A COMPARISON OF THE BEHAVIOR STYLES OF COLLEGE-EDUCATED AND NON-COLLEGE POLICE OFFICERS

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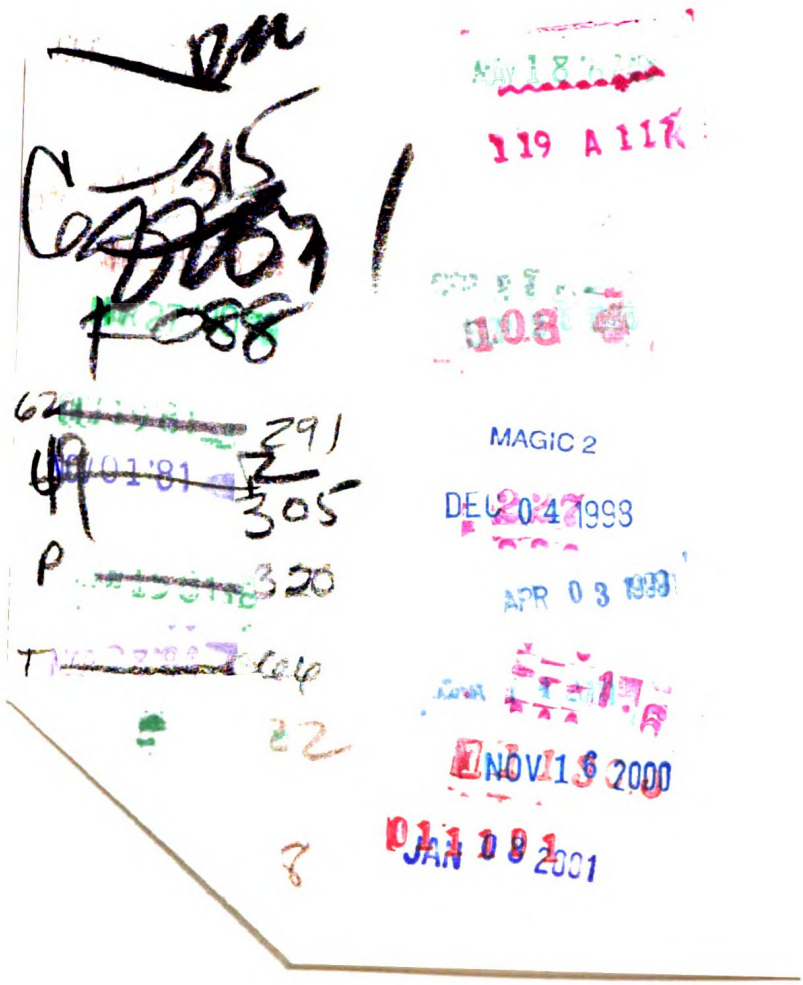
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ABSTRACT

A COMPARISON OF THE BEHAVIOR STYLES OF COLLEGE-EDUCATED AND NON-COLLEGE POLICE OFFICERS

By

Kenneth Edward Christian

Purpose

Many law enforcement agencies are following the recommendations of the various national law enforcement and criminal justice commissions by requiring a college degree as an educational prerequisite for employment. However, other departments are still hiring at the high school equivalency level; they consider a college degree dysfunctional and unnecessary.

The fact is that most police departments will have personnel with mixed and varied levels of education. If a college-educated police officer is actually different from his non-college counterpart, and the rise in educational levels of police officers is imminent, then it is crucial to identify these differences in order to develop organizational policies which can best capitalize on them.

Method

All of the college graduates employed as sworn police officers by the Michigan Department of State Police with the rank of trooper or sergeant (N=126) and a sample of sworn officers who had not attended college (N=126) were inventoried using the Job

Analysis Interest Measurement (JAIM), a self-report inventory used to measure behavior styles (the consistent ways in which individuals organize and direct their mental, physical, and energy resources to accomplish goals).

Almost 75 percent of the respondents returned the self-administered questionnaires. The college and non-college groups were tested for differences with the t-test at the .05 level.

Findings

Two of the six hypotheses stating no difference in behavior styles between the total college (N=105) and non-college (N=93) groups of police officers were rejected; college and non-college police officers differed on Self-Management Style and Leadership Style.

Six of the 18 dimensions used to measure aspects of behavior style showed significant differences. Based on the findings, profiles of the behavior style differences of the college and non-college police officers were developed.

The non-college police officer can be described as a person who: (1) likes to follow a schedule and daily routine; (2) considers himself as practical, sensible, "with both feet on the ground," in contrast to being imaginative and having novel ideas; (3) likes to work closely with his supervisor rather than working by himself; and (4) would rather have his supervisor make decisions for him rather than consult with him, and would prefer to have the supervisor keep a careful watch for deficient performance and to discipline those officers who fall below the supervisor's standard.

The college-educated police officer, in contrast, can be described as a person who: (1) would prefer an unscheduled or a varied work routine, (2) considers himself imaginative and having novel ideas, (3) likes to work independently using his own methods, (4) would prefer to assume a leadership role and likes to direct and supervise the work of others, and (5) uses a logical thought process for processing information and reaching decisions.

A COMPARISON OF THE BEHAVIOR STYLES OF COLLEGE-EDUCATED AND NON-COLLEGE POLICE OFFICERS

By

Kenneth Edward Christian

A DISSERTATION

Submitted to
Michigan State University
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DOCTOR OF PHILOSOPHY

College of Social Science

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Dedicated to my Mother,

Mrs. Ruth L. Christian

Your eldest son has completed school.

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CHAPTER I

THE PROBLEM

Introduction

The ranks of police organizations in the United States are increasingly filled by college graduates as some departments have followed the lead of federal law enforcement agencies, and are requiring a college degree as the minimal educational level for employment. This trend is in sharp contrast to the educational standards which a popular journalist reported in 1968:

> He is a 38-year-old white man. He is above average in height and physical stamina. His eyesight is superior. His education is not.
>
> He finished high school, but did not attend college, and he received what a Federal task force calls "grossly inadequate" training for one of the most "complex and delicate" assignments in American society.
>
> His superiors term his work a profession, but he makes only about $130 a week, less than most union craftsmen. His calling rates low in national esteem. People rank it 54th in status, along with playground directors and railroad conductors, among 90 occupations.
>
> He has sworn to keep his "private life unsullied" and to maintain "courageous calm in the face of danger, scorn, or ridicule," yet such noble dedication seems in pathetic contrast to the environment in which he spends his years. He deals with helpless, broken or enraged people, and he reports daily to an odorous, shabby office. The establishment for which he works is perpetually understaffed, and one in which he feels he has but small chance of advancement.
>
> He works 40 hours a week, spends tedious off-duty hours waiting in court, must remain on constant call, wears a blue uniform, carries a gun on the job, rides in a radio-equipped

> patrol car and faces one chance in eight of being assaulted by someone during the year.
>
> He is the average American cop.[1]

Etched from studies amassed by the President's Commission on Law Enforcement and the Administration of Justice, Fletcher Knebel presented a layman's profile of the average American cop. Knebel went on to say:

> The surveys the Commission gathered supply other insights into the character and career of the average police officer: While his job requires that he make instant street decisions of the wisest and least provocative caliber, he was not tested for emotional stability before going on the police force.
>
> Attitude samplings show that he is prejudiced against Negroes and other minority groups and that he tends to be tougher in his dealings with non-whites. He has little appreciation of the psychology and culture of the poor, minorities or juveniles. He is aware that some fellow officers treat minority citizens with rudeness, abuse and even physical roughness. He opposes full integration of his own police department.
>
> He finds few compensations in his work. He feels stifled by the police seniority system, believes his superiors desert him under political pressure, thinks society expects an impossible performance from him and feels harrassed by the courts for recent decisions that hobble him in gaining convictions. He is disheartened by the increasing difficulty of making a case against criminals he feels certain are guilty.
>
> Many of his emergency calls involve domestic squabbles, in which he acts as arbiter. He seldom arrests either party. Actually, he makes few arrests each month, and half are for such minor offenses as vagrancy, loitering and drunkenness. Two-thirds of his time is consumed by non-crime duties, many of them irksome, criminal investigation occupies few of his hours.
>
> His education has not fitted him to master the enormous social-worker chores that are thrust upon him. The complexities of his job would tax a superman. He is supposed to be familiar with and help enforce a staggering 30,000 local, state and Federal laws. His career becomes a long march of frustration. He is expected to embody the compassionate qualities of priest, nurse, Boy Scout, physician, father, and friend--but he is also supposed to galvanize himself into an instant commander, disciplinarian, keen shot and military genius. He may be pardoned if he fails.

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[1] Fletcher Knebel, "Police in Crisis," Look 32 (February 6, 1968): 14.

> This is the man--the average policeman in the United States--who patrols the streets at a time when lawlessness, riots, racial strife, juvenile unrest and the depredations of the organized Cosa Nostra combine to produce an era of social disorder unmatched in the nation's history.
>
> The police of the United States--350,000 men and women of the municipal, county, and state forces--are in a state of crisis. . . Crime rates rise. Crime solutions recede. Police retreat from rioters, looters, and snipers in one city while exploding with indiscriminate and excessive force in another. . . . Police training, despite stellar exceptions in such cities as New York, Chicago and Los Angeles, remains poor. Educational standards are low. . . .
>
> Thirty percent of the nation's police departments still do not require that applicants have a high school diploma. Only about 20 departments, chiefly in California, require some college credits. And only one of the nation's local and state police units, the 235-man force of Multnomah (Portland) County, Oregon, insists on a college degree for recruits.[2]

Knebel's 12-page article appeared in an issue of a popular magazine which devoted almost its entire content to the problems of the police. The article was based on the findings of the President's Commission on Law Enforcement and the Administration of Justice, which reported in 1967 that "If law enforcement is ever to upgrade the existing levels of personnel, it must do so by concentrating recruiting efforts among college students or among persons who have the capacity to perform college work."[3] The Commission recommended minimum educational requirements: "Due to the nature of the police task and its effect on our society, there is need to elevate educational requirements to the level of a college degree from an

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[2]Ibid., p. 15.

[3]The President's Commission on Law Enforcement and Administration of Justice, Task Force Report: The Police (Washington, D.C.: Government Printing Office, 1967), p. 136.

accredited institution for all future personnel selected to perform the functions of a police agent."[4] These recommendations spurred action on the part of police officers and educators. Between 1967 and 1973 there was an increase of from 191 to 716 law enforcement and criminal justice education programs in two- and four-year institutions of higher learning in the United States.[5] And increasingly, the students in these programs were either already police officers or intended to become such.

Despite the President's Commission recommendation, the necessity and relevance of a college education for police officers was questioned and debated. Citizens, police administrators, government officials, civil rights groups, and various writers addressed the issue. For example, former New York City Police Commissioner Patrick V. Murphy stated, "A college education will be a requirement for advancement to the highest ranks."[6] While Commissioner Murphy was advocating higher education as a means of upgrading the department and heightening professionalism, Chief Jerry V. Wilson of the Metropolitan Police Department, Washington, D.C., was quoted by Alfred E. Lewis as seeing the requirement of a college degree for appointment or advancement in the police department as arbitrary, discriminatory, and "not a sensible policy for a large city police

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[4]Ibid., p. 126.

[5]International Association of Chiefs of Police, Law Enforcement and Criminal Justice Directory 1975-76 (Gaithersburg, Maryland: International Association of Chiefs of Police, Inc., 1975), p. 3.

[6]Bernard Bard, "Should Cops Go to College?" The Lion (May 1973): 29.

department."[7] On the west coast the sheriff of Multnomah County, Oregon, one of the first law enforcement agencies in this country to require a bachelor's degree, found the experience "most disappointing." Sheriff James Holzman believed that the job requirements were emotional stability, intellectual honesty, intelligence, and physical capacity. He further felt that a college degree did not guarantee any of those traits.[8]

The debate is not only found at the highest levels of police agencies but, in a recent survey which included mid-level managers, a Los Angeles recruitment officer stated: "We are interested in the better educated police officer because of the complicated problems he must face on the job." And in the same survey, a Chicago lieutenant was quoted as saying, "I think boredom is a real factor in questioning whether highly educated men are necessary for a patrolman's job."[9]

Further evidence of the division on the issue of the relevance of higher education for the police is the proliferation of editorials and journal articles whose titles state their authors' concerns:

"What's Wrong With Our Police Departments?"[10]
"Can Colleges Make Better Cops?"[11]

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[7]Alfred E. Lewis, "Police Halt Push for College Grads," Washington Post, December 17, 1970, p. D-1.

[8]Bard, "Should Cops Go to College?" p. 29.

[9]Ibid.

[10]John P. Howard, "What's Wrong With Our Police Departments?" The American City 83 (November 1968).

[11]Jonathan Hoffman, "Can Colleges Make Better Cops?" College Management 7 (November 1972).

"Should All Policemen Be College Trained?"[12]

"How Should We Educate the Police?"[13]

"An Unforeseen Problem Resulting From College Educated Policemen"[14]

"College Education for the Patrolman--Necessity or Irrelevance?"[15]

"The College Level Entry Requirements: A Real or Imagined Cure-All"[16]

"Higher Education and Police: Is There a Need for a Closer Look?"[17]

"Quiet Revolution Underway in Police Training and Education"[18]

"The Role of a College Education in Decision-Making"[19]

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[12]William J. O'Rourke, "Should All Policemen Be College Trained?" The Police Chief 38 (December 1971).

[13]George A. Lankes, "How Should We Educate the Police?" Journal of Criminal Law, Criminology and Police Science 61 (December 1970).

[14]Lee P. Brown, "An Unforeseen Problem Resulting From College Educated Policemen," Police 10 (January-February 1966).

[15]Robert J. Jagiello, "College Education for the Patrolman--Necessity or Irrelevance?" Journal of Criminal Law, Criminology and Police Science 62 (1971).

[16]James W. Sterling, "The College Level Entry Requirement: A Real or Imagined Cure-All," The Police Chief 41 (August 1974).

[17]Solomon Gross, "Higher Education and Police: Is There a Need for a Closer Look?" Journal of Police Science and Administration 1 (December 1973).

[18]Noel Greenwood, "Quiet Revolution Underway in Police Training and Education," Los Angeles Times, January 9, 1972.

[19]John M. Trojanowicz and Robert C. Trojanowicz, "The Role of a College Education in Decision-Making," Public Personnel Review 33 (January 1972).

These articles reflect the varying views of field personnel, police trainers, and college teachers.

College administrators, however, as befits their role, have been found to be supportive of higher education for the police and generally agree with former President Donald Riddle of John Jay College when he said,

> The liberal arts curriculum contributes, in ways for which no substitute has been found, to the development of men as thinking, critical, creative beings with an awareness of their relations to the whole of mankind. We do this in faith that this type of man is a better man--whatever occupation he pursues. This faith is not that any educated man is better than an uneducated man, but rather that any man with education is better than that man without it.[20]

It would appear that President Riddle's opinion was shared by the majority of the members of the National Advisory Commission on Criminal Justice Standards and Goals when, in 1973, they advocated college education for police officers.[21] The Commission commented that police agencies have relied on the high school diploma for approximately 25 years, despite the rising education level of the public and despite studies reporting that more than 50 percent of high school graduates are going on to college.

Citing research, the Commission took note of a 1972 Rand Corporation study of the New York Police Department--Police Background Characteristics and Performance--which revealed that college-educated police officers were rated as superior performers and received fewer

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[20]Bard, "Should Cops Go to College?" p. 29.

[21]National Advisory Commission on Criminal Justice Standards and Goals, Police, U.S. Department of Justice, Law Enforcement Assistance Administration (Washington, D.C.: Government Printing Office, 1973), p. 369.

citizen complaints. Similarly, they noted a 1968 study of the Chicago Police Department--Psychological Assessment of Patrolman Qualifications--which revealed that the highest rated group of tenured officers had achieved significantly higher levels of education than those who had been rated lower on measures of field performance such as awards, disciplinary actions, numbers of arrests, times absent, and department evaluations.[22] Based on a review of studies and reports, the Commission stated that, "Police agencies must take a positive approach toward recruiting college-educated applicants and convince students that law enforcement is ready for the college-educated cop."[23]

To insure the continued educational upgrading of police the Commission recommended:

> Standard 15.1:
>
> 1. Every police agency should require immediately, as a condition of initial employment, the completion of at least 1 year of education (30 semester units) at an accredited college or university. Otherwise qualified police applicants who do not satisfy this condition, but who have earned a high school diploma or its equivalent, should be employed under a contract requiring completion of the educational requirement within 3 years of initial employment.
> 2. Every police agency should, no later than 1975, require as a condition of initial employment the completion of at least 2 years of education (60 semester units) at an accredited college or university.
> 3. Every police agency should, no later than 1978, require as a condition of initial employment the completion of at least 3 years of education (90 semester units) at an accredited college or university.
> 4. Every police agency should, no later than 1982, require as a condition of initial employment the completion of at least 4 years of education (120 semester units or a baccalaureate degree) at an accredited college or university.[24]

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[22]Ibid., p. 323. [23]Ibid., p. 327. [24]Ibid., p. 369.

Since the NAC recommendation there have been numerous statements made and conclusions drawn about college-educated police officers. In a panel discussion on standards in criminal justice agencies, Fred Satterthwaite stated:

> I can tell you right now, that that is the way it is now, all of the administrators are people who have come up through the ranks. I am saying that 90% of them have had 8th grade and high school education. They do not understand the new ideas and they feel threatened. Until we can get administrators who have completed this body of knowledge, these men are hard to utilize.[25]

In a 1974 text, Police Personnel Administration, William Bopp noted that college education appears to have a disquieting influence on police officers, though he stated no scholarly study has yet been undertaken to measure its extent. Bopp feels that Henry Baron Brougham was correct when he wrote: "Education makes people easy to lead but difficult to drive, easy to govern but impossible to enslave."[26]

When police officers, who are college students, are daily exposed to a badly administered department and then to lectures on new concepts in creative police administration, the mixture can produce an angry person. It is also noted that exposure to the social and behavioral sciences can have a disturbing effect on patrolmen, who may not cherish the idea of serving in a rigid, highly structured, autocratic environment in the midst of academic

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[25]Academy of Criminal Justice Sciences, "Report of the Standards Committee of the Academy of Criminal Justice Sciences," vol. 3 (1974), pp. 1-9. (Mimeographed.)

[26]William J. Bopp, Police Personnel Administration (Boston: Holbrook Press, Inc., 1974), p. 332.

discussion, which centers on the need for men to control their own destinies, and maintain freedom, liberty, justice, institutional honesty, and participate in group dynamics.

However, another issue that surrounds advanced education for police officers concerns the effect it may have on a person's self-concept. New college graduates often antagonize command officers, who have not had advanced education. This quite necessarily can lead to trouble. Bopp states that,

> Command officers should understand that, generally speaking, this elitist impulse (from new graduates) will run its course in due time, and it will be in the long-range interest of the department to keep from shattering a young officer's potential by launching a personal attack on him to teach him the facts of life.[27]

Many perceive a college education as a panacea to improve individuals and to solve problems that have not yielded to other approaches. But this is hardly sufficient reason for a police administrator to insist upon a college degree as a prerequisite to the police force. Several questions need first to be answered, including whether differences exist between college and non-college police officers in respect to issues such as attitudes and job performance.

