Development of Pre-Employment Psychological "Screening-In" Testing for Police Dispatchers

Daron D. Diecidue

Abstract

This research seeks to determine whether psychological screening can be utilized as a valid tool in predicting whether police dispatcher candidates will be successful in the telecommunications field. A review of the literature reflected that only one similar research project on this topic has been conducted.

Dispatcher stress has been well documented. Also, the uniqueness and importance of that position, in conjunction with its integration to police work, is well known. Research and documentation regarding psychological testing for police officer candidates abounds. Therein lies the experience, foundation, and understanding needed not only for this research, but to substantiate results and to offer guidelines for the future. This study found that dispatcher applicants can be psychologically screened with marked difference exhibited between those candidates whose personality traits are similar to known outstanding dispatchers, and those candidates who exhibit serious psychological problems and/or personality traits not reflective of highly successful dispatchers.

Introduction

Past research indicates, and law enforcement recruitment history supports, that psychological screening has proven to be a valid, reliable tool in the selection process of applicants to the police ranks. Law enforcement candidates displaying gross psychopathology are "screened-out," i.e., eliminated by the process. Experience and refinements within law enforcement psychological testing programs over the past decade have produced advances that now enable psychologists to "screen-in" candidates. Not only are undesirables eliminated, but also, remaining candidates can be identified to those most suitable to be successful in the law enforcement career field. This research project focuses on the development of a pre-employment psychological "screening-in" profile for police dispatcher candidates, that may allow for the employment of individuals who are more ideally suited for their chosen field.

This research presents a review of the literature containing information supporting the value of psychological screening for police officers, and also developmental test results from dispatchers participating in experimental research. The scope of this project allows the reader to have a basic insight into police psychological screening, which is a prerequisite to understanding the methodology behind the development of psychological test screening batteries for dispatcher applicants.

The findings and analysis should support one of two conclusions: 1) psychological testing of police dispatcher applicants can only serve as a screening-out elimination process, identifying only those who manifest gross psychopathology that would normally prohibit them from consideration for most any responsible employment; 2) a valid psychological profile can be developed that will enable the "screening-in" of dispatcher applicants. Not only will tests identify applicants with negative psychopathic personality
traits, but further, the tests will designate applicants with certain characteristics suitable for the police dispatcher career field.

Glossary

Screen Out: used to reflect a selection alternative with candidates who demonstrate levels of undesirable personality characteristics, as compared to the general population (i.e., gross psychopathological traits).

Screen In: used to reflect a selection alternative with candidates who demonstrate levels of desired personality characteristics, as compared to demonstratively successful groups of individuals within the occupation for which the candidate is applying (i.e., critical law enforcement personality traits).

Validity: established through demonstrated relationships showing that the test actually measured that which it was intended to measure.

Psychopathology: behavioral dysfunction occurring in mental disorder, or social instability.

Reliability: Ability of the test to be repeated with the same group at a later date and achieve exact to similar result. This coefficient determines the extent of reliability pertaining to that particular group.

Problem Statement

Today, police communications centers not only serve as the time honored axiom of "police officers life lines," but they also provide the primary initial answering point for the public seeking assistance and service. Although that first contact directly reflects an agency's image, attention to personnel assigned to communication centers has not kept pace with the enhancements allocated to sworn staff.

The Associated Public Safety Communications Officers, Incorporated, Florida Chapter (APCO) has not been unique in its efforts to professionalize telecommunications personnel, but it became a forerunner by gaining legislative training guidelines in 1982. Florida APCO had become disturbed by increasing reports that telecommunicators had failed to respond efficiently and expeditiously. Its study found that the average attrition rate of telecommunicators was in excess of 30%. Job dissatisfaction was related to low salary, job stress, and working conditions; and there was a lack of formalized training (APCO, 1980).

Telecommunications has historically been characterized in two ways. First, there is the positive "nerve center" perspective that demonstrates great respect for communications as being a vital and demanding component of the law enforcement and public safety mission. This position is held not only by communications personnel, but also by virtually everyone who has studied and consulted on the role of communications. Second, there is the negative perspective with negative labels such as "second class citizens" and "step children" (Shenkman, 1986). However, through the efforts of APCO and concerned police administrators, the tide has changed, and more training programs are being established.

