AN ASSESSMENT OF HOW STRESS LEVELS DURING POLICE RECRUIT TRAINING AFFECT FUTURE SUCCESS OF GRADUATES

by

Jack F. Harris

A Master’s Research Project submitted in partial fulfillment of the requirement for the degree

Master of Arts

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has been approved

July 2000

APPROVED:

[Signature]

ACCEPTED:

[Signature]

Associate Dean for Graduate Studies
ABSTRACT

Research literature and articles were read and reviewed. These were used to evaluate previous work related to stress levels used in training programs that may be related to police training.

Three classes of police recruits were chosen to represent classes in which low, moderate or high levels of stress was induced during training. Data was gathered from police personnel records of the Phoenix Police Department in an attempt to evaluate the success of the graduates from each of the representative classes. Success was evaluated on the basis of longevity in employment with the police department, promotions attained during a career and level of performance evaluations received from supervisors.

It was believed that the results of the study would show no correlation between success rates over an entire career and stress levels induced during academy training. Results of the study indicated that officers attending an academy training program that induced moderate levels of stress were more successful than those who attended programs involving low or high levels of stress.
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CHAPTER 1

THE PROBLEM

Introduction

Over the past 25 years, the Phoenix Regional Police Academy has been tasked with the responsibility to train police officers for agencies throughout the state of Arizona. During this time, a variety of training philosophies have been employed that utilize various levels of stress directed at police recruits by training staff members. In general, these stress levels are categorized as low, moderate or high.

The organizational structure of police agencies throughout the United States is para-military in nature. The recruit training for police agencies is traditionally structured along the lines of a high stress environment similar to military training. The past belief is that a high stress training academy produces the “best” police officer. This belief is highly debatable and has been refuted by studies that are discussed later in this thesis. Although studies have been conducted addressing stress levels utilized during training, these studies were directed at the effect stress level has upon the learning process.
Purpose of the Study

The purpose of this thesis is to assess the effect that stress levels administered at the Phoenix Regional Police Academy have had on the success of those officers who have graduated. More concisely, is there a training stress level that produces officers that are more successful during their careers? The appropriateness of the stress level that should be used at the basic training level will emerge from the analysis of the careers of the graduates of the academy. It is expected that stress levels utilized at the academy will have little or no affect upon the success a graduate attains throughout his or her career.

This expectation is based on several factors. “Success” as defined in this thesis refers to measurement and comparison of career longevity, numerical performance evaluations, promotions and number of formal disciplinary actions taken against an officer by the department during an officer's career. Many of these categories of measurement may not occur for several years after graduation from the training academy. These categories can be influenced by the officer's work assignment. For example, an officer assigned to an area with high crime and arrest rates may generate a higher number of citizen complaints that, therefore, result in more discipline than an officer assigned to a lower crime rate area. Other factors can also influence these categories. Some supervisors are stricter than others, which may influence the performance evaluations, and an officer's decision to take or not take a promotional exam can influence that category.
Background of the Problem

Historically, police academies have conducted training programs that induce a high level of stress upon recruits. The reasoning for the use of high stress levels has not been based upon scientific research, but on tradition, military experience, and to some degree, on theory. That theory is that for an officer to be capable of responding appropriately in a high stress situation, he or she must have experienced high stress levels.

A research study was conducted within the Los Angeles County Sheriff's Department, which was directed by Howard H. Earle (1973), the Assistant Sheriff of Los Angeles County. This study attempted, through standard research methods, to answer the question of which stress level (low or high), produced the better officer. This study evaluated productivity and performance, job satisfaction and acceptability by persons served. This study indicated that of the two methodologies, low stress was preferable.

Previous research has also addressed learning capabilities based upon stress levels such as in Harris, Mackie, and Wilson (1956) which indicates that mild stress levels improve performance and increase learning. Previous research has not addressed whether an officer will attain a higher degree of success based upon the learning experience during academy training. Berkun, Bialek, Kern, and Yagi (1962) demonstrated the relationship between stress and performance effectiveness, with increased performance resulting from increased
stress up to moderate levels, beyond which increases in stress levels progressively impaired performance.

