

EXPLORING JOB RELATED STRESS AND JOB SATISFACTION IN A
MODERN LAW ENFORCEMENT COMMUNICATIONS DIVISION

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A seriously neglected area of criminological and social science research is the police communications or dispatch center. While research projects dealing with stress and job satisfaction are found in abundance for other occupations, studies specific to the police dispatcher are uncommon. Work pressures, burnout, high employee turnover, low pay, and a lack of respect from police coworkers easily result in negative emotional and psychological consequences for the public safety dispatcher. This study utilizes survey data from a sample of police communications centers in the Dallas/Fort Worth, Texas area. The purpose of the survey is to identify the level of stress and job satisfaction reported by the respondents. The effects of differing types of stress will be investigated.

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CHAPTER 1

INTRODUCTION

Why Study 9-1-1 Communication Centers

When a crime occurs in this country, law enforcement becomes aware of the event frequently through one of three methods. First, the officer could happen upon the crime while it is being committed or shortly after it occurs. Second, the victim goes out after realizing a crime has occurred and locates an officer to report the crime. Third, and most frequently, the victim calls the police. All three of these methods result in the same notification, a notification of dispatch. Either by citizen or officer, dispatch is made aware of the crime.

Dispatch is a term used to describe a hub of activity revolving around information. It consists of personnel, equipment, records, and resources needed by the police agency to provide 24-hour service to the citizens. Most often it involves radio, computer, and telephone operators. In some centers, the personnel carry out each duty simultaneously. They may provide service solely to police units or they may also oversee fire and emergency medical services. They may serve a single city or they may be responsible for the care of 15 or more cities. This center may operate with one dispatcher or dozens. It all depends on the size and need of the agency.

This area of activity is typically called dispatch or communications. If the agency provides 24-hour service, dispatch may be the only room occupied at 3

A.M. When officers come on duty, they notify communications. When someone needs information regarding a vehicle registration, the requestor asks dispatch. If an investigator needs the criminal history of a suspect, the investigator most likely calls dispatch. If the services of law enforcement could be described as a wagon wheel, dispatch is the hub.

When a citizen needs an officer, fireman, or paramedic, the citizen typically speaks to a dispatcher first. This first contact is vital as the citizen develops an opinion of emergency services. Often an irate citizen can be calmed while on the phone, before the officer gets there. This can be very helpful when the officer arrives. When a citizen calls and speaks to a dispatcher that sounds confident and well trained, the citizen can feel more secure that his or her needs will be met. If the caller reaches a dispatcher who seems confused or incompetent, it could set the tone for a bad contact once the officer arrives.

Since police communications is so important in the day-to-day workings of an agency, one would think it would often be the focus of study from the academic realm of criminal justice. This is not the case. Unfortunately, the agency itself probably does not put a great deal of focus on the activities of dispatch. When daily operations run smoothly, dispatch is often overlooked. If an unpleasant incident occurs, even if it occurred in the field, others flock to dispatch for information. What happened? What information did the field personnel have? Did you ask all of the correct questions? Where do we place the blame for this?

There is a dearth of literature on law enforcement communications. One would probably have more luck finding information about related fields or jobs with similar work duties. There is an abundance of information on police officers, firemen, detention officers, and probation/parole officers. Information is also available regarding administration styles and management theories for law enforcement. However, if a search engine is given “police communications” to find information, it is more likely to list studies on the communication between officers and their supervisors than dispatch.

Understanding what is working and what is failing in communications should be at the forefront of concern for criminologists. It is unfortunate that other researchers have not spent more time looking into the communications aspect of law enforcement. The suggestion that problems facing patrol officers or detention officers are the same as problems facing communications is presumptuous. Because the dispatch function plays such a vital role in criminal justice, it should be the focus of more study. Finding improvements for this field of law enforcement will only improve the criminal justice system as a whole.

The Questions to Address

For over eight years I have worked in the communications field. I have spent time as a line operator and as a supervisor. I have personally experienced several problems during my 9-1-1 career. From my own personal experience with agencies in the Denton, Texas area I believe there are six common concerns facing 9-1-1 center managers today. Those problems are: stress, job

satisfaction, low employee staffing levels, training, liability concerns, and keeping up with technology. The most common problems found in many communications divisions can be related to or derived from stress and/or job satisfaction. For this reason, this study will focus on stress and job satisfaction.

For this study, two types of stress will be discussed, intrinsic and extrinsic. Intrinsic stress is the anxiety felt while dispatching a high-speed pursuit on the radio or when instructing someone in CPR on the phone. This type of stress is expected as part of the job. Many dispatchers would say that they enjoy these situations. It allows them to do what they do best. Extrinsic stress is anxiety brought on by factors in the environment that could be modified. Working in a confined space with poor lighting is an example. Dealing with a hard-to-please supervisor could be extrinsic stress. Extrinsic stress is brought on by factors that could change and lower the level of anxiety associated with them. Center managers could have some control over extrinsic stress.

Job satisfaction is necessary to any working position, but this may be especially true for communications. Unhappy dispatchers can lead to unhappy officers or worse, citizen complaints. Keeping the dispatchers happy is often a time consuming goal for good communications managers. They understand the need for a content communications employee. Dispatch is a career marred by burnout. A veteran of ten years or more is a jewel, especially if the veteran lacks the sarcasm that can develop over time. Recruits in dispatch start off awed or frightened by the responsibility. Many fall in love with the work but become

disappointed by the work environment or lack of recognition. Many managers find there is no simple solution to this problem.

Low job satisfaction can lead to a major problem in communications, low employee staffing. Turnover is rampant in the dispatch field. Since my first exposure to the field of communications, not once have I observed an agency of any size achieve and maintain full staff status. Some believe staffing problems may be due to pay levels. It is true that few take the job because of an awe-inspiring pay and benefits. But agencies with superior pay still have a hard time reaching and maintaining a full staff. Many dispatchers might relate their low job satisfaction to the lack of recognition from officers and coworkers. A feeling of worthlessness or shame can be associated with the way others in the department sometimes describe communications. Terms like the “redheaded stepchild of the department” or using a petty tone when saying they are *just* dispatchers can be harmful to the dispatcher’s feeling of self worth. This is made worse when patrol officers who have been placed on light duty due to injury or because the officer is in trouble with the department are placed in dispatch to work temporarily. It can leave the others in communications with the feeling that the administration does not value their skill and feels that anyone can do the job.

This poor opinion towards the administration is reinforced when communications training is discussed. Unfortunately, many administrators misunderstand the necessity of improved training in dispatch. Budgets are tight in law enforcement agencies today. Often there is a deficiency of funds

designated for communications training. Training classes can be expensive and the agency may not see a need to pursue advanced or even routine training.

Many citizens assume that their 9-1-1 services are at least average or working at an acceptable level. Many would be surprised to find the poor level of training made available to the communications officers serving their jurisdiction.

Regrettably, many agencies play a game of Russian roulette when it comes to dispatcher training. They do not focus on training until after a mistake has been made or after they find themselves facing a lawsuit.

Lawsuits are growing in frequency in criminal justice. People feel victimized so they look to place the blame. In some instances this blame is wrongly given to someone who could not have improved the situation. In other instances the blame is more fittingly applied because a mistake was made. With as many tasks as dispatchers complete each shift, mistakes are inevitable. Many communication managers are left feeling like they are dodging the lawsuit bullet. Unfortunately for dispatch, it is not a question of "if you are sued" it is more like "when you are sued" and "how bad will your lawsuit be." Liability is a word that can bring fear into any administrator's heart. Mentioning liability when pointing out a problem at an agency can result in more attention for that problem.