One study, comparing police officers who have college degrees with those officers who do not, found that college-educated policemen resign from the force much more frequently than other policemen. In a survey examining police officer personnel files the following emerged: ". . . We find a consistent and definite trend that with

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[27]Ibid., p. 333.

increasing education, there is a reduction in length of service for all . . . groups."[28] This is typical of the type of research which has been done and the conclusions which have been made. These conclusions do not tell us anything about the differences between college and non-college police officers, but they certainly raise questions about the existence of differences.

Need

The reports of studies such as the above have caused a polarization of opinion about the value of college graduates as police officers. Extreme positions have been taken by police administrators--either everyone needs a degree or a degree is dysfunctional and unnecessary. This study assumes that most police departments will have personnel with mixed and varied levels of education. Therefore, it will attempt to assist the administrator who will have to effectively utilize all his personnel where they are most competent, and this will mean, in part, being cognizant of the differences in behavioral styles between college and non-college police officers.

Purpose

The purpose of this study is to analyze the differences in behavioral styles between college and non-college police officers,

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[28]Ruth Levy, "Summary of Report on Retrospective Study of 5,000 Peace Officer Personnel Records," Police Yearbook, 1966 (Washington, D.C.: The International Association of Chiefs of Police, 1966), p. 69.

as measured by the Job Analysis and Interest Measurement (JAIM)[29] in relation to dimensions of:

1. Self-Management
2. Interpersonal Style
3. Reaction to Aggression
4. Information Processing
5. Reaction to Authority
6. Leadership Style

In addition, these concepts will be looked at in reference to the control variables of rank and specialization.

Theory

Basic Beliefs

Each of us makes judgments about what we can expect from the world, from ourselves, and from other people. These judgments may to a very large degree be situational, but our judgments are also influenced by basic expectations or beliefs. No matter what the source, beliefs orient us to the world in terms of optimism or pessimism, self-confidence or self-doubt, and trust or suspicion.

Although our several beliefs are normally consistent with each other, sometimes they are not. For example, some individuals may be optimistic about receiving satisfactions, but have little confidence in their own ability to influence outcomes. They may feel that the world is a good place, but that it is best to take

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[29]Regis H. Walther, The Psychological Dimensions of Work: A Research Approach Through Use of a Self-Report Inventory (A Monograph available from The George Washington University, 1972), p. 3.

things as they come. Other individuals may be very self-confident, but very distrustful of other people. They may view the world as a dangerous jungle, but are confident of their own ability to take care of themselves. This pattern is often found among juvenile delinquents.

Three aspects of basic beliefs should be considered. First, a person's basic beliefs often influence, to a significant degree, what happens to him in specific situations. Perhaps a mechanism sometimes called the "self-fulfilling prophecy," in which a person's expectations will influence the outcome, is at work. For example, a person who expects hostility acts in a way which increases the chances that he will be treated in a hostile manner; while, conversely, a person who expects friendship acts in a way to increase the chances of a friendly response. In both cases, expectations may be confirmed, and the basic belief is reinforced.[30]

From Beliefs to Behavior

Everyday experience, as well as a large body of research, indicates that a man's actions are guided by his beliefs. A person reacts to the world through a perceptual frame of reference which influences his judgments, attitudes, and behavior. His apparently irrational acts, no less than his rational acts, are guided by how he represents his circumstances to himself. No matter how bizarre his behavior may appear to an outsider, his behavior usually makes sense in terms of his own system of beliefs.

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[30]Ibid., p. 1.

The notion that the study of the internal frame of reference of the individual is a useful approach for understanding behavior is consistent with the view of many personality theorists.[31] Kelly, for example, in proposing his psychology of personal constructs, states that man creates his own ways of seeing the world in which he lives; the world does not create them for him. Thus, if we examine a person's philosophy closely, we find ourself examining the individual himself. To understand how a person behaves, we need to know the manner in which he represents his circumstances to himself.

Beliefs do not exist in isolation, but in larger belief systems. Each individual constructs for himself his own meaningful world through a comprehensive belief system taking into account all aspects of the environment that he considers to be important. An individual's belief system serves as a "cognitive map" guiding his behavior. Beliefs can have a rational, cultural, or emotional basis. Some beliefs are based upon and supported by an individual's observations combined with reasoning. Other beliefs are essentially social and cultural in nature. These social and cultural beliefs are the things which in any given society or social group "everybody knows" without need of proof. Such beliefs may or may not be logically consistent with other beliefs. Finally, there are beliefs which enable the individual to feel better about something which would

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[31] A. W. Combs and D. Snygg, Individual Behavior (New York: Harpers, 1959); G. A. Kelly, The Psychology of Personal Constructs (New York: Norton, 1955); C. R. Rogers, Becoming a Person (Boston: Houghton Mifflin, 1961); Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960); Milton Rokeach, Beliefs, Attitudes and Values: A Theory of Organization and Change (San Francisco: Jossey-Bass, 1968).

otherwise produce an unpleasant or distressful state of emotion. Any given belief may have all three elements inherent in it, but the relative proportions vary greatly.[32]

Behavior Styles

We function in a world too complex for continuous, conscious response to all of the information around us. There are an almost infinite number of decisions and physical actions that need to be made at the physical, psychological, and sociological levels for people to function adequately in their environment. Perhaps determinations concerning what we notice, what it means, what to do about it, and the resulting physical manipulation of both our internal and external environment are performed "automatically" through complex patterns of behavior which are available to us with a minimum of conscious effort.

We develop "automatic" ways of dealing with recurring situations and reserve conscious information processing and decision making for the more significant or the more unusual occasion. These automatic processes give rise to behavioral styles--characteristic types of performance, conscious and unconscious, in various environments. Our behavioral styles are determined by our innate characteristics (personality), acting in combination with our experience with what works for us, and our social values.

Behavioral styles are very difficult to change because their elements work together as part of a functioning system. Varied life

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[32]Walther, Psychological Dimensions of Work, p. 3.

experiences can effect slow change in one's behavior styles, but planned change requires a good deal of conscious effort.

No one individual can maintain a full repertoire of behavioral styles to enable him to be effective in all situations. A behavioral style which leads to effective performance in one situation may lead to ineffective performance in another situation. In this respect an individual with a broad array of behavioral styles would be considered more adaptable than one with a more narrow set of responses.

Summary

People make judgments about what they can expect from the world and from other people. Their behavior usually reflects their own system of beliefs. They act in ways which confirm their expectations, and their basic beliefs are reinforced. Beliefs can have a rational, cultural, or emotional basis; some are based upon observations combined with reasoning; others are essentially social and cultural in nature. Our behavioral styles are determined by our innate characteristics, our experiences, and our social values. Life experiences can effect slow change, but planned change requires concerted effort.

Hypotheses

A college education can be considered a structured experience. It will be hypothesized in this study that police officers who have a college education will differ from those who have not attended college. Research has shown that certain self-reported

beliefs are associated with the occupation a person chooses, his satisfaction with the job, and the quality of his work performance. It is hypothesized that these attitudes relate to his behavioral styles, and are associated with his level of education.

Hypothesis 1: College and non-college officers will report differences in their degree of self-regulation or Self-Management.

Hypothesis 2: College and non-college officers will report differences in their handling of Interpersonal Situations.

Hypothesis 3: College and non-college officers will report differences in the manner in which they React to Aggression.

Hypothesis 4: College and non-college officers will report differences in the manner in which they Process Information.

Hypothesis 5: College and non-college officers will report differences in the manner in which they Relate to Authority.

Hypothesis 6: College and non-college officers will report differences in regard to their Leadership Styles.

Overview

In this chapter it was reported that presidential commissions are recommending college education for police officers while police administrators are divided on the question of the necessity and relevance of college education for police officers. Educators espouse education for the purpose of developing creative beings who possess an awareness of their relation to the whole of mankind, while police supervisors call attention to the short tenure of college-educated officers.

Researchers cite college-educated officers as superior performers with few citizen complaints, while police management specialists see police administrators as unable to accept or to utilize the college-educated officers. The officer himself may have behavioral characteristics which antagonize command officers who have not had advanced education.

Those studies to date which have concentrated on differences in performance or length of service are really treating only symptoms of underlying differences. Using the preceding hypothetical statements as a basis for investigation, this study will attempt to identify behavioral style differences between college and non-college officers. The general influence of education and the empirical studies of the police and education are reviewed in Chapter II.

In Chapter III, the population, the measures, and the analyses are explained. Each hypothesis is restated in an operational manner with the terms defined and the rationale for each summarized.

The results of the JAIM survey of behavior styles differences between college and non-college police officers are presented in Chapter IV.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Research reports have found: ". . . The department should attempt to attract and retain [men who obtained college degrees]. . . . However, we believe that men of average intelligence and no college education are still needed in substantial numbers. . . ."[33] Even in light of such research conclusions, extreme positions have been taken by police administrators--either everyone needs a degree, or a degree is dysfunctional and unnecessary. Each of these positions is unrealistic.

Astute administrators realize they must deal with the reality that most police departments will have personnel with mixed and varied levels of education. What are some of these differences? The research literature has defined differences between college and non-college individuals in the general population and also differences between college and non-college police officers. But none of these studies have focused on specific behavioral style differences between college and non-college police officers.

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[33]Bernard Cohen and Jan M. Chaiken, Police Background Characteristics and Performance: Summary Reports (Washington, D.C.: Government Printing Office, 1972), p. 31.

Background

The literature review for this study was begun using the sources found in the James J. Brennan Memorial Library located in the School of Criminal Justice at Michigan State University and the Michigan State University Library, both in East Lansing, and in the State of Michigan Library in Lansing. Then a computer search of education, law enforcement, and related topics was made through the Department of Justice, Law Enforcement Assistance Administration, National Criminal Justice Reference Service, an international clearinghouse for criminal justice information. This initial search of the libraries and the National Criminal Justice Reference Service identified over 200 articles, books, theses, dissertations, and studies, of which 191 were physically located and reproduced. The citations for these 191 references were published by the Criminal Justice Systems Center at Michigan State University as "Preliminary Bibliography: The Effects of Higher Education on Criminal Justice Personnel," December 1974.

The sources which were of particular relevance to this study are noted in the footnotes and the bibliography. Other reference sources were not included because they either duplicated findings covered in the review or were considered inappropriate for reasons of questionable methodology.

The Influence of Education

Dr. James W. Trent and Dr. Leland L. Medsker conducted a massive investigation of 10,000 high school graduates in 16 different communities and demonstrated that higher education did make a

difference. After finishing high school, young people who persist through college have not only higher levels of intellectual curiosity and more autonomous styles of thinking than their counterparts who spent the same four years in the world of work, they are also more tolerant of ambiguity, less authoritarian, and more receptive and responsive to a wider environment than those who did not attend college. In personality, as well as in cognitive performance, those who go on to college and maintain their enrollment through the degree-granting process reveal such gains relative both to those who do not enter some institution of higher learning and to those who drop out after matriculation to college. They found that the persisting student is one who conforms to an adult reference group which shares the modal values of the fundamentally middle-class college. And because the student's conforming tendencies are sufficiently well established relatively early in life, he is able to conform to the demands that college makes on him, to change in directions along which he has already been pointed. "It follows then that those who do persist represent middle-class values--intellectual openness, personal autonomy, freedom from authoritarianism, independence of thought, and tolerance of ambiguity."[34]

The research of Trent and Medsker permits us to look also at the development of high school graduates who enter the world of work rather than the university. Compared on the attributes facilitated by college, these young people showed little gain, and even regressed

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[34]James W. Trent and Leland L. Medsker, Beyond High School: A Psychological Study of 10,000 High School Graduates (San Francisco: Jossey-Bass, 1968), pp. x-xi.

on some measures of middle-class values. The researchers reflected on the somewhat ominous likelihood that in some occupational milieus, "independence, autonomy, and tolerance, are not viewed as desirable traits." This observation is not surprising when we look at industry and public service and see that they have not been known for prizing those characteristics which college tends to foster, except at certain special levels of the organization. Many structures of commerce, the military, and law enforcement were not created to build character, at least not the same forms of character as those coming from the university.[35]

Personality development--growth of autonomy, intellectual interests, and an enlightened self-awareness--was found to be most evident among adults who persisted in college for four years, and least evident among their peers who did not enter college. This was expected even with the factors of ability and socioeconomic background held constant. It was also found that the factors which were related to persistence in college were the same ones which were associated with change in attitudes and values. This corroborated the idea of the function of predisposition for change. Lastly, it was found that non-college youth did not find, in their working environment, the options and opportunities for exploration necessary for adequate vocational and personal development.[36]

Evidence in the literature and in current studies tends to indicate that college does make a difference. Although the college experience seems typically to be incorporated within a life pattern,

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[35]Ibid. [36]Ibid., p. 16.

the main lines of which have already been determined, the experience nonetheless appears to precipitate crucial changes of direction for many people. There are increases in the amounts of information possessed about various topics, and in the degree of skill in performing certain tasks. There are changes in interests, which are often accompanied by changed attitudes toward the self and the world. And in some cases, there are more fundamental personality changes, accompanied by the emergence of new values.[37]

Higher Education for the Police--The Issue

The education literature indicates both that individuals who go on to college are different from those who do not attend college and that college does make a difference. With this background, we will explore the relevance of higher education for the police.

In Chapter I the positions of various advocates and opponents of higher education for the police were presented in general terms. Now, the work of Paul Chevigny, who has taken a stand and has cited examples concerning the irrelevance of education for the police, will be reviewed and critiqued.

In his book, Police Power, Chevigny maintains that academic training for patrolmen is largely irrelevant.[38] To support his position he offers three reasons and one example: first, college education is unnecessary for the patrolmen; second, police academies

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[37]Nevitt Sanford, ed., The American College: A Psychological and Social Interpretation of the Higher Learning (New York: John Wiley and Sons, Inc., 1962), p. 72.

[38]Paul Chevigny, Police Power (New York: Pantheon, 1969), p. 272.

provide adequate technical training; third, the authoritarian aspects of police work will, in any event, overwhelm any liberal impulses derived from a college experience. As an example he cites the hapless law-trained police officer as a paradigm of educational failure. The book describes racial slurs, police job violence, hothead tactics, and other foolish and provocative behavior as common-place forms of police conduct. Chevigny states that the police believe in conventional wisdom, are intolerant of deviance, and actively suppress legitimate political activity. He further states that they are ignorant disciples of law and order, simultaneously demanding and abusive. They exercise power both arbitrarily and unconstitutionally. He speaks of the police as authorized enforcers of societal intolerance, men of crushing arrogance, following a self-ordained system of ethics and law, operating in secrecy on behalf of the questionable goal of social bigotry and destroying respect for the law and hence its usefulness as a social tool.[39]

In his critique of Chevigny's book, Jagiello, after identifying the negative implications of police behavior and in apposition to the negative typification, constructs an ideal type patrol officer. He is tolerant of deviance, enjoys broad social vision, is schooled in the complexities of the political processes in a pluralistic society, educated in the law and the competing values it serves, dispenses even-handed justice, stands secure against the impulses

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[39]Robert J. Jagiello, "College Education for the Patrolman--Necessity or Irrelvance?" Journal of Criminal Law, Criminology and Police Science 62,1 (1971): 114.

of prejudice and bigotry, and commits himself to the preservation of law as an effective social arbiter.

Where will this ideal man come from? Why, he will be a high school graduate, trained in a police academy before going on the street!

The following is a rebuttal to Chevigny's reasons, in support of his statement that academic training is largely irrelevant.

1. Chevigny has made a simple statement regarding the irrelevance of academic training for police officers. He seemingly offers three simple and forthright reasons in support of his position. However, the situation is much more complex than one is first led to believe. Evidence to support either side of such an assertion is sparse; few attempts have been made to systematically and empirically study the problem; most empirical studies which have taken place have limited utility because their data bases were limited.

2. Most writers do not sufficiently discriminate among the kinds of values that they attribute to either college-educated police officers or to non-college officers.

3. Writers such as Chevigny do not take sufficient account of the socializing values of college and the kinds of values likely to be developed by a college experience, i.e., a respect for intellectual accomplishments and analytical skills.

4. Many uneducated officers of higher rank do not take into account that a college-educated officer has been exposed to the process of reasoning for an extensive period of time, and therefore

is less prone to accept simplistic values and simplistic solutions for complex problems.

5. Police administrators have not considered the college-educated officer as an asset early enough in the officer's career. As such, the educated officer comes to the administrator's attention only after situations have become unbearable or out-of-hand.

6. Police work involves discretion beyond that of many other occupations, and until studies demonstrate that individual values do not frame and direct an officer's discretionary response, it is premature to assert that a college education is not needed.[40]

Strong assertions and recommendations have been made concerning the necessary educational level for police officers. Before we either accept or condemn these recommendations, we should first look at the differences between the college-educated officer and the police officer who has not chosen to attend college. When we can distinguish and discuss the differences empirically, then we will have a basis for personnel decisions.

Empirical Studies of Education and the Police

The first social scientists to study the police in the United States were psychologists Lewis Terman and Arthur Otis, who were interested in intelligence tests and their effect on police selection. In 1916, they concluded that more than two-thirds of the candidates for the San Jose, California, Police Department were "mentally inferior." This finding was in harmony with numerous investigations which had shown that inferior ability was one of the

[40]Ibid., p. 119.

important factors operating in favor of elimination from school. They recommended excluding from examination for the position of police officer all applicants who had not completed a certain minimum of school work, preferably that represented by graduation from high school.[41]

A few years later, Louis Thurstone conducted a similar study of the Detroit Police Department. He administered the Army Alpha Intelligence Examination to 358 members of varying ranks. The results were that the higher ranking officers did not do as well as the patrolmen who served under them. He believed that this paradoxical result was because the most intelligent men left the department for greener pastures and did not wait for promotion.

After examining the Army Alpha scores for Army draftees in the Surgeon General's office in Washington, Thurstone wrote:

> The point I want to make clear is that the lower intelligence scores of officers in the police service is not individual for the Detroit department but that it is indicated also in other available records about this occupation. These data at least point to the possible conclusion that the brightest men who enter the police service drop out from that occupation in favor of other occupations where their ability is better recognized.[42]

Intelligence tests, such as those noted by Thurstone and Terman, were used by the major law enforcement agencies in the twenties and thirties as a part of their selection process. But until the depression, membership in police departments was a monopoly of the less educated lower class.

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[41]Lewis Terman, "A Trial of Mental and Pedagogical Tests in a Civil Service Examination for Policemen and Firemen," Journal of Applied Psychology 1 (March 1917): 26.

[42]Louis Thurstone, "The Intelligence of Policemen," Journal of Personnel Research 1 (1922): 70.

