is so great concerning standards, selection

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<sup>27</sup>Ohio State Highway Patrol. Diagnostic Forced-Choice Personnel Evaluation. Columbus, Ohio: Ohio State Highway Patrol. (No date given), p. 14.



and administration, training, etc. that no relationships between performance and characteristics exist. If this is true, it would logically follow that each department should create its own evaluation system, possibly using exterior guidelines, but avoiding any "canned" programs.<sup>28</sup>

5. No entirely satisfactory method to objectively measure police performance has as yet been devised. Although some systems have high correlations, all systems tend to reflect the internal standards of the police department, and there is no evidence these are in fact the requirements or standards of the community it serves. With this in mind some attention should be given to the idea of including a form of citizen evaluation, other than the negative complaint form, in the design of performance evaluation instruments.

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<sup>28</sup> Sidney Epstein, et al. Guidelines for Police Performance Appraisal, Promotion and Placement Procedures. National Institute of Law Enforcement and Criminal Justice, (Washington, D.C.: U.S. Department of Justice, March 1973).

## CHAPTER III

## METHODOLOGY

Hypothesis and Concepts

The central hypothesis of this study, stated in the null form, is that there is no significant relationship between amount of formal education and police performance ratings.

During March of 1970 the Baltimore Police Department developed a Performance Evaluation Instrument that has been in continuous use since that time. The evaluation form, a copy of which appears in Appendix C, divides performance into four main categories: 1) Performance of various type duties, 2) exhibition of various traits and characteristics, 3) overall general value to the department, and 4) the willingness of the rater to have the officer under his command based on perceptions (actual or perceived) of his ability in crisis situations. The individual items are rank ordered as follows: outstanding, excellent, above average, average, unsatisfactory, and not observed or not applicable. This is the major device from which all performance scores were obtained.

Performance is operationally defined as the results of scores from the performance evaluation reports contained in the Baltimore Police Department personnel files of the subjects in this study. For purposes of measurement, the ranking was converted to a Likert Scale (ordinal data level) from one to five with the "not observed" and "not applicable" ranks omitted and the "outstanding" rank identified as five.

Although every officer is evaluated quarterly during his probationary period, it was decided to use only his last probationary evaluation and each annual evaluation thereafter. This decision resulted from a feeling the last probation evaluation would be more comprehensive than the first quarterly evaluation. Each probationary evaluation and each annual evaluation was then recorded.

The question of validity and reliability of the performance evaluation instrument must be addressed. As a condition for allowing this study to be conducted, the Baltimore Police Department required that its performance evaluation form be the only form used for the evaluation and it did not allow any additional questionnaires or instruments. In addition, no contact by this researcher was allowed with its personnel; thus all data had to be obtained from file records. Considering these constraints, the Evaluation Instrument is accepted at face validity and its reliability is assumed.

College education can be operationally defined in two ways. One is through the attainment of a degree which represents the completion of an academic program. Subjects can then be categorized into two major groups; those that have completed an associate degree, but no higher degree, and those that have completed a bachelors degree irrespective of whether or not they also hold an associate degree.

There is a second method of assessing college education. It is possible some people may have been exposed to college education, but are not holders of a degree at this time. In order to understand the incremental effect of college education, the subjects can be grouped on a continuum. For the purpose of determining the amount of college completed, the groups can be divided into the following intervals:

Group 1	Group 2	Group 3	Group 4	Group 5
no college	1 yr. col.	2 yrs. col.	3 yrs. col.	4 yrs. col.
0 - 29 sem. hrs.	30 - 59 sem. hrs.	60 - 89 sem. hrs.	90 - 119 sem. hrs.	over 120 sem. hrs.
0 - 44 qtr. hrs.	45 - 89 qtr. hrs.	90 - 134 qtr. hrs.	135 - 179 qtr. hrs.	over 180 qtr. hrs.

For the purpose of interpretation, those in Group 1 are considered as having no college; those in Group 2 are considered as having one year college; those in Group 3 two years college; those in Group 4 three years college; and those in Group 5 four years college.

Originally it was intended to utilize both methods of assessing college education to understand its full effect; however, research revealed only sixteen officers had any amount of education beyond high school and several of these officers had never been evaluated. Therefore, due to the small sample size no attempt was made to determine the incremental effect of education.

Several additional variables must of necessity be defined, both for clarity and operational purposes. They are as follows: Police Agents are those individuals who have met the entrance level requirements for the position of police officer; completed the sixteen-week academy training course; hold a bachelors degree from an accredited college or university; have completed one year in the patrol division; and been appointed by the police commissioner as a police agent. Appointment criteria include a physical examination, psychological tests, oral interview and review of past performance.

Age at the time of appointment was determined by identifying the date of birth and the date of appointment from the personnel file of each officer and then computing the nearest year of age at time of

appointment. For example: an individual born August 6, 1950 and appointed January 1, 1972 would be identified as 21 years old while another subject with the same date of birth but who was appointed March 1, 1972 would be identified as 22 years old.

Degree major for this research was identified as one of four types: criminal justice which includes law enforcement, corrections, etc.; social science which includes psychology, sociology, political science, anthropology, geography, history and economics; business which includes accounting, management, business administration; and others which includes all other majors.

### Design for Data Gathering

#### Sources of Data and Instrumentation

As noted previously, there is a relatively small number of Baltimore police officers with education beyond high school. On October 2, 1969, the Baltimore Police Department established their Police Agent Program, requirements for which include completion of academy training and possession of any type baccalaureate degree. Considering there was a group of police officers who had only high school educations and a group of police agents, all of whom are college graduates, coupled with constants of academy training for both groups and evaluation of performance on the same instrument, it would appear these variables, along with the extraneous variable controls outlined below, would provide the necessary ingredients to determine if a significant difference exists in the performance of college-educated police personnel and non-college-educated police personnel.