Each of these problems can be multiplied when the factor of technology is included. Technology in communications is growing by leaps and bounds. Radio equipment and CAD systems are obsolete almost as soon as they are installed. Moreover, unfortunately both are very expensive. The days of finding

a recruit who can simply type well and answer the phone have been replaced by job descriptions requiring more and more computer skills. Job tasks are becoming more technical and complex. Some agencies have improved technology to the point that officers have computers in their patrol cars. Now the dispatcher can call the officer on the radio, page him, call his mobile phone, or email his car. With improved technology comes a need for improved technical help. If a server goes down, dispatch must have someone come fix it and quickly. Lives could depend on it.

These problems are not independent of each other. Each has some effect on the other. Stress is a prime example. Either stress causes the problem or the problem causes stress. One issue, employee staffing, is especially entwined in the stress equation. Stressful conditions can result in lowered job satisfaction that could affect staffing levels. The job gets to be more than the operators can handle, so they quit. Now the remaining operators are facing the same level of work demands as before, only with fewer coworkers to help them. This overworking of current dispatchers leads to increased stressful working conditions. And the cycle continues to spiral until adequately trained operators are found to relieve the situation.

Attempting to relieve the work demands in a dispatch center, the agency may consider a new CAD system or better radio equipment. Improving technology almost always leaves a need for more training. If training on new equipment is lax, an error could be made which could result in a lawsuit. Now

the dispatcher has the added stress of being subpoenaed to court to explain what happened. Because it is so intertwined with the other problems discussed, stress is likely the most challenging of the problems facing communication managers today.

Properly addressing all six issues would be a broad and overwhelming task. The focus of this study is directed at two primary problems: stress and job satisfaction. Stress and job satisfaction are strongly affected by the other four issues. They also contribute to the other issues. Testing for levels of stress and job satisfaction should prove easier because similar studies in other fields have already been conducted.

Conducting the Study

Since the purpose of the study is to explore and attempt to comprehend two problems facing 9-1-1 communications centers, a survey has been used. The survey addresses these problems and attempts to determine a level of severity for each issue. Not only did the managers themselves rate the various problems, the line crew dispatchers also completed the survey. When juggling the issues facing communications with other administrative duties, a manager may lose touch with the center's true problems. Finding differences between the manager's responses and the line crew's responses could be evidence of such a disparity. This alone could contribute to how well the problems are being addressed at the agency.

Due to budgetary and time constraints, a sample was drawn from agencies local to the Dallas/Fort Worth metroplex. Dispatch personnel in agencies selected first received notice of the study and its purpose. This information included details regarding anonymity and its importance to this work. All who participate in the study must be assured that their responses will be used solely for the study and their identities will not be revealed. Confidentiality is crucial in ascertaining truthful responses. Shortly thereafter the surveys were sent to the agencies for completion and return. After a designated time elapsed, no further studies were accepted if returned.

The agencies differ in size and responsibilities, but only 24-hour communications centers were used. Since some agencies are large enough to divide 9-1-1 call-taking from radio dispatching, employees from both groups were asked to participate. Only municipal police departments are included in the study. The number and types of different job duties are included, such as emergency and non-emergency phone assignments and radio tasks. State and federal agencies were not included in this study. Also excluded are agencies without property-owning residents, such as the airport, university, or hospital police. The municipal police agencies were divided into two categories: large and small. The agency size category depended on the number of dispatch positions an agency employs. This number also included any agency that occasionally utilizes police officers in the dispatch center. Large agencies were all those whose communications division consisted of 25 or more employees

when fully staffed. All agencies with less than 25 communications personnel when fully staffed were categorized as small. Since the number of current employees could easily change from day to day, full-staff levels were used rather than current staff levels. Once the surveys were received and scored the responses were reviewed using a statistical software system. This allows an evaluation of the scores and the problems they reflect. Differences found between managers and line crew will be noted as well as any significant differences between agency size and responsibilities.

The primary focus of this study is to provide 9-1-1 center managers with a tool for change. The inner workings and problems of the dispatch center are a mystery to many in the criminal justice field. Most professionals make erroneous assumptions about the communications environment and duties. This study is an attempt to gain a greater understanding of dispatch and two problems within the field. The findings could prove useful to a communications manager when attempting to gather support for making changes in dispatch. Managers may someday find themselves facing a governing body, such as the city council, asking for help. If this manager has a research study in hand identifying the level of stress and job satisfaction in communications, it may help to rally more support or explain the arguments more clearly.

Previous studies address job satisfaction and stress problems in other criminal justice environments but fail to relate them to the communications field. Researchers have investigated stress and job satisfaction among officers from

the police, detention, parole and probation fields. Some researchers have compared findings to other professions such as teaching and air-traffic control. It is important to identify similarities and differences by comparing findings from dispatch to these research projects.

One research question and three hypotheses were addressed in this research project. The research question is actually quite simple, what are the reported levels of job satisfaction and job stress among agencies in the Dallas/Fort Worth area? The first hypothesis is that “No relationship exists between reported employee job satisfaction and stress in the 9-1-1 communications environment.” The second hypothesis is that “No independent variables exist within the 9-1-1 communications population that impact reported stress or job satisfaction.” The last hypothesis considered is that “Reported levels of stress or job satisfaction with the 9-1-1 communications environment have no relationship with an individual’s reported number of job changes.”

Because the problems in communications have not received adequate attention, there may be more to them than we are currently aware. The time is ripe for an exploratory investigation into dispatch. This study could prove beneficial to the field of communications and to those charged with communications management.

CHAPTER 2

LITERATURE REVIEW

The Individual Stress Studies

An abundance of research is available dealing with stress and criminal justice. Many aspects of stress have been addressed. These include: what causes stress, stress on the job, stress in life, the effects of stress on the employee, the effects of stress on the family of the employee, the effects of stress on job performance, etc. This portion of the paper will serve as an introduction to some of the research previously addressing the issue of stress.

In the early 1980s, studies regarding stress and the police officer burst into the research scene of criminal justice. One of the leaders in this area is John Violanti. Violanti and Marshall teamed together to write an article called “The Police Stress Process” (1983). The research extended the analysis of police occupational stress to three elements: stressors, experienced individual stress, and coping (Violanti and Marshall, 1983).

Violanti and Marshall began their work by categorizing the stress causing agents into two groups: depersonalization and authoritarianism (Violanti and Marshall, 1983). Depersonalization items were related to a sense of forced emotional distancing. Officers are not encouraged to show emotion when dealing with highly emotional incidents. This can increase the stress in the

individual because it causes a conflict between objectivity and real human emotion (Violanti and Marshall, 1983). This is a frequent occurrence for dispatchers. The pressure to remain professional and not show emotion is strong in communications. Authoritarianism, according to Violanti and Marshall deals with the necessity to demonstrate that an officer is in control of the situation. It relates to an essence of power. The officers feel pressure to project themselves as aggressive, tough, and possibly even cynical (Violanti and Marshall, 1983). This is not as great an issue for dispatchers. Using aggressive techniques to control hysterical callers is sometimes recommended, but demonstrating a level of empathy with the caller is often more effective.

In their findings, Violanti and Marshall listed a strong positive relationship between depersonalization and stress (Violanti and Marshall, 1983). They stated that the dilemma is one of occupational necessity versus personal considerations. Unfortunately for the officer, police occupational norms view depersonalization as necessary for effective police work (Violanti and Marshall, 1983). They also found a positive relationship between stress and cynicism. Those who demonstrated a high level of stress seemed to cope with their conflicts by becoming cynical in the workplace (Violanti and Marshall, 1983).

A year later Mallory and Mays (1984) addressed similar influential variables when looking at stress in policing. Their article, "The Police Stress Hypothesis: A Critical Evaluation" mentions several previous studies and their findings regarding police stress. In a 1974 study conducted by Kroes, Margolis,

and Hurrell, the researchers found that many of the sources of stress for law enforcement professionals are outside of their control (Mallory and Mays, 1984). These issues also afflict communications personnel, they include: administrative policies and lack of support from administrators, lack of or poor equipment, negative public attitudes towards police work, and shift work (Mallory and Mays, 1984). This early study suggested that sources of stress for police workers were largely organizational and bureaucratic in nature (Mallory and Mays, 1984). This research is further supported by the findings of Brooks and Piquero in 1998. Their work addressed how the size of the agency can affect feelings of stress for the officer (Brooks and Piquero, 1998). In their findings, they expressed that much of officer stress is generated by the agency itself and this is even more pronounced in larger agencies (Brooks and Piquero, 1998). Mallory and Mays mention another study from 1974 by Reiser which argued that the authoritarian nature of police agencies contributed to stress because of the alienation between line officers and management (Mallory and Mays, 1984).