The membership in police departments began to change when, in the late 1930's, top-grade patrolmen in New York City could earn $3,000 a year. They could afford the luxuries that were the envy of the middle class, and they were never laid off. During this time, middle-class students began to regard a police career pragmatically. They chose police work in preference to occupations which were higher on the social scale, because of the department's salary and security. City government welcomed the better-educated middle-class candidates, and entrance examinations of course favored them. Of the 300 recruits appointed to the New York City Police Department in June 1940, more than half held college degrees; some were teachers, engineers, lawyers, and medical school students. Similar groups of middle-class college men began their careers as police officers during this time and they formed a nucleus of the future elite group which attempted to raise the prestige of the police occupation by transforming it into a profession, consistent with their middle-class ideology. This gave law enforcement its first real cohesive group of college graduates.[43]

A researcher might assume that the police and police education would have been the topic of much research between 1916 and 1965. However, only three studies are to be found from this period that relate to police attitude, behavior, or education. The police, in general, were neglected. In the 25-year period from 1940 to 1965, only six articles remotely concerned with the police were published in the American Journal of Sociology and the American Sociological

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[43]Arthur Niederhoffer, Behind the Shield (Garden City, New York: Doubleday and Company, Inc., 1967), pp. 16-17.

Review, the two major sociological journals.[44] Since 1966, however, this condition has been reversed and the police system has become a popular subject for research.

In one of the first sociological articles which dealt with the education of the police, Read Bain investigated the ill feelings between the police and citizens. He concluded that the ill feeling was fueled by police misconduct (of 294 men leaving the Los Angeles Police Department in one year, 115 were discharged for misconduct ranging from intoxication on duty to grand larceny), and poor personnel with low education and low intelligence. He estimated that three-quarters of the policemen in the United States were mentally unfit for their work as evidenced by their low I.Q. scores and lack of education. Among his recommendations, in 1939, was one that policemen should be college men.[45]

Neiderhoffer's work, Behind the Shield, represents the first systematic attempt to draw together various pieces of information on the police personality. He found that cynicism in police (viewing the world as a jungle in which crime, corruption, and brutality are normal features of the terrain) is generally a function of time on the job. He found that in contrast to 34 recruits surveyed who were relatively free of cynicism, 186 veteran members of the same force exhibited substantial cynicism directed against life, the world, people in general, and against the police system itself. They were

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[44]Ibid., p. 4.

[45]Read Bain, "The Policeman on the Beat," The Scientific Monthly 48 (May 1939): 450-58.

most cynical about newspapers (enjoy playing police misdeeds) and departmental complaints (results from pressures from higher authority). Cynicism as measured by the questionnaire increased with the length of service for five to ten years, then leveled off. Patrolmen with higher education exhibited more cynicism. This was explained as being caused by frustration at the lack of advancement.

The scores of the college-educated group are relevant to the problem of whether authoritarianism of policemen (feeling justified and righteous in using power and toughness to perform his duties, and like a martyr when charged with brutality and abuse of power) is implanted prior to appointment through a process of self-selection, or whether it develops later as part of the socialization process. Supporters of the theory that authoritarianism is part of the personality before appointment to the department should be consistent and acknowledge that high authoritarians are more susceptible than low ones to cynicism. It has been well established, however, that the higher the degree of education, the lower is the degree of authoritarianism. It would follow, then, that the college-educated policemen, ostensibly low in authoritarianism, would be less cynical than other patrolmen. However, college patrolmen, on the contrary, are more cynical than other patrolmen. Where cynicism is concerned, frustration is a more important variable than either education or, by implication, authoritarianism. The conditions of life on the police force prevail over personality potentials.[46]

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[46]Neiderhoffer, Behind the Shield, p. 242.

Since the effect of education was masked by the frustration factor, Niederhoffer investigated the effects of education by attempting to control the effect of frustration. To do this, he chose the detective and superior officer groups. Their degree of frustration on the job was lower than that of patrolmen, because they succeeded in one of the two great goals of every member of the force--promotion to higher rank, or assignment to the prestige-laden detective division. He applied the same test of college education to these two groups. The educated members scored consistently lower on authoritarianism than the rest of the sample who were those who had fewer than two years of college education.[47]

While it would appear, in our present society, that education is regarded as an almost magic-like mechanism for improving the individual and uplifting the community, not everyone who has the ability desires to attend college. The factors behind college attendance need to be considered. Smith, Lock, and Walker (1967) realized that though cultural and socialization processes were significant in impelling people to attend colleges and universities, the matter of personality as a factor in undertaking higher education had not been sufficiently investigated insofar as the police were concerned. The researchers questioned whether personality factors might explain college attendance by policemen, or the lack thereof.

Their study was an investigation in which the authoritarianism of the newly appointed police who had not chosen to attend college and those who had enrolled in college were compared. They

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[47]Ibid.

found that while there were different facets of personality as measured by the Rokeach and Piven scales, the college-oriented police were significantly less authoritarian than the non-college police. Further, there was no significant difference between the older (25-29) and younger (21-24) non-college police, but there was between the older and younger college policemen--the younger college men being least authoritarian.

They concluded:

> This study demonstrates that police who are attracted to college are significantly less authoritarian than police who are not compelled to attend college. This implies that there are certain personality characteristics of police who attend college that make it likely that they will be able to function more effectively with respect to problems stemming from civil rights demonstrations and more effectively in accordance with the guidelines set down by the Supreme Court with respect to arrests and search and seizure.[48]

Using the same test as in the previous study, Smith, Locke, and Walker asked the following question: "Are there differences in authoritarianism between non-police freshmen and newly entered college students who are policemen?" The subjects were 89 non-police freshmen and 122 newly appointed policemen. Both groups were enrolled in the same classes at the John Jay College of Criminal Justice in New York City.

Contrary to what had been expected, the policemen scored significantly lower on the authoritarianism scale than the non-police students. Compared with the results of the earlier study, this group

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[48]Alexander B. Smith, Bernard Locke, and William E. Walker, "Authoritarianism in College and Non-College Oriented Police," Journal of Criminal Law, Criminology and Police Science 58 (March 1967): 132.

of college-oriented policemen was again lower in authoritarianism than the non-college oriented group of police officers.

The researchers concluded:

> The present investigation demonstrates that the police officer enrolled in college, scores significantly lower on the "authoritarian" scale than does his fellow student who is not a police officer. The implications of these results in terms of role of these college educated police officers in dealing with the many social problems of the day cannot be overemphasized, and the provision of an opportunity for a college education for these police officers becomes a public obligation.[49]

A question left unanswered was the effect of a four-year college degree on the personality of policemen. Was there a significant difference between the authoritarianism of police who had completed their studies for a baccalaureate degree, and a matched group of policemen who had not attended college? Smith, Locke, and Fenster addressed this question. They selected 39 graduates of John Jay College and matched them with a group of 39 police officers who had no college experience. The mean age for the police college graduate was 40.6 years and that for the non-college group was 40.0 years. The college group had 18.2 years of service in the New York City police department, while the non-college sample had a mean of 18.3 years of service. Again the modified Rokeach and Piven scales were combined, as previously, to test for authoritarianism.

The findings revealed a highly significant difference between the college graduate and the non-college population. The findings were consistent with those found earlier (1967) on which men attending

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[49]Idem, "Authoritarianism in Police College Students and Non-Police College Students," Journal of Criminal Law, Criminology and Police Science 59 (September 1968): 442.

college were found to be less authoritarian than those who had no college experience. This study demonstrated that the completion of a baccalaureate program had a considerable impact upon the authoritarian attitudes of the policeman student, as contrasted with his brother officer who did not attend college at all. The researchers concluded:

> . . . The present study shows that the completion of a baccalaureate program results in a notable diminution of authoritarian attitudes in a police population as contrasted to a matched group of non-college educated police.[50]

In a study for the International Association for Chiefs of Police, Dr. Nelson Watson surveyed a national sample of 4,672 policemen, and found some interesting differences between college and non-college officers in their perception of their role and in approaches to the concepts of justice and law. For example, the lower the educational level of the officer, the greater was the tendency to view the law as fixed and inflexible. The statement that "as long as a law is on the books the police must enforce it" was supported by 71 percent of the policemen who were not high school graduates, by 67 percent of the high school graduates without any college credits, by 59 percent of those with some college education, and by 53 percent of those with college degrees.[51] Watson's findings were not conclusive, but when viewed in light of earlier research in which McNamara observed

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[50]Alexander B. Smith, Bernard Locke, and Abe Fenster, "Authoritarianism in Policemen Who Are College Graduates and Non-College Police," Journal of Criminal Law, Criminology and Police Science 61 (June 1970): 314-15.

[51]Nelson A. Watson and James W. Sterling, Police and Their Opinions (Washington, D.C.: International Association of Chiefs of Police, 1969), p. 143.

that "Such a view of the law [as fixed and inflexible] can create difficulties because it predisposes police to seek quasi-legal or illegal solutions to their perceived problems," it suggests that large-scale recruitment of college graduates would significantly affect police performance.[52]

The effect of advanced education on law enforcement personnel was again demonstrated in a 1972 study of 1,915 New York City police officers by Bernard Cohen and Jan Chaiken of the Rand Institute. They looked at patterns of behavior of college and non-college officers over an 11-year period. A typical example of the differences which they found was in the number of civilian complaints against officers. Three hundred sixty-nine men or 24 percent of the non-college officers had a civilian complaint; men with at least one year of college, who remained on the force, had fewer civilian complaints than average; and only four college graduates, or 8 percent, had a civilian complaint. Generally speaking, the older, more educated officer received fewer civilian complaints than the younger, less educated officer.[53]

A similar disparity in civilian complaints was found between older college graduates and younger high school graduates. The researchers stated that candidates who are 21 years of age at the time of joining the force and are high school graduates may be

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[52]John H. McNamara, "Uncertainties in Police Work: The Relevance of Police Recruits' Backgrounds and Training," The Police: Six Sociological Essays, ed. David Bodua (New York: John Wiley and Sons, Inc., 1967), p. 250.

[53]Cohen and Chaiken, Police Background Characteristics, p. 21.

expected to receive 6.5 times as many civilian complaints as older candidates (age 31) who graduated from college and had 11 years on the force. They stated that similar predictions could be obtained from the regression equations for other performance variables such as absenteeism, removal of firearms for cause, and other departmental disciplinary actions.[54]

Cohen and Chaiken concluded:

> Since men who obtained college degrees either prior to or after joining the force were good performers, the department should attempt to attract and retain such men and should assist them in continuing their education. However we believe that men of average intelligence and no college education are still needed in substantial numbers for assignments such as traffic duty, where they appear to perform well and become stable, satisfied employees.
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> Officers who are older at the time of appointment and have advanced education should be assigned in greater numbers on a permanent basis to sensitive areas of the city, and also they should be heavily represented in those units which are routinely mobilized and assigned to trouble spots. This is a direct result of our findings that the older and more educated subjects were less likely to incur civilian complaints than their younger, less educated counterparts.[55]

Irving Guller examined another facet of the impact of college education: whether policemen who were college seniors differed from police of comparable age and status who were freshmen, in terms of levels of authoritarianism as measured by the Dogmatism Scale.[56] Dogmatism, "closed-mindedness," implies the tendency to form opinions about things largely on the basis of their source and independent of their validity. The person high in dogmatism is regarded as prone

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[54]Ibid., p. 23.

[55]Ibid., p. 31.

[56]Irving Guller, "Higher Education and Policemen: Attitudinal Differences Between Freshman and Senior Police College Students," The Journal of Criminal Law, Criminology and Police Science 63,3 (1972): 396.

toward opinionation, rigidity, resistance to new ideas, and traditionalism. Conversely, the low dogmatism or "open-minded" person tends to be willing to weigh new ideas, is considered to be more flexible, and is less prone toward prejudgment and prejudice.[57]

Guller found evidence that exposure to higher education was associated with less negative self-esteem and diminished "hard line" or punitive attitudes toward social deviance.[58] It has been noted that policemen man tend to develop tough and punitive attitudes for reasons of self-defense and social acceptability within police society.[59] If education is correlated with improved self-esteem and reduced rigidity, and has some impact by softening hard attitudes toward people, it would presumably be meeting some of the goals its proponents have enunciated.

Education of the police has been widely, and for the most part simplistically, proposed as a panacea. The question is, however, what kind of education? What should the police study if they are to become sufficiently wise to deal with their dilemma? The results of Guller's study would suggest that it does not make very much difference what is studied. What he found is that the amount of exposure to college education itself, rather than the issue of which major, has the most effect on producing presumably positive cognitive changes. He found that the statistically most significant of these was in the

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[57]Milton Rokeach, Beliefs, Attitudes and Values: A Theory of Organization and Change (San Francisco: Jossey-Bass, 1968), pp. 3-27.

[58]Guller, "Higher Education and Policemen," p. 401.

[59]Niederhoffer, Behind the Shield, pp. 102-151.

area of dogmatism. The police students sampled were not significantly more dogmatic than a randomly selected group of largely upper middle-class, predominantly white, suburban-dwelling, and liberally oriented students who were much younger and were not exposed to the conservative traditions of police organization. His finding is in accord with the conclusions reached by Smith, Locke, and Walker. The results further suggest that those police students who have been exposed to college are less dogmatic than those whose college experience has just begun. As was noted, lower levels of dogmatism are related to greater flexibility and openness to alternative points of view. Guller reemphasized that dogmatism has historically been regarded as a relatively stable if not inherent cognitive style of the individual and highly resistant to change.[60]

Guller concluded:

> There is no reason to assume any fundamental difference between our subject groups with regard to dogmatism at the outset, i.e., before exposure to college. Furthermore our senior police subjects were, on the average, older, more firmly rooted in their jobs (though not significantly in either case) than the freshman police group. One might, therefore, anticipate greater rigidity on their part. The opposite was the case. Barring the operation of potent unknown variables, greater exposure to education on a college level is what seems to make a difference. . . .[61]

Research on the police and education has been limited in both breadth and depth. Two reasons for this have been identified: First, officers will not talk. As Justice Oliver Wendell Holmes noted, the surrender of freedom of speech is a condition of employment

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[60]Guller, "Higher Education and Policemen," p. 400.

[61]Ibid.

for police officers. Second, the code of the job stresses secrecy and the confidential nature of police knowledge and opinions.[62]

In spite of these limitations, a close look at the available studies gives some insight into the comparative profiles of college and non-college police officers. The college-educated police officer in comparison to the non-college police officer has a generally higher I.Q., is embued with more cynicism, has a lower degree of authoritarianism, views the law as less fixed and more flexible, receives fewer citizen complaints, is less dogmatic, has more self-esteem and less punitive attitudes toward social deviance.

Since the profile of the college-educated police officer has been outlined, let us present a profile of the behaviors we might expect on the part of the non-college officer: being higher in authoritarianism, one could expect him to more often use force or the threat of force to obtain citizens' compliance or cooperation; viewing the law as fixed and inflexible would predispose him to seek quasi-legal or illegal solutions to perceived problems; each of the prior actions would increase the probability of receiving citizen complaints; higher dogmatism would imply the tendency toward opinionation, rigidity, resistance to new ideas, and traditionalism; this closed-mindedness would be evidenced by inflexibility and proneness toward prejudgment and prejudice; negative self-esteem would be expressed by actions which would reflect arrogance, an inability to express feeling, cowardice, an inferiority complex, sensitivity to criticism, and feelings of hopelessness; a hard line attitude would

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[62]Niederhoffer, Behind the Shield, p. 193.

be associated with behavior which reflects a lack of trust, a reliance on force and combat, a dislike of individualistic and unconventional people, and the belief that intellectuals are out of touch with reality.

This chapter has not exhausted the literature which deals with the differences between college and non-college police officers. Primary attention here has been devoted to a review of those studies where differences between the groups have been found. Other studies which have found no differences, or which have found that college graduates perform "poorer," have not been explicitly reviewed here. These other studies may be criticized for one or more of the following reasons:

1. Some studies have used questionable performance measures as criteria. For example, studies which find that college graduates make fewer arrests tell very little.

2. Some studies have found no differences in attitudes between two groups of college and non-college police officers. One group may have attended the local community college staffed by police department personnel, while the other group experienced the same socialization process on the job. In reality they are two homogeneous groups.

3. There are several studies which have been contaminated during the data-gathering process. Through their professional curiosity, police officers have become aware of research hypotheses before the data gathering has taken place.

4. The analysis of law enforcement data has not been as sophisticated and insightful as it has been in some of the other social science research.

5. The law enforcement field has its share of politically motivated studies, though some only become political when results are released selectively.

Summary and Conclusions

Massive research on education has demonstrated that higher education does make a difference. College graduates are more intellectually curious, autonomous in their thinking, tolerant of ambiguity, less authoritarian, and more receptive and responsive to a wider environment than those who did not attend college.

Using the preceding summary of the literature on the differences between college and non-college individuals as well as the information contained in previous sections, a methodology was developed to investigate the differences in behavior styles between college and non-college police officers.

CHAPTER III

DESIGN OF THE STUDY

Introduction

Occupational psychologists are in general agreement that every occupation and profession, over a period of time, develops a common set of beliefs, values, attitudes, and working styles which tend to characterize members of that occupation or profession. An occupation personality tends to reinforce itself, establishing a high degree of stability. The specific mechanisms through which this stability is achieved include: (1) the attraction of a particular type of personality and repulsion of others; (2) the establishment of informal and formal selection processes for entry into the occupation or profession; and (3) the reinforcement of desired characteristics and behavior. This process results in shared assumptions regarding the ideal philosophy, the ideal set of behaviors, and the ideal person for the occupation or profession. The resultant personality structure consists of those interests, attitudes, values, and modes of relating to others that make the individual maximally receptive to the cultural norms and ideologies of his occupation or profession, that help him perform adequately, and that enable him to achieve adequate gratification and security.

With this in mind, we will look at the police occupation which has traditionally maintained an entrance requirement of a high

school diploma or its equivalent, but which through its representatives on the President's Commission on Law Enforcement and Administration of Justice in 1967 and on the National Advisory Commission on Criminal Justice Standards and Goals in 1973 has stated as a goal the upgrading of the educational level of the police. We have seen that selection criteria have been altered and in some areas college graduates are being given preference. One can naturally expect differences to occur between the "old guard" policemen and the "new breed" of officer. In this chapter a methodology will be presented for examining one aspect of the differences in behavior styles between college-educated police officers and officers who have not attended college.

Sample

The sample for this study consists of two groups of police officers: (1) all of the college graduates employed as sworn officers by the Michigan Department of State Police[63] with the rank of sergeant or trooper (N=126) and (2) a sample of sworn officers from the same department who had not attended college (N=126). Police officers with from one to three and one-half years of college were not used in the study (see Table 3.1).

At the time of the data gathering, the Department had approximately 1900 sworn officers, of whom 126 were college graduates with the rank of sergeant or trooper. There was one woman, a college graduate, included in the study.

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[63]See Appendix A for a Brief Description of the Michigan Department of State Police.

Table 3.1.--Demographic information on JAIM Inventory respondents.