Statement of the Problem

A conclusion of the Los Angeles County study (Earle, 1973) was that low stress is preferable to high stress in producing the best officer. It would be possible to assume that the best officer would then be the most successful throughout the length of a career. If that assumption could be validated by research, then it would further enhance the conclusion reached by Earle. A hypothesis for this thesis is that graduates of low or moderate stress level recruit training programs have more successful careers than graduates of high stress training programs.

Definition of Terms

The conceptual constructs that will be defined and discussed in this section are: (1) stress, (2) low, moderate and high training programs, and (3) success.

Stress. Dr. Hans Selye (1974, p. 27) defines stress as "the nonspecific response of the body to any demand made upon it." Selye explains that response to stress can be categorized as "specific" and "nonspecific." The specific response is biological and is the body's response to a stress agent. The "nonspecific" response is the demand for readjustment to return to a state of
normalcy. Selye (1974, p. 28-29) states that “it is immaterial whether the agent or situation is pleasant or unpleasant; all that counts is the intensity of the demand for readjustment or adaptation.” In addressing the issue of punishment, Selye states that:

Punishment attempts to condition proper future conduct by the fear of retaliation. Unfortunately, it is often hard to draw this line between constructive teaching by punishment and senseless, purely vindictive retaliation or the desire for self-assertion. Professional teachers and even members of a family are not always adept at making this distinction. (Selye, 1974, p. 76)

**Unpleasant stress.** Unpleasant stress is the focus of most police training academies and is utilized to produce the readjustment that is intended. This unpleasant stress is not biological in nature, but is psychological or social stress. David Mechanic (1978 p. 22), defines social-behavioral stress as “being characterized by physical, social and cultural conditions likely to be discomforting for most people living within a specified group.”

For many years, unpleasant stress was induced on police recruits at the Phoenix Regional Police Academy without regard for learning objectives. Learning objectives were not documented in training policy and the reasons for stress varied from class to class.

**Low stress.** A low stress academy would be characterized by a program lacking the indicators used to define high stress and would also include the following indicators:

1. A relaxed supportive atmosphere
2. Predictable schedule that is presented to recruits early in the program (usually prior to the start of the academy or on the first day)

3. Helpful staff that includes one or more counselors to assist recruits academically, psychologically or socially

4. A training staff chosen to provide a leadership role for recruits

5. Normal tone of voice used by staff and recruits

**Moderate stress.** A moderate stress academy would be characterized as one that included stress agents introduced early in the program but that were induced with an intent to illicit a specific, appropriate training response. Stress would be reduced dramatically after the first one to two weeks and would only be employed periodically for a specific purpose thereafter. An example would be during role playing sessions designed to simulate real life stressful situations.

**High stress.** High stress would be indicative of a strict military academy atmosphere that employed stress agents such as, but not limited to:

1. Harsh, loud, public discipline
2. Physical punishment for infractions of code, policy or procedure
3. Designed confusion where the recruit is set up for failure
4. Continuous doubt expressed about the recruit's abilities
5. Minimal interaction or support
6. Emphasis on superior position of the staff over recruits
7. Very short time constraints for task completion
Success. Career success is defined in four specific, measurable categories.

1. **Longevity** - This is a measurement of the officer's length of service with the Phoenix Police Department.

2. **Performance Evaluations** - Officers are evaluated annually and are rated with a numerical score.

3. **Promotions** - Was the officer promoted during his or her career and, if so, how many times?

4. **Discipline** - This is a measurement of the number of times the officer was formally disciplined during his or her career.
CHAPTER 2
LITERATURE REVIEW

Previous Research

A great deal of the previous research has centered around the concept of stress as it relates to task analysis. The most exhaustive study relating task analysis to a stress vs. non-stress environment for police training was conducted by Howard H. Earle, then the Assistant Sheriff of the Los Angeles County Sheriff’s Office. This study attempted to compare officers who attended a low stress training program with those who attended a high stress program in an effort to determine which program produced the best officer. Prior to this study, objective evidence to support either methodology was nonexistent. Before this study, administrators structured training programs on the basis of personal experience and observation rather than on a systematic collection of supporting evidence. The hypotheses for his study were as follows:

1. The use of authoritarian inputs during the training of persons who occupy authoritarian roles lead to a higher level of proficiency in performing those roles.