Mallory and Mays mention a measuring instrument called the Law Enforcement Critical Life Events Scale (LECLES) developed by Sewell in 1981 (Mallory and Mays, 1984). This scale tests two aspects of police work. The first section focuses on police work events such as the death of a partner or a hostage situation. The second section is concerned with agency related issues such as administration support, budget issues, and report writing. Sewell's survey instrument (or one very similar) could easily be adjusted to address

similar problems in dispatch. The first section could address intrinsic stress and the second section handles extrinsic stress.

Mallory and Mays hint at a lack of research in law enforcement communications. They mention a study conducted by Cobb and Rose in 1973, finding the level of stress reported by air traffic controllers as higher compared to pilots (Mallory and Mays, 1984). A similar study involving the railway profession found that rail dispatchers reported more occurrences of ulcers, diabetes mellitus, and hypertension than the train conductors (Mallory and Mays, 1984). At the time of Mallory and Mays publication, research indicated that the major sources of stress revolve around feelings of helplessness and uncontrollability in the work environment (Mallory and Mays, 1984). These two characteristics are unavoidable in the police communications field.

Researcher Terry (1985) looked at police stress as it relates to a professional self-image. His article identifies aspects of law enforcement which are stressful, but do not occur during dangerous police duties. This side of policing is seen as stressful but lacks the element of a threat to physical harm for the officer. Communications officers often encounter these events as well. They include: contact with other peoples' miseries and problems, handling suicide calls, aiding mentally ill persons, dealing with irate or hysterical individuals, and facing death (Terry, 1985). Even though the dispatcher does not physically see the deceased person, the dispatcher could be on the phone as the person dies or while the family reacts emotionally to the death. Police workers are similar to

other professionals because they are expected to face their occupational strains and cope without allowing any interference or delay to the task at hand (Terry, 1985).

A research project completed by White et al. (1985) proposed that additional research be completed in an effort to provide additional empirically based results to more specifically define the sources of police related stress. Their research was directed at more clearly defining the issues facing officers which impact reported stress. The responses were then divided into three groups depending on which facet of law enforcement was being discussed: physical/psychological threats, evaluation systems, and lack of support. The highest levels of stress were considered in the first category. These activities include: fear of being killed in the line of duty, fear of killing someone else, police chases, fights, etc (White et al., 1985). The second category contained aspects of the judicial system, promotion system, and pressure from the police culture (White et al., 1985). The last category was identified as problems with interoffice support, poor equipment, inadequate supervision, etc (White et al., 1985). This third category had a significant effect on the officers polled. Those who reported high stress in this category had higher levels of emotional exhaustion and feelings of depersonalization than the other officers. This is an interesting finding considering how this third category lists problems that are also substantial issues in the communications field.

The authors conclude their study discussing the applicability of Role Theory when considering job-related stress. They contend that a conflict within the understanding of one's role within the agency contributes a great deal to the level of stress felt by the employee. This may be especially true in law enforcement where role expectations are not always clearly understood. The authors acknowledge a flaw in their research: the lack of a frequency test to illustrate how often this stress is experienced. They also suggested that further studies look more closely at the role theory explanation and how stress relates to personality differences (White et al., 1985).

In 1984, Pendergrass and Ostrove looked at stress from a different angle in their article "A Survey of Stress in Women in Policing." This article was selected primarily as an attempt to address a trend in law enforcement communications. The exact reason this trend occurs is not precisely clear, however, it is undeniable. Law enforcement communications personnel are predominantly female. The introduction to the Pendergrass and Ostrove study may offer a possible explanation for this occurrence.

According to the authors, the number of women in policing rose sharply in the 1970s (Pendergrass and Ostrove, 1984). Before this, females were typically regarded as incapable of being effective police officers. Physical strength and a lack of assertiveness were routinely given as reasons for keeping women out of the police role (Pendergrass and Ostrove, 1984). Possibly because physical strength is not a factor in dispatch, women gravitated towards the

communications field. It is also possible that the high number of women in telephone operator positions made them valued candidates for emergency dispatcher positions.

Their study was conducted in Montgomery County, MD. Questionnaires were given to every employee within the police department along with their paycheck (Pendergrass and Ostrove, 1984). Once returned, they were divided into three groups for comparison: sworn, police technician, and civilian. Within these groups, the responses were divided again according to gender (Pendergrass and Ostrove, 1984).

The survey consisted of five sections: demographics, rating the impact of stressful events, rating organizational factors such as support, rating the frequency of stress consequences such as disturbed sleep or headaches, and the perceived need for counseling services (Pendergrass and Ostrove, 1984). Demographic results indicated expected trends. Males dominated the sworn positions while females led the civilian duties (Pendergrass and Ostrove, 1984). Women were over represented in the low prestige and low-income positions, while men held the more prestigious and better paid jobs (Pendergrass and Ostrove, 1984). The study never explains exactly what positions are included in the police technician category. This group contained slightly more women than men so communications personnel could possibly be included in this group.

Sworn women reported slightly more stress than men when considering using deadly force in the line of duty (Pendergrass and Ostrove, 1984). They

also listed making an arrest alone and responding to a felony in progress as stressful, while the men did not (Pendergrass and Ostrove, 1984). Among the other groups, the civilians and police techs, an interesting similarity was noted. Females from both groups highly rated “feeling like a second-class citizen in the department” as a stressful job event. The feelings of second-class status could be perpetuated by the lack of research involving these groups and their role in criminal justice. As the feelings of alienation increased, so did the number of stressful physiological consequences such as headache and depression (Pendergrass and Ostrove, 1984).

Other findings indicated that the older females, typically the civilian secretarial staff, reported higher physiological consequences to stress than the men (Pendergrass and Ostrove, 1984). Pendergrass and Ostrove point out that the men, who tend to be primarily included in the sworn category, retire earlier because this agency provides sworn personnel with an early retirement package. Another reason for this result could be explained by the social nature of men and women. Perhaps the women were more willing to disclose personal information (Pendergrass and Ostrove, 1984). Their study concludes with a suggestion that new instruments or modified versions of current stress assessments be developed to address the work characteristics of other disciplines within law enforcement, rather than comparing the apples to oranges (Pendergrass and Ostrove, 1984).

Tables provided in the Pendergrass and Ostrove study listed several stressful job events that are all too common in the communications field. These were: feeling like a second-class citizen in the department, insufficient manpower to adequately handle a job, inadequate support by supervisor, taking home pressures of the job, competition for or lack of advancement, fellow employees not doing their jobs, inadequate salary, and personal insult from citizen. Even though this civilian group is not explicitly described as communications, their responses could be expected from any communications division. A correlation table in this study listed the same percentage of physiological consequences and psychological/behavioral consequences for sworn personnel as the civilians. This parallel is important in that it calls for more research in this area.

Patterson looked at years of experience and reported stress in the article "Job Experience and Perceived Job Stress Among Police, Correctional, and Probation/Parole Officers." Patterson was strongly influenced by the 1983 work of Violanti. Violanti was the first to identify a curvilinear relationship between years of service and perceived stress among police officers (Patterson, 1992). Violanti discovered that officers with the least and the most years experience reported the lowest levels of stress (Patterson, 1992). The intermediate officers, those with two to 20 years on the job, reported the highest problems with stress (Patterson, 1992). Patterson's study is an attempt to identify that curvilinear relationship in other criminal justice occupations.