All police agents in the Baltimore Police Department who have, 1) been evaluated by the Performance Evaluation (dated 3-18-70) form number 70/397 and, 2) have at least one year of service or, 3) have resigned after evaluation, were included in the research. This group was then compared to police officers of the same academy class who have only a high school education.

The selection process was as follows: First, each academy training class (starting with the first group evaluated by form 70/397) was identified from the personnel master list of the Baltimore Police Department. Second, each police agent who was a member of that class was identified from the master list of police agents. Third, the number of police agents in that particular class was identified and counted. Fourth, a random sample of the same number of police officers from that particular class was drawn. For example: If, in the first class five (5) police agents were identified and 25 police officers made up the remainder of the class, five (5) police officers were randomly selected using a table of random numbers; thus for the "first" class we would have the names of five (5) police officers and five (5) police agents for comparison purposes. The process was then repeated for each academy class until the supply of police agents was exhausted. There were 113 police agents and a corresponding number of police officers in the research; thus the total population for the research was 226.

Once the master list was obtained, each individual personnel file of those identified was located and the information on the variable required for the study placed on data coding sheets. The coding

Dependent Variable: Performance

This study utilizes a performance evaluation instrument created and in use by the Baltimore Police Department. One of the conditions imposed by the Baltimore Police Department regarding the research was that all information was to be obtained from their personnel files and no other questionnaires or evaluation instruments were to be used. Another condition that places a limitation on the research is that their own performance evaluation must be used as the measuring device. Both of these conditions, as well as several relating to confidentiality, were contingencies that governed approval to conduct the research. The conditions were accepted and approval was granted; however, the validity and reliability of the performance evaluation report were never tested. Admittedly the research conclusions may be questioned on the issue of reliability and validity; however, the constraints of the research place an overriding condition on the study that must be met. In other words, to conduct the research certain stipulations had to be accepted. One of these stipulations was that the performance evaluation be accepted as valid and reliable.

The evaluation form, according to Baltimore Police Department general order number 72-02, was initiated March 18, 1970; thus the instrument itself places a limitation on the research. Since the instrument was used as a measuring device, only those agents and their officer counterparts who were evaluated on the present evaluation instrument could be included in the research. Officers appointed prior to implementation of the present performance evaluation and who resigned before being evaluated are excluded from the study. Obviously

those agents who for some reason, such as new appointments or undercover work,<sup>31</sup> are excluded from this research.

Performance evaluation is identified by four separate categories on the instrument. The first category relates to performance of duty and includes a rank order (outstanding, excellent, above average, average, unsatisfactory, not observed and not applicable) of the following: regular duties, additional duties, administrative duties; supervision of subordinate officers, handling citizens, evaluation (marking) of subordinates, training personnel and tactical handling of officers.

The next section of the performance evaluation lists thirteen traits and characteristics, also rank ordered in the above manner. These include the following: (a) endurance, (b) personal appearance, (c) dignity of demeanor, (d) attention to duty, (e) cooperation, (f) initiative, (g) judgment, (h) presence of mind, (i) force, (j) leadership, (k) loyalty, (l) personal relations, (m) economy in management.

The third section is a one-item category that identifies, also by rank order, the attitude of the rater toward the officer being rated concerning "the requirement of service during extreme emergencies or crisis situations." The last section gives the overall rating, "general value to the department," and is also rank ordered.

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<sup>31</sup>Departmental policy requires the personnel records of officers and agents working undercover be removed from the personnel record section.



Since the evaluation instrument identifies and measures a number of different aspects of performance as a part of its rating scale, it was decided to include all four categories and all individual items in those categories for study. Initial examination of the evaluation form revealed a strong possibility some items may be only slightly related to the performance of the sample under study, while other items may be measuring the same thing; however, all items were included.

The question of rater bias must be addressed. Police in the City of Baltimore are randomly assigned during their probation period and the random assignments continue until specialization or rank occurs; thus the effect of rater bias is modified. In addition to this, there is no valid method of measuring the effect if in fact it does exist.

#### Extraneous Variables

A number of extraneous variables have been identified that may have a significant impact on this research and thus must be controlled to test against the spuriousness of relationships between the independent variable education and the dependent variable of performance. These variables are age, race, military service and I.Q.

Additional extraneous variables are identified below which were not controlled. The first of these is prior employment. Both the type and length of prior work experience may have an influence on performance; however, the Rand Study of the New York City Police Department indicates no significant relationships between performance and employment history. Due to the relatively young age of the

sample at time of their appointment, no significant number of individuals have prior police experience, and therefore control for this type experience is not included.

Stability and maturity are somewhat related to each other. However, it is expected their effect has been randomized by the screening mechanics built into the hiring structure. In addition, there is no method to measure their effect under the present circumstances.

The effect of recruit training is a constant built into the study. Every agent and officer has undergone identical recruit training. For every agent, an officer from the same academy class has been randomly selected for inclusion in the study sample.

Peer experience is another extraneous variable, but there seems to be no need to build it into the design due to the fact all probationary employees are randomly assigned during the probation period and this random assignment continues until rank or specialization is attained.

Motivation is, of course, a primary extraneous variable when dealing with any type of achievement such as college education. Although it is acknowledged as such, there appears to be no valid way to control its influence in this particular research. Under section two of the Performance Evaluation form, dealing with traits and characteristics, "initiative" is listed as a trait. While initiative and motivation are not totally synonymous, there is a strong relationship in the terms; thus motivation may be partially identified, but not actually controlled as an extraneous variable.