2. Persons in authoritarian roles, trained with authoritarian inputs, report a higher level of job satisfaction in the performance of their roles.
3. The use of authoritarian inputs during the training of persons in authoritarian roles produce a higher level of performance acceptability by the people being served.

Prior to this study, the Los Angeles County Sheriff’s Department prided itself on conducting a high stress academy. The department was surprised to find that after analysis of the gathered data, the data did not support the three operational hypotheses. But, it supported the three alternative hypotheses: Non-stress trained subjects performed at a slightly higher level in the areas of job performance, job satisfaction and performance acceptability by persons served.

Limitation of the Los Angeles Study

A problem with the Los Angeles study is that it only compared a low stress environment with a high stress one. It did not consider that a third methodology was in existence, which could be classified as a moderate stress academy. During the past 25 years, the Phoenix Regional Police Academy used a variety of methodologies including a moderate stress philosophy. Administrators have changed many times during these years and the methodology changed depending on the philosophy and experience of the staff. Choice of a particular methodology was not based upon scientific research. Many departments still debate the pros and cons of various training methodologies, and they are still seeking research that provides evidence that one particular philosophy is best.
A related study was conducted by Koroloff (1989) that made a comparison between job competency and formal task analysis methods designed to validate the police officer training curriculum of Oregon police officers. One of the research questions asked in this study was:

What is the relationship between police academy performance and effective on-the-job performance? Are individual officers identified as superior performers more likely to have an above average academy record? Conversely, can trainees with superior academy records be predicted to be superior performers? (Koroloff, 1989, p. 9)

Officers in this study were identified as standout performers within their respective departments, and an attempt was made to draw a correlation between being an outstanding performer in the academy and being identified as an outstanding performer as a police officer. Results indicated that academy performance as measured by class standing does not predict whether or not a person will be identified as a standout in the job environment. In this study, almost as many of the standouts graduated in the bottom half of their recruit classes as those in the top half.

Research Significance

The significance of this research, as it relates to this current thesis, is that it may indicate that academy performance or experience may not have an effect on the success that a graduate experiences as an officer over the length of a career. This result is not a surprising one. Traditionally, recruit training has been mostly an academic pursuit conducted in a classroom setting. It is not difficult to
understand that some people do very well when studying law or theory but fail when attempting to apply that knowledge to a real world setting.

Summary

As stated earlier, there is little data or previous research to indicate the impact that stress level experienced during a recruit training program will have on future performance of graduates. There is no research that addresses the impact that stress level during the training process will have on the future success of graduates. Research that would assist in validating one methodology over another would be useful to training administrators attempting to choose a philosophy for their academies. Previous research has indicated that some stress is useful as a learning tool but that prolonged use of stress is usually detrimental to the learning process. The study by Earle (1973) also made it clear that graduates of low stress training were better performers than those from high stress environments. To some degree, this data was reinforced by the research conducted by Koroloff (1989). It should be noted that neither of these studies addresses the effects of a moderate stress academy on performance.
CHAPTER 3

METHODOLOGY

Method

The method chosen for this project was action research. The purpose of the study is to assess the impact that a training philosophy used during basic recruit training for police officers has on the success of those officers throughout their careers. For the purpose of this study, training philosophy relates directly to the level of stress imposed during the recruit training program. Stress levels have been categorized as low, moderate or high.

Research Design

There will not be a systematic sampling conducted for this research. Purpose of this research is not to generalize outside the parameters of the focus of this study, which is the effect that a low, moderate or high stress training program has on future success of graduates from those programs.

Data collection gathered to support the hypothesis (graduates of low or moderate stress level recruit training programs have more successful careers than graduates of high stress training programs) will be performed by reviewing personnel records of graduates from a class representing each of the three types
of academy philosophies. The Phoenix Regional Police Academy trains and
graduates police officers from many agencies within the state of Arizona.
Usually, recruits from various agencies are mixed together to form a recruit class.
For the purpose of this research, only records of Phoenix Police graduates will
be analyzed due to the impossibility of obtaining access to personnel records
from various other agencies.