The study itself consisted of 59 items, taken from a larger instrument, designed to measure perceived levels of stress (Patterson, 1992). Nine factors were determined meaningful and significant for consideration (Patterson, 1992). These include: danger, demands of decision making, intra-agency personal support, lack of technical support, ineffectiveness of the criminal justice system, racial pressure, political pressure, compensation, and job schedule (Patterson, 1992). It should be noted that the survey was erroneously distributed without an item requesting the racial background of the respondent (Patterson, 1992).

The results varied slightly between the three professions. Trends were found between the line personnel and management for each group (Patterson, 1992). Line personnel typically scored a higher rate of stress (Patterson, 1992). The curvilinear relationship was found insignificant among the correctional officers (Patterson, 1992). For the other occupations, a similar trend was identified.

Patterson suggested that employees within their first year of employment lack the strong perception of stress for several reasons. First, they typically are assigned to a veteran employee for monitoring; questions or mistakes are dealt with promptly (Patterson, 1992). Second, because of their low seniority status, they face very few important decision making experiences (Patterson, 1992). Third, in their short period of employment, they have recognized fewer equipment and staff deficiencies (Patterson, 1992). Fourth, any anxiety they may feel could be due to the excitement associated with a new job (Patterson, 1992). Patterson

summarizes that these employees simply do what they are told and are too eager to realize the problems in the field (Patterson, 1992). The communications field operates in the same fashion. Most new employees are placed on a probationary status following their training program. Their lack of seniority results in almost no decision-making opportunities. And many individuals new to the work environment are not completely comfortable with their assigned job duties until well after the probationary period.

Patterson found that those with the most years experience score second lowest to the new hires (Patterson, 1992). Violanti called this period the introspective years because these officers reported a higher level of job security, held more rank, and spent time thinking back to the “good old days” (Patterson, 1992). The group between new hire and old-timer was tagged the disenchantment stage by Violanti (Patterson, 1992). This group reported higher levels of stress than the others.

Patterson concluded with several suggestions. First, researchers should attempt to identify the coping mechanisms that take over in the later portion of one’s criminal justice career (Patterson, 1992). Identifying these characteristics and providing training to improve coping skills may reduce burnout (Patterson, 1992). Second, more in-depth research is needed to address the reliability of the respondents’ self-report and actual behavior (Patterson, 1992). Thirdly, this study focused on one time period, the time of the survey. Other research should consider following the respondents throughout their lives (even if they leave the

field) to observe changes in perceived stress and coping techniques (Patterson, 1992).

It would be interesting to see if similar trends in reported stress appear according to years of experience as a dispatcher. Similar research conducted by Brooks and Piquero suggests that those short-timer individuals are notably different from their disenchanted co-workers with regard to coping skills. They indicate that the short-timers are less likely to use cynicism when dealing with stress (Brooks and Piquero, 1998). Those who cope with stress by becoming cynical simply leave the profession before reaching the higher years of experience.

A study by Sigler and Wilson was very interesting because it finally provided a comparison group from outside of law enforcement. The authors quickly point out the flaw in only studying law enforcement and failing to weigh policing against another profession (Sigler and Wilson, 1988). The characteristics which are typically noted in law enforcement as stressing were listed: leaders from closed promotional methods, limited mobility and promotional systems, traditionally conservative administrations, limited training and resources, low salaries and compensation, and unclear policies for rewards and promotion (Sigler and Wilson, 1988). Reflect on this list while considering the teaching profession. The similarities are obvious.

The authors selected teaching because they felt educators have been consistently identified as a group experiencing high stress at work (Sigler and

Wilson, 1988). They also decided to conduct this study within a suburb of Syracuse, NY (Sigler and Wilson, 1988). The seven-page survey included a demographic section and a Likert-type stress assessment (Sigler and Wilson, 1988). It was administered to the patrol officers and the classroom instructors from the town of Dewitt, NY (Sigler and Wilson, 1988).

Sigler and Wilson acknowledge a flaw in the sample dealing with gender. Half of the teachers who responded were female, while only one female officer is employed by the Dewitt Police Department (Sigler and Wilson, 1988). This issue prevents any serious analysis comparing like genders from each profession. However, it should be noted that similar gender variances may be found in law enforcement between dispatch and patrol.

The teachers typically had achieved higher education accomplishments and held their current positions for longer periods than the officers (Sigler and Wilson, 1988). The researchers suggest this could be due to the early retirement characteristic of law enforcement. They mention that many agencies do not provide pay incentives to remain on the force beyond 20 years (Sigler and Wilson, 1988). When comparing the officers with the teachers who reported less than 20 years tenure, the pay rates were very similar.

The findings illustrated a higher level of perceived job stress among the police officers (Sigler and Wilson, 1988). The officers also reported higher levels of life stressors than the teachers. The researchers point out that the teachers reported life stressors as having more influence on their overall stress level

(Sigler and Wilson, 1988). Sigler and Wilson conclude by suggesting further studies focusing on the factors or processes that lead to elevated levels of stress. Identifying those items could lead to new coping and intervention programs for employees in both professions (Sigler and Wilson, 1988).

Sigler and Wilson also point out the recent interest in stress in the workplace, role conflict, and, more importantly, burnout. Burnout is a common occurrence in the communications field. The job by its very nature assumes a certain level of stress. The dispatcher is always aware that the next call could be chaos. Sigler and Wilson mention that twenty- or thirty-year police veterans may work their entire career without facing a major crisis. However new police recruits are trained to be prepared for major crises. For every crisis an individual officer may face, the dispatcher may face dozens. Dealing with a high level of tragedy day after day can understandably lead the dispatcher to burnout. If studying stress and burnout is important for patrol officers, imagine how necessary it must be for those who are responsible for the lives of the patrol officer.

Dispatch Specific Stress Studies

Fewer studies can be found relating specifically to dispatchers and stress. A research study performed by Sewell and Crew in 1984 appears, by all accounts, to be the first attempt at addressing dispatcher concerns. This article is not the result of a survey, but rather it serves as an introduction to police dispatchers and their work environment. Since previous studies are lacking, the

authors are forced to compare police communications to the work of air traffic controllers (Sewell and Crew, 1984). The effects of stress were expected to be similar among these groups. Effects such as sleep disruption, loss of appetite, anxiety, irritability and sexual dysfunction were mentioned. The authors propose that the high workload level coupled with elevated pressures to complete work accurately and quickly make air traffic controllers a valid comparison group for police communications.

Many aspects of police communications were briefly introduced. Sewell and Crew only narrowly approach how these issues relate to the broader picture of policing. Most of their work is focused on introducing the communications environment. The first characteristic discussed is the feelings of second-class citizenship shared by dispatchers within a department. Another frequent characteristic of the communications division is a lack of formalized training. Most training occurs on the job with senior personnel guiding the new employee. Sewell and Crew point out that this practice easily leads to anxiety within the new employee because they do not feel properly prepared for the job at hand. High call volumes and the need for immediate decision making were discussed as typical occurrences in communications. This leads to a build up of anxiety and stress. Confinement issues only add to the problem. Not only do the dispatchers feel as if they are drowning in calls, but they are rarely able to take small breaks to relieve the anxiety. Anticipation levels on high priority calls mirror that of the police officer. Just as an officer is concerned about his or her own safety on a

dangerous call, so is the dispatcher. The dispatchers have reported feelings of wanting to reach through the microphone and protect their officers. Equipment deficiencies and limited upward mobility add to dispatcher stress. These issues are compounded by feelings of disrespect from field officers and citizens (Sewell and Crew, 1984).