A survey of 13 randomly selected Florida law enforcement agencies conducted by the Hillsborough County Sheriff's Office in early 1991, found extensive training requirements for dispatchers in all but four agencies. Programs range from 40 to 80 hour classroom sessions with combinations of on the job training requirements (Widdoes, Loper, & Heron, 1991). Such trends indicate that professional police
agencies will continue to train dispatchers as 911 centers increase, communications consoles become more comprehensive and complex, and lawsuits become more prevalent.

Although training has been a major positive factor in the upgrading of telecommunications staff, there are two prevalent factors which delay progress. These two factors are directly related to this research project. The two factors are stress and the hiring process.

Much has been documented regarding telecommunicator stress. The type of work required of dispatchers is unique and demanding because of confinement, uncontrolled work flow, and periods of boredom, interspersed with moments of critical emergencies, shift work, irate callers, recorded conversations, work overload, and a totally reactive job function. Administrators can relate to the personnel problems associated with communication centers. Excessive disciplinary cases, abuse of sick time, high error rates, and poor attitudes are all symptoms of stress related conditions and lead to high turnover rates.

Of the 13 agencies in the State of Florida surveyed by the Hillsborough County Sheriff's Office, it was clear that only minimum qualifications are expected when hiring dispatchers. Although they vary from agency to agency, hiring processes include a written exam for reading comprehension, minimal clerical skills such as typing 20 words a minute, basic math, oral interview questions, and a minimal background check. It is obvious that police telecommunications candidates are selected under basic qualification standards, and are placed in low profile, high stress positions with performance expectations of serious magnitude.

The problem addressed by this research is the need to improve the "quality" of persons hired as police dispatchers. "Quality" refers only to the suitability of the individual for this particular career field. The more appropriate and adaptable the candidate is to the job, the greater the benefit derived by both the employee and the agency.

In the past, researchers have applied psychological testing to law enforcement dispatchers only once. This project assumes that augmenting the selection process by adding another dimension of pre-employment psychological testing will aid in hiring candidates whose psychological profile is compatible to a dispatcher's career. A reduction of stress and stress-related personnel problems may then be achieved. Reducing numbers of persons hired into positions of incompatibility would certainly be a positive enhancement and should have a positive impact on turnover rates.

This research is designed to determine whether a valid psychological profile can be established that will reflect personality traits of successful dispatchers. If successful, utilization of psychological testing as a pre-employment "screening-in" tool would be intrinsically valuable.

Review of the Literature

In 1988, Moriarty and Field suggested that psychological testing may be the answer in fitting the person to the job. As of this writing, the author and his associates, both in the law enforcement field and psychology profession, are aware of only one clinical research project involving the psychological testing of police dispatchers for job suitability. In 1982, Martin Reiser, compared a sample of 40 working Radio Telephone
Operators (RTO). The RTO's were divided by knowledgeable administrator's into an "excellent" and a "poor" group of 20 each, based on past performance. Both groups were comparable in terms of age, education level, marital status, and experience. The two groups were compared using the California Psychological Inventory (CPI) to determine measurable differences between those operators identified as "excellent" and those labeled as "poor". The CPI was administered to the groups by a trained clerical person using the standardized procedure. A T-test of significance between mean scores was computed for the two groups on each trait. Of the 18 personality traits measured by the CPI, six were found to significantly differentiate between the two groups. On five of the six measures, the "poor" group scored lower than the "excellent" group.

The poor group scored lower, at the .01 level of significance, on tolerance (To), and well-being (Wb). Traits associated with low scores on To are suspiciousness, aloofness, wariness, passiveness, excessive judgmentalness, and distrust. Related to low scores on Wb are lack of ambition and a leisurely, apathetic, and constricted approach in thought and action (Reiser, 1982).

In light of these findings, it is the opinion of this author that a replication of this research would produce a viable mechanism enabling law enforcement agencies to selectively "screen-in" law enforcement dispatcher candidates.

In times of increased litigation, demands for job excellence, and organizational standards, the horizon reflects more attention being focused on the telecommunicator. The advent of centralized 911 systems has done much to increase the awareness of the vital role played out daily by police dispatchers. With the knowledge of their importance in the police process, comes heightened levels of public expectation and demand for effectiveness and efficiency. Historically, police psychological testing was derived to meet those evolving expectations of trust and competency. In order to establish a foundation for this research, it was imperative to delve into the arena of police psychological screening. There, the history, the justifications, and the testing instruments that allow for this expanded research, can be found.