With the assistance of Police Academy staff, one class representing each
of the three differing philosophies was chosen. Personnel records of members of
the Phoenix Police Department who graduated from those classes were
examined. Data was collected in support of the four categories that are being
used to determine success. Longevity, performance evaluation scores, and
promotion data were extracted from the officers' Department Personnel File.
Disciplinary records are maintained separately in the Professional Standards
Bureau and had to be examined independently. The graduates were compared
statistically from existing records which did not necessitate participation by the
graduates in any type of control group. Research based on this data will be
utilized to assist managers and administrators in changing the academy
methodology and philosophy to a more productive one, or to validate the
philosophy that is currently in existence.
Population and Sample

Participants will be officers who have graduated from the Phoenix Regional Police Academy and were members of one of the classes selected as representative of a low, moderate or high stress environment. The population will include demographics related to gender, age, ethnic origin, and class ranking at time of graduation and date of graduation from the academy.

Recruit classes that graduated at least 10 years ago were intentionally chosen. The reasoning was that more recent graduates would not have had time to experience success in several of the categories.

Data Collection in Success Categories

1. **Longevity** - Officers normally become eligible to retire with full benefits after 20 years of service in the state retirement system. It is to the benefit of the organization to have productive officers remain with the police department for many years following graduation due to the high cost of selection and training. Full years of service was calculated for each graduate with points assessed for each year of service. These scores were calculated along with scores for the other three categories to provide a final placement for each participant in the sample.

2. **Performance Evaluations** - Officers receive a scored performance evaluation at the end of each year of service. These evaluations are
scored with an overall numerical score from a one (lowest) to a six (highest score available).

3. **Promotions** - Officers are given a numerical score for each promotion received.

The promotional career ladder is as follows:

- Officer
- Sergeant
- Lieutenant
- Commander
- Assistant Chief
- Executive Assistant Chief
- Police Chief

4. **Disciplinary Actions** - Officers are scored numerically for receiving formal discipline.

**Data Analysis**

Data will be scored and analyzed in an attempt to create a ranking of success factors. The purpose of the research is to attempt to assess the probability of success of graduates from academies using training programs that impose different stress levels. In order to assess the relationship between academy stress levels and success, the research must provide a basis for ranking officers and rating the degree of success achieved by those officers. This
will be accomplished by attaching a numerical score to each of the success
categories and then ranking graduates based upon the scores accumulated.

Limitations of the Study

A limitation of the study is relating the degree of success achieved in a
career directly to the experience at the training academy. People receive
promotions, for example, due to many factors including their ability to prepare for
and take written and oral exams. The ability to prepare for such exams probably
has little correlation to what the stress levels were at the academy five or 10
years prior. In addition, officers leave police work or a particular city for many
reasons and, therefore, may have reduced longevity, again, not related to
academy training. It is important to note, however, that even though these
limitations do exist, they should not completely invalidate the research. Prior
research does indicate that there is a correlation between superior performance
and the stress levels induced at the academy. If that is valid, then it could also
be deduced that superior performers are more likely to enjoy a greater degree of
success.
CHAPTER 4

PRESENTATION AND ANALYSIS OF THE DATA

Success Criteria

It was expected that the data would indicate that the stress levels induced in police academy training would have little or no effect on the success that an officer achieves throughout his or her career. As stated previously, this theory was based on several factors, including but not limited to, the following:

1. Promotions and ratings continue to occur for years following the academy experience. It would be difficult to expect that 12-16 weeks of training that occurred 10 years in the past would have a positive or negative effect on an individual's performance that far in the future.

2. Longevity in a job or career occurs for a variety of reasons. Economic conditions can certainly affect the decision to stay in a particular career. If jobs are difficult to find, a person may decide to stay in the safety net of a civil service protected occupation. Academy training may have little or no influence on that decision.

3. Discipline is imposed on individual officers for a variety of reasons. Being late for work, rude behavior, excessive force or missing court are but a
few reasons that officers are disciplined. These factors may or may not be related to the training experience.

Selection of Classes

Three recruit classes were selected for analysis and comparison. The classes were representative of a low, moderate or high stress philosophy at the academy. Each class was composed of 15 recruits. For the sake of simplicity, each class was given a designator to indicate the stress level used during the training period for that particular class. 100L indicates the low stress class. 100M the moderate stress class and 100H indicates the high stress class.