### Design for Data Analysis

This research is an ex-post-facto study utilizing information from the personnel files of the Baltimore Police Department. In October 1969 the Baltimore Police Department initiated a special Police Agent Program. Several months later, in March of 1970, the Baltimore Police Department created a performance evaluation report which has been used in evaluating all officers since its inception. The performance evaluation makes use of a Likert Scale to identify ratings for each officer; therefore, all data obtained from the forms are ordinal level. The instrument is taken at face validity and reliability is assumed, due to the conditions and constraints outlined in preceding chapters. Confidentiality of names and accompanying data was maintained by eliminating identification from each coding sheet after the data were gathered.

The major hypothesis in this study is a non-directional statement which indicates there is no significant relationship between the amount of higher education and the performance ratings of police personnel. A two-tailed test using the .05 level of significance was used to test the null hypothesis on all dimensions of performance identified in the performance evaluation over small periods of time. These data are ordinal in nature and computation was accomplished by use of the Mann Whitney U to test the difference between the samples. This test, according to Popham, states, "if scores of two similar groups are ranked together, there will be considerable intermingling of the two groups ranking: however, if one group significantly exceeds the other, then most of the superior groups' rankings will be higher than those of the inferior group. The value of U is computed after the combined

ranking by concentrating on the lower ranked groups and counting the number of ranks of the higher groups which fall below the lower ranked group. If all the higher ranked groups exceed all the lower ranked group, the value of U would be zero; thus the lower the statistic value, the more significant."<sup>32</sup>

Analysis was begun by first testing the relationship between the primary variables of education and performance to determine the strength of the relationship. The stability of that relationship was then systematically tested while other variables that may have had an effect on the relationship were controlled. For example, if the statistical relationship between performance ratings and education was significantly decreased by an extraneous variable, the original relationship might be spurious. Thus, if age significantly decreases the relationship between performance and education, then age might be more significant to performance than the original primary relationship. Should control of an extraneous variable increase or strengthen the relationship between the primary variable, it probably plays a supporting role, or in other words, the combination of the two maximizes the relationship between the primary variables generally held constant--neither decreasing nor increasing significantly; thus, the variables controlled had no effect.

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<sup>32</sup>W. James Popham, Educational Statistics (New York: Harper & Row, 1967), p. 285.

## CHAPTER IV

## ANALYSIS AND INTERPRETATION OF DATA

The central issue in this study is the relationship between higher education and performance ratings of Baltimore police. The null hypothesis tested in this research specifically states: There is no significant relationship between education and level of performance. Individual performance evaluations of agents and officers formed the basis of comparison between agents and officers and the null hypothesis was tested on each of twenty-three individual characteristics identified in the evaluation instruments. A number of extraneous variables were then controlled to determine the possible spuriousness of the original relationship. Again the twenty-three items of the performance evaluation formed the basis of comparison between groups with the null hypothesis being tested on each of the items for each variable controlled.

Initially it was intended to compare agents with police officers who had varying years of college education; however, the number of officers with education beyond high school totaled only sixteen. Three of those sixteen had never been evaluated and an additional five had received only one probationary evaluation. Considering the limited sample size, a decision was made against attempting any statistical manipulation for this group. All high school officers were treated as one group and the sixteen officers with education beyond high school

were eliminated from the study. Thus, a total of ninety-seven officers and one hundred thirteen agents comprised the sample to be statistically analyzed.

A number of extraneous variables have been identified that may prove to have significant impact on this research and thus must be controlled to test against the possible spuriousness of any relationship between the independent variable education and the dependent variable of performance.

#### Age

When age is held constant, agents receive higher performance ratings than high school officers; thus age in itself does not change the observed difference between agents and officers. However, as can be seen in Table 1,<sup>33</sup> age is a factor within the agent and officer groups. Older officers tend to receive higher overall ratings than younger officers while younger agents tend to receive higher overall ratings than older agents. However, older agents did not seem to receive significantly higher ratings than younger officers except in items relating to regular and administrative duties; yet younger agents were rated significantly higher in all items when compared to both older and younger officers. When younger officers were compared to older officers, the older officers were generally rated higher except for endurance, presence of mind, and force. "Force," according to Baltimore, relates to the ability to carry forward objectives and convictions, and "presence of mind" is related to quick thinking,

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<sup>33</sup>All Tables appear under Appendix A beginning on page 47.

while "endurance" is synonymous with strength and/or "staying power." It seems likely these three items are maturity factors favoring the younger officer.

#### Military Service

When military service is held constant, agents continue to receive higher performance ratings than high school officers; thus any observed difference in performance between agents and high school officers could not be attributed solely to military experience. Although agents without military service rated higher in all items when compared to officers with or without military service, Table 2 indicates that when officers with no military service were compared to agents having military service, a number of items (handling citizens, personal appearance, cooperation, presence of mind, and personal relations) lost significance. When agents without military service were compared to agents having military service, the items of "handling citizens" and "judgment" were significantly in favor of the non-military agents. Also officers without military service were rated higher in a number of items when compared to their cohorts having military service. It may be that whatever effect military service has is partially neutralized by education; but when education is removed, military service or its lack becomes significant, the direction of which is dependent on other factors.

#### Race

Agents continue to receive higher scores than officers when race is controlled; thus again any observed differences between officers and agents would not be affected by race. White agents tend to receive higher rating scores than black agents; however, black officers

are rated higher than white officers. The validity of the data in the agent category may be questioned due to the difference in sample size. As can be seen in Table 3, the number of evaluations for black agents is only 29 opposed to 293 for white agents. Sample size in the officer category appears to be sufficient since the number of black officer evaluations is 48 and white officer evaluations total 168.

#### I.Q.

When persons of similar I.Q. were compared, the agents received the higher ratings and when persons of dissimilar I.Q.'s were compared, the agents still tended to receive the higher ratings. This would tend to suggest any difference in performance between agents and officers is probably not influenced by I.Q. alone. I.Q. does have some effect within the agent and officer groups, since both agents and officers with high I.Q.'s show a tendency to be rated higher when matched with their peers. Although the tendency to be rated higher is apparent, Table 4 reveals that the items on which each is rated higher differs between agents and officers with the exception of "general value to the department."