Holt listed similar concerns in his article “The Top Ten Things You Should Know About Dispatcher Stress” in 1997. Holt worked in a dispatch center for almost ten years. His experience brings a new point of view to the concept of studying stress in dispatch. His work here is not supported by any empirical data, simply his own life experiences. His work, directed specifically at communications personnel, listed the following unique aspects related to dispatcher stress:

1. Dispatcher stress is not always caused by the same things as police officer stress, firefighter stress, or EMT/paramedic stress. What could have been a routine call for a police officer may have started as an extremely stressful call for the dispatcher, and vice versa.
2. Most dispatchers identify poor communications within the department as a prime cause of stress. This is most prevalent when administrators who have never worked in dispatch and do not have a clear understanding of what a dispatcher does develop regulations and procedures governing dispatch.

3. The work environment can take just as much out of you as the work itself. Work environment issues such as lighting, noise levels, ventilation, windows, and ergonomics can have a tremendous impact on stress.
4. Dispatching is a sedentary job. The duties of the job do not typically involve a great deal of physical activity. The dispatcher must make a direct attempt to seek out physical exercise on their own.
5. Dispatchers' diets are generally abysmally awful. Many dispatchers find themselves routinely eating at their consoles. This activity supports a high reliance on fast food with very little nutrition. To compound the problem, shift work can affect the individual's circadian cycle which impacts digestion even further.
6. Variety is the spice of life. Dispatchers who do not participate in non-law enforcement social activities develop fewer social supports for dealing with stress.
7. Get to know the other players in your sandbox and then "play nice." An absence of comradeship between dispatchers and officers can easily lead to negative feelings towards dispatch. These feelings of "second class citizenship" can have a significant affect on stress.
8. Expectations can be killers. Public safety dispatchers are noted for having a positive attitude towards the delivery of service. Setting their own self-expectations too high regarding their work can add feelings of stress for the individual.

9. Competence in the task at hand reduces stress and proper training increases competence. Training on the job is simply not enough. Training in classrooms and other environments must be utilized to improve competence.

10. You act and feel according to what you think. Cynicism can be fatal to a dispatcher's career. To reduce stress, try replacing cynicism with attitude pep talks. Get a new perspective (Holt, 1997).

Holt's experiences in dispatch receive some support in the research of Doerner. His research was conducted within the Tallahassee Police Department. Thirty-one employees made up the communications division and 22 responded with acceptable participation. Among this group, females outnumbered the males and appeared to react more positively to the job-related stressors (Doerner, 1987).

Findings indicated a special culture within the communications division. This group indicated high interest in helping people, assisting field officers, and responding to telephone inquiries from the public. They described themselves as adrenaline junkies working in an environment where every day is a new day and could be drastically different from yesterday. A major concern of this group was understaffing and work overload. Like many other agencies, this department found the city was growing at a faster rate than their department could expand (Doerner, 1987).

Another problem for communications is being the punching bag of law enforcement. Dispatchers are often the first encounter for most citizens contacting the police. Any negative views regarding the police held by the reporting citizen is expressed to the dispatcher answering the phone. Dispatchers also regularly feel the brunt of police officer frustration. This study found a high percentage of dispatchers feel under-appreciated or disrespected by their field officers.

The last major stress contributor is a feeling of being unable to fulfill a perceived level of higher performance. The goal always seems a step ahead. They may feel the equipment needs more improvement or possibly better training would help. Regardless of what aspect they perceive as lacking, this group is characterized by an inability to achieve its own high expectations (Doerner, 1987).

Doerner closed with five characteristics of police dispatchers. First, they are not a pathologically stressed group of employees although they do exhibit elevated levels of stress. Second, these individuals are driven by service providing attitudes. Third, this group receives an enormous amount of satisfaction from the multitude of tasks performed routinely. Fourth, their positions are typically civilian so they easily become upset with organizational barriers to their service delivery efforts. And lastly, they share many of the frustrations illustrated by the patrol employees (Doerner, 1987). Because of their own special dynamics, more research is strongly suggested.

A year earlier, Shenkman published similar aspects regarding dispatch and stress. Shenkman stated two perspectives exist when considering dispatch. On one hand exists a positive “nerve center” attitude, which demonstrates great respect for communications as being a vital and demanding component of the law enforcement mission. This perspective is most often found in the dispatchers themselves and the researchers of communications. The other perspective is found more often in the other employees of the department. It is fraught with negative labels such as “second class citizens,” “step children,” and “if you ain’t sworn, you ain’t born.” (Shenkman, 1986)

Shenkman goes on to state that a great deal of the stress that is found in communication divisions is not created by the work itself, but rather the work environment. He suggests the most influential variables for stress are the internal organizational processes (Shenkman, 1986). This is apparent when departmental changes occur. Any change that occurs in the department will most likely result in a change for dispatch. However input from communications regarding procedure changes is rarely solicited. Stress results when the dispatcher is left with new responsibilities for things over which the dispatcher has no control (Shenkman, 1986).

A study by Burke in 1995 specifically addressed stress and the dispatcher. He expressed that the role of the dispatcher contributes to stress because it is often misunderstood by administrators, officers, and citizens (Burke, 1995). He

feels that administrators and officers often overlook the different functions that a dispatcher performs.

According to Burke, dispatchers experience specific stressors unique to their position. These include: being relegated to a low position within the departmental hierarchy; insufficient training; lack of support and positive reinforcement from officers, supervisors, and managers; shift work; lack of control; antiquated equipment; confinement and lack of interpersonal communication; lack of breaks; negative citizen contacts; lack of personal development; and insufficient pay (Burke, 1995). The variables that had the greatest impact on stress were related to low status, responsibility to others, and lack of formal training.

Burke concluded with several suggestions for communications managers to reduce stress-causing agents in their departments. He also briefly mentioned the impact job satisfaction could have on stress. He indicated a need for more research regarding the relationships between job satisfaction and stress for communications personnel (Burke, 1995).

Clark choose dispatcher stress as the topic of his thesis while completing a Masters program at Sam Houston State University. The purpose of his study was to compare dispatcher stress to the stress of police officers. He noted that since organizational elements contribute a great deal to work-related stress levels, dispatchers who typically report more negatively on organizational scales

could demonstrate higher levels of stress than police officers (Clark, 1997). His study addressed this possibility.

Of the respondents to his survey, forty-six (52.9%) reported themselves as either police officers or deputies while forty-one (47.1%) were dispatchers. Among this group, women were predominantly employed in communications while the patrol officers were overwhelmingly male (Clark, 1997).

The findings indicated that dispatchers did score higher on perceived work-related stress (in both state anxiety and trait anxiety scales) than their patrol counterparts. Demographic data indicated dispatchers were typically younger and had less experience in the municipal agencies compared to the county departments. The county dispatchers, however, reported a greater amount of stress than the municipal dispatchers (Clark, 1997).

If the county group scored higher in reported stress, could this age difference be related to the previous postulations of Patterson and Violanti? This could be the case if the county group's years of experience fit primarily into the disenchanting middle category, those between the new hires and the old timers. Or it could relate to coping techniques suggested by Brooks and Piquero, those with the most years on the job are the least susceptible to prolonged feelings of cynicism.

Clark concluded that lower the prestige or position held within the department, the greater the reported stress. Gender differences within either job position produced only slightly significant results. County dispatchers reported

higher levels of stress, however county deputies did not show higher stress levels than their municipal peers. Clark suggests that the demands of dealing with numerous agencies at the county level could explain this variance. The deputies only deal with one dispatch, just as their municipal counterparts, but county dispatchers routinely provide service for multiple agencies such as the state police and municipals too small to staff their own communications division (Clark, 1997).

This discrepancy between county and municipality dispatch centers could be addressed in a more thorough study of communications. Clark fails to describe in more detail the types of stress reported in his sample. Is the stress found here related to the job (intrinsic) or are other agency factors increasing the anxiety of the department (extrinsic)? If the stress is extrinsic, do both groups experience the same level and response to the stress or does one group cope better than the other?

A Summary of the Stress Studies

Although a great number of stress studies exist, few specifically address the criminal justice field. It is more rare to find a stress study specific to the police communications field. Some studies focusing on police work or other criminal justice professions may be useful in shedding light on the communications arena. Similarities between the studies mentioned here could possibly be found in other dispatch specific research. For that reason, we should review what the stress studies here have found.