Discipline

Unfortunately, it was not possible to utilize discipline as a determinant of success in this study. During the data collection process, it was discovered that the employee union had bargained for and obtained the right to purge employee files of negative material on a regular basis. Many employees availed themselves of this right and purged all discipline from department files. Other employees opted to leave all material of an adverse nature in their files. It was not possible to state that one employee was more or less successful than another based on amount or severity of discipline due to the inequity in the filing system.
Promotions

Data indicates of the 45 officers studied, 11 were promoted during their careers. That figure represents 24% of the total. Promotions by class were as follows:

Class 100L
3 promotions to the rank of Sergeant
2 promotions to the rank of Lieutenant
1 promotion to the rank of Commander

Class 100M
2 promotions to the rank of Sergeant
4 promotions to the rank of Lieutenant

Class 100H
1 promotion to the rank of Sergeant

Figure 1 depicts the total number of officers in each class and indicates the number of promotions to each rank by members of that class. For example, in class 100L there were nine people who remained at the rank of officer or detective during their career. Assignment as a Detective is not considered a promotion in the Phoenix Police Department. Of the remaining six people in that class, three were promoted to Sergeant, two to Lieutenant, and one attained the rank of Commander.

Twenty-six percent of class 100L had been promoted at least once during their careers. Forty percent of class 100M had received at least one promotion and four of those class members were promoted twice. Only six percent of class 100H had been promoted and that individual had only been promoted one time. A total of 11 individuals from all three classes had received promotions which
Figure 1. The number of officers at each rank by class.
may seem somewhat low. It is important to note, however, that these recruit classes represent a period of low to moderate growth for the Phoenix Police Department. A period of high recruitment and hiring occurred during the 1980's and 1990's. These individuals were hired during the early to late 1970's. Opportunities for advancement increased dramatically during the late 1980's. By that time, it would be reasonable to assume that these individuals had become specialized in a particular field and may not have had the desire to pursue promotional opportunities. For example, an officer who developed the skills to perform as a homicide investigator, or as a member of an elite SWAT team (special weapons and tactics), most likely would not pursue a promotion late in his or her career. There are far more promotional opportunities today on the Phoenix Police Department. During the 1970's, for more than 20-30 people to be promoted to Sergeant from a list of 75 would be unusual. Today, all 75 would likely be promoted! The data clearly indicates a far greater success rate for the class 100M representing the moderate stress philosophy.

Longevity

Data collected from police department personnel records indicate that the moderate stress level class retained employment significantly longer than the low or high stress level classes. Class 100L remained employed an average of 11.4 years. Class 100M remained employed an average of 19.2 years and Class 100H an average of 13.2 years. Fourteen members of Class 100M remained
employed in excess of the 20 years required for retirement and 10 of those individuals remain employed at this time. Seven members of Class 100L exceeded the 20-year minimum time for retirement and four of those members remain employed today. Class 100H had eight members that reached the 20-year mark and all eight remain employed today.

It should be noted that longevity for individual members of a class may vary by a few months even though all members of the class graduated on the same day. This is due to the fact that longevity begins by the hiring date as opposed to the start date or graduation date of a class. Individuals are hired at different times in the hiring process and, therefore, have different lengths of service even though they were in the same class. This fact is reflected in Figures 3-5 in the longevity category.

Performance Evaluations

Data related to performance evaluations was the most difficult to obtain and to interpret. The difficulty was a result of a change in the performance evaluation form itself. Class 100L started the police academy in July, 1973. Class 100M began academy instruction in June, 1979. Class 100H started the academy in March, 1979. At the time that each of these classes began, employee performance was documented on a form that rated individuals on a scale of one to four. A rating of an overall one indicated performance that exceeded standards. An overall two indicated average performance and an
overall three indicated that the employee required improvement. A four rating indicated unacceptable performance and was only used when an employee was to be terminated. None of the employees in this study ever received a four overall rating.