#### Agent-Officer Differences

The primary test on the twenty-three performance items between agents and high school officer groups reveals agents consistently rated higher than officers in the performance characteristics outlined in the Baltimore Performance Evaluation. In as much as the control of variables did not significantly affect the observed difference and since the observed difference in performance was significant at the .05



level,<sup>34</sup> it was concluded the difference between agents and officers was due primarily to education; thus the null hypothesis of no relationship was rejected.

#### General Value to the Department

Since general value to the department seemed analogous to a summary type evaluation, it was decided to treat the item as a separate category. It is inconsistent, at best, to rate agents consistently higher than officers in every single item of the performance evaluation and then conclude both groups' general value to the department is the same. What this item may be reflecting is rater bias in the form of a general philosophy of moderation among rating supervisors.

Another suggestion is that the general value item is not related to individual characteristics. That is, this item may not be a "summary" of the other items, and it may have its own reference point beyond the evaluation instrument.

#### Degree Type

Probably the most interesting relationship in the entire study is the lack of significant difference between types of college degrees held and the accompanying performance ratings of those agents holding such degrees. The data indicate that holders of criminal justice degrees do not receive significantly different ratings from holders of social science, business or other type degrees on any item in the performance evaluation of the Baltimore Police Department. However,

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<sup>34</sup>The significance level in the majority of items reached the .003 level.

as can be seen in Table 5, when criminal justice degrees are excluded, the social science people tend to perform better in the ratings than either business or other types.

Two explanations are offered which may suggest an answer to the relationship. First, a criminal justice education may be irrelevant to job performance as measured by this kind of evaluation. What might exist is a commonality between college-educated people who become police and their willingness to work with people. In other words, some common but unmeasured motivational factor may be operating among all educated people who become police.

Since the only constant among agents is the completion of a sixteen-week academy training, it seems reasonable to assume the academy might have neutralized any edge the criminal justice degree holder may have had originally by increasing the performance level of other type degree holders. Academy training probably adds little to criminal justice degree holders, but greatly increases the knowledge and subsequent performance of holders of other type degrees.

One reason for this may be the commonality of skills and information between education and training of a criminal justice degree holder. A review of the course curriculum and training manual of the Baltimore Police Academy reveals a strong overlap of law enforcement courses usually taught in universities and colleges. A comparison (page 37) is made of the Baltimore Training Academy courses with those of two community colleges. While the course curriculum of the community colleges cited may not be truly representative of all college programs, there is a great commonality.

Baltimore Police Academy

Lakeland Community College  
Mentor, Ohio

Catonsville Community College  
Baltimore County  
Catonsville, Maryland

<u>Courses</u>	<u>Courses</u>	<u>Courses</u>
Introduction to Law Enforcement 68 hrs.	Introduction to Law Enforcement and/or Criminal Justice 3 cr. hrs.	Introduction to Law Enforcement and Organization 3 sem hrs.
Police Operations includes Patrol Operations and Criminal Investigation 75 hrs.	Patrol Operations 4 cr. hrs. Criminal Investigation 4 cr. hrs.	Criminal Investigation 4 sem. hrs.
Community Relations 7 hrs.	Community Relations 3 cr. hrs.	Law Enforcement and the Community 3 sem. hrs.
Administration of Justice includes Criminal Law (substantive) 42 hrs. Criminal Law (procedures) 42 hrs.	Criminal Law 4 cr. hrs. Criminal Evid. & Proced. 3 cr. hrs.	Criminal Law 3 sem. hrs.
Traffic 34 hrs.	Traffic Administration 3 cr. hrs.	Vehicle Laws & Accident Investigation 2 sem. hrs.
Sociology 42 hrs.	Sociology 5 cr. hrs.	Sociology 3 sem. hrs.
Psychology 42 hrs.	General Psychology 5 cr. hrs.	General Psychology 3 sem. hrs.
Field Training 72-144 hrs.	Internship (field observations) 6 cr. hrs.	

There are several required courses taught at the Ohio community college not programmed into the Baltimore Academy such as Juvenile Delinquency - 3 cr. hrs., Administration - 3 cr. hrs., and Introduction to Criminalistics - 4 cr. hrs. However, as can be seen, there is a great deal of similarity. In addition to course similarity, several of the textbooks used in the academy are the same texts used in the Ohio college, such as Baker's Traffic Investigation Manual for Police used for an elective course in accident investigation, and O. W. Wilson's Police Administration used in the required administration course.

Although the rationale presented for the relationship is only conjecture, it appears strong enough to form the basis of a hypothesis which might be used for future research.

During the recording of data, a rather interesting phenomenon was observed within the "other" type degree category. Accounting, philosophy, and English degree holders tended to receive very high ratings; however, the number of cases was far too small for any statistical implications to be drawn.

The data on degrees suggests that police should hire either criminal justice or social science people. It does not suggest that business or other degree people perform poorly, but when matched with social science degree holders, they tend not to perform as well.

Considering all of the data on performance and the accompanying cross break analysis, a composite of agents and officers who are rated highest is outlined.

<u>Agent</u>	<u>Officer</u>
Social Science or Criminal Justice Degree	High School
No military service	Military service
Age 21 - 24 at entry	Age 25 at entry
I.Q. 121 or above	I.Q. 121 or above
White	Black
Recruit score 90 or above	Recruit score 90 or above

#### Other Observations

Some general findings, not related to variable control, are that police agents tend to receive promotions at a significantly higher rate than officers. Records indicate fourteen agents were promoted to sergeant while no officer in the sample group received a promotion. Agents also tend to remain employed by the department longer than officers; however, these observations are not based upon statistical tests. Of greater import is the fact that of the twenty-two agents who have left the Baltimore force exactly one-half have left to enter other law enforcement agencies or to return to school. It is noteworthy that all of those agents who left the force to return to school held criminal justice type degrees.