One of the most useful aspects of these studies has been the identification of stress causing characteristics. That is to say, what aspects are leading to stress or to a higher reporting of stress? A great deal of research has identified certain characteristics common to high stress reporting. Violanti, who believed strongly that organizational hierarchy impacted stress, initially introduced criminal justice to the stress research arena. He felt that the stringent, non-personal environment in law enforcement hierarchical organizations promoted other stress-inducing characteristics. Subsequent research studies have supported similar findings (Violanti & Marshall, 1983; Burke, 1995; Shenkman, 1986; Mallory & Mays, 1984; Doerner, 1987; Patterson, 1992; Clark, 1997; Brooks & Piquero, 1998). The lower prestige within the department results in greater feelings of stress (Violanti & Marshall, 1983; Clark, 1997; Doerner, 1987; Mallory & Mays, 1984). Because of their status within their organization, these employees feel powerless to impact change (Violanti & Marshall, 1983; Shenkman, 1986; Doerner, 1987; Brooks & Piquero, 1998).

Other research studies have investigated deeper into the specific stress-causing agents. The list is substantial and not all agencies experience each item. It is most probable that agencies experience a majority of the items, only in varying degrees. These characteristics include: depersonalization, contact with the misery of others, handling suicidal persons, handling mentally ill persons, facing death, dealing with irate or hysterical individuals, improper or inadequate training, feelings of physical confinement in the workplace, disrespected by peers

or coworkers, insufficient manpower, inadequate support from supervisors, lack of professional advancement, inadequate salary and/or benefits, poor equipment, conflicting policies leading to role conflict, poor working environment such as lighting and ergonomics, shift work, exposure to negative attitudes from the public, lack of interdepartmental communication, lack of personal growth opportunities, racial and political pressures, and constant demands of instant and flawless decision-making (Patterson, 1992; Burke, 1995; Mallory & Mays, 1984; Clark, 1997; Violanti & Marshall, 1983; Terry, 1985; Sewell & Crew, 1984; Pendergrass & Ostrove, 1984; White et al., 1985; Sigler & Wilson, 1988; Holt, 1997).

While these characteristics are all too common in the dispatch environment, the dispatchers themselves generate additional stressors. The last characteristic listed above, constant demands of instant and flawless decision-making, is a good example of a dispatcher-generated stressor. The agency may demand that dispatchers make good decisions and quickly, but the dispatchers take this concept to the next level. They often demand of each other perfect, emotionless, and rapid execution of work duties. This self-imposed challenge in the workplace can place additional stress on the communications employees (Doerner, 1987; Violanti & Marshall, 1983; Holt, 1997).

Holt and others go further to state that criminal justice professionals do not necessarily view such a characteristic in a negative manner (Holt, 1997; Violanti & Marshall, 1983; Terry, 1985). Holt believes rather that dispatchers admire

coworkers who can respond to critical incidents quickly, without emotion and without making mistakes. This may be one of the few stressful characteristics of communications viewed by the dispatchers in a positive manner rather than a negative one. And this concept may result in curious findings considering the long-standing notion that as stress increases the effect will be a lower reported level of job satisfaction.

Once we have identified the characteristics that can lead to reporting high levels of stress we should consider what the stress is doing to the employee. We must now identify the physical and emotional consequences of perceived stress. A handful of the studies listed here went on to address this question. Some researchers found that stress resulted in physiological consequences such as exhaustion, headache, disrupted sleep, irritability, sexual dysfunction, anxiety, and altered appetite (Sewell & Crew, 1984; Sigler & Wilson, 1988; White et al., 1985; Pendergrass & Ostrove, 1984). Other research discussed the emotional and psychological consequences of stressful living. Burnout and cynicism were the most popular results of stress in the criminal justice field (Sigler & Wilson, 1988; White et al., 1985; Pendergrass & Ostrove, 1984; Violanti & Marshall, 1983; Doerner, 1987; Holt, 1997).

Other common curiosities for many researchers deal with how gender and age impact reported stress. Several of the researchers here found a disparity in gender when comparing law enforcement to dispatchers or other professions (Doerner, 1987; Clark, 1997; Sigler & Wilson, 1988; Pendergrass & Ostrove,

1984). Overwhelmingly police officers tend to be male, while comparison groups and communications personnel are typically female (Doerner, 1987; Clark, 1997; Sigler & Wilson, 1988; Pendergrass & Ostrove, 1984). Age discrepancies were also found, however they were less frequently mentioned. These inconsistencies indicate that the female comparison groups tended to be older on average and also reported varying responses to a stressful environment (Clark, 1997; Pendergrass & Ostrove, 1984). Some research indicates that age may have an obscure relationship to cynicism and coping techniques (Pendergrass & Ostrove, 1984; Brooks & Piquero, 1998).

None of the studies addressing stress directly deal with the impact stress has on job migration. If the researchers previously discussed have any opinions regarding stress and job switching they do not take the time to discuss it in their work. Since the desire to leave one job for another may have more to do with the satisfaction of work rather than the pressures of work, looking into job satisfaction studies may provide more insight into this phenomenon.

The Job Satisfaction Studies

Studies in job satisfaction are popular, however not as popular as stress research. Several studies could be found dealing with job satisfaction as it relates to the use of community policing programs. These studies were not included because, in the opinion of this author, community-policing programs have little impact on the overall working aspects of dispatch. Customer service in communications is not a new concept. The techniques of community policing do

not reflect great changes in the day-to-day operations of the communications division.

Research studies focusing on job satisfaction are similar to studies of stress in that they fail to address the police communications aspect. They primarily focus on the same variables addressed in stress research: age, gender, ethnicity, level of education, etc. Some researchers began to look deeper into other aspects such as agency size, rank of the respondent, and education requirements. These studies serve as an introduction to the concept of job satisfaction and how it relates to policing in general.

A leader in the area of this research is Dantzker. Referrals to his research can be found in numerous other studies. His 1994 article, "Identifying determinants of job satisfaction among police officers" took the exploration of job satisfaction deeper into the policing environment. He indicates the reason for his research is to address a void in academia regarding job satisfaction. Dantzker points out that social scientists have shown considerable interest in job satisfaction for many industries, however they have failed to study job satisfaction in policing. The studies Dantzker found dealt primarily with reported job satisfaction as it relates to job stress (Dantzker, 1994).

Dantzker accepted six variables tested in previous research to apply to the policing field. These six variables are age, gender, ethnicity, rank, years of service, and education (Dantzker, 1994). He also added four variables: required level of education, department size, change, and offer (Dantzker, 1994).

Dantzker's "change" was addressed by asking questions such as "If you knew when you started this job what you know now, would you have taken the job?" He also tested "offer" with similar questions such as "If you could leave your current agency for another agency and not lose pay or benefits would you?" His reason for adding change and offer was to reflect any relationship between job satisfaction overall and job satisfaction with the current environment. In other words, do some officers love police work nevertheless they are currently reporting low job satisfaction because of the agency environment?

Dantzker mentions the three most popular scales for job satisfaction: Job Descriptive Index, Minnesota Satisfaction Questionnaire, and Faces Scale (Dantzker, 1994). He recognizes the value of each scale, but suspects that none accurately addresses the special issues involved in policing. Dantzker developed his own scale with 23 items in Likert-style format (Dantzker, 1993). He distributed his survey to nine agencies from four states. The agencies varied in size and education requirements. The total number of officers available for the sample was 3131. The total return was 48% or 1514 (Dantzker, 1994).

The findings were similar to previous research. The addition of change and offer demonstrated interesting results. There was a significant negative correlation between these variables and job satisfaction. Those who reported the highest probability that they would leave the agency or pursue other career paths also reported the lowest levels of satisfaction with the current top administrators of their agency.