In 1989, the City of Phoenix developed a new rating system. The new system scored employees on a scale of one to six. The new rating scale indicated the following performance evaluations:

* 1- Unacceptable performance
* 2- Needs improvement
* 3- Average performance
* 4- Performance occasionally exceeds standards
* 5- Performance regularly exceeds standards
* 6- Exceptional performance

Performance evaluation data collected on individuals from the three classes in this study indicated that all members of these classes had been evaluated utilizing both performance evaluation forms. A method was developed to give a numerical score to each rating under the old system as well as the new system. By giving an equivalent score for each rating, it was possible to average the score for all ratings that an individual received and, therefore, compare the three classes.

The number of ratings received by individual class members varied widely depending on the length of service and the evaluation policy at the time. Some
individuals received more ratings than others due to the fact that officers hired earlier may have only been rated once per year. Officers hired later were evaluated as many as four times during the first year of employment. Performance evaluations are also subject to the purging process, therefore, some employees chose to purge some or all of their evaluations.

The following scale was used to score ratings from both the old and new rating forms:

Old Rating Form

3 = 50 points
2 = 75 points
1 = 100 points

New Rating Form

1 = 50 points
2 = 60 points
3 = 70 points
4 = 80 points
5 = 90 points
6 = 100 points

Using these two scales, points were awarded for each rating that an individual received and an average overall score was determined. All scores for individuals in a class were averaged to allow a class score to be determined.
Class 100L received a total average score of 83.2. Class 100M's average score was 88.5 and Class 100H had a final average score of 85.5. Figure 2 depicts the percentage of all individuals in the study that scored in the various percentage ranges.

Figures 3-5 depict individual officer data by class in each of the categories. Officers are individually listed in the personnel category. For example, L1-L15, would indicate each officer within the low stress class designated as 100L. M1-M15 would indicate the officers within the moderate stress class designated 100M, and H1-H15 indicates the individuals assigned to the high stress class designated as 100H.

Some of the performance evaluation scores indicate an "unknown" factor. As previously explained, some records have been purged and evaluation scores are no longer available.
Figure 2. The percentage of evaluations recorded in each scoring group
**Recruit Class 100L**

**Individual Variables**

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Longevity</th>
<th>Performance Evaluations</th>
<th>Promotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>Terminated In Academy</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>L2</td>
<td>20 Years 3 Months</td>
<td>Unknown</td>
<td>None</td>
</tr>
<tr>
<td>L3</td>
<td>03 Years 7 Months</td>
<td>Unknown</td>
<td>None</td>
</tr>
<tr>
<td>L4</td>
<td>26 Years 3 Months</td>
<td>86.5</td>
<td>None</td>
</tr>
<tr>
<td>L5</td>
<td>8 Months</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>L6</td>
<td>26 Years 3 Months</td>
<td>85.0</td>
<td>Commander</td>
</tr>
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<td>L7</td>
<td>20 Years 2 Months</td>
<td>Unknown</td>
<td>Sergeant</td>
</tr>
<tr>
<td>L8</td>
<td>02 Years 6 Months</td>
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<td>None</td>
</tr>
<tr>
<td>L9</td>
<td>26 Years 6 Months</td>
<td>85.1</td>
<td>Sergeant</td>
</tr>
<tr>
<td>L10</td>
<td>7 Months</td>
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<td>L11</td>
<td>26 Years 3 Months</td>
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</tr>
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<td>01 Year 9 Months</td>
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<td>L15</td>
<td>10 Years 6 Months</td>
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**Figure 4.** The data totals for each member of class 100M