Some preliminary data analysis was accomplished using recruit scores as predictors of later performance. Results were inconclusive; however, the data seem to favor high recruit scores as a predictor of high performance.

## CHAPTER V

## CONCLUSIONS

The purpose of this research was to determine if a relationship exists between education and performance. An ex-post-facto design utilizing information from the personnel files of the Baltimore Police Department was developed to determine if a relationship exists between education and performance ratings.

Two groups were selected for study. The first comprised all police agents hired by the Baltimore Police Department since the Police Agent Program's creation in October of 1969. The second group includes a random sample of police officers drawn in proportion to the agents from each particular academy class attended by each agent. All agents hold a college degree of some type and in addition have completed the required sixteen-week Academy Training Program, while all officers have varying degrees of education (high school or above) and they also have completed the required academy training period.

Agents were then compared to the sample group of officers on twenty-three traits outlined on the performance evaluation instrument. Multi-variant analysis was used to test the null hypothesis of no relationship on each of the twenty-three items. A number of extraneous variables thought to be significant were then controlled and the null hypothesis of no relationship was again tested for each extraneous variable on each of the twenty-three items.

If a null hypothesis is rejected at the .05 level, it means the observed difference could have occurred by chance in fewer than 5 out of 100 times. The null hypothesis was rejected on all items, indicating

college educated agents out perform high school educated officers on every evaluation item of the Baltimore Police Department Performance Evaluation.

This study contains several basic assumptions which must be identified and discussed before any conclusions or implications are drawn. The research assumes performance evaluations are valid measures of actual performance. In other words, supervisors who make the evaluations perceive the reality of the individual's performance and that perception is transferred to a performance evaluation instrument objectively. Another basic assumption is that the Baltimore Performance Evaluation is both valid and reliable. The conclusions which follow must of necessity be viewed in light of these untested assumptions.

Agents were consistently rated as performing at higher levels than high school officers. When extraneous variables were controlled to test against the possible spuriousness of the relationship, the relationship continued to hold; thus the observed relationship between agents and officers was unchanged by age, race, military service or I.Q.

Although age was not found to be a significant factor between the agent and officer groups, it was found significant within the two groups. Younger agents tend to perform higher than older agents; but older officers out performed younger officers.

Military service may not be as dependable an indicator of performance as is usually thought. This research tends to indicate military service may at times be counter-productive, since non-military

agents score higher on several items than their cohorts and non-military experienced officers are rated higher on a number of items when compared to police officers with military service. It would seem that any broad generalization which indicates military service is an absolute positive attribute to police service must be suspect.

There is a general tendency of white agents to out perform black agents; however, as previously indicated, the sample number is not large; thus conclusions concerning race when applied to agents must be qualified. [The same is not true for officers.] Black officers, however, are consistently rated as higher performers when compared to white officers.

The extraneous variable of I.Q. was found not to be significant when agents and officers were compared; however, like age, it does have an effect within the agent and officer groups. Both agents and officers with higher I.Q.'s tend to receive higher ratings when compared with their peers; however, the items on which each group's higher ratings are received are not the same.

When agents' performance was compared on type of degree held, statistics indicate that holders of criminal justice degrees did not perform any differently than social science, business or other degree holders; but when criminal justice degree holders were excluded, social science degree holders were rated higher than either business or other type degree holders.



### Recommendations

Based on the performance evaluation research it seems logical to suggest that Baltimore should continue its police agent program. Considering the results of the research on degree type, it seems reasonable to expect a continuation of the open door hiring policy for agents regarding types of degrees. However, it would seem preferable to hire persons holding "people type" degrees if all other things were equal.

Considering the theory that academy training neutralizes the edge criminal justice degree holders may have over all other degree holders, it might be feasible within the constraints of civil service and organizational demands to conduct a pilot research project in which agents with criminal justice degrees would not be required to attend academy training or only be required to participate in specific phases of training. After a number of evaluations had been completed, these agents could be compared to agents not holding criminal justice degrees. If the original relationship of no significance held, it would be fairly conclusive evidence the Baltimore Training Academy is accomplishing in sixteen weeks what universities and colleges are taking four years (45 quarter hours-major) to accomplish.

It might be of some benefit to research the idea that criminal justice courses taught at the training academy are in fact duplications of local college curriculum. If some positive feed-back from academic administrators is obtained, it may be possible to obtain

college credit by examination. This could be accomplished by standardized tests with pre-set levels of attainment and pass/fail grades issued--the whole approach being optional.

As indicated previously, there may be a form of central tendency error operating on the evaluation item dealing with "general value to the department." Also in reviewing the performance evaluation directives, there is a lack of examples and guidelines in which the supervisor may compare his evaluation with the department's outline of what constitutes excellent or good performance or what exactly constitutes the trait under consideration. Considering these, it is recommended the performance evaluation directives be modified to include examples or references. For example, the Detroit Police Department uses a questionnaire type form on their performance evaluation ratings. An excerpt from their guidelines, for sergeants, is as follows:<sup>35</sup>

A. Technical Knowledge:

In this section the supervisor should be concerned with the subordinate's effectiveness as it relates to his level of general knowledge of the job.

1. Level of general knowledge of federal laws; state laws; city ordinances; and department regulations, policies, and procedures. - Can he answer routine questions quickly and clearly? Will he make decisions regarding law and policy accurately? Does he frequently refer questions to his superior? Does he keep abreast of new court decisions and policy and procedure changes?

When considering a man's level of specialization unique to the assignment, bear in mind primarily the specific functions of the unit.

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<sup>35</sup> Detroit Police Department Performance Evaluation Program Guidelines, Nov. 1972. p. 7.