As early as 1954, a psychiatrist employed by the City Personnel Department (Civil Service) in Los Angeles, California conducted psychological-psychiatric testing as part of the screening procedure for potential police officers. Without a valid psychological profile of a successful police applicant, the approach was to "screen-out" those considered to be emotionally unfit to function as a police officer, rather than trying to "select-in" those with desired personality traits and aptitudes (Reiser, 1982).

However, it wasn't until the mid to late 1960's that police officer candidate testing began to develop. In 1967, the Presidential Commission on Law Enforcement and Administration of Justice issued a report entitled, "The Challenge of Crime in a Free Society." This comprehensive study documented the evolution of policing, and also reported on the practices of selection, training, promotion, and management techniques. Recommendations for major innovations in all areas were advanced. In this regard, it is a historic document that attempted to address the fundamental conflict between the need for the police and the misuse of police power. The report also addressed and legitimized emotional stability of police officer candidates as a necessary standard; psychological tests and interviews to determine emotional stability should be conducted by all departments, administered only by trained professionals (Benner, 1986).

The Commission reported that many of the screening criteria in the police officer
selection process, such as physical requirements, education, credit history, and background checks, had a limited effect. The criteria did not necessarily identify potential good police officers. Psychological testing represented a new positive tool.

Since the mid-1960's, candidates for law enforcement training have been psychologically screened for personality problems in many police departments. The actual number of agencies participating has been unclear but recent estimates in 1990, suggest that more than 50 percent of the major police agencies (those serving cities of over 100,000 population) make use of the psychological screening process. This is up from an approximate 20 percent utilization in the late 1970's. While doubts still lurk, such processes are generally accepted as a valuable service. (Bennett, 1990, p. 23)

The Commission on Accreditation for Law Enforcement Agencies (1987) stated:

...law enforcement work is highly stressful and places officers in positions and situations of heavy responsibility. Psychiatric and psychological assessments are needed to screen out candidates who might not be able to carry out their responsibilities or endure the stress of the working conditions. The Commission on Accreditation has set a mandatory standard that an emotional stability and psychological fitness examination of each candidate be conducted, prior to appointment or probationary status, using valid useful and nondiscriminatory procedures. And further, that only qualified professionals be used to assess the emotional stability and psychological fitness of candidates.

A report to the Florida Criminal Justice Standards and Training Commission indicated that 43% of more than 4,300 police and correctional officers hired between October 1, 1990 and August 15, 1991 underwent psychological exams ("Police applicant testing," 1991).

The history of police officer candidate screening has actually evolved through three relatively distinct generations or stages. The first generation emphasized the use of intuition and expertise in hopes that a competent psychologist or seasoned police administrator would simply be able to spot a "bad apple." This was devoid of consistency.

The second generation was characterized by the marketing of standardized tests and the development of norms based on deviant populations. The challenge was to compare the officer candidates to various groups of clinically disturbed people, rejecting those who presented a good match. The standardized MMPI tests have proven most suitable in determining personal psychopathology. This involved the process of "screening-out" those unsuited for police work. The question that remained unanswered was whether those candidates not "screened-out" would have the personality profiles suitable for police work. Selecting candidates, therefore was done by default.

The third generation is the current generation of testing. Psychologists have taken standardized testing and normed them to police work (Moriarty & Field, 1989).
Test Battery

Psychosocial History: 91-question survey on the applicant's family history, educational history, family status, medical history, marital and family life, diet and exercise habits, and self-perceived psychological and social stressors (15 minutes).

Rotter's Incomplete Sentence Blanks - Adult: 40 item test asks the applicant to complete sentences that express the individual's current feelings; provides a quick measure of the applicant's writing ability, as well as being useful at times to pick up obsessive personality features (20 minutes).

Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B): scale provides a measure of a person's characteristic interpersonal behavior in the areas of inclusion, control, and affection (10 minutes).

Minnesota Multiphasic Personality Inventory (Group Form): first developed in the 1930's and 1940's using hospital in-patients. MMPI-2 (the revised MMPI) is a 567 item paper and pencil personality inventory that is sensitive to personal psychopathology. MMPI/MMPI-2 are the instruments most frequently administered (60-90 minutes at 8th grade reading level); serves to identify individuals with mental dysfunctions who will be at a higher risk of performing poorly in training or on the job. Examples of identifiable traits: argumentativeness, hostility toward authority, adverse reactions to stress, irresponsibility, anti social attitudes, impulsive behavior and substance abuse tendencies.