Subgroup	College	Non-College	Total
Rank	35	29	64
Non-rank	70	64	134
Total	105	93	198
Specialists	31	18	49
Non-specialists	74	75	149
Total	105	93	198
Years service			
5 years	47	44	91
10 years	39	29	68
15 years	11	5	15
20 years	6	13	20
20+ years	2	2	4
Total	105	93	198

The sample of college graduates was determined by a search of personnel records, and also through the personal knowledge of the employees in the personnel division. For each member of the college sample a non-college (who had never attended college) cohort from his recruit class who was of the same rank (sergeant or trooper) and who was performing similar duties (patrol or a specialized assignment) at the time of the study was selected (see Table 3.1). If more than one recruit classmate met the criteria for being in the comparison group, each was identified and one was randomly selected. Police officers with one to three and one-half years of college were not used in the study, because almost 1000 more personnel would fit into that category.

A total of 198 inventories (93 college police officers and 105 non-college police officers) were obtained from the 252 inventories distributed, a 74.6 percent response. The demographic information on the inventory respondents is shown in Table 3.1.

Measurement Instrument--The Job Analysis Interest Measurement (JAIM)[64]

Self-Report Inventories

The measurement of basic beliefs, behavioral styles, work preferences, and values through self-descriptive statements such as is done in this study raises two issues of theoretical concern--how accurately can an individual report on his beliefs and his own personality and how truthful will he be when he makes such reports? The first issue relates to the differing effects of unconscious and conscious understandings and motives and the second to the problem of response sets.

In the approach used in this study with the Job Analysis Interest Measurement,[65] hereafter referred to as the JAIM, the crucial question is the relationship between beliefs and behavior. To deal adequately with his task environment, the individual needs (a) to know what he wants and what he does not want, (b) to obtain pertinent and reliable information about his environment, and (c) to make productive choices among the alternatives available to

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[64]Information on the measurement instrument, the Job Analysis Interest Measurement (JAIM) Form 669 presented in this section, is from Regis Walther, Psychological Dimensions of Work.

[65]Distributed for research purposes by the Educational Testing Service, Princeton, New Jersey.

him. In making these decisions, he will be guided by his beliefs about the intentions of other people, his beliefs about his own ability to influence the outcomes of events, and his strategies--which are his notions about what will work for him. These beliefs can be reported by means of self-descriptive statements and can be used to examine behavior. Unconscious forces are assumed to be represented reliably but not necessarily accurately by these beliefs.

The amount of intentional distortion of responses was reduced in this study by administering the JAIM to cooperative subjects under non-threatening circumstances. Participation was voluntary but was encouraged by the Commissioner of State Police.[66] A 74.6 percent return was obtained on the JAIM inventories with no follow-up needed. The effect of response set is kept to a minimum in the JAIM through use of a "forced choice" format. Self-report methods are not foolproof, however.

Accuracy of self-reports.--Self-reports of beliefs may be inaccurate for several reasons: the respondent may fake in order to make a better impression; he may be influenced by the social desirability of the option; his answer may be guided by a response style; or he may not know the real determinants of his behavior. Each of these problems is discussed.

Faking: Self-report inventories cannot prevent respondents from faking if they think it is to their advantage to do so. The

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[66]See Appendix B for copy of cover letter sent to participants.

use of the JAIM, therefore, is not recommended unless the respondent is willing to give accurate responses.

Social desirability: It has been pointed out that it is difficult to know if a response is, in fact, descriptive of the subject or whether he simply says it is because he regards it as a socially desirable characteristic.[67] For the most part, the items used in these inventories avoid this problem by using multiple options which are attractive to different groups of people. Some people, for example, regard competition as socially desirable, while others place a greater value on cooperation.

Response style: There is a tendency for people to respond to questions in a standard way regardless of the content. For example, some people tend to agree with positively worded statements and others to disagree. Cronbach[68] states that variations in response style are reduced or eliminated by forcing all persons to respond to the same issue and the "forced choice" technique is the most common one for doing this. The "forced choice" construction of most of the questions used in these inventories should minimize inaccuracies resulting from response styles.

Unconscious determinants: Whenever measurement is based on self-reports, consideration must be given to the degree to which behavior is determined by irrational forces about which the individual has no awareness. To the extent that behavior is determined

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[67] A. L. Edwards, The Social Desirability Variable in Personality Research (New York: Dryden, 1957).

[68] L. J. Cronbach, "Response Sets and Test Validity," Educational Psychological Measurement 6 (1946): 475-94.

by unconscious factors which have no representation in consciousness, it will be impossible to predict it through self-reports. It is not necessary, however, for the individual to be accurate about the causes of his behavior for the self-report to be a useful source of information. All that is necessary is for the unconscious or irrational forces to have some reliable representation or coding in his consciousness. Research with the JAIM has indicated that most individuals are able to make an accurate report of the beliefs which influence their behavior.

Background of the JAIM

The initial work on the research instrument used in this study, the Job Analysis Interest Measurement (JAIM), began in 1957[68] when Dr. Regis H. Walther of George Washington University found that certain self-descriptive items answered by U.S. State Department clerical personnel at the time they began their employment were useful in discriminating among employees assigned to different jobs, and in predicting both staying power and performance ratings within these jobs. Hypotheses were then developed to explain the empirical results in terms of the behavioral requirements and satisfaction potential of the jobs, and new items were prepared on the basis of these hypotheses. Through this interlocking strategy of working back and forth between data and theory, the JAIM has gone through a number of revisions and scales have been

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[69]Regis H. Walther, "Self-Description as a Predictor of Success or Failure in Foreign Service Jobs," Journal of Applied Psychology 46 (1962): 314-16.

developed measuring characteristics of individuals which are relevant to job performance and satisfaction.

JAIM Scales

In constructing items for each scale, an attempt has been made to make each option an appropriate response for a particular situation. Items have been grouped into scales based on the following criteria:

1. a logical relationship to the underlying hypotheses for the scale;
2. the ability of the item to discriminate between criterion groups in the direction predicted by the scale's hypotheses; and
3. correlations in the expected direction with other items in the scale.

A scale is considered to have established its usefulness when (1) it makes reliable discriminations among criterion groups on a criterion of occupational choice, job performance, stability, or satisfaction; and (2) the hypotheses for the scale can be integrated into occupational or role theory. The number of scales on progressive revisions (forms) of the JAIM has varied from 28 to 37; presently there are 32 scales in Form 669, which was used in this study. Scales numbered 5 through 22, which measure dimensions of behavioral styles, have been extracted from the total JAIM and will be analyzed in this study. In the development of the JAIM, scales which have not made unique and useful discriminations have been either eliminated or combined with other scales. Through the above process the early

study has been replicated many times by Dr. Regis Walther and other researchers[70] and the results have led to the conclusion that the achievement of a satisfactory level of job satisfaction and performance requires an adequate psychological match between the job and the individual, and that self-reported behaviors provide useful information for judging the adequacy of the match. Thus, by examining a person's philosophy closely, one can examine the individual himself. To understand how a person behaves, we need to know the manner in which he represents his circumstances to himself.

The notion that the internal frame of reference of the individual is a useful approach for understanding behavior is consistent with the views of personality theorists (Rogers, 1961; Combs and Snygg, 1959; Kelly, 1955; and Rokeach, 1960, 1968)[71] regarding the importance of personal constructs and for the predictive power of self-descriptive statements. It also led to the conclusion that one useful way to subdivide personality variables for occupational role analysis was into a category which they designated behavioral styles.

Briefly, behavioral styles are the consistent ways in which individuals organize and direct their mental, physical, and energy resources to accomplish goals. (Because this research utilizes a self-report instrument there is always the possibility that the self-reported behavior and the actual behavior may not be the

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[70] See Appendix C for Reported Studies Using the JAIM.

[71] Combs and Snygg, Individual Behavior; Kelly, The Psychology of Personal Constructs; Rogers, Becoming a Person; Rokeach, The Open and Closed Mind; Rokeach, Beliefs, Attitudes, and Values.

same.) These variables influence the degree of occupational match as follows:

--Different roles or jobs have different behavioral requirements and provide varying opportunity for personal satisfaction and feeling of value;

--Individuals bring behavioral styles to their roles or jobs;

--It is the degree of match between the role or job and the individual in these dimensions which significantly influences how well the individual will either perform in the job, be satisfied with the role or job, or both.

Research with the JAIM has shown that certain self-reported beliefs are associated with the occupation a person chooses, his satisfaction with the occupation, and the quality of his work performance. These beliefs relate to his basic beliefs about the world, himself, his behavior styles, his activity preferences, and his values. This study will not analyze basic beliefs, activity preferences, and values, but will concentrate on behavioral styles. The behavior styles and the JAIM scales that measure them are discussed in the following sections.

Behavior Styles

Behavioral styles are defined as the consistent ways in which individuals organize and direct their mental, physical, and energy resources to accomplish goals. Individuals necessarily develop standard ways for dealing with recurring situations and reserve conscious information processing and decision making for non-standard occasions. This coping behavior gives rise to

characteristic types of performances or behavioral styles, conscious and unconscious, in various life situations. An individual's behavioral styles are determined by: his innate characteristics; his experience with what works and what does not work for him; and the social values and training to which he has been exposed.

It is probably impossible for an individual to have behavioral styles which will enable him to be equally effective in all types of situations. Behavioral organizations which lead to effective performance in one type of situation may lead to ineffective performance in other situations. An habitual response effective for one type of situation can be expected to make responses more difficult for other situations. A person's perception of his behavioral style is an important part of his belief system.

Self-Management.--Some degree of self-regulation or self-management is essential to almost any type of achievement. We need to organize and systematize our activities, to plan what we are going to do in the future, and to keep our emotions under control. These qualities are related to the psychological concepts of deferment of gratification, future orientation, and impulse control. It is also true that excessive planning and control can lead to a lack of spontaneity and an inability to enjoy life. Our plans can be so complicated or so long range that we can never complete them; we can be so thoroughly organized that we are unable to adapt our behavior to current realities; or we can keep our feelings under

such tight control that we behave artificially and bottle resentments inside ourselves.

Significant aspects of self-management are: planning ahead, orderliness, perseverance, emotional control, and scheduling activities. The most widely adaptive style probably calls for a middle point on each of these dimensions. A balance between self-discipline and spontaneity, between immediate pleasures and potential future pleasures, and between duty to society and personal pleasures is probably the most generally productive self-management style. More specialized adaptations, however, can lead to highly effective performance in particular situations. A person who plans ahead may make a good executive, a person who is unusually orderly may make a good detective, and a person who keeps a tight rein on his emotions may make a good complaint clerk. Scales[72] used in the JAIM to measure dimensions of self-management are:

5. Plan Ahead--the degree to which the individual establishes long-range goals and attempts to achieve them.
6. Orderliness--the degree to which the individual is orderly, attends to details, and keeps things in their place.
7. Perseverance--the degree to which the individual keeps at something even when he is not particularly interested

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[72]The first four scales (numbered 1, 2, 3, and 4) of the JAIM Form 669, which measure aspects of basic beliefs, will not be analyzed. The 18 scales numbered 5 through 22, which measure behavior styles, are the area of interest of this study. The numbering of the 18 scales (5 through 22) measuring behavior styles will be retained to facilitate referencing other JAIM materials or studies.

in it, does not like to leave a task unfinished, and is thorough in anything he undertakes.

8. Emotional Control--the degree to which the individual keeps control of his temper, does not do things which he later regrets, and does not tell people off when they "bug" him.
9. Schedule Activities--the degree to which the individual likes to follow a schedule or daily routine.

Interpersonal Style.--Situations differ in their requirements concerning interpersonal relations. Some situations call for a good deal of personal leadership or persuasiveness, while others require supportive interpersonal behavior that will help maintain harmonious social relationships. Still other situations require the individual to be assertive in the pursuit of his own goals when they are in conflict with the goals of others. Finally, there are situations in which there is only a minimal need personally to influence the behavior of others.

An important issue with respect to interpersonal relations concerns competition and cooperation. To some degree, both are required, and an exclusive concentration on one or the other will almost certainly lead to difficulties. A person who considers only his own goals is bound to create hostility and lose the social satisfactions obtainable from cooperation. The person who focuses entirely on the desires of others and does not consider his own wishes loses the ability to pursue personal goals. Different balances are, nevertheless, appropriate to different work situations.

A self-assertive attitude seems to be required for many business situations; and a "supportive-of-others" attitude seems to be required for many activities of a social nature. Scales used in the JAIM to measure dimensions of interpersonal style are:

10. Self-Assertive--the degree to which the individual likes competition and tends to pursue his own goals when they are in competition with others.
11. Supportive-of-Others--the degree to which the individual is concerned about the feelings of other people, goes out of his way to support or comfort them, as opposed to doing what has to be done even if it doesn't please everyone.
12. Take Leadership--the degree to which the individual assumes a leadership role and likes to direct and supervise the work of others.

Reaction to Aggression.--Jobs differ in their requirements and people differ in their preferred styles for dealing with aggressive behavior from others. Some people respond to aggressive behavior by fighting, others respond by attempting to win over or accommodate themselves to the aggressor, and still others respond by psychological or physical withdrawal. It is obviously desirable to be able to vary the strategy depending on the situation, but most people tend to rely on some strategies more than others. The more inflexible the individual, the more important it is that he obtain work which matches his style. Few persons could duplicate the performance of the drill sergeant in whipping the raw recruits

into shape. At the same time, we can expect that the qualities which make the sergeant a success with the troops would seriously limit his ability to be a successful labor negotiator. Three styles for dealing with aggression are measured: Move Toward (accommodate), Move Away (retreat), and Move Against (fight). Scales used in the JAIM to measure dimensions of reaction to aggression are:

13. Move Toward Aggressor--the degree to which the individual tries to behave diplomatically when someone acts toward him in a belligerent or aggressive manner.
14. Move Away From Aggressor--the degree to which the individual withdraws when someone acts toward him in a belligerent or aggressive manner.
15. Move Against Aggressor--the degree to which the individual counter-attacks when someone acts toward him in a belligerent or aggressive manner.

Information-Processing Style.--Life situations differ in the manner by which information must be processed and decisions made; and individuals differ in their preferred approach to these activities. One aspect of these differences involves the emphasis given to speed or accuracy. Sometimes rapid decisions are required involving only partially explicit considerations. In such cases, an impressionistic, intuitive approach is most effective, and a delayed response is often no response at all because the situation has changed and the opportunity to react has gone. In other situations, the emphasis is on accuracy rather than speed. In these

situations, a rational, logical approach, depending on a formal deliberate process, is most effective.

A second aspect of information processing and decision making relates to whether a "practical" or a "theoretical" approach is more effective. Some people prefer to be guided by past experience; other people like to be guided by the potentials of the future and to theorize about what could happen. The advantage of the "practical" strategy is that the wisdom from past experience can be used to guide the present. The disadvantage is that the present is to some degree different from the past and these differences may be important. The advantage of a "theoretical" approach is that the individual is able to extract the variables at work in a situation and manipulate them in a new situation so as to be able to predict consequences. It thus becomes possible to make predictions without having experienced the exact set of circumstances in the past. The disadvantage is that the theories may not be valid and thus the prediction may be inaccurate.

A third aspect of information processing and decision making relates to the degree to which the individual initiates or accepts change. Some situations require a willingness on the part of the individual to consider new possibilities, to experiment, and to accept change. Although change is more of a factor in some occupations than in others, accommodation to change is an increasingly important factor in modern society.

Since no single information-processing strategy is equally applicable to all situations, there is no "ideal" style for any

individual which is applicable for all situations. Extreme scores may suggest that the individual needs to examine his approach to information processing and problem solving.

If he is exceptionally systematic and methodical, he may be so slow and cautious in coming to decisions that he may not be making timely decisions. If he is extremely unsystematic, he may be making too many snap decisions without considering significant facts or alternatives.

If he is very practical, he may not be considering all the possibilities in a situation. If he is very theoretical, he may be pursuing unproved theories and disregarding practical reality.

If he is highly accepting of change, he may be willing to adopt an innovation before its usefulness has been established. If he is slow to accept novelty, he may be out of step with the rapid pace of change in contemporary life. Scales used in the JAIM to measure the dimensions of Information-Processing Style are:

16. Concrete-Practical--the degree to which the individual considers himself as practical, sensible with both feet on the ground in contrast to being imaginative, ingenious, and having novel ideas.
17. Systematic-Methodical--the degree to which the individual uses step-by-step methods for processing information and reaching decisions.

Relation to Authority.--Work situations almost always involve some authority structure through which the activities of workers are coordinated, instructions are transmitted, and decisions made. Two

aspects of authority relationships are measured by this inventory: (a) the kind of authority structure within which the individual wants to work, and (b) the degree of independence with which he wants to operate within these settings.

When thinking about occupations, JAIM results (shown for representative occupational groups in the following table) suggest that it is often useful to consider the interaction between these two aspects of authority relationships.

	Preferred Work Role, Selected Occupations			
Preferred Degree of Independence	Work as Supervisor	Work as Assistant	Work With Group	Work Alone
High	Executive	Staff Assistant	Social Worker	Research Scientist
Low	Clerical Supervisor	Secretary	Nurse	Bookkeeper

Scales used in the JAIM to measure dimensions of Relation to Authority are:

18. Act Independently--the degree to which the individual likes to have freedom in working out his own methods for doing the work rather than having definite procedures and instructions which he can follow.
19. Work as an Assistant--the degree to which the individual likes to work closely with his supervisor rather than working by himself.

Leadership Style.--A leadership role is present in all social systems or organizations and people differ in the approach they take

to this role. Students of leadership are almost unanimous in believing that leadership is situational; and a leadership behavior that works in one situation may fail in another. Thus, it is important that there be a match between leadership style and the requirements of the situation. Situational factors include both the requirements of the task and the behavioral styles and expectations of subordinates.

Two dimensions of leadership have been found to be important: (a) the way decisions are made, and (b) the motivational strategies used. Decision making can be exercised in a directive or in a participative manner; a boss can make all the decisions himself or a manager can, to some degree, share decision making with his subordinates. A directive style can be expected to be most effective when maximum decisiveness is required, time is limited, and obedience can be expected or required. A participative style works best when maximum use of the resourcefulness of the work group is desired or when obedience cannot necessarily be expected. Which style works best also depends upon the characteristics and expectations of the work group. Persons with poor self-discipline probably do better work under a directive style, while employees who are able to discipline themselves do better with a participative style.

Possible motivational strategies can be divided into three categories: (a) external controls, (b) rewards, (c) knowledge of results. Supervisory personnel usually have access to incentives essential for each of these strategies, and success as a supervisor will depend in large measure on the skill in using an appropriate

strategy to obtain the results with a minimum of undesirable by-products.

Motivation through external controls is based upon the assumption that people work only when they must and that it is, therefore, necessary for the boss to demand performance. A combination of a directive style of decision making and a strategy of motivation through external controls can be called authoritarian leadership, and may result in dependency and hostility. A person subjected to this type of leadership is not likely to use initiative and may feel that the supervision is oppressive.