2. Level of specialized knowledge unique to the assignment. - Is he a good resource person for his subordinates? Is he familiar with all court decisions affecting his area of command? Does his level of knowledge give him the ability to make quick decisions that are accurate as to fact? Is he familiar with other resource material that is applicable to his area of command? Can he draw on this source of knowledge when the situations demands it?

This course of action will have little, if any, effect unless a specific training program is undertaken to reinforce the organizational goals in the performance evaluation process at all supervision levels. Some attention should also be directed to section "D" of the performance evaluation form. This section deals with a narrative of the officer's performance by the supervisor. Although this caption is required to be filled out, the absence of any remarks or presence of a two-word essay such as "good man" is much more frequent than any meaningful objective statements. It would seem the majority of these minor errors could be corrected by the suggested training program.

APPENDIX A

Mann Whitney U Tests of Relationships

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TABLE 1

MANN WHITNEY U TEST OF RELATIONSHIP  
 BETWEEN AGENTS AND OFFICERS ON PERFORMANCE  
 ITEMS USING AGE AS A CONTROL

Performance Evaluation Items	Agents 21 - 24 N=249		High School Officers 21 - 24 N=159	
	Agents 25 or Older N=73		High School Officers 25 or Older N=57	
	Significance Level	Direction	Significance Level	Direction
Regular Duties	<.05	Agents 21-24	NS	
Additional Duties	<.05	Agents 21-24	NS	
Administrative Duties	NS		NS	
Handling Citizens	<.05	Agents 21-24	NS	
Endurance	<.05	Agents 21-24	<.05	Officers 21-24
Personal Appearance	<.05	Agents 21-24	NS	
Dignity of Demeanor	<.05	Agents 21-24	NS	
Attention to Duty	<.05	Agents 21-24	<.05	Officers 25 or older
Cooperation	<.05	Agents 21-24	<.05	Officers 25 or older
Initiative	<.05	Agents 21-24	<.05	Officers 25 or older
Judgment	<.05	Agents 21-24	<.05	Officers 25 or older
Presence of Mind	<.05	Agents 21-24	<.05	Officers 21-24
Force	<.05	Agents 21-24	<.05	Officers 21-24
Leadership	<.05	Agents 21-24	<.05	Officers 25 or older
Loyalty	<.05	Agents 21-24	<.05	Officers 25 or older
Personal Relations	<.05	Agents 21-24	<.05	Officers 25 or older
Economy in Management	<.05	Agents 21-24	NS	
Crisis Evaluation	<.05	Agents 21-24	<.05	Officers 25 or older
General Value to Department	<.05	Agents 21-24	<.05	Officers 25 or older

TABLE 2

MANN WHITNEY U TEST OF RELATIONSHIP  
 BETWEEN AGENTS AND OFFICERS ON PERFORMANCE  
 ITEMS USING MILITARY SERVICE AS A CONTROL

Performance Evaluation Items	Agents no Military		Officers no Military		Officers no Military	
	v		v		v	
Performance Evaluation Items	Agents with Military		Officers with Military		Agents with Military	
	Significance Level	Direction	Significance Level	Direction	Significance Level	Direction
Regular Duties	NS		NS		<.05	Ag.W/Mil.
Additional Duties	NS		NS		<.05	Ag.W/Mil.
Administrative Duties	NS		NS		<.05	Ag.W/Mil.
Handling Citizens	<.05	Ag.N/Mil.	<.05	Of.N/Mil.	NS	
Endurance	NS		<.05	Of.N/Mil.	NS	
Personal Appearance	NS		NS		NS	
Dignity of Demeanor	NS		<.05	Of.N/Mil.	<.05	Ag.W/Mil.
Attention to Duty	NS		<.05	Of.W/Mil.	<.05	Ag.W/Mil.
Cooperation	NS		<.05	Of.N/Mil.	NS	
Initiative	NS		<.05	Of.W/Mil.	<.05	Ag.W/Mil.
Judgment	<.05	Ag.N/Mil.	<.05	Of.W/Mil.	<.05	Ag.W/Mil.
Presence of Mind	NS		<.05	Of.W/Mil.	NS	
Force	NS		<.05	Of.W/Mil.	<.05	Ag.W/Mil.
Leadership	NS		<.05	Of.N/Mil.	<.05	Ag.W/Mil.
Loyalty	NS		<.05	Of.N/Mil.	<.05	Ag.W/Mil.
Personal Relations	NS		<.05	Of.N/Mil.	NS	
Economy in Management	NS		NS		<.05	Ag.W/Mil.
Crisis Evaluation	NS		<.05	Of.W/Mil.	<.05	Ag.W/Mil.
General Value to Department	NS		<.05	Of.W/Mil.	<.05	Ag.W/Mil.

Of.N/Mil. - officer no military experience

Of.W/Mil. - officer with military experience

Ag.N/Mil. - agent no military experience

Ag.W/Mil. - agent with military experience

Direction - in favor of identified group

TABLE 3

MANN WHITNEY U TEST OF RELATIONSHIP  
 BETWEEN AGENTS AND OFFICERS ON PERFORMANCE  
 ITEMS USING RACE AS A CONTROL

Performance Evaluation Items	White Agents N=293		White Officers N=168	
	v		v	
	Black Agents N=29		Black Officers N=48	
	Significance Level	Direction	Significance Level	Direction
Regular Duties	NS		NS	
Additional Duties	<.05	White Agents	NS	
Administrative Duties	<.05	White Agents	NS	
Handling Citizens	<.05	Black Agents	<.05	Black Officers
Endurance	<.05	White Agents	<.05	White Officers
Personal Appearance	<.05	Black Agents	<.05	Black Officers
Dignity of Demeanor	<.05	White Agents	<.05	Black Officers
Attention to Duty	<.05	White Agents	<.05	White Officers
Cooperation	<.05	White Agents	NS	
Initiative	<.05	White Agents	<.05	White Officers
Judgment	<.05	White Agents	<.05	White Officers
Presence of Mind	<.05	White Agents	NS	
Force	<.05	White Agents	<.05	Black Officers
Leadership	NS		<.05	Black Officers
Loyalty	<.05	White Agents	<.05	Black Officers
Personal Relations	<.05	White Agents	<.05	Black Officers
Economy in Management	<.05	White Agents	NS	
Crisis Evaluation	<.05	White Agents	<.05	Black Officers
General Value to Department	NS		<.05	Black Officers