California Psychological Inventory (CPI): first published in 1951, is a self administered paper and pencil personality test of 480 items (60 minutes) devised for use with "normal" non-clinical populations; CPI allows the examiner to make statements about personality traits, strengths, and weaknesses that are within normal limits; standard scales reflect traits such as dominance, sociability, self acceptance, tolerance, flexibility, conformance, and responsibility.

Inwald Personality Inventory (IPI): developed in the early 1980's, is a 310 question "true-false" inventory designed specifically to aid law enforcement agencies in selecting new officers who satisfy specified "psychological fitness" requirements; documents combinations and patterns of historical life events which studies suggest correlate significantly with occupational failure in law enforcement, such as depression, anxiety, rigidity, anti-social, illness concerns, lack of assertiveness, aggressiveness (Inwald, 1982).

Testing batteries used for law enforcement candidates may vary from psychologist to psychologist. For example, a typical battery could include a Psychological History, Rotter's Incomplete Sentence Blanks, Fundamental Interpersonal Relations Orientation Behavior (FIRO-B), Minnesota Multiphasic Personality Inventory, Inwald Personality Inventory, and California Psychological Inventory (CPI), described at left.

Of paramount importance to this research, is the understanding that tests must be standard in nature and form. In other words, the tests do not change, nor are they modified when applied to different job groups. As an example, psychologists may use an Inwald, MMPI-2, and CPI test battery on potential police officer applicants and potential security guard applicants for a nuclear power plant. The MMPI-2 could typically reflect individuals with gross psychopathology or personality traits outside normal limits as compared to extensive past study results of the general population and deviant personalities. Beyond that, the CPI could typically identify differences in normal specific personality traits as compared to extensive past studies of the general population. "Screening-out" takes place with the MMPI-2; "screening-in" is associated with the CPI. In the diverse career fields, the psychologist would be examining for differences in personality traits identified by the CPI. The security guard position may call for a quiet, passive, reserved individual, not one to make independent decisions, with limited verbal skills. For the law enforcement position, the higher test scores should be on certain scales such as independence, verbal skills, assertiveness, persuasiveness, poise, logic, and stress tolerance. The standardized CPI test reflecting personality variance in the
general population would reflect the differences in applicant personalities.

The psychologist can now evaluate the performance of an individual ranging from the MMPI-2 (gross psychopathology), CPI (general personality traits), and Inwald (police-related personality traits).

There is no definitive clinical research indicating dispatchers have been group tested to determine if certain specific personality traits exist between successful and nonsuccessful dispatchers. As with law enforcement applicants (except as noted in the refinements of the Inwald Personality Inventory), a new test need not be created, only the application of standard models against the two groups of dispatchers is desired.

The third generation of pre-employment psychological testing received national attention and was sanctioned by the Federal Bureau of Investigation, which hosted a World Conference on Police Psychology in Quantico, Virginia in 1985. Based on research stemming from the conference, the International Association of Chiefs of Police (IACP), Psychology Section unanimously approved a set of standards in 1987, which serve as guidelines for comprehensive psychological screening programs.

The IACP strongly recommends, as do the other psychology professionals associated with this field, that pre-employment psychological assessments should be used only as one component of the overall selection process. Written test results should not be used as the sole determining factor for a "hire/no hire" decision.

Inwald (1983) noted that "arguments in favor of psychological testing have become stronger in recent years and since it is unlikely that psychological testing will be banned and/or discontinued as a screening device, professionals must reach some consensus regarding minimum standards for conducting testing programs."

A review of the literature supports that psychological services for selection of police recruits has developed into a valid and reliable system. Professional psychologists in the field are cognizant of and practice methods to ensure that standards are maintained. This research was conducted so that valid and reliable psychological testing of police dispatch applicants could be developed to enhance the selection process.