Motivation through rewards is based on the asumption that intrinsic satisfaction from performing the work is not sufficient, and that the employee needs to be motivated primarily by extrinsic incentives such as money, praise, or recognition. The disadvantage of this strategy is that it may create a dysfunctional distinction between the goal of performing the job and the goal of obtaining the reward.

Motivation through knowledge of results is based upon the assumption that people are best motivated by intrinsic incentives coming from the performance of the work itself. It can have the disadvantage of being too impersonal and thus not filling the social needs of the individual. It can also be ineffective when the work is not particularly satisfying. Scales used in the JAIM to measure dimensions of Leadership Style are:

20. Directive Leadership--the degree to which the individual believes that an effective supervisor makes the

decisions himself rather than consulting with subordinates and delegating as much as possible to them; and keeps a careful watch for deficient performance in order to discipline those who fall below standard.

21. Motivate by Rewards--the degree to which the individual believes that people are best motivated by praise and rewards (extrinsic motivation).
22. Motivate by Results--the degree to which the individual believes that people are best motivated by the chance to accomplish something (intrinsic motivation).

Stability of JAIM Scales

An important problem which concerns the users of a self-report inventory is the stability of the scales when used for different samples from the same population. The JAIM Manual reports a study of Junior Foreign Service officers showing that there was not significant difference between successive classes of newly appointed officers who completed the JAIM as a part of their training shortly after entering on duty.

In a study[73] by Walther in 1966 a comparison was made between 44 first-year students from the 1965-66 class at one of the schools of social work. Over 90 percent of the two classes completed the JAIM shortly after the first semester started. The differences between means for only 2 of the 34 scales were significant

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[73]Regis H. Walther, Personality Variable and Career Decisions: A Pilot Study of Law and Social Work Students (The Social Research Group, The George Washington University, 1966).

at the .05 level. The slight differences which were found were thought to be accounted for by minor differences in selection standards or in the characteristics of the students who applied for admission during the two years.

The JAIM Manual notes that using test-retest procedures, with the two administrations four days apart, the average reliability of all of the scales used in Form 669 of the JAIM is estimated to be in the low .70's.

Validity

Results from a number of studies have shown that the scales of the JAIM can be used effectively to differentiate among occupational groups. Data gathered on over 50 occupations and professions show highly significant differences between groups, and stable results have been obtained when different samples have been taken from the same occupation or profession. It has also been found that the results can be interpreted in terms of the behavioral requirements and satisfaction potential of the occupation or profession.

In several studies, some longitudinal and others concurrent, the scales of the JAIM have proved successful in distinguishing between high and low performers in the jobs being studied. In other studies, the scales distinguished between employees who stayed on the job and those who left.

Scoring

Scoring keys for the JAIM are not available. Arrangements for scoring must be made through the Office of Special Tests,

Educational Testing Service, Princeton, New Jersey, or through Dr. Regis Walther, author of the JAIM. The questionnaires in this study were scored by Dr. Regis Walther at The George Washington University and run on his program using the t-test for differences between means.

Interpretation of Scores

The score reports for the JAIM are based on a normative group of 1,500 applicants who took the U.S. Department of State Foreign Service officers examination between 1957 and 1964, and who turned in JAIM[74] answer sheets.[75]

The higher the score on a particular scale, the more often the subject has chosen the options for this scale as being descriptive of himself in preference to the options for other scales and has avoided choosing those options which are negatively scored for the scale. The lower the score on a particular scale, the less often the subject has chosen the options for this scale as being descriptive of himself in preference to the options for the other scales and the more often he has selected options which are negatively scored for the scale.

The logical relationship to the underlying hypothesis for each scale is the ability of the item to distinguish between

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[74]See Appendix D for the norm groups and scores for Form 669 of the JAIM.

[75]Regis H. Walther, Job Adjustment and Employee Health (The Social Research Group, The George Washington University, 1969).

occupants of a job requiring the characteristic being measured from occupants of a job not requiring the characteristic.

The JAIM as It Relates to the Present Study

The previous discussion and description of the JAIM instrument has illustrated how the concept of behavioral styles is related to the 18 measurement scales of the instrument. The hypotheses of this study have been predicated on the concept of behavioral styles and their implicit relationship to the 18 scales of the instrument which was developed to test and discriminate between behavioral styles of different professions and more specifically in this study, between different groups of individuals in the same occupation.

Even though the hypotheses of this study are general in nature, specific scales of the instrument can be correlated with the previous research in the police field. Under the hypothesis section of this chapter, the particular scales that will be most relevant for this study will be designated and discussed in relation to the literature. First, however, the data preparation and processing techniques used in the study will be discussed.

Level of significance.--The .05 level of significance will be the criterion for the acceptance of a relationship.

Data handling.--In terms of the data-gathering process and the statistical tests used in the study, the machine-scored answer sheets were coded after they were received from the respondents.

They were then sent to George Washington University where they were placed in an optical scanner and then into the computer.

The statistical test used was the t-test of the difference of means.

The comparisons which were made by the use of the t-tests were:

1. A comparison of the behavioral styles of the college police officers and the non-college officers;
2. A comparison of the behavioral styles of the college police officers with rank and the non-college officers with rank;
3. A comparison of the behavioral styles of the college police officers without rank and the non-college officers without rank;
4. A comparison of the behavioral styles of the college police officers who were specialists and the non-college officers who were specialists;
5. A comparison of the behavioral styles of the college police officers who were not specialists and the non-college officers who were not specialists.

Design

Research Design

Research relating education and the police varies greatly in methods and procedures. The most serious methodological weakness is failure to meet the requirements of experimental design. To establish a causal relationship between education and police

behavior styles, research should employ the classic four-cell model with subjects randomly selected and assigned to experimental and control groups. Both groups should be tested before the experimental group is subjected to the test condition (i.e., education) and all other conditions should remain the same until all subjects are tested again. Then a greater change between time 1 and time 2 for the experimental (those who have graduated from college) than the control group could presumably be attributed to the effect of education or could be attributed to the initial differences at time 1 between those who chose to attend college and those who did not attend.

In practice, such experimental research in the area of police education is very difficult to achieve. Instead, a two-celled cross-sectional or static group comparison design was employed.[76] It involved identifying college-educated police officers and comparing them at time 2 with a control group of non-college police officers. No time measurement was used. Comparative studies such as this bridge the gap between descriptive research and experimental studies. Borg[77] reports that the careful selection of a comparable control group can produce results that approach the precision of an experimental design.

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[76]Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally and Co., 1963), p. 8.

[77]Walter R. Borg and Meredith O. Gall, Educational Research: An Introduction (New York: David McKay Co., Inc., 1971), pp. 298-99.

Limitations

Though a static-group comparison design can produce results which approach the precision of an experimental design, any correlation with the key variable, in this case college education, cannot be taken as evidence of a causal relationship. All that can be concluded is that a relationship exists.[78] Because of the lack of time measurement, cross-sectional studies are also plagued by the difficulty of establishing that the two groups were originally alike.

Description of Study Variables

Dependent variables.--Behavior Styles are the dependent variables in this study. They have been defined and discussed earlier and will not be repeated here (see Behavior Styles earlier in this chapter).

Independent variables.--The level of formal education of the subjects is the independent variable in this study.

For the purposes of this study, the college police officer group consists of those officers of the rank of sergeant and below in the Michigan Department of State Police who have completed four or more years of formal academic education at an accredited college or university and have received a bachelor's degree. Officers who had one to three years of college were not chosen for this study.

The non-college police officer group consists of those officers of the rank of sergeant and below in the Michigan Department

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[78] Ibid.

of State Police who have attained a high school diploma or GED certificate, but who have never enrolled in an academic course for credit in a two- or four-year accredited college or university. The distribution of inventory respondents by education is shown in Table 3.2.

Table 3.2.--Distribution of inventory respondents by educational level.

	JAIM Inventories Distributed	JAIM Inventories Completed
College police officers	126	105
Non-college police officers	126	93
Total	252	198

Control variables.--Two variables were selected for this study as control variables: rank and assignment.

Rank was dichotomized: patrol officer level troopers constituted one category and those who had received one or more promotions in rank above the patrol officer-trooper level comprised the other category. The distribution of inventory respondents by rank is shown in Table 3.3.

Assignment was also dichotomized: those who were assigned to uniformed patrol constituted the non-specialists, and those who were assigned to other than uniformed patrol comprised the specialists. The distribution of inventory respondents by specialization is shown in Table 3.4.

Table 3.3.--Distribution of inventory respondents by rank.

	College	Non-College
Rank	35	29
Non-rank	70	64
Total = 198	105	93

Table 3.4.--Distribution of inventory respondents by specialization.

	College	Non-College
Specialists	31	18
Non-specialists	74	75
Total = 198	105	93

Hypotheses[79]

Self-Management

College and non-college police officers will report no differences in their degree of self-regulation or Self-Management.

1. There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

1a. There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

[79]Hypotheses will be stated in the null.

1b. There will be no difference between college and non-college police officers without rank on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

1c. There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

1c. There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

Rationale.--Some degree of self-regulation or self-management is essential to almost any type of achievement. College seniors have been found to be more dominant,[80] more autonomous,[81] more persistent and independent[82] than college freshmen and non-college individuals. Non-college individuals, on the other hand, have found the non-academic environment not to be conducive to the open, flexible disposition and spirit of inquiry that is important to the attainment of identity.[83] Because of the college-educated individual's orientation and the non-college person's perspective of the non-academic environment, it is hypothesized that the self-management of the two groups will differ.

Interpersonal Situations

College and non-college police officers will report no differences in their handling of Interpersonal Situations.

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[80]Kenneth A. Feldman and Theodore M. Newcomb, The Impact of College on Students (San Francisco: Jossey-Bass, 1969), p. 33.

[81]Trend and Medsker, Beyond High School, p. 153.

[82]Ibid., p. 217.

[83]Ibid., p. 176.

2. There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

2a. There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

2b. There will be no difference between college and non-college police officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

2c. There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

2d. There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

Rationale.--Situations differ in their requirements concerning interpersonal relations and likewise individuals differ in their behavior when confronted with situations. Research has shown that college graduates, with some but not many exceptions, are more dominant and confident, more self-sufficient, more ascendant and assertive, and more independent and autonomous than non-college graduates. They showed less need to be deferent, submissive, and dependent upon others.[84] Two of the more salient changes through college were in open-mindedness, reflected by declining authoritarianism, and an increase in autonomy.[85]

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[84]Feldman and Newcomb, The Impact of College on Students, p. 33.

[85]Ibid., p. 48.

Researchers describe the autonomous individual as one capable of thinking for himself without reliance upon authority. Autonomy incorporates the ideas of flexible, objective thinking, and an openness of attitude which facilitates awareness and adaptability to the environment. The authoritarian individual, on the other hand, is distinguished by highly opinionated, closed thinking.[86]

Since college-educated police officers have scored consistently lower on authoritarianism than officers who had fewer than two years of college,[87] and lower than non-police students in a police administration program,[88] it is felt that they will differ from the non-college officers in autonomy and authoritarianism as measured by scales reflecting self-assertiveness, support of others, and the inclination to take leadership.

Reaction to Aggression

College and non-college police officers will report no differences in the manner in which they React to Aggression.

3. There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

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[86]H. Webster, M. B. Freedman, and P. Heist, "Personality Changes in College Students," The American College, ed. N. Sanford (New York: Wiley, 1972), pp. 811-45.

[87]Niederhoffer, Behind the Shield, p. 242.

[88]Smith, Locke, and Walker, "Authoritarianism in Police College Students and Non-Police College Students," p. 442.

3a. There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

3b. There will be no difference between college and non-college police officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

3c. There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

3d. There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

Rationale.--The rationale for Hypothesies 3 through 3d is the same as that for Hypotheses 2 through 2d.

Information-Processing Style

College and non-college police officers will report no differences in the manner in which they Process Information.

4. There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

4a. There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

4b. There will be no difference between college and non-college police officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

4c. There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

4d. There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

Rationale.--Life situations differ in the manner in which information must be processed and decisions made. Individuals differ in their approach to these activities. Though there is considerable controversy on this point, many educators agree with Becker, who stated:

> Many, perhaps most college-goers learn in college precisely what they need to know to get along as adults in a middle-class world. The middle-class world of business and the professions demand a number of specific skills and abilities and the experience of college is such as to provide college students with training in precisely those skills and abilities.[89]

Students learn a number of organizational skills, attitudes, and motivations that are necessary for success in the typical middle-class occupational world. These include gaining the more general abilities and motivations to meet deadlines, start and finish tasks, juggle several things at once and keep them straight, and budget personal time and energy. For these reasons the college and non-college police officers will differ in their orientation to information processing.

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[89]H. S. Becker, "What Do They Really Learn in College?" Transaction 1 (May 1964): 14-17.

Relation to Authority

College and non-college police officers will report no differences in the manner in which they Relate to Authority.

5. There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

5a. There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

5b. There will be no difference between college and non-college police officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

5c. There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

5d. There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

Rationale.--Work situations almost always involve some authority structure through which the activities of workers are coordinated, instructions are transmitted, and decisions made. A majority of studies on college students show that as students increase their education toward a bachelor's degree, they show increases in independence, dominance, and confidence.[90] The evidence suggests that the comparison groups of non-college subjects

[90]Feldman and Newcomb, The Impact of College on Students, p. 48.

found the work world not conducive to the open, flexible disposition and spirit of inquiry that is so important to the attainment of identity, acceptance of others, understanding of the environment, and fullest realization of potentials.[91]

Leadership Style

College and non-college police officers will report no differences in regard to their Leadership Style.

6. There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

6a. There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

6b. There will be no difference between college and non-college police officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

6c. There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

6d. There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

Rationale.--Situational factors in a leadership situation include both the requirements of the task and the behavioral styles and expectations of subordinates. With few exceptions, studies have found college graduates to be more ready to express impulses, more

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[91]Trent and Medsker, Beyond High School, p. 177.

spontaneous, less ready to defer gratification, and less self-controlled or restrained than college freshmen and non-college cohorts. College graduates also have a higher need for flexibility, change, and non-routinized activities.[92]

Analysis of Data

Data Collection

Each police officer in the study was given or mailed a self-administered questionnaire, the JAIM Form 669, and asked to return it to the police officer-coordinator for the study at Department Headquarters. Two hundred fifty-two questionnaires were distributed and 198 were returned, for a 74.6 percent response rate. One hundred five were college officers, while 98 were non-college officers.

Statistical Technique[93]

Group differences on the JAIM scales were tested for significance by using the difference-of-means test involving the t-distribution.

Assumptions

Level of measurement: Mean scores on JAIM interval scales

Model: Independent samples

Sampling distribution: t-distribution

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[92]Feldman and Newcomb, The Impact of College on Students, p. 33.

[93]Hubert H. Blalock, Social Statistics (New York: McGraw-Hill, 1960), pp. 169-78.

Significance level and critical region: .05 level and two-tailed tests

Decision rule: Reject H_0 if any dimension is significant at

$$\alpha = \frac{.05}{\text{\# of dimensions}}$$

Summary

The sample for this study consists of two groups of police officers: (1) all of the college graduates employed as sworn officers by the Michigan Department of State Police with the rank of sergeant or trooper (N=126) and (2) a sample of sworn officers from the same department who had not attended college (N=126). The college graduates were compared with non-college cohorts from the department who had attended the same recruit class, had attained the same rank, and who were presently performing the same duties.

The research instrument used in this study, the Job Analysis Interest Measurement (JAIM), is a self-report inventory used to measure behavior styles (the consistent ways in which individuals organize and direct their mental, physical and energy resources to accomplish goals). The behavior styles which the JAIM measures are: Self-Management, Interpersonal Style, Reaction to Aggression, Information-Processing Style, Relation to Authority, and Leadership Style.

A two-celled cross-sectional design was employed. It involved identifying college-educated police officers and comparing them at one point in time with a control group of non-college

police officers. The level of formal education is the independent variable and behavior styles are the dependent variables; rank and assignment were used as controls.

General hypotheses were developed to examine differences between college and non-college police officers on the six behavior styles measured by the JAIM. Five operational hypotheses were used to test the differences between college and non-college police officers.

Almost 75 percent of the respondents returned the self-administered questionnaires. Group differences on the JAIM scales will be tested for significance at the .05 level using a two-tailed t-test.

In Chapter IV the results of the comparison of college and non-college police officers on the scales of the JAIM measuring behavior styles will be presented. Each operational hypothesis will be restated and the significant findings will be discussed.

CHAPTER IV

ANALYSIS OF THE DATA

In this chapter an analysis of the data, obtained as a result of comparing the responses of college-educated police officers and police officers who have not attended college, on the scales of the JAIM measuring dimensions of behavior styles is presented. The general hypotheses are restated, operational hypotheses are analyzed, and significant findings are discussed.

Primary Analysis of Data

Statements of Significance

Six general hypotheses were developed around the six behavior styles (Self-Management, Interpersonal Style, Reaction to Aggression, Information Processing, Relation to Authority, and Leadership Style) described by the 18 dimensions of the JAIM. Five operational hypotheses (for example for Self-Management Hypotheses 1, 1a, 1b, 1c, and 1d) were used to test each of the six behavior style concepts.

All hypotheses are stated in the null. For a hypothesis to be rejected, one or more of the dimensions within a family (group of dimensions describing a behavior style) would need to be significant. For example, Hypothesis 1 has a family of four dimensions, Plan Ahead, Perseverance, Emotional Control, and Schedule Activities.

If any one of these dimensions is significant, the null hypothesis is rejected--that there is no difference between college and non-college officers in their Self-Management Style. The significance of the family of tests within a given hypothesis is no greater than the total of the significance levels of the separate tests on the dimensions making up that family, $\alpha \leq \alpha 1 + \alpha 2 + \alpha 3 \ldots$[94]

In the following section each of the general hypotheses, 1 through 6, is restated, the computations for determining the critical t-values are presented, and the data are presented and discussed.

Hypothesis 1: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

Hypothesis 1 has a family of four dimensions (see Table 4.1). Therefore to keep $\alpha = .05$, take $\alpha 1 = \alpha 2 = \alpha 3 = \alpha 4 = \frac{.05}{4} = .0125$. The critical value for a two-tailed test of this level is 2.5.

Hypothesis 1 is rejected through the dimension--Schedule Activities--as shown in Table 4.1.

Hypothesis 2: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

Hypothesis 2 has a family of three dimensions (see Table 4.2). Therefore to keep $\alpha = .05$, take $\alpha 1 = \alpha 2 = \alpha 3 = \frac{.05}{3} = .0167$. The critical value for a two-tailed test of this level is 2.39.

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[94]John Neter and William Wasserman, Applied Linear Statistical Models (Homewood, Illinois: Richard D. Irwin, Inc., 1974), p. 581.

Hypothesis 2 was not rejected, as shown in Table 4.2.