TABLE 4

MANN WHITNEY U TEST OF RELATIONSHIP  
BETWEEN AGENTS AND OFFICERS ON PERFORMANCE  
ITEMS USING I.Q. AS A CONTROL

Performance Evaluation Items	Agents I.Q. 92 - 109 N=47		Officers I.Q. 92 - 109 N=109	
	Agents I.Q. 121 - 135 N=149		Officers I.Q. 121 - 135 N=32	
	Significance Level	Direction	Significance Level	Direction
Regular Duties	NS		NS	
Additional Duties	NS		NS	
Administrative Duties	<.05	Agent I.Q. 121-135	NS	
Handling Citizens	NS		<.05	Officer I.Q. 121-135
Endurance	NS		NS	
Personal Appearance	NS		<.05	Officer I.Q. 121-135
Dignity of Demeanor	NS		<.05	Officer I.Q. 121-135
Attention to Duty	NS		NS	
Cooperation	<.05	Agent I.Q. 121-135	NS	
Initiative	NS		<.05	
Judgment	NS		NS	
Presence of Mind	NS		NS	
Force	NS		NS	
Leadership	NS		NS	
Loyalty	NS		NS	
Personal Relations	<.05	Agent I.Q. 121-135	NS	
Economy in Management	NS		NS	
Crisis Evaluation	NS		NS	
General Value to Department	<.05	Agent I.Q. 121-135	<.05	Officer I.Q. 121-135



TABLE 5

MANN WHITNEY U TEST OF RELATIONSHIP  
OF DIFFERENT DEGREE TYPES BETWEEN  
AGENTS ON PERFORMANCE ITEMS

Performance Evaluation Items	Social Science v Business		Social Science v Other		Business v Other	
	Significance Level	Direction	Significance Level	Direction	Significance Level	Direction
Regular Duties						
Additional Duties	<.05	Soc. Sci.				
Administrative Duties						
Handling Citizens	<.05	Soc. Sci.	<.05	Soc. Sci.		
Endurance						
Personal Appearance						
Dignity of Demeanor						
Attention to Duty			<.05	Soc. Sci.	<.05	Business
Cooperation						
Initiative			<.05	Soc. Sci.	<.05	Other
Judgment						
Presence of Mind	<.05	Soc. Sci.	<.05	Soc. Sci.	<.05	Business
Force						
Leadership	<.05	Soc. Sci.	<.05	Soc. Sci.		
Loyalty			<.05	Soc. Sci.		
Personal Relations						
Economy in Management						
Crisis Evaluation			<.05	Soc. Sci.	<.05	Business
General Value to Department			<.05	Soc. Sci.	<.05	Business





APPENDIX C

Baltimore, Maryland Police Department  
Performance Evaluation Report Form

POLICE DEPARTMENT  
BALTIMORE, MARYLAND

PERFORMANCE EVALUATION REPORT

Date: 10/29

Section A (To be completed by rating officer)

1. NAME: Last \_\_\_\_\_ First \_\_\_\_\_ Middle Initial \_\_\_\_\_ RANK \_\_\_\_\_

2. ORGANIZATION \_\_\_\_\_

3. OCCASION FOR THIS REPORT (Check appropriate box)  
 Anniversary Report  Quarterly Report  End Report  \_\_\_\_\_

4. PERIOD COVERED FROM \_\_\_\_\_ TO \_\_\_\_\_

5. REPORT OF \_\_\_\_\_ (Check appropriate box)

6. DUTY ASSIGNMENT DURING PERIOD COVERED: A. REGULAR (Date, description, etc., and duty)

B. ADDITIONAL (Describe title and number of months)

7. OFFICER'S PREFERENCE FOR NEXT ASSIGNMENT

(a) \_\_\_\_\_ (b) \_\_\_\_\_

Section B (To be completed by rating officer)

8. NAME AND RANK OF RATING OFFICER \_\_\_\_\_ 9. DUTY ASSIGNMENT \_\_\_\_\_

10. DURING THE PERIOD COVERED BY THIS REPORT — YES NO  
(a) Has the work of this officer been reported as to a court (mandatory only)  YES  NO  
(b) Has the work of this officer been reported elsewhere?  YES  NO  
(c) Has this officer the subject of any disciplinary action that should be recorded on his report?  YES  NO  
If yes in (a), (b), or (c), give a brief description of what action was taken and attach supporting documents to this report below.

11. A. GRADE ON THIS REPORT AND BASIS ON (Check appropriate box)  
 Fully meets the duty assignment  Partial description of the officer's work  Subsequent description of the officer's work

B. DUTY LOG DURING PERIOD COVERED BY THIS REPORT  
DATE \_\_\_\_\_ TIME \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_

**POLICE DEPARTMENT  
BALTIMORE, MARYLAND**

PERFORMANCE EVALUATION REPORT  
Form 70/397

Section A (To be completed by rating officer)

1. NAME	(Last)	(First)	(Middle Initial)	RANK	HEIGHT	WEIGHT
2. ORGANIZATION					E.O.D.	
3. OCCASION FOR THIS REPORT: (Check Appropriate box)						
<input type="checkbox"/> Semiannual Report		<input type="checkbox"/> Quarterly Report		<input type="checkbox"/> Final Report		<input type="checkbox"/> _____
4. PERIOD COVERED FROM		(Day, Month, Year)	TO	(Day, Month, Year)	MONTHS	
5. PERIODS OF NONAVAILABILITY (15 days or more) (Explain)						
6. DUTY ASSIGNMENTS DURING PERIOD COVERED: A. REGULAR (Date, descriptive title, and duty)						
B. ADDITIONAL (Descriptive title and number of months)						
7. OFFICER'S PREFERENCE FOR NEXT ASSIGNMENT						
(1st choice)			(2nd choice)			