Methodology

Communications Center supervisors at the Hillsborough County Sheriff's Office in Tampa, Florida, identified the 32 top performing dispatchers. The supervisors also recommended 26 dispatchers from "everyone left over," or those not chosen as outstanding. The groups were further broken down by gender to determine if different predictors exist for male and female employees. There were too few noncaucasians to statistically analyze for race differences. However, a breakdown was conducted for educational level (high school and below, versus college level) (Skotko, 1992). These dispatchers were then administered a battery of psychological tests:

- Minnesota Multiphasic Personality Inventory (MMPI-2)
- California Psychological Inventory (CPI)
- Fundamental Interpersonal Relations Orientation-Behavior (FIRO-B)
- Psychosocial History
<table>
<thead>
<tr>
<th>Scale</th>
<th>Group 1 (N = 32)</th>
<th>Group 2 (N = 26)</th>
<th>Main Effects</th>
<th>Other Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>3.8(1.7)</td>
<td>4.6(2.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3.3(2.7)</td>
<td>4.4(5.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td>16.0(5.3)</td>
<td>15.5(4.8)</td>
<td>Males &gt; Females</td>
<td></td>
</tr>
<tr>
<td>Hs</td>
<td>7.1(5.2)</td>
<td>5.0(4.1)</td>
<td>Group x Gender</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>19.2(3.7)</td>
<td>17.4(4.7)</td>
<td>Group x Gender</td>
<td></td>
</tr>
<tr>
<td>Hy</td>
<td>23.0(3.6)</td>
<td>20.5(6.2)</td>
<td>Group x Gender</td>
<td></td>
</tr>
<tr>
<td>Pd</td>
<td>16.5(4.4)</td>
<td>16.0(5.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mf</td>
<td>31.0(6.3)</td>
<td>29.8(5.7)</td>
<td>Females &gt; Males</td>
<td></td>
</tr>
<tr>
<td>Pa</td>
<td>10.1(2.6)</td>
<td>8.5(2.9)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Pt</td>
<td>9.9(7.0)</td>
<td>9.5(6.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sc</td>
<td>9.4(6.4)</td>
<td>9.6(8.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ma</td>
<td>16.6(3.3)</td>
<td>18.2(4.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Si</td>
<td>24.7(8.5)</td>
<td>23.7(9.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>7.3(7.5)</td>
<td>7.7(7.6)</td>
<td>Females &gt; Males</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>15.7(3.5)</td>
<td>15.5(4.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Es</td>
<td>37.2(5.3)</td>
<td>36.6(5.6)</td>
<td>Males &gt; Females</td>
<td></td>
</tr>
<tr>
<td>Mac-R</td>
<td>21.1(3.5)</td>
<td>22.1(3.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-H</td>
<td>14.0(2.3)</td>
<td>14.3(2.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do</td>
<td>16.7(2.3)</td>
<td>15.7(2.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re</td>
<td>20.7(2.6)</td>
<td>20.3(3.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Si1</td>
<td>4.8(4.0)</td>
<td>4.3(3.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Si2</td>
<td>2.8(2.3)</td>
<td>2.8(2.4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P<.05    p<.01
Psychologists conducting the tests were supplied with a complete job analysis profile of dispatcher tasks. The authors in this study sought to address the question of whether psychological tests can be of use in predicting which individuals will perform best in a dispatching position. There would have to be a marked difference in the scores on the various personality scales between Group 1 and Group 2, in order to claim a success in this endeavor.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Group 1 (N = 32)</th>
<th>Group 2 (N = 26)</th>
<th>Main Effects</th>
<th>Other Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominance</td>
<td>29.7(5.2)</td>
<td>23.8(6.3)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Capacity for Status</td>
<td>20.5(4.4)</td>
<td>17.0(3.7)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Sociability</td>
<td>25.4(5.0)</td>
<td>22.0(5.6)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Social Presence</td>
<td>34.5(8.6)</td>
<td>25.8(6.5)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>30.7(3.8)</td>
<td>25.7(4.7)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Socialization</td>
<td>36.9(4.3)</td>
<td>30.7(5.1)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Self Control</td>
<td>32.8(6.2)</td>
<td>23.9(5.9)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Good Impression</td>
<td>21.3(6.5)</td>
<td>24.0(5.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communality</td>
<td>26.0(1.8)</td>
<td>33.2(5.6)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Well Being</td>
<td>37.8(3.9)</td>
<td>31.7(5.8)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Tolerance</td>
<td>23.1(6.5)</td>
<td>21.2(4.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement via Conformity</td>
<td>30.2(3.6)</td>
<td>29.4(5.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement via Independence</td>
<td>20.2(3.9)</td>
<td>22.9(5.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Efficiency</td>
<td>38.0(5.3)</td>
<td>30.3(4.7)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Psychological Mindedness</td>
<td>12.6(2.7)</td>
<td>17.1(3.4)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td>8.2(4.7)</td>
<td>11.2(4.5)</td>
<td>Group1 &gt; Group2</td>
<td></td>
</tr>
<tr>
<td>Femininity/Masculinity</td>
<td>19.5(3.9)</td>
<td>14.5(4.1)</td>
<td>Group1 &gt; Group2</td>
<td>Females &gt; Males</td>
</tr>
</tbody>
</table>