Dantzker's work is important for criminologists looking to address job satisfaction and police work. Many, if not most, individuals who seek a profession in police work do not follow such a position for the monetary rewards. Other professions, which are driven by monetary goals, attract a different type of individual. Because of goal differences between police work and other professions a different set of variables is warranted. His new variable list is more accurately tuned to the unique aspects of police work. His work directs future studies to take new variables into consideration.

In 1996, Dantzker continued his work in this area with the article "The perceived levels of job satisfaction among police officers: A descriptive review." He scorns traditional social scientists again for not paying closer attention to police work and job satisfaction. Dantzker found that of the 1007 published studies regarding job satisfaction since 1974, only 34 are related to police work (Dantzker, 1996). None of those studies dealt specifically with police dispatch or communications.

Dantzker points out that job satisfaction can have a significant impact on other aspects of the organization such as employee turnover, absenteeism, productivity, and stress (Dantzker, 1996). He takes the lack of previous studies as an opportunity to shine light further into the police field. This article focuses on the perceptions of police officers as to their satisfaction with several job-related facets (Dantzker, 1996). Dantzker mentions that other job satisfaction

studies address the topic as facet-specific, facet-free, or a combination of the two. Dantzker chose the combination of the two for his study.

After distributing his survey, Dantzker had a response rate of 57%. When no distinctions regarding specific police duties or work are made, the responses indicate that the officers are relatively happy with their jobs (Dantzker, 1996). Yet the facet-specific items showed contradictory responses. Of the 23 facet-specific items only seven averaged a response that indicates satisfaction. Because of the contradictions found between facet-free and facet-specific, Dantzker indicates that the level of job satisfaction is not as strong as it appears.

As in previous studies, Dantzker found that officers are more agreeable than disagreeable to changing departments. He feels this illustrates satisfaction with being a police officer, but being agreeable to leaving policing for a better paying job (Dantzker, 1996). He concludes that most officers are generally satisfied with being police officers. However, he points out that when the facets of the job are studied individually, the reported job satisfaction decreases. Many of the facets studied by Dantzker are controlled by the police organization. If the organization found a problem with a specific facet, it could be changed to improve satisfaction. Dantzker mentions that since job satisfaction can affect the performance of the officer (thereby affecting the agency's overall effectiveness), agencies should put more focus on keeping their officers happy. Due to this possibility and the ever-changing environment of police work, additional studies regarding job satisfaction within the police department are needed. Research

studies addressing job satisfaction in the communications realm of the department should also prove highly useful.

In 1997, a study from Florida addressed job satisfaction as it relates to stress and probation officer's inclination to quit. This study conducted by Simmons, Cochran, and Blount was limited in scope by the governing state correctional facilities. Even with the limitations this study provides useful information. This study identified problems with job satisfaction within the probation field that are very similar to work conditions within the dispatch field.

The Florida research team was interested in many variables. They wanted to address job stress, how it relates to reported job satisfaction, and how the two impact an employee's desire to quit an organization. They also looked into other variables such as demographic information and their influences on stress and job satisfaction. The Florida Department of Corrections (FDOC) prevented the researchers from asking many of their stress and volunteer turnover questions. The FDOC also limited the potential sample size to a specific 14 county area in central Florida (Simmons et al., 1997).

The results of their study found the primary obstacles to satisfied employees were excessive work, inadequate salary, inadequate administrative support, and lack of promotional opportunities (Simmons et al., 1997). The strongest contributor to a desire to quit dealt with the inadequate salary issue. Almost 80% of the respondents indicated that low salary resulted in a decreased level of job satisfaction. Others reported that excessive paperwork and highly

restrictive procedures and policies contribute to their low job satisfaction (Simmons et al., 1997). Almost three-quarter of the respondents reported feelings of inadequate support from supervisors (Simmons et al., 1997). Almost 90% of the respondents disliked their current supervisor and 81% felt their supervisors were incompetent (Simmons et al., 1997). Overall, the problems identified by this study indicate that major sources of dissatisfaction stem from organizational factors. Several of these issues can also be found in the dispatch center.

This study was important because it was one of the first investigations into the combined effects of stress and job satisfaction in the probation field. The Simmons group addressed work environment aspects that also appear in the communications field. It would be interesting to see if reports of dissatisfaction are as high with communications personnel as it is reported with the probation employees.

Another research group, Zhao, Thurman, and He, addressed job satisfaction in 1999 with their article "Sources of Job Satisfaction among police officers: a test of demographic and work environment models." They mention that although thousands of articles and studies can be found related to job satisfaction only a minor portion of these deal with the criminal justice field (Zhao et al., 1999). One purpose for their article is to bring attention to previous studies regarding job satisfaction and criminal justice. They also use this opportunity to

conduct their own investigation into the current models used to study job satisfaction.

Their article reviews previous literature related to their interests. From these previous studies they point out four common demographic variables that have gained the interest of researchers. These variables include: officer education level, ethnicity, gender, and years of service (Zhao et al., 1999).

Zhao and his colleagues discuss how many researchers who address job satisfaction in policing fail to address the variables dealing with the officer's work environment. These variables include managerial support, equipment dependability, working varying shifts, etc (Zhao et al., 1999). However, they found most studies focus on attitudes about the police role and community support (Zhao et al., 1999). Zhao's group suggests that studies focusing on the police work environment might be worthwhile.

Zhao's group begins by discussing previous researchers and their contributions to the topic of job satisfaction and policing. One researcher mentioned is Herzberg. Herzberg believed that a great deal of satisfaction in the workplace is derived directly from the tasks completed (Zhao et al., 1999). He identified a number of sources of job satisfaction within the work environment. These include: the importance of the work itself, the responsibility one has while doing the work, and the recognition received from doing one's work (Zhao et al., 1999). Herzberg found in his own research that low job satisfaction could result from strict policies, overemphasis on rules, inadequate working conditions, and

poor interpersonal relationships (Zhao et al., 1999). Some of these characteristics are unavoidable in police communications such as strict policies and a preoccupation with adherence to rules. These variables represent intrinsic stressors in the dispatch center. The other variables of inadequate working conditions and poor interpersonal relationships are more extrinsic in nature. The management of a communications center may have more control over the extent of these problems.

Keeping the work of previous studies in mind, Zhao and his colleagues conducted their own research study to compare demographics to work environment as they relate to job satisfaction. Their study involved surveying police officers from the Spokane, Washington Police Department (Zhao et al., 1999). According to their findings, Zhao's group found that job satisfaction is more closely related to an employee's work environment than demographics. Direct relationships with job satisfaction could be found regarding: the perception of importance and significance of the job, the recognition they receive, their autonomy, and the capability to do their work (Zhao et al., 1999). Identifying relationships between these factors and job satisfaction in police communications could be very useful for management. Many of these work environment factors are within the control of the organization. Improving these factors could improve job satisfaction not only for dispatchers, but for other police employees as well.

Jihong Zhao joined with another researcher, Reiner in 1999 to conduct a similar study focusing on job satisfaction. Their article "The Determinants of Job

Satisfaction among United States Air Force Security Police” addressed job satisfaction in an environment saturated with strict hierarchal design (Reiner & Zhao, 1999). This research also focused on comparing demographics with work environment relationships (Reiner & Zhao, 1999).

In this study a survey was given to the military police of a Nebraska airbase. Almost 75% of the surveys were returned (Reiner & Zhao, 1999). In their study, Reiner and Zhao compared demographics and work environment as they related to three variables. These variables were: satisfaction with one’s job, satisfaction with one’s supervisor, and satisfaction with one’s co-workers (Reiner & Zhao, 1999). Satisfaction with one’s supervisor had a stronger relationship with job satisfaction than satisfaction with one’s job (Reiner & Zhao, 1999). Reiner and Zhao also found that those who reported performing a wide variety of tasks tended to also demonstrate greater satisfaction with their job (Reiner & Zhao, 1999). Finding similar results among dispatchers and their managers could further support this research.