Table 4.1.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring the concept of Self-Management.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Plan Ahead	18.78	18.75	0.15
Orderliness	58.44	58.30	0.51
Perseverance	39.33	39.69	1.04
Emotional Control	17.11	17.10	0.03
Schedule Activities	43.88	43.05	2.50*

*Significant at the .05 level for the family of four dimensions.

Table 4.2.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring the concept of interpersonal style.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Self-Assertive	23.23	22.92	1.35
Supportive of Others	31.60	31.20	0.96
Take Leadership	15.88	16.84	-1.76

Hypothesis 3: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

Hypothesis 3 has a family of three dimensions (see Table 4.3) and needed a critical value of 2.39 to reject. Hypothesis 3 was not rejected, as shown in Table 4.3.

Table 4.3.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring the concept of Reaction to Aggression.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Move Toward Aggressor	28.60	28.74	-0.55
Move Away From Aggressor	11.73	11.51	0.69
Move Against Aggressor	18.61	18.28	1.14

Hypothesis 4: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

Hypothesis 4 has a family of two dimensions (see Table 4.4). Therefore to keep $\alpha = .05$, take $\alpha 1 = \alpha 2 = \frac{.05}{2} = .025$. The critical value for a two-tailed test of this level is 2.27.

Hypothesis 4 was not rejected, as shown in Table 4.4.

Table 4.4.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring the concept of Information-Processing Style.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Concrete-Practical	37.63	37.12	2.15
Systematic-Methodical	15.11	15.45	-1.99

Hypothesis 5: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

Hypothesis 5 has a family of two dimensions (see Table 4.5) and needed a critical value of 2.27 to reject. Hypothesis 5 was not rejected, as shown in Table 4.5.

Table 4.5.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring Relation to Authority.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Act Independently	24.94	25.20	-1.49
Work as an Assistant	8.03	7.59	1.67

Hypothesis 6: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

Hypothesis 6 has a family of three dimensions (see Table 4.6) and needed a critical value of 2.39 to reject. Hypothesis 6 is rejected through the dimension--Directive Leadership--as shown in Table 4.6.

Table 4.6.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring Leadership Style.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Directive Leadership	28.14	26.97	2.52*
Motivate by Rewards	26.06	26.31	-0.80
Motivate by Results	20.56	20.74	-0.75

*Significant at the .05 level for the family of three dimensions.

Summary

When statistically strict criteria were applied to each family of dimensions describing each of the six behavior styles, two of the six hypotheses were rejected. The total group of college and non-college police officers differed significantly in Self-Management Style and Leadership Style.

When the same standards were applied to subgroups a, b, c, and d, measuring the six behavior styles, Hypotheses 1a, 4a, 5a, and 4b were rejected. College and non-college officers who held rank differed significantly on the Schedule Activities dimension of Self-Management Style, the Concrete-Practical dimension of Information-Processing Style, and the Work as an Assistant dimension of Relation to Authority. Officers without rank differed significantly on the Systematic-Methodical dimension of Information-Processing Style.

In Table 4.7 the significant findings and the t-values obtained in the primary analysis are summarized. From the top of the table to the bottom, the six behavior styles are numbered from 1 to 6, corresponding to the hypotheses listed. Subsumed under each behavior style are the dimensions used to describe them. Across the top, from left to right, are the subgroups labeled from a to d, corresponding to the subgroup hypotheses. As shown in Table 4.7, there are two significant differences between the total groups of college and non-college police officers, and four significant differences between college and non-college police officers in the subgroups.

Table 4.7.--Summary of behavior style differences between college and non-college officers on the JAIM--primary analysis.

Behavior Style Dimension	Total College and Non-College	a. Officers With Rank	b. Officers Without Rank	c. Officers Who Were Specialists	d. Officers Who Were Not Specialists
1. Self-Management					
Plan Ahead					
Perseverance					
Emotional Control					
Schedule Activities	2.50*	3.10*			
2. Interpersonal Style					
Self-Assertive					
Supportive of Others					
Take Leadership					
3. Reaction to Aggression					
Move Toward Aggressor					
Move Away From Aggressor					
Move Against Aggressor					
4. Information-Processing Style					
Concrete-Practical		2.42*			
Systematic-Methodical			-2.41*		
5. Relation to Authority					
Act Independently					
Work as an Assistant		2.35*			
6. Leadership Style					
Directive Leadership	2.52*				
Motivate by Rewards					
Motivate by Results					

*Significant at the .05 level for the family of dimensions of each behavior style.

When the small number of significant findings in this study is compared with the number of significant differences found in other studies using the JAIM, the method of analysis needs to be explained. First, the hypotheses in this study were based on the six behavior styles rather than the individual dimensions, resulting in 6 as opposed to 18 possible hypotheses. Second, a rigid critical value was maintained before a hypothesis could be rejected; total alpha for all the dimensions was not allowed to exceed .05.

Since other studies using the JAIM had used hypotheses based on the individual dimensions of the instrument, and since they had used the .05 level to test for significance on each dimension, it was decided that further analysis would be undertaken using the .05 level for each dimension.

Further Analysis With Control Variables

The purpose of undertaking a secondary analysis is to develop profiles of both the college and non-college police officer based on the behavior styles of the JAIM. Each general hypothesis (1 through 6) and each subgroup hypothesis (1a through 6d) was tested for significance on each of the 18 dimensions of the JAIM. The alpha level was .05 for each test, on each dimension of each behavior style.

Self-Management

Finding.--Two of the subgroups of college and non-college officers, those who had rank and those officers who were specialists, as well as the total group of college and non-college

officers, differed significantly on the dimension--Schedule Activities. The non-college groups all scored higher. Each of the five operational hypotheses 1 through 1d is restated, and the result of each analysis is shown in Tables 4.8 through 4.12.

Hypothesis 1: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

Table 4.8.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring Self-Management Style.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Plan Ahead	18.78	18.75	0.15
Orderliness	58.44	58.30	0.51
Perseverance	39.33	39.69	1.04
Emotional Control	17.11	17.10	0.03
Schedule Activities	43.88	43.05	2.50*

*Significant at the .05 level.

Hypothesis 1a: There will be no difference between college and non-college officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

Table 4.9.--Comparison of college and non-college police officers with rank; mean scores--JAIM scales measuring Self-Management.

JAIM Scale Dimensions	Non-College (N=29)	College (N=35)	t-value
Plan Ahead	18.86	19.23	-1.03
Orderliness	58.76	58.69	0.16
Perseverance	40.17	40.69	-0.92
Emotional Control	17.34	17.46	-0.18
Schedule Activities	45.21	43.40	3.10*

*Significant at the .05 level.

Hypothesis 1b: There will be no difference between college and non-college officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

Table 4.10.--Comparison of college and non-college police officers without rank; mean scores--JAIM scales measuring Self-Management.

JAIM Scale Dimensions	Non-College (N=64)	College (N=70)	t-value
Plan Ahead	18.75	18.51	0.87
Orderliness	58.30	58.11	0.55
Perseverance	38.95	39.19	-0.58
Emotional Control	17.00	16.91	0.18
Schedule Activities	43.28	42.87	1.06

Hypothesis 1c: There will be no difference between college and non-college officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

Table 4.11.--Comparison of college and non-college police officers who are specialists; mean scores--JAIM scales measuring Self-Management Style.

JAIM Scale Dimensions	Non-College (N=18)	College (N=31)	t-value
Plan Ahead	18.61	19.13	-1.17
Orderliness	58.67	58.32	0.65
Perseverance	39.83	40.03	-0.31
Emotional Control	17.61	17.19	0.59
Schedule Activities	44.50	43.00	2.03*

*Significant at the .05 level.

Hypothesis 1d: There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of Self-Management.

Table 4.12.--Comparison of college and non-college police officers who are not specialists; mean scores--JAIM scales measuring Self-Management Style.

JAIM Scale Dimensions	Non-College (N=75)	College (N=74)	t-value
Plan Ahead	18.83	18.59	0.93
Orderliness	58.39	58.30	0.28
Perseverance	39.21	39.54	-0.82
Emotional Control	16.99	17.05	-0.15
Schedule Activities	43.73	43.07	1.77

Discussion.--The concept of Self-Management Style is described by four dimensions of the JAIM, one of which--Schedule Activities--distinguished between the college and non-college respondents to the inventory. The total group and two of the four subgroups, officers with rank and officers who were specialists, were significant on this dimension of Self-Management. Non-college officers scored higher than college officers. This would indicate that non-college officers would prefer to follow a schedule or a daily routine more than college officers.

The general education literature and especially the studies of Trent and Medsker support the finding that non-college persons would prefer Scheduled Activities. Their research found that college graduates were more intellectually open, personally autonomous, and tolerant of ambiguity, which are characteristics not found in non-college persons nor fostered in many of their working environments.[95]

Police researchers, particularly Guller, have examined dogmatism and its relationship to police officers. Guller has found that a person ranking high in dogmatism is regarded as being prone toward factors of rigidity and traditionalism. Guller has also found that police officers who are exposed to higher education produce the most significant change in reducing dogmatism.[96]

The overall and subgroup t-values on the dimension of Schedule Activities are shown in Table 4.13.

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[95]Trent and Medsker, Beyond High School, p. xi.

[96]Guller, "Higher Education and Policemen," p. 401.

Table 4.13.--Schedule Activities dimension of Self-Management Style.

	Non-College		College		t-value
	(n)	Mean	(n)	Mean	
Overall	93	43.88	105	43.05	2.50*
Rank	29	45.21	35	43.40	3.10*
Non-rank	64	43.28	70	42.87	1.06
Specialists	18	44.50	31	43.00	2.03*
Non-specialists	75	43.73	74	43.07	1.77

*Significant at the .05 level.

Interpersonal Style

Finding.--One of the four subgroups of college and non-college officers, those who were specialists, differed significantly on the dimension--Self-Assertive. The non-college group scored higher. Each of the five operational hypotheses 2 through 2d is restated and the result of each analysis is shown in Tables 4.14 through 4.18.

Hypothesis 2: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

Table 4.14.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring Interpersonal Style.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Self-Assertive	23.23	22.92	1.35
Supportive of Others	31.60	31.20	0.96
Take Leadership	15.88	16.84	-1.76

Hypothesis 2a: There will be no difference between college and non-college officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

Table 4.15.--Comparison of college and non-college police officers with rank; mean scores--JAIM scales measuring Interpersonal Style.

JAIM Scale Dimensions	Non-College (N=29)	College (N=35)	t-value
Self-Assertive	23.28	22.66	1.44
Supportive of Others	31.55	31.20	0.44
Take Leadership	17.83	18.23	-0.44

Hypothesis 2b: There will be no difference between college and non-college officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

Table 4.16.--Comparison of college and non-college police officers without rank; mean scores--JAIM scales measuring Interpersonal Style.

JAIM Scale Dimensions	Non-College (N=64)	College (N=35)	t-value
Self-Assertive	23.20	23.06	0.56
Supportive of Others	31.63	31.20	0.86
Take Leadership	15.00	16.14	-1.79

Hypothesis 2c: There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

Table 4.17.--Comparison of college and non-college police officers who are specialists; mean scores--JAIM scales measuring Interpersonal Style.

JAIM Scale Dimensions	Non-College (N=18)	College (N=31)	t-value
Self-Assertive	23.56	22.52	2.02*
Supportive of Others	31.33	31.58	-0.27
Take Leadership	17.78	17.71	0.07

*Significant at the .05 level.

Hypothesis 2d: There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of Interpersonal Style.

Table 4.18.--Comparison of college and non-college police officers who are not specialists; mean scores--JAIM scales measuring Interpersonal Style.

JAIM Scale Dimensions	Non-College (N=75)	College (N=74)	t-value
Self-Assertive	23.15	23.09	0.21
Supportive of Others	31.67	31.04	1.31
Take Leadership	15.43	16.47	-1.65

Discussion.--College and non-college police officers differed on one of the three dimensions measuring Interpersonal Style. Non-college officers who are not specialists were significantly higher on the dimension--Self-Assertive. This would indicate that non-college officers, more so than college officers, would tend to prefer competition and like to pursue their own goals when they are in competition with others.

Non-college officers who were not specialists were those assigned to the patrol division. There is nothing in the literature which would directly support their being significantly higher on the Self-Assertive dimension of Interpersonal Style. However, the fact that these officers work primarily alone in patrol cars and handle sensitive enforcement situations on a daily basis may account for their being high on the Self-Assertive dimension of Interpersonal Style.

The t-values on the Self-Assertive dimension of Interpersonal Style are shown in Table 4.19.

Table 4.19.--Self-Assertive dimension of Interpersonal Style.

	Non-College		College		t-value
	(n)	Mean	(n)	Mean	
Overall	93	23.23	105	22.92	1.35
Rank	29	23.28	35	22.66	1.44
Non-rank	64	23.20	70	23.06	0.56
Specialists	18	23.56	31	22.52	2.02*
Non-specialists	75	23.15	74	23.09	0.21

*Significant at the .05 level.

Reaction to Aggression

Finding.--No group of college and non-college police officers differed on any of the three dimensions measuring Reaction to Aggression. Each of the operational hypotheses 3 through 3d is restated and the result of each analysis is shown in Tables 4.20 through 4.25.

Hypothesis 3: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

Table 4.20.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring Reaction to Aggression.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Move Toward Aggressor	28.60	28.74	-0.55
Move Away From Aggressor	11.73	11.51	0.69
Move Against Aggressor	18.61	18.28	1.14

Hypothesis 3a: There will be no difference between college and non-college officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

Table 4.21.--Comparison of college and non-college police officers with rank; mean scores--JAIM scales measuring Reaction to Aggression.

JAIM Scale Dimensions	Non-College (N=29)	College (N=35)	t-value
Move Toward Aggressor	28.86	28.86	0.01
Move Away From Aggressor	12.14	11.31	1.52
Move Against Aggressor	18.07	18.43	-0.72

Hypothesis 3b: There will be no difference between college and non-college officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

Table 4.22.--Comparison of college and non-college police officers without rank; mean scores--JAIM scales measuring Reaction to Aggression.

JAIM Scale Dimensions	Non-College (N=64)	College (N=70)	t-value
Move Toward Aggressor	28.48	28.69	-0.68
Move Away From Aggressor	11.55	11.61	-0.17
Move Against Aggressor	18.86	18.20	1.80

Hypothesis 3c: There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

Table 4.23.--Comparison of college and non-college police officers who are specialists; mean scores--JAIM scales measuring Reaction to Aggression.

JAIM Scale Dimensions	Non-College (N=18)	College (N=31)	t-value
Move Toward Aggressor	28.94	28.90	0.08
Move Away From Aggressor	11.94	10.97	1.66
Move Against Aggressor	18.06	18.71	-1.33

Hypothesis 3d: There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of Reaction to Aggression.

Table 4.24.--Comparison of college and non-college police officers who are not specialists; mean scores--JAIM scales measuring Reaction to Aggression.

JAIM Scale Dimensions	Non-College (N=75)	College (N=74)	t-value
Move Toward Aggressor	28.52	28.68	-0.52
Move Away From Aggressor	11.68	11.74	-0.17
Move Against Aggressor	18.75	18.09	1.82

Information-Processing Style

Finding.--The total group of college and non-college police officers and one of the subgroups, officers with rank, differed significantly on the dimension--Concrete-Practical. On the dimension Systematic-Methodical, the total group and one subgroup, officers without rank, differed. Each of the operational hypotheses,

4 through 4d, is restated and the result of each analysis is shown in Tables 4.25 through 4.29.

Hypothesis 4: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

Table 4.25.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring Information-Processing Style.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Concrete-Practical	37.63	37.12	2.15*
Systematic-Methodical	15.11	15.45	-1.99*

*Significant at the .05 level.

Hypothesis 4a: There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

Table 4.26.--Comparison of college and non-college police officers with rank; mean scores--JAIM scales measuring Information-Processing Style.

JAIM Scale Dimensions	Non-College (N-29)	College (N=35)	t-value
Concrete-Practical	38.03	37.11	2.42*
Systematic-Methodical	15.28	15.26	0.07

*Significant at the .05 level.

Hypothesis 4b: There will be no difference between college and non-college police officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

Table 4.27.--Comparison of college and non-college police officers without rank; mean scores--JAIM scales measuring Information-Processing Style.

JAIM Scale Dimensions	Non-College (N=64)	College (N=70)	t-value
Concrete-Practical	37.45	37.13	1.08
Systematic-Methodical	15.03	15.54	-2.41*

*Significant at the .05 level.

Hypothesis 4c: There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process information.

Table 4.28.--Comparison of college and non-college police officers who are specialists; mean scores--JAIM scales measuring Information-Processing Style.

JAIM Scale Dimensions	Non-College (N=18)	College (N=31)	t-value
Concrete-Practical	37.50	37.06	0.92
Systematic-Methodical	15.28	15.55	-0.84

Hypothesis 4d: There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Process Information.

Table 4.29.--Comparison of college and non-college police officers who are not specialists; mean scores--JAIM scales measuring Information-Processing Style.

JAIM Scale Dimensions	Non-College (N=75)	College (N=74)	t-value
Concrete-Practical	37.67	37.15	1.86
Systematic-Methodical	15.07	15.41	-1.67

Discussion.--College and non-college officers differed on both dimensions measuring the concept of Information Processing. The total group, and the subgroup of non-college officers with rank, scored higher than the college-educated officers on the dimension--Concrete-Practical--which measures the degree an individual considers himself to be practical and sensible, in contrast to being imaginative, ingenious, and having novel ideas.

It may be that the non-college officers with rank consider themselves as "practical and sensible, with both feet on the ground," because they have succeeded in the system; i.e., they were promoted. They have competed against college officers and in comparison may feel that their hard work, application of common sense, and perseverance have been recognized and rewarded.

The t-values on the Concrete-Practical dimension of Information Processing are shown in Table 4.30.

Table 4.30.--Concrete-Practical dimension of Information-Processing Style.

	Non-College		College		t-value
	(n)	Mean	(n)	Mean	
Overall	93	37.63	105	37.12	2.15*
Rank	29	38.03	35	37.11	2.42*
Non-rank	64	37.45	70	37.13	1.08
Specialists	18	37.50	31	37.06	0.92
Non-specialists	75	35.67	74	37.15	-1.67

*Significant at the .05 level.

College officers as a group, college officers without rank, and college officers who were specialists were significantly different from their non-college counterparts on the dimension--Systematic-Methodical. College officers scored higher than their non-college counterparts on this dimension of Information-Processing Style, which indicates their preference for using step-by-step methods for processing information and reaching decisions.

Evidence in the literature, as well as in current studies, tends to indicate that college does make a difference in the degree of skill necessary to perform certain tasks. One of these tasks is the way in which information is processed for decision making.[97] College graduates are more likely to have been exposed to decision-making theory, and may perceive a decision as not simply a choice among alternatives, but a conclusion drawn from a logical thought process.

[97]Sanford, The American College: A Psychological and Social Interpretation of the Higher Learning, p. 72.

The t-values on the Systematic-Methodical dimension of Information-Processing Style are shown in Table 4.31.