P<.05                      p<.01
### Table 3

<table>
<thead>
<tr>
<th>Scale</th>
<th>Group 1 (N = 32)</th>
<th>Group 2 (N = 26)</th>
<th>Main Effects</th>
<th>Other Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>38.0(9.8)</td>
<td>35.7(10.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jobtime</td>
<td>4.1(1.2)</td>
<td>3.6(1.1)</td>
<td></td>
<td>Group x Gender</td>
</tr>
</tbody>
</table>

Note: for Jobtime, 3 = one to three years, 4 = three to five years

### Findings

An analysis of variance was conducted on relevant scales for all tests. For the MMPI-2, the three validity scales and ten (10) clinical scales, as well as the supplemental scales A, R, Es, Mac-R, 0-H, Do, Re, Si1, Si2 were analyzed (see Table 1).

MMPI-2 analysis showed that the scores reflected male-female differences and a significant group difference on the Pa scale only.

Male-female differences were found to be present on four validity scales -- K, Mf, and the supplemental scales A and Es. These differences are consistent with what would be expected in the general population and offer no special meaning. Coping skills are measured by the K scale. Mf measures masculine-feminine interests. The A scale is a general measure of anxiety and Es is a measure of ego strength.

The only group difference was identified in the Pa scale which is a measure of social sensitivity in subclinical ranges. This finding is also consistent with CPI results.

FIRO-B scores presented no significant differences except that successful dispatchers in Group 1 emerged as being more comfortable in social situations than the dispatchers in Group 2. The FIRO-B differences were overall insignificant.

The CPI scoring analysis showed a significant difference between the two groups in 14 out of 18 subscales (see Table 2, next page). A review of the main effects indicates that Group 1 dispatchers appeared more comfortable in positions of power and authority, have a stronger sense of self, and are much more sociable than individuals from Group 2. They also reflect greater self acceptance, social responsibility, and emotional control. Group 1, additionally, is more likely to work better independently and appear to tolerate ambiguity less well and prefer more structure than Group 2 individuals (American Psychological Association, 1985). The CPI did not indicate gender differences in its results.

No significant difference between the two groups was found in the amount of time on the job or with education.

### Conclusion

While there were some statistical differences, the MMPI-2 failed to find any practical, meaningful effects. The absence of those effects may represent an accurate picture of both groups in that MMPI-2 is most sensitive to identifying gross
psychopathology. It may well be concluded that as compared to the general population, both groups simply were not pathological.

Scale differences on the FIRO-B were insignificant and therefore, did not support the hypothesis.

CPI emerges as a useful discriminator. The research tested two groups of dispatchers to determine whether a psychological profile of highly successful dispatchers would emerge. This clearly happened with the CPI showing the greatest strength in its ability to identify differences between the two groups.

The usefulness of the CPI as a potential predictor was further substantiated by a lack of gender difference on this measure. Also, no significant difference between the two groups was found in the amount of time on the job or education (see Table 3). This is vitally important because it shows the test scores tapping into more chronic personality features that are independent of length of employment or level of education.

The differences identified by the CPI are quite strong and pervasive indicating that psychological testing, at the applicant stage, is likely to be of value in identifying individuals who are more likely to achieve success in the area of police dispatching.

This research was not conducted under preconceived ideas that it would be successful. The results have so impressed Dr. Vince Skotko, contract psychologist to the Hillsborough County Sheriff's Office, that all new dispatcher candidates will be tested with the CPI instrument as part of the candidate selection process.

Certainly, this individual research project does not mean an end to further research regarding psychological testing with dispatchers. Rather, it expectantly will encourage more examination and refinements. Retests of the same two groups to establish reliability is an area for consideration.

Given enough lapsed time to ensure sufficient justification, the CPI may be administered to both groups to determine if different scores or patterns will emerge. Additionally, Dr. Skotko is considering a retest of both groups with MMPI to re-evaluate the results. Any expanded research, to widen knowledge and enhance adaptability of the instruments, either within the Hillsborough County Sheriff's Office or beyond, is certainly encouraged.