<table>
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<th>Personnel</th>
<th>Longevity</th>
<th>Performance Evaluations</th>
<th>Promotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>20 Years 5 Months</td>
<td>79.3</td>
<td>Sergeant</td>
</tr>
<tr>
<td>L2</td>
<td>20 Years 4 Months</td>
<td>88.1</td>
<td>Lieutenant</td>
</tr>
<tr>
<td>L3</td>
<td>20 Years 4 Months</td>
<td>93.6</td>
<td>None</td>
</tr>
<tr>
<td>L4</td>
<td>20 Years 2 Months</td>
<td>89.3</td>
<td>Sergeant</td>
</tr>
<tr>
<td>L5</td>
<td>20 Years 4 Months</td>
<td>97.0</td>
<td>None</td>
</tr>
<tr>
<td>L6</td>
<td>20 Years 4 Months</td>
<td>75.5</td>
<td>None</td>
</tr>
<tr>
<td>L7</td>
<td>20 Years 5 Months</td>
<td>90.2</td>
<td>Lieutenant</td>
</tr>
<tr>
<td>L8</td>
<td>20 Years 5 Months</td>
<td>90.6</td>
<td>None</td>
</tr>
<tr>
<td>L9</td>
<td>20 Years 5 Months</td>
<td>83.8</td>
<td>None</td>
</tr>
<tr>
<td>L10</td>
<td>20 Years 4 Months</td>
<td>95.8</td>
<td>None</td>
</tr>
<tr>
<td>L11</td>
<td>03 Years 5 Months</td>
<td>Unknown</td>
<td>None</td>
</tr>
<tr>
<td>L12</td>
<td>20 Years 4 Months</td>
<td>83.9</td>
<td>Lieutenant</td>
</tr>
<tr>
<td>L13</td>
<td>20 Years 4 Months</td>
<td>91.0</td>
<td>None</td>
</tr>
<tr>
<td>L14</td>
<td>20 Years 4 Months</td>
<td>93.0</td>
<td>Lieutenant</td>
</tr>
<tr>
<td>L15</td>
<td>20 Years 2 Months</td>
<td>88.4</td>
<td>None</td>
</tr>
</tbody>
</table>
Figure 5. The data totals for each member of class 100H

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Longevity</th>
<th>Performance Evaluations</th>
<th>Promotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>20 Years 7 Months</td>
<td>93.0</td>
<td>None</td>
</tr>
<tr>
<td>L2</td>
<td>20 Years 7 Months</td>
<td>Unknown</td>
<td>None</td>
</tr>
<tr>
<td>L3</td>
<td>01 Year 2 Months</td>
<td>72.5</td>
<td>None</td>
</tr>
<tr>
<td>L4</td>
<td>20 Years 7 Months</td>
<td>93.0</td>
<td>None</td>
</tr>
<tr>
<td>L5</td>
<td>20 Years 7 Months</td>
<td>88.3</td>
<td>Sergeant</td>
</tr>
<tr>
<td>L6</td>
<td>20 Years 7 Months</td>
<td>72.5</td>
<td>None</td>
</tr>
<tr>
<td>L7</td>
<td>20 Years 7 Months</td>
<td>72.1</td>
<td>None</td>
</tr>
<tr>
<td>L8</td>
<td>20 Years 7 Months</td>
<td>93.2</td>
<td>None</td>
</tr>
<tr>
<td>L9</td>
<td>20 Years 7 Months</td>
<td>91.0</td>
<td>None</td>
</tr>
<tr>
<td>L10</td>
<td>04 Years 10 Months</td>
<td>100</td>
<td>None</td>
</tr>
<tr>
<td>L11</td>
<td>20 Years 7 Months</td>
<td>88.0</td>
<td>None</td>
</tr>
<tr>
<td>L12</td>
<td>01 Year 3 Months</td>
<td>75.0</td>
<td>None</td>
</tr>
<tr>
<td>L13</td>
<td>01 Year 1 Month</td>
<td>67.5</td>
<td>None</td>
</tr>
<tr>
<td>L14</td>
<td>03 Years 4 Months</td>
<td>100</td>
<td>None</td>
</tr>
<tr>
<td>L15</td>
<td>02 Years 4 Months</td>
<td>91.6</td>
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</tbody>
</table>
Summary

The purpose of this study was to attempt to determine the effect that stress levels administered at the Phoenix Regional Police Academy has on the future success of those individuals who graduate from the academy. It was hoped that this study would definitively indicate if a low, moderate or high stress level at the academy would produce the most successful officer. Success was based on four factors: longevity of employment as a Phoenix Police Officer, promotions in rank attained over each individual's career, highly scored performance evaluations and a low level of discipline. It was determined during the accumulation of data that discipline records could not be used as a factor due to the approved purging of personnel records by employees.