Section B (To be completed by rating officer)

8. NAME AND RANK OF RATING OFFICER	9. DUTY ASSIGNMENT
10. DURING THE PERIOD COVERED BY THIS REPORT --	
	YES      NO
(a) Has the work of this officer been reported on in a commendatory way?	<input type="checkbox"/> <input type="checkbox"/>
(b) Has the work of this officer been reported adversely?	<input type="checkbox"/> <input type="checkbox"/>
(c) Was this officer the subject of any disciplinary action that should be included on his report?	<input type="checkbox"/> <input type="checkbox"/>
11. A. ENTRIES ON THIS REPORT ARE BASED ON (Check appropriate box)	
<input type="checkbox"/> Daily contact and close observation of this Officer's work.	<input type="checkbox"/> Frequent observations of this Officer's work.
<input type="checkbox"/> Infrequent observations of this Officer's work.	<input type="checkbox"/> _____
B. DAYS LOST DURING PERIOD COVERED BY THIS REPORT	
SICK _____	INJURED LOD _____
	INJURED NLOD _____
	OTHER _____

**Section C (To be completed by rating officer)**

Considering the rated officer reported on in comparison with all other officers of the same rank whose professional abilities are known to you personally, indicate your estimate of this officer by marking "X" in the appropriate space below.

**12. PERFORMANCE OF DUTY (Based on Fact)**

	NOT APPLICABLE	NOT OBSERVED	UNSATISFACTORY	AVERAGE	ABOVE AVERAGE	EXCELLENT	OUTSTANDING
(a) REGULAR DUTIES							
(b) ADDITIONAL DUTIES							
(c) ADMINISTRATIVE DUTIES							
(d) SUPERVISION OF SUBORDINATES / OFFICERS							
(e) HANDLING CITIZENS							
(f) EVALUATION (Marking) OF SUBORDINATES							
(g) TRAINING PERSONNEL							
(h) TACTICAL HANDLING OF OFFICERS							

**13. TO WHAT DEGREE HAS HE EXHIBITED THE FOLLOWING:**

	NOT APPLICABLE	NOT OBSERVED	UNSATISFACTORY	AVERAGE	ABOVE AVERAGE	EXCELLENT	OUTSTANDING
(a) ENDURANCE (Physical and mental ability for carrying on under fatiguing conditions)							
(b) PERSONAL APPEARANCE (The trait of habitually appearing neat, smart, and well-groomed in uniform or civilian attire)							
(c) DIGNITY OF DEMEANOR (The qualities of attitude, mannerisms and bearing)							
(d) ATTENTION TO DUTY (Industry; the trait of working thoroughly and conscientiously)							
(e) COOPERATION (The faculty of working in harmony with others, sworn and civilian)							
(f) INITIATIVE (The trait of taking necessary or appropriate action on own responsibility)							
(g) JUDGEMENT (The ability to think clearly and arrive at logical conclusions)							
(h) PRESENCE OF MIND (The ability to think and act promptly and effectively in an unexpected emergency or under great strain)							
(i) FORCE (The faculty of carrying out with energy and resolution that which is believed to be reasonable, right or duty)							
(j) LEADERSHIP (The capacity to direct, control, and influence others and still maintain high morale)							
(k) LOYALTY (The quality of rendering enlightened, faithful and unswerving allegiance to the Department and to professional law enforcement)							
(l) PERSONAL RELATIONS (Faculty for establishing and maintaining cordial relations with sworn and civilian associates)							
(m) ECONOMY IN MANAGEMENT (Effective utilization of men, money, and material)							

14. Considering the possible requirement of service during extreme emergencies or crisis situations, indicate your attitude toward having this officer under your command.

Would you:	NOT OBSERVED	PREFER NOT TO HAVE	BE WILLING TO HAVE	BE GLAD TO HAVE	PARTICULARLY DESIRE TO HAVE
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

15. Indicate your estimate of this officer's "General Value to the Department" by marking "X" in the appropriate box.

NOT OBSERVED	UNSATISFACTORY	AVERAGE	ABOVE AVERAGE	EXCELLENT	OUTSTANDING
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section D. (To be completed by rating officer in pen and ink). (Record additional comments that would further classify the rated officer's performance and qualifications. This space must not be left blank).

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Section E (To be completed by rating officer)

I CERTIFY that to the best of my knowledge and belief all entries made hereon are true and without bias.

\_\_\_\_\_  
(Signature of rating officer)

\_\_\_\_\_  
(Duty assignment)

\_\_\_\_\_  
(Date)

Section F (To be completed by rated officer)

I have seen this completed report. (Check one)

I HAVE NO STATEMENT TO MAKE

I HAVE ATTACHED A STATEMENT

\_\_\_\_\_  
(Signature of Rated Officer)

\_\_\_\_\_  
(Date)

Section G (To be completed by reviewing officer)

SIGNATURE OF REVIEWING OFFICER \_\_\_\_\_ RANK \_\_\_\_\_ PAYROLL NO. \_\_\_\_\_

DISTRICT/SECTION COMMANDER \_\_\_\_\_ Initials \_\_\_\_\_ CHIEF \_\_\_\_\_ Initials \_\_\_\_\_

DEPUTY CHIEF/DIRECTOR \_\_\_\_\_ Initials \_\_\_\_\_ DEPUTY COMMISSIONER \_\_\_\_\_ Initials \_\_\_\_\_

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