The research results of this project may serve as a catalyst for professional psychologists assigned to other law enforcement agencies. By utilizing CPI, they can employ the same criterion validity model testing their "most successful" dispatchers and "other" groups. It is important to realize that there may be a variance in personality scales and results based on the difference in dispatchers from one jurisdiction to another. A successful dispatcher at an agency as large as the Hillsborough County Sheriff's Office may need to possess personality traits that are different from a successful dispatcher at a very small agency. Further, the personality differences of the two groups of dispatchers tested within the smaller agency may not vary significantly between each other. Because of differences in job responsibilities between agencies, profiles need to be developed locally. Until vast clinical testing is accomplished, no standard measure such as a counterpart to the law enforcement Inwald test, is likely to emerge.

Systematic development of a psychological profile and subsequent validation of the profile for civilian employees is a necessary prerequisite for implementation of a pre-employment screening program. Unlike sworn personnel, no existing database or body
of scientific literature exists for selecting pre-employment measures. Therefore, it is important to establish local norms which can be used to defend the choice and use of such measures in a selection process (Gamache, 1991).

As referenced earlier in the Review of Literature portion of this paper, psychological testing of police dispatchers has found its basis in the plateau reached in the third generation of police officer candidate testing. The same approach should be followed for dispatchers, as stipulated for police officers, under the International Association of Chiefs of Police Guidelines.

Psychologists, through their work with police candidates, have paved the road for development and research into the arena of dispatching. Dispatchers are police officers' life-line. Therefore, potential dispatchers should receive as much prescreening as professionally possible.

Most importantly, it should be recognized that psychology is not an exact science, nor are professional police administrators tasked with personnel decisions considered scientists. Harrison Gough, the creator of the California Personality Inventory (CPI), summed this:

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\text{Let us have tests and instruments which are relevant to life and true to life, and let us have users of these tools who possess the talent, the training, and the integrity to interpret them validly and with creative insight (Megaree, 1972).}
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Addendum

The Hillsborough County Sheriff's Office initially tested the first group of 32 dispatchers under the guidance of Michael P. Gamache, Ph.D., in August 1991. The CPI test administered was the model established in 1954.

The second group of 26 dispatchers was tested under the guidance of Vincent P. Skotko, Ph.D., in January 1992. A change in contract had occurred after the first group was tested, which necessitated the change of psychologists. Dr. Skotko administered the 1987 CPI Version.

While these two instruments are very similar, they are not identical and cannot be directly compared. Unfortunately, it was not until the research was complete and all documentation had been submitted that it was discovered by Dr. Skotko that different versions of the CPI had been administered.

Certainly, the results cannot now be considered valid because different tests were utilized.

An attempt was made to duplicate conditions for a retest. It was discovered that during the 8-10 months period between the administering of the test batteries and the discovery of the error, 9 of 26(35%) dispatchers from Group 2 were no longer employed. Of Group 1, only 3 of 32(9%) had left.

Complete retesting was conducted on the remaining members of both groups utilizing CPI (1987 Version) and MMPI-2. Test results reflected no significant differences in the CPI scores between the "outstanding" group of dispatchers and the group identified as "not outstanding." This seems to be in conflict with the Reiser Study cited earlier and the results of this research paper. However, significant is the fact that 9 of the 26 dispatchers (35%) in Group II had left employment by the time the second round
of testing occurred. In contrast, only 3 of 32 dispatchers (9%) previously rated as outstanding had left employment. Although not scientifically supported, these facts tend to support the hypothesis that psychological evaluation may well be an effective tool in identifying those individuals most likely to be successful in the dispatching field.

Tests results on the MMPI reflected significant differences, which were not the case with MMPI-2 in the original test segment. MMPI may emerge as a useful screening-out tool. However, rather than expound on its value at this time, it will further be examined at a later date. This research project will continue. In the near future, two new groups will be identified, (outstanding dispatchers and not outstanding dispatchers) and complete testing will be conducted utilizing MMPI and CPI (1987 Version). Those results will be analyzed, evaluated, and documented.

Colonel Daron D. Diecidue is a 26-year veteran law enforcement administrator, having begun his career with the Tampa Police Department in 1967. He currently serves as the Colonel of the Administration Department in Hillsborough County. The Hillsborough County Sheriff's Office is the fourth largest in the United State, employing 2,300 individuals as a full service police and detention agency. Colonel Diecidue holds a Degree in Sociology from the University of Tampa, and is a 1993 graduate of the Charter Class of the Florida Criminal Justice Executive Institute's Senior Leadership Program.

References