Table 4.31.--Systematic-Methodical dimension of Information-Processing Style.

	Non-College		College		t-value
	(n)	Mean	(n)	Mean	
Overall	93	15.11	105	15.45	-1.99*
Rank	29	15.28	35	15.26	0.07
Non-rank	64	15.03	70	15.54	-2.41*
Specialists	18	15.28	31	15.55	-0.84
Non-specialists	75	15.07	74	15.41	-1.67

*Significant at the .05 level.

Relation to Authority

Finding.--One of the subgroups of the college and non-college officers, officers with rank, differed significantly on the Work as an Assistant dimension of the behavior style--Relate to Authority. Each of the five operational hypotheses, 5 through 5d, is restated and the result of each analysis is shown in Tables 4.32 through 4.36.

Hypothesis 5: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

Table 4.32.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring Relation to Authority.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Act Independently	24.94	25.20	-1.49
Work as an Assistant	8.03	7.59	1.67

Hypothesis 5a: There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

Table 4.33.--Comparison of college and non-college police officers with rank; mean scores--JAIM scales measuring Relation to Authority.

JAIM Scale Dimensions	Non-College (N=29)	College (N=35)	t-value
Act Independently	24.86	25.37	-1.54
Work as an Assistant	8.38	7.43	2.35*

*Significant at the .05 level.

Hypothesis 5b: There will be no difference between college and non-college police officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

Table 4.34.--Comparison of college and non-college police officers without rank; mean scores--JAIM scales measuring Relation to Authority.

JAIM Scale Dimensions	Non-College (N=64)	College (N=70)	t-value
Act Independently	24.96	25.11	-0.69
Work as an Assistant	7.88	7.67	0.60

Hypothesis 5c: There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

Table 4.35.--Comparison of college and non-college police officers who are specialists; mean scores--JAIM scales measuring Relation to Authority.

JAIM Scale Dimensions	Non-College (N=18)	College (N=31)	t-value
Act Independently	25.00	25.45	-1.27
Work as an Assistant	7.78	7.68	0.21

Hypothesis 5d: There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of the manner in which they Relate to Authority.

Table 4.36.--Comparison of college and non-college police officers who are not specialists; mean scores--JAIM scales measuring Relation to Authority.

JAIM Scale Dimensions	Non-College (N=75)	College (N=74)	t-value
Act Independently	24.92	25.09	-0.84
Work as an Assistant	8.09	7.55	1.70

Discussion.--College and non-college officers differed on one of the two dimensions--Work as an Assistant--measuring the behavior style Relate to Authority. Non-college officers with rank scored significantly higher on this dimension. This would indicate that non-college officers would prefer to work closely with their supervisors rather than to work by themselves.

Support for this finding concerning the general effects of education may be found in the literature.[98] If college graduates have higher levels of intellectual curiosity, more autonomous styles of thinking, more tolerance for ambiguity, and a greater need for independence,[99] it would follow that they would prefer to work by themselves as opposed to the non-college officers who would prefer to work more closely with their supervisors.

The t-values on the dimension--Work as an Assistant--of the behavior style Relate to Authority are shown in Table 4.37.

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[98]Feldman and Newcomb, The Impact of College on Students, p. 48.

[99]Trent and Medsker, Beyond High School, p. x.

Table 4.37.--Work as an Assistant dimension of Relation to Authority.

	Non-College		College		t-value
	(n)	Mean	(n)	Mean	
Overall	93	8.03	105	7.59	-1.49
Rank	29	8.38	35	7.43	2.35*
Non-rank	64	7.88	70	7.67	0.60
Specialists	18	7.78	31	7.68	0.21
Non-specialists	75	8.09	74	7.55	1.70

*Significant at the .05 level.

Leadership Style
Leadership Style

Finding.--The overall group of college and non-college officers, and one of the subgroups, officers who were specialists, differed significantly on the Directive Leadership dimension of the behavior style labeled Leadership Style. Each of the five operational hypotheses, 6 through 6d, is restated and the result of each analysis is shown in Tables 4.38 through 4.42.

Hypothesis 6: There will be no difference between college and non-college police officers on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

Table 4.38.--Comparison of college and non-college police officers' mean scores--JAIM scales measuring Leadership Style.

JAIM Scale Dimensions	Non-College (N=93)	College (N=105)	t-value
Directive Leadership	28.14	26.97	2.52*
Motivate by Rewards	26.06	26.31	-0.80
Motivate by Results	20.56	20.74	-0.75

*Significant at the .05 level.

Hypothesis 6a: There will be no difference between college and non-college police officers, with rank, on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

Table 4.39.--Comparison of college and non-college police officers with rank; mean scores--JAIM scales measuring Leadership Style.

JAIM Scale Dimensions	Non-College (N=29)	College (N=35)	t-value
Directive Leadership	27.76	26.40	1.83
Motivate by Rewards	26.48	26.83	-0.63
Motivate by Results	20.24	20.54	-0.85

Hypothesis 6b: There will be no difference between college and non-college police officers, without rank, on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

Table 4.40.--Comparison of college and non-college police officers without rank; mean scores--JAIM scales measuring Leadership Style.

JAIM Scale Dimensions	Non-College (N=64)	College (N=70)	t-value
Directive Leadership	28.31	27.26	1.80
Motivate by Rewards	25.88	26.06	-0.48
Motivate by Results	20.70	20.84	-0.44

Hypothesis 6c: There will be no difference between college and non-college police officers, who are specialists, on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

Table 4.41.--Comparison of college and non-college police officers who are specialists; mean scores--JAIM scales measuring Leadership Style.

JAIM Scale Dimensions	Non-College (N=18)	College (N=31)	t-value
Directive Leadership	28.78	26.84	2.31*
Motivate by Rewards	26.39	26.48	-0.14
Motivate by Results	20.33	20.68	-0.78

*Significant at the .05 level.

Hypothesis 6d: There will be no difference between college and non-college police officers, who are not specialists, on their responses to specific items on the JAIM measuring various dimensions of Leadership Style.

Table 4.42.--Comparison of college and non-college police officers who are not specialists; mean scores--JAIM scales measuring Leadership Style.

JAIM Scale Dimensions	Non-College (N=75)	College (N=74)	t-value
Directive Leadership	27.99	27.03	1.73
Motivate by Rewards	25.99	26.24	-0.71
Motivate by Results	20.61	20.77	-0.53

Discussion.--College and non-college police officers differed on one of the three dimensions--Directive Leadership--measuring the behavior style labeled Leadership Style. The non-college officers as a group, and non-college officers who were specialists, scored significantly higher. This indicates that the non-college officer

is one who believes that an effective supervisor makes the decisions himself rather than consulting with subordinates and delegating to them. Further, he feels the supervisor is one who should keep a careful watch on subordinates for deficient performance and should discipline those who fall below his standards.

As for supporting this finding, there are few direct studies, but by implication there is evidence to indicate that this exists. For instance, situational factors in a leadership situation include both the requirements of the task and the behavioral styles and expectations of subordinates. With few exceptions, studies have found college graduates to be more ready to express impulses, more spontaneous, less ready to defer gratification, and less self-controlled or restrained than college freshmen and non-college cohorts. College graduates also have a higher need for flexibility, change, and non-routinized activities.[100] From the above information, then, one could assume that college graduates would neither adopt nor conform to a directive leadership style.

The t-values on the Directive Leadership dimension of Leadership Style are shown in Table 4.43.

Summary

When the t-tests were analyzed in relation to each dimension of the six behavior styles, there were 11 significant differences, an increase of five significant differences above the primary analysis (see Table 4.44). In the further analysis, the total group

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[100]Feldman and Newcomb, The Impact of College on Students, p. 33.

of college and non-college officers differed on both of the dimensions measuring Information-Processing Style. The other three significant differences were between the college and non-college police officers who were specialists. They differed on the Schedule Activities dimension of Self-Management, on the Self-Assertive dimension of Interpersonal Style, and on the Directive Leadership dimension of Leadership Style.

Table 4.43.--Directive Leadership dimension of Leadership Style.

	Non-College		College		t-value
	(n)	Mean	(n)	Mean	
Overall	93	28.14	105	26.97	2.52*
Rank	29	27.76	35	26.40	1.83
Non-rank	64	28.31	70	27.26	1.80
Specialists	18	28.78	31	26.84	2.31*
Non-specialists	75	27.99	74	27.03	1.73

*Significant at the .05 level.

In Chapter V the study will be summarized, conclusions will be outlined, the results of the analysis will be used to develop behavior style profiles of both the college and the non-college police officer, and recommendations will be made for the law enforcement field.

Table 4.44.--Summary of behavior style differences between college and non-college police officers on the JAIM analysis with control variables.

Behavior Style Dimension	Total College and Non-College	a. Officers With Rank	b. Officers Without Rank	c. Officers Who Were Specialists	d. Officers Who Were Not Specialists
1. Self Management					
Plan Ahead					
Perseverance					
Emotional Control					
Schedule Activities	2.50**	3.10**		2.03*	
2. Interpersonal Style					
Self-Assertive				2.02*	
Supportive of Others					
Take Leadership					
3. Reaction to Aggression					
Move Toward Aggressor					
Move Away From Aggressor					
Move Against Aggressor					
4. Information-Processing Style					
Concrete-Practical	2.15*	2.42**			
Systematic-Methodical	-1.99*		-2.41**		
5. Relation to Authority					
Act Independently					
Work as an Assistant		2.35**			
6. Leadership Style					
Directive Leadership	2.52**			2.31*	
Motivate by Rewards					
Motivate by Results					

*Significant at the .05 level.
**Significant at the .05 level for the family of dimensions.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

Purpose

Many departments are following the recommendations of the various national law enforcement and criminal justice commissions by requiring a college degree as an educational prerequisite for employment. However, other departments are still hiring at the high school equivalency level; they consider a college degree "dysfunctional and unnecessary."

The fact is that most police departments will have personnel with mixed and varied levels of education. If a college-educated police officer is actually different from his non-college counterpart, and the rise in educational levels of police officers is imminent, then it is crucial to identify these differences in order to develop organizational policies which can best capitalize upon them.

Method

All of the college graduates employed as sworn police officers by the Michigan Department of State Police with the rank of sergeant or trooper (N=126) and a cohort sample of sworn officers who had not attended college (N=126) were inventoried using the Job Analysis Interest Measurement (JAIM), a self-report inventory used

to measure behavior styles (the consistent ways in which individuals organize and direct their mental, physical, and energy resources to accomplish goals). The six behavior styles which the JAIM records are: Self-Management as measured on the dimensions of planning ahead, orderliness, perseverance, emotional control, and schedule activities; Interpersonal Style as measured on the dimensions of self-assertiveness, support of others, and take leadership; Reaction to Aggression as measured on the dimensions of move toward aggressor, move away from aggressor, and move against aggressor; Information-Processing Style as measured on the dimensions of concrete-practical and systematic-methodical; Relation to Authority as measured by the dimensions of act independently and work as an assistant; and Leadership Style as measured by the dimensions of directive leadership, motivate by rewards, and motivate by results.

A two-celled cross-sectional design was employed. It involved identifying college-educated police officers and comparing them at one point in time with a control group of non-college police officers. The level of formal education was the independent variable and behavior styles the dependent variables; rank and assignment were used as controls.

General hypotheses were developed to examine differences between college and non-college police officers on the six behavioral styles measured by the JAIM. Five operational hypotheses were used to test the differences between college and non-college police officers on each of the behavior styles.

There was a 74.6 percent return on the self-administered questionnaires. Group differences on the JAIM scales were tested for significance at the .05 level using a two-tailed t-test.

Results

Two of the six null hypotheses, stating no difference between the total groups of college and non-college police officers, were rejected, and six of the dimensions used to measure aspects of behavior style showed significant differences between college and non-college police officers. Based on the results of this study, profiles of the behavior style differences of the college and non-college officers were developed.

Conclusions

As a result of the analysis, behavior style profiles were developed for both the non-college and the college police officer.

Behavior Style Profile of the Non-College Police Officer

When the behavior style profile of the non-college police officer is compared to the college-educated police officer, the non-college police officer can be described as a person who: (1) likes to follow a schedule and daily routine (he scored high on the dimension--Schedule Activities); (2) considers himself as practical, sensible, "with both feet on the ground," in contrast to being imaginative and having novel ideas (he scored high on the dimension--Concrete-Practical); (3) likes to work closely with his supervisor rather than working by himself (he scored high on the

dimension--Work as an Assistant); and (4) would rather have his supervisor make decisions for him rather than consult with him, and would prefer to have the supervisor keep a careful watch for deficient performances and to discipline those officers who fall below the supervisor's standard (he scored high on the dimension--Directive Leadership).

Behavior Style Profile of the College-Educated Police Officer

When the profile of the college-educated police officer is compared to the non-college police officer, the college-educated police officer can be described as a person who: (1) would prefer an unscheduled or a varied work routine (he scored low on the dimension--Schedule Activities); (2) considers himself imaginative and having novel ideas (he scored low on the dimension--Concrete-Practical); (3) likes to work independently using his own methods (he scored low on the dimension--Work as an Assistant); (4) would prefer to assume a leadership role and likes to direct and supervise the work of others (he scored high on the dimension--Take Leadership); and (5) uses a logical thought process for processing information and reaching decisions (he scored high on the dimension--Systematic-Methodical).

Discussion

The Significant Findings

Those differences found between college-educated and non-college police officers were not unexpected for the profiles

developed present no unanswerable problems. They are consistent with the findings of other educational research and lend support to the concept of behavior styles.

Discussed in Chapter I is how a person's beliefs often influence what happens to him and how his expectations influence the outcome of a situation. For example, when examining the behavior style, Information Processing, it is apparent that the non-college officers with rank are significantly higher on the dimension--Concrete-Practical. If the non-college officer with rank sees himself as practical and sensible, and gains reinforcement from the organization by attaining a promotion, then his actions or behavior will be guided by this belief. In addition, his actions will be guided by how he represents circumstances to himself. It doesn't matter how unorthodox his behavior may appear to an outsider, his behavior will generally make sense in terms of his own belief system.

The notion that the study of the internal frame of reference is a useful approach for understanding behavior of an individual (as with the JAIM) remains consistent with the view of personality theorists[101] who believe that man creates his own ways of seeing the world, and that by examining a person's philosophy or internal frame of reference, we find ourselves examining the individual himself.

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[101] A. W. Combs and D. Snygg, Individual Behavior (New York: Harpers, 1959); G. A. Kelly, The Psychology of Personal Constructs (New York: Norton, 1955); C. R. Rogers, Becoming a Person (Boston: Houghton Mifflin, 1961); Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960); Milton Rokeach, Beliefs, Attitudes and Values: A Theory of Organization and Change (San Francisco: Jossey-Bass, 1968).

When we know the manner in which he represents his circumstances to himself we can better understand how he will behave.

When people develop "automatic" ways of dealing with recurring situations, these processes are referred to as behavior styles. They are measurable types of performances that may be either conscious or unconscious and which are exhibited in various situations. A person's behavior styles are determined by his innate characteristics acting in combination with his life experiences. It would appear that a college education may be one such life experience which can be used to distinguish between some dimensions of behavior styles of college and non-college police officers as measured by the JAIM.

Limitations of Significant Findings

The college-educated and non-college police officer profiles are generally consistent with the findings of other researchers in the education and police fields. However, when the small number of significant findings in this study is compared with the number found in other studies using the JAIM, the present study needs to be explained.

For example, where Trojanowicz[102] found social workers and police officers differing on 13 of the 18 dimensions describing behavior styles, this study found that college-educated and non-college police officers differed on only six dimensions.

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[102]Robert C. Trojanowicz, "A Comparison of the Behavioral Styles of Policemen and Social Workers" (Ph.D. dissertation, Michigan State University, 1969).

One reason that may explain the small number of differences may be the composition of the sample. The personnel used in this study, the troopers and sergeants of the Michigan Department of State Police, are really a very homogeneous group when compared to police officers of other departments.[103]

Through the years the Michigan State Police have maintained much of their early military bearing and training. Their hierarchy has maintained the traditional rank structure. For example, they begin as recruits and progress to trooper, sergeant, lieutenant, captain, major, lieutenant colonel, and on up to colonel.

Another factor that demonstrates the homogeneity of the MSP is their recruitment procedure. Until recently, MSP recruitment was accomplished by word of mouth; officers would tell their friends and family when positions were open. As a result, there are several family generations of Michigan State Police officers.

Concerning the training of MSP personnel, only recently[104] have they broken away from the strict, traditional military model. New personnel (recruits) were trained and tested in a rigid live-in academy setting, similar to military basic training. Recruits were required to wear short hair cuts; conform to strict regimentation; perform close order drill, to and from classes; and to address senior police officers by their rank. If a recruit failed to conform to these or other organizational standards, he was dropped

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[103]See Appendix A for Description of the Michigan State Police.

[104]At the time of this study, only about 1 percent of the sworn personnel were black, Spanish speaking, or female.

from the program. After graduation from the academy, these now-probationary troopers served in the field in various assignments, where they were re-evaluated, and again, if they failed to conform to the department's standards, they were released from employment.

As a check on the effects of experience, the respondents were divided into five categories by the number of years of service in the organization. The five categories were: 0-5 years, 6-10 years, 11-15 years, 16-20 years, and 20+ years. Again, the college-educated and non-college officers were tested in each group. The same six dimensions--Schedule Activities, Take Leadership, Concrete-Practical, Systematic-Methodical, Work as an Assistant, and Directive Leadership--showed significant differences between college-educated and non-college officers. There were no changes in patterns across experience groups.

Limitations of the Study

Sample.--The study may be criticized because the sample was taken from only one organization, the Michigan State Police. Also, because of the past personnel practices, the MSP may not be a representative police agency as was previously discussed.

Self-report inventories.--It should be reaffirmed that self-report inventories, as noted in Chapter III, cannot prevent respondents from faking. Preiss and Ehrlich note that on self-report instruments "there is always the potential for inconsistency between

a person's reported role perception and his actual behavior."[105] It is also thought that persons who have attained a higher level of education are more likely to be "test wise" and manipulate their answers. Because respondents answered the questions in a non-threatening situation and did not need to identify themselves, manipulation may have been kept at a minimum. It should be noted that more than 90 percent of the respondents did identify themselves.

Self-report inventories also have a tendency to force a respondent to make a choice even when no choices are particularly desirable. The alternatives are many times limited and suggest that situations are more clear-cut than they actually are. But, even realizing these limitations, research using self-report instruments can be very helpful.

Research design.--A two-celled cross-sectional or static-group comparison design was used. The sample was identified at one point in time and inventoried. There was no way of determining if the two groups were originally alike before the intervention of the key variable, college education. Therefore, it is difficult to distinguish differences having their source in the college experience from other differences due to experiential or maturational influences.

Analysis.--Group differences were tested for significance using the difference-of-means test involving the t-distribution. The scoring process and computer analysis were done at George

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[105] J. J. Preiss and H. J. Ehrlich, An Examination of Role Theory: The Case of the Police (Lincoln: University of Nebraska Press, 1966), p. 93.