The literature review process revealed that there was little data or previous research that has been conducted in the area of preferred stress levels during police training. No research was found that has ever been conducted that even attempts to relate police recruit training to subsequent success in the field of law enforcement.
One study was conducted at the Los Angeles County Sheriff’s Office (Earle, 1973) that compared productivity levels of low stress graduates to that of high stress academy graduates. The results of this study indicated that low stress graduates were better performers. Previous studies also indicated that some stress is useful as a learning tool, but that prolonged exposure to high stress is usually detrimental to the learning process.

The methodology chosen for this project was action research. Data was collected to support the hypothesis: graduates of low or moderate stress level recruit training programs have more successful careers than graduates of high stress level programs. Data collection was attained through the review of personnel records of three classes of graduates from the Phoenix Regional Police Academy.

Findings of this study clearly indicate that graduates of moderate level stress programs achieve a greater degree of success as related to the areas of longevity, promotions and performance evaluation scores than did high or low stress graduates.

**Conclusions**

Several conclusions can be drawn from this study. Moderate stress levels appropriately applied during a training program can enhance the success an officer attains after graduation. Officers of moderate stress academies will have longer careers, will attain more promotions, and will earn higher performance
evaluations from their superiors. This conclusion is substantiated by the data. In all three categories, the moderate stress graduates excelled over their low and high stress counterparts. The moderate stress group achieved 19.2 years of longevity compared to 13.2 for the high stress group, which was nearest in this category. The moderate stress group also had a 40% promotion rate compared to the 26% rate for the high stress group. The moderate level stress group also achieved an 88.5 performance evaluation score compared to the high stress group at 85.5.

A second conclusion that can be drawn from this study is that a high stress environment produced better success rates than the low stress group. This was particularly interesting in light of the Los Angeles County Sheriff Department study that concluded that low stress academy graduates were more productive than high stress graduates.

**Recommendations**

Several recommendations for positive changes to the training program at the Phoenix Regional Training Academy can be made for consideration as a result of this study.

1. Academy staff could give serious consideration to the concept of consulting a psychiatric team to assist in the formation of a training program that has appropriate levels of stress throughout the program.
Training objectives could have specific goals, which could be enhanced by the appropriate use of stress.

2. Stress could be induced at an appropriate time to achieve the learning goal. A good example would be to have stress induced in a role-playing situation involving a domestic violence situation. An example of inappropriate stress inducement would be screaming or yelling because a recruit was observed with his hands in his jacket pockets while on a break from class.

3. There could be the creation of a professionally staffed counseling center to oversee psychological evaluation processes and to assist in ongoing and meaningful role playing programs.

Future Research

It would be useful for future research to be directed at more extensive study of data that substantiates the findings of this study and evaluates other areas related to the effects of stress-induced training programs. It was unfortunate that data could not be collected that was related to the number of complaints filed against officers and the resulting discipline related to sustained allegations of misconduct. It would be enlightening to determine if recruits treated to a high level of stress in an academy setting would transfer that stress to the public the officer is sworn to serve. The findings of this study can have a great deal of importance to the training academy administrators who are responsible
for training curriculum and stress levels at an academy that has the responsibility of training officers from communities throughout Arizona.
REFERENCE LIST


BIOGRAPHICAL SKETCH

Jack Harris was born in Des Moines, Iowa on September 23, 1949. His family moved to Phoenix, Arizona in 1951 and he continues to live there today. He completed his elementary education at James B. Sutton public school. His secondary education was completed at Carl Hayden High School, also in Phoenix.

Jack graduated with an Associate in Arts Degree from Phoenix College in 1970 and served for nine years in the United States Marine Corp Reserve and the Arizona National Guard. He joined the Phoenix Police Department in 1972 and has worked for that department for 28 years.

In 1973, Jack married his wife Connie who is a high school principal in Glendale, Arizona. They recently celebrated their silver wedding anniversary.

Jack graduated from Arizona State University in 1977 with a Bachelor of Science Degree in Political Science. In 1994, he graduated from Federal Bureau of Investigation National Academy, and in 1996, he entered the graduate program in Human Resources at Ottawa University.

Jack is currently serving as an Assistant Police Chief in the Professional Standards Bureau of the Phoenix Police Department.