Washington University using a program prepared for the JAIM. If the data had been available to be processed at Michigan State University, it may have been possible to use analysis of variance to further test for interactional effects.

Recommendations

The importance of the findings is that there are differences between college-educated and non-college police officers even though they are performing the same functions in the organization.

The previous discussion of profiles shows that the college-graduate police officer differs from the non-college police officer. The college-educated police officer likes to have less direction from supervisors, to work independently using his own methods, and to have an unscheduled or varied work routine. This may, in fact, cause problems for the organization due to his quasi-rejection of the military-like supervision and the routine activities often found in police departments. The non-college officer more readily fits into the traditional police organization, prefers to take direction, and is less of a "problem" for the organization for many different reasons.

Good police work has traditionally been defined by many as the maintaining of the status quo. For this reason, as well as many others, this study did not undertake to define the police role for the college graduate. The non-college officer has been and may continue to be the more desirable employee. For it is not so much what he does as contrasted to the college-educated officer that makes

him desirable, as it is what he does not do. The college-educated officer asks questions, displays imagination, develops novel approaches to problems, and can tolerate unstructured situations.

Since society is changing and our population as an aggregate is becoming more educated, the time has come for police departments and police managers not to discourage higher education, but to ask the important question: How can police organizations change so that the college-educated officer can be retained and employed most effectively without destroying the morale of the non-college officer in this period of transition? Ultimately, all police positions will be filled by college graduates. In the interim period, however, it is important to prevent a "head on" collision spearheaded by college-graduate officers.

During this transition period, methods of adaption must be developed. For example, an engineering psychology approach to personnel development rather than a personnel psychology approach can be utilized. The engineering psychology approach puts its emphasis on redesigning the job and its physical environment to fit the capacities of the human being. The person is considered a constant, while the job is considered a variable. It attempts to alter the organization to adapt to the individual, whereas the personnel psychology approach fits the individual into a slot by pre-employment preparation, selection, and socialization after employment.[106]

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[106]Edgar H. Schein, Organizational Psychology (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1965), p. 10.

An engineering psychology approach will assist, and as this study has pointed out there are differences between the college-educated and non-college officer. To be retained and to develop a sense of accomplishment, the college graduate should be given duties that stimulate his thinking and imagination, be kept away from the more routine functions, and be put in positions or specialized units where his education can best be utilized. On the other hand, the non-college officer who appears to prefer the more directive and routine activities, and who more readily follows the current role requirements of the organization, can be used effectively in the latter areas.

An example of a category of actions that might be taken using the engineering psychology form of adaption would be a change of management style. The traditional management style practiced within most police departments should be carefully reviewed and evaluated with the results of this study in mind. Consideration should be given to increasing the level of communication between managers and police officers. Policies which encourage increased constructive feedback and more participation by police officers in planning, goal setting, and decision making should be established. The myth that the boss has all the answers has been rejected by progressive corporate managers with excellent results. However, this is not so suggest that a vote be taken prior to making an arrest. The proper supervisor-subordinate relationship lies somewhere between this overly democratic condition and the strongly boss-oriented management style of many police departments. In

other words, police managers might profitably spend more time listening and asking questions rather than directing and giving answers.

Actions under the engineering psychology approach are generally taken within the department, while actions under the personnel psychology approach are frequently taken outside the department and prior to employment as a police officer. Since an engineering psychology approach was recommended, and an example presented to show how a department might change to adapt to college-educated police officers, it seems appropriate to consider actions which might be taken using the personnel psychology approach.

There is an apparent gap between the expectation and realization levels of college graduates in police departments in terms of job satisfaction and rewards. This gap can be narrowed by changing the organization (engineering psychology approach) and thus raising realization levels. This gap may also be narrowed by lowering expectation levels using the personnel psychology approach and conditioning the individual for employment in the organization.

Actions which would lower the level of expectation of college graduates to a level which is more consistent with reality should serve to narrow the expectation/realization gap of this group. As an example, many young men leave high school and immediately enter into a college or university program. As a part of their education they are frequently exposed to solutions through case studies or hypothetical high-level management problems which may not translate intact to "real world" situations.

In some cases, important limiting variables may not be emphasized. As these students pass through their programs the education may instill an expectation of fast promotion and prompt use of high-level management skills. Such graduates may frequently feel that they have the solutions to many of the organization's problems if someone would only listen.

Young men and women who complete college programs may become extremely frustrated when they are faced with slow promotions and encounter what they perceive as indifference if not hostility when they propose solutions to management problems based on information gained in college courses.

An educational program in which a prospective police officer attends college for two years prior to employment, and is encouraged to return to college at a point in his career when high-level management skills are more appropriate, might tend to mitigate this frustration. Such a program may close the expectation/realization gap from the expectation side by not building up unrealistically high expectations at such an early point in a police career. A combination of actions which would both lower expectations and raise realization levels of college-graduate police officers appears to offer the greatest probability of success.

The future of the college graduate in police organizations is looking brighter. Many officers with college degrees have attained command positions and many command officers are now attending college. This should help them to empathize with other college-going officers.

The police function, role, and tasks have to be more rationally identified, defined, and then given to those persons who can best perform them. This means creating more career tracts for personnel with different skills so that both the organization and the individual can benefit.

The literature has shown that a college degree is beneficial because it allows the individual more flexibility, broadens his horizons, increases his mobility, and helps him to deal with such things as the dynamics of organizational and human behavior. As pointed out earlier, however, this study examined differences in behavioral styles and did not attempt to determine if a college-educated officer is a more effective performer on the job.

A large percentage of the problems police administrators encounter can be classed as personnel problems. The department must learn to deal with persons who may be bored with some aspects of the job and who feel that they are not advancing as fast as they should. In addition, the officer with the college degree will have to be handled differently if he is to be retained and satisfied. The educated officer is more likely to question decisions that he perceives as illogical and counterproductive. This will force administrators to do a more effective job of supervision and job placement to maximize performance so that bright, productive college graduates can be retained.

The primary contribution of this study has been to identify the fact that there are differences between college-graduate

officers when compared to their non-college-going counterparts. These differences should be recognized and dealt with by police organizations so they might retain the many capable officers who can make a great contribution not only to their own organization but to the entire community.

APPENDICES

APPENDIX A

THE MICHIGAN STATE POLICE

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The Michigan State Police (MSP) had their origin during the period of World War I. It was due to the departure of the Michigan National Guard, which left for foreign service, that the state was without a reserve force to protect internal security. Therefore, in 1917, the legislature enacted the War Preparedness Board, which gave the governor authority and funds to organize state troops for home defense.

Since there was a widespread positive response to what the legislature and governor did in 1917, the legislature reorganized the State troops in 1919, into the Michigan State Police. In this reorganization, the MSP was given general police powers, unlike some State Police organizations whose authority is confined to highway patrol and offenses committed on highways. By having general police power a MSP officer is allowed to render many services to the public of Michigan.

In addition to having general police powers, the Michigan State Police perform a number of other duties through the office of the Director of State Police. State Police personnel are assigned state fire marshal inspection duties; personnel are assigned to the State Civil Preparedness Agency (formerly Civil Defense). Another division of the MSP is the Office of Highway Safety Planning. These

jobs outline just some of the major tasks and responsibilities the Michigan State Police are empowered to perform, and gives one a general description of the organization.

APPENDIX B

COVER LETTER SENT TO PARTICIPANTS

APPENDIX B

COVER LETTER SENT TO PARTICIPANTS

MICHIGAN STATE POLICE

Inter-Office Correspondence

Date : July 27, 1973

Subject: Research Project (Trojanowicz)

To :

In cooperation with Professor Robert C. Trojanowicz, of Michigan State University, School of Criminal Justice, we are participating in a research project designed to determine differences, if any, between college graduate officers and non-college officers.

I am asking for your cooperation in completing the attached questionaire in accordance with the instructions. Please return the completed questionaire and answer sheet to the Personnel Division by August 10, 1973.

DIRECTOR

JRP:pd
att.

APPENDIX C

REPORTED STUDIES USING THE JOB ANALYSIS AND INTEREST MEASUREMENT (JAIM)

APPENDIX C

REPORTED STUDIES USING THE JOB ANALYSIS AND INTEREST MEASUREMENT (JAIM)

Manual

Walther, R. H., Job Analysis and Interest Measurement, Educational Testing Service, Princeton; N.J.: 1964.

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Lippitt, G.L. and Petersen, P.B., "Development of a Behavioral Style in Leadership Training", Training and Development Journal, July 1967, 9-17 (Form 864). Based on the Petersen Master's thesis (see below).

Petersen, P.B. and Lippitt, G.L., "Comparison of Behavioral Styles Between Entering and Graduating Students of Officer Candidate School," Journal of Applied Psychology, 1968, 52, No. 1, 66-70 (From 864). Based on the Petersen Master's thesis (see below).

Walther, R.H., "The Functional Occupational Classification Project: A Critical Appraisal," Personnel Guid J., 1960, 38, 698-707. A review of the U.S. Department of Labor's Functional Occupational Classification Project in light of constructs guiding the initial development of the JAIM.

Walther, R.H., "Self-Description as a Predictor of Success or Failure in Foreign Service Clerical Jobs," Journal of Applied Psychology, 1961, 45, 16-21. (Original inventory) An early form of the JAIM used in a longitudinal study of Foreign Service clerical jobs.

Walther, R.H., "Self-Description as a Predictor of Rate of Promotion of Junior Foreign Service Officers," Journal of Applied Psychology, 1962, 46, 314-216. An early form of the JAIM used in a longitudinal study of Foreign Service Officers.

Walther, R.H., "Job Analysis and Interest Measurement," Education, 1963. An outline of the theory underlying the JAIM.

Walther, R.H., "ASTD Members - Their Perceptions and Training Goals," Training and Development Journal, March, 1971, 32-37 (Form 669). Reports of JAIM scores of a sample of ASTD members.

Walther R.H. and McCune, Shirley D., "Juvenile Court Judges in the United States Part II: Working Styles and Characteristics," Crime and Delinquency, Oct., 1965, 384-393, (Form 663). An article summarizing the data from the monograph listed below, Socialization Principles and Work Styles of the Juvenile Court, which studied the job of the juvenile court judge and related occupations, such as probation officers, social workers, and youth police officers (From 663).

Walther, R.H., McCune, Shirley D., and Trojanowicz, R.C., "The Contrasting Occupational Cultures of Policemen and Social Workers," Experimental Publication System, American Psychological Assoc., 1200 17th St., NW, Wash., D.C., Dec., 1970, 9, Ms. no. 314-256.

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McCune, Shirley D. and Mills, E.W., Continuing Education for Ministers, a Pilot Evaluation of Three Programs, Ministry Studies Board, Washington, D.C., 1968. The JAIM was used as one of the evaluation instruments in a study of three continuing education programs for ministers.

Walther, R.H., The Psychological Dimensions of Work: An Experimental Taxonomy of Occupations, The George Washington University, 1964. Avaliable from the U.S. Office of Education, ERIC Document Reproduction Service, ED 012, 937 National Cash Register, Box 2206, Rockville, Maryland 20852. A review of occupational research and the proposal of a taxonomy of occupations based on JAIM constructs.

Walther, R.H., Orientations and Behavioral Styles of Foreign Service Officers, Carnegie Endowment for International Peace. New York, 1965. A study of 387 senior and 200 junior Foreign Service Officers of U.S. Department of State using examination scores, performance ratings and functional specialization as criterion measures.

Walther, R.H. and McCune, Shirley D., Socialization Principles and Work Styles of the Juvenile Court. Center for the Behavioral Sciences, The George Washington University, 1965. A study of the job of the Juvenile Court judge and of related occupations such as probation officers, social workers, and youth police officers (From 663).

Walther, R.H., Personality Variables and Career Decisions: A Pilot Study of Law and Social Work Students. The Social Research Group, The George Washington University, 1966. Available from the U.S. Office of Education, ERIC Document Reproduction Service, ED 012, 937, National Cash Register, Box 2206, Rockville, Maryland 20852. A study of graduate and undergraduate law students and graduate social workers using Form 864.

Walther, R.H., Job Adjustment and Employee Health, Social Research Group, The George Washington University, 1969. Report submitted in connection with Grant No. UI 00447, Public Health Service, U.S. Department of Health, Education and Welfare. A study of the effects of job stress on health using the JAIM scores as a measure of job adjustment and medical records as a measure of health. The subjects were 1,500 persons who entered the Foreign Service of the U.S. Department of State during 1957-1964.

Walther, R.H., Orientations and Behavioral Styles of Public School Officials, Social Research Group, The George Washington University, 1967. A study of public school officials in a large city school system using From 864.

Walther, R.H., McCune, Shirley D., and Petersen, P.B., The Shaping of Professional Subcultures: A Study of Student Groups from Five Professions. Social Research Group, The George Washington University, 1968. Available from NCR/EDRS, 4936 Fairmont Ave., Bethesda, Maryland 20014, reference no. ED-038-904. A study of business administration students, public administration students, law students, Army officer candidates and social work students using Form 864.

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Kirch, J.M., The Successful Police Educator: A Profile. Master's thesis, The George Washington University, 1969. A comparison between the JAIM scores of 33 FBI agents assigned to the FBI Training Division, 38 FBI agents receiving special training prior to being assigned to the job of first-line supervision instructors, and 45 FBI agents receiving special training prior to being assigned to the job of police-community relations instructors (Form 864).

Leonard, R.G., An Exploratory Study of Executive Personality Patterns Within Selected Private Industry. Doctoral dissertation, The George Washington University, 1972. A study of the "organizational personality" of three constrasting industries (Form 864).

McCune, Shirley D., An Exploratory Study of the Measured Behavioral Styles of Students in Five Schools of Social Work. Doctoral dissertation, Catholic University, Washington, D.C., 1966. A study of JAIM scores of 497 students in five graduate schools of social work to determine (1) differences between social work students and other occupational groups, (2) relationship between JAIM scores and field work and classroom performance, (3) differences between students selecting various practice methods and practice settings, and (4) differences among schools (Form 864).

Petersen, P.B., A Comparison of Behavioral Styles Between Entering and Graduating Students in Officers Candidate School. Master's thesis, The George Washington University, 1967. A comparison between JAIM scores of 671 entering and 353 graduating students attending Army Officer Graduate School (Form 864).

Petersen, P.B., An Investigation of the Effects of Training. Doctoral dissertation, The George Washington University, 1971. A study of the stability and effects of training at an Army Officer Candidate school. A total of 347 candidates completed the JAIM as both entering and graduating students; 757 candidates completed it both as graduating students and again about three years after graduation (Form 864).

Reeves, Edgar A., Jr., A Comparative Study of Behavioral Style as Measured by the Job Analysis and Interest Measurement (JAIM) of Retired Adult Participation and Non-Participation in the Institute of Lifetime Learning, Washington, D.C. Doctoral dissertation, The George Washington University, 1969 (Form 864).

Reiner, D.J., The Relationship Between Childhood Experience and Certain Variables Correlated with Occupational Choice and Performance. Master's thesis, The George Washington University, 1967. A study of the relationship between JAIM scores and four dimensions of childhood experience determined by a self-report inventory for a sample of subjects attending an Army Officer Candidate school (Form 864).

Robinson, William Harvey, Jr., An Element of International Affairs - The Military Mind. Master's thesis, The George Washington University, 1970. A study of 280 students at the Naval War College, Newport, R.I. (Form 669).

Roth, R.M., Personal Characteristics of the Overseas Chief School Administrator and the Relationship of these Characteristics to the Type of his School, and its Geographic Location. Doctoral dissertation, Temple University, 1972 (Form 669).

Trojanowicz, R.C., A Comparison of the Behavioral Styles of Policemen and Social Workers. Doctoral dissertation, Michigan State University, East Lansing, Michigan, 1969. A comparison of the JAIM scores of 98 social workers in the Lansing, Michigan area and 99 members of the Michigan State Police (Form 864).

Wald, Max, A Study of Selected Personal and Behavioral Characteristics of Public School Principals in the Commonwealth of Pennsylvania. Doctoral dissertation, Temple University, Philadephia, 1971. A study of the JAIM scores of public schools principals in the state of Pennsylvania (Form 669).

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Walther, R.H., The Prediction of Occupational Adjustment through Measured Behavioral Styles. Doctoral dissertation, The George Washington University, 1963. A review of the theoretical and statistical support for the JAIM constructs.

APPENDIX D

NORMS FOR FORM 669 OF THE JAIM

APPENDIX D

NORMS FOR FORM 669 OF THE JAIM

		Overall Norms		ASTD Norms	
		Mean	S.D.	Mean	S.D.
1.	Optimism	27.360	2.04	27.635	2.02
2.	Self-Confidence	23.310	3.17	23.992	2.73
3.	Interpersonal Trust	19.011	3.59	19.589	3.19
4.	Open System	62.708	2.92	63.755	2.66
5.	Plan Ahead	18.931	1.61	19.229	1.48
6.	Orderliness	57.524	2.25	57.620	2.00
7.	Perseverance	38.494	2.75	38.955	2.45
8.	Emotional Control	16.286	2.83	16.490	2.54
9.	Schedule Activities	43.207	2.60	42.657	2.57
10.	Self-Assertive	22.499	2.11	22.629	2.04
11.	Supportive of Others	31.737	2.91	32.054	2.71
12.	Take Leadership	17.527	3.85	19.445	2.73
13.	Move Toward Aggressor	28.479	2.33	29.331	1.83
14.	Move Away From Aggressor	12.297	2.81	11.312	2.61
15.	Move Against Aggressor	18.062	2.37	18.045	2.01
16.	Concrete-Practical	36.770	2.07	35.714	2.16
17.	Systematic-Methodical	15.125	1.23	15.102	1.19
18.	Act Independently	24.775	1.69	25.637	0.75
19.	Work as an Assistant	8.261	1.98	7.620	1.80
20.	Directive Leadership	26.061	3.90	24.101	3.61
21.	Motivate by Rewards	25.819	1.92	25.561	1.78
22.	Motivate by Results	21.634	2.01	22.521	1.96
23.	Social Interaction	20.130	3.21	21.218	2.73
24.	Mechanical Activities	5.731	2.49	6.028	2.56
25.	Group Participation	8.278	2.15	8.635	2.10
26.	Activity-Frequent Change	18.803	2.91	20.153	2.67
27.	Job Challenge	26.089	2.49	27.572	1.88
28.	Status Attainment	10.660	6.66	11.229	6.49
29.	Social Service	13.966	5.25	14.357	5.03
30.	Approval From Others	17.261	3.63	16.241	3.29
31.	Intellectual Achievement	19.340	5.24	20.788	4.84
32.	Role Conformity	14.644	5.06	13.312	5.37

The norms for Form 669 are based on the following eight groups:

1. Social workers
2. School administrators
3. Computer programmers
4. Naval War College students
5. U.S. Military Academy cadets
6. Women returning to the labor market, most of whom possessed a college-level education
7. Government executives
8. American secondary school principals stationed overseas

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