Cochran and Blount joined with two other researchers in 2000 to conduct another study of job satisfaction in the criminal justice field. Led by Byrd and Silverman they produced, “Behind Bars: An Assessment of the Effects of Job Satisfaction, Job-Related Stress, and Anxiety on Jail Employees’ Inclinations to Quit.” This study was very similar to the probation officer study. The focus of interest involves the relationship stress and job satisfaction has on detention officers’ desire to quit (Byrd et al., 2000).

Due to the similarities between the detention field and the communications field, this is a very important study. Even though their duties are different, both fields have similar problems: high turnover, lenient hiring requirements, poor training, highly stressful working environments, and sometimes an ineffectual administration. Detention encounters the same spiral of decay when experiencing a high turnover period. The level of work does not decrease, however the level of resources to complete the tasks is further strained when employees quit. This results in lower morale for those still working and ultimately increased risk of turnover (Byrd et al., 2000).

The subject group for this study consists of detention officers from a large jail facility in west-central Florida (Byrd et al., 2000). Of the 412 eligible recipients of the survey, 352 returned usable responses (Byrd et al., 2000). The subjects were primarily middle-aged, white males (Byrd et al., 2000). More than one rank of detention officer was included in the research. The detention deputy is the line officer responsible for the basic care and supervision of the inmates. Supervisors such as detention corporals and sergeants were also surveyed (Byrd et al., 2000).

The survey instrument breaks down into three parts. Job satisfaction was measured using a 36-item scale (Byrd et al., 2000). Job-related stress was addressed using a 27-item scale adopted and modified from the Police Stress Survey by the 1981 work of Spielberger (Byrd et al., 2000). Another Spielberger

instrument was used to develop the 20-item anxiety measurement scale (Byrd et al., 2000).

In their findings the researchers found many interesting results. They found detention employees had a strong desire to leave their current positions, but lower desires to leave their current employer (Byrd et al., 2000). The officers aspired to continue working for the agency, only in another capacity such as patrol officer (Byrd et al., 2000). Some of the causes for low job satisfaction are all too familiar: dealing with aggressive individuals, insufficient manpower, equipment problems, and lack of support from the agency (Byrd et al., 2000). Individuals who reported moderate to high levels of satisfaction with their job nevertheless reported high levels of dissatisfaction with a select few items related to their work environment. These items include: lack of promotion opportunities, insufficient salaries/raises, insufficient benefits, and feelings that their hard work goes unnoticed by the administration (Byrd et al., 2000).

Job satisfaction and stress relationships were typical. As stress increased the level of job satisfaction decreased and the result was a higher desire to quit (Byrd et al., 2000). Those with the lowest reported job satisfaction also reported overwhelmingly the highest desire to quit (Byrd et al., 2000). Those least satisfied in their work have been at their positions for the longest duration (Byrd et al., 2000). Perhaps these individuals started their employment unaware of the actual stress they would endure or with dreams of using the position as a

stepping-stone to another position (such as a patrol officer). This attitude is common in the communications field as well.

This Florida group ended the publication by making a few suggestions to improve job satisfaction in detention facilities. They suggest that the administration allow line crews to more actively participate in day-to-day problem solving and decision-making. They also suggest that more opportunities for personal and professional growth be provided. Even if the detention officer never has an opportunity to promote, the officer should at least be given an opportunity to improve as a detention professional (Byrd et al., 2000). It was also suggested that routine reviews of organizational policies and procedures should be conducted. During these reviews informal and formal procedures should be addressed with the input of the line personnel (Byrd et al., 2000). Even if massive changes in the environment cannot be made, the line personnel should feel that they have a voice in the minor changes (Byrd et al., 2000).

Dispatch Specific Job Satisfaction Studies

Unfortunately, no previous research could be found related specifically to job satisfaction and the 9-1-1 communications field. It is apparent when searching job stress and communications in criminal justice search engines that research in this area is virtually non-existent. Perhaps future research in this area could change this disparity in job satisfaction research and communications.

A Summary of the Job Satisfaction Studies

Many studies investigating job satisfaction and criminal justice professions focused on identifying characteristics or variables that impacted the employee's reported job satisfaction. Dantzker was a pioneer in this arena of research. He and others explored the relationship between age, gender, ethnicity, rank, years of service, education, and department size with job satisfaction (Dantzker, 1994; Simmons et al., 1997; Zhao et al., 1999, Dantzker, 1996; Reiner & Zhao, 1999). Clear and significant relationships between many of these variables and job satisfaction were difficult to find.

Relationships were identified between hierarchical variables such as agency size and stringent rules and job satisfaction (Reiner & Zhao, 1999; Simmons et al., 1997; Zhao et al., 1999; Byrd et al., 2000). Other variables such as excessive workload, inadequate salary, lack of promotional opportunities, and poor training influenced job satisfaction reports (Simmons et al., 1997; Zhao et al., 1999; Dantzker, 1996; Byrd et al., 2000). These findings left several researchers with the opinion those aspects under the control of the employer impact the job satisfaction level of the employee (Simmons et al., 1997; Dantzker 1994; Dantzker, 1996; Zhao et al., 1999; Byrd et al., 2000).

Only two of the studies listed here specifically looked at the relationship between job satisfaction and reported stress. These studies found that high levels of reported stress typically coincided with low levels of job satisfaction (Byrd et al., 2000; Simmons et al., 1997). Both research groups were able to identify specific stressful variables that negatively impacted job satisfaction such

as low pay, higher turnover, poor training, and inadequate equipment (Simmons et al., 1997; Byrd et al., 2000).

Additionally, researchers identified characteristics that positively impact job satisfaction. These aspects include: variety of job tasks, the perception of responsibility associated with the work, and satisfaction with the supervisor (Reiner & Zhao, 1999; Zhao et al., 1999). The researchers exploring the positive impacts on job satisfaction agree that these variables are often within the control of management (Reiner & Zhao, 1999; Zhao et al., 1999).

The Overall Importance of These Works

For several decades, the interest in stress and job satisfaction has slowly grown into a rush of research. Since the 1980s this interest has splintered into more specialized investigations of the workplace. Researchers have tapped into the realm of criminal justice. This is an attempt to identify and reduce aspects of criminal justice professions that result in stress and affect job satisfaction. Each of these studies demonstrates importance for several different reasons. Most of the studies shed light into areas of research previously overlooked.

Stress studies have an overwhelming lead in the research field over job satisfaction investigations. This direction of study primarily began with John Violanti and his concepts regarding police work. Violanti's views of hierarchical work environments and depersonalization directed his studies into the police field. Other researchers have focused on agency size and hierarchical work environments. Large agencies and those with especially suffocating rules seem to facilitate stressful environments (Brooks and Piquero, 1998; Mallory and Mays,

1984; Zhao et al., 1999; Reiner and Zhao, 1999). The most recent research has indicated that stressful work conditions can negatively impact job satisfaction (Simmons et al., 1997; Byrd et al., 1999).

In a work environment where burnout and high turnover can be notoriously destructive, communications managers would be foolish to ignore the effects of stress and job satisfaction. From previous studies, several characteristics have been identified as related to high stress or low job satisfaction. These characteristics include: lack of administration support, shift work, negative attitudes from fellow officers or citizens, contact with the misery of others, dealing with death, poor equipment, inadequate salary, limited promotional opportunities, and confining work environment (Mallory and Mays, 1984; Terry, 1985; White et al., 1985; Pendergrass and Ostrove, 1984; Patterson, 1992; Sigler and Wilson, 1988; Holt, 1997; Doerner, 1987; Burke, 1995; Simmons et al., 1997; Zhao et al., 1999; Byrd et al., 2000). Not all agencies demonstrate the same magnitude or frequency of these problems. However it is the opinion of this author that a significant portion of communications centers are victims of the listed obstacles.

If the communications field is infected with characteristics that make it prone to a stressful work environment, research should focus on identifying these characteristics and finding their solutions. Are the problems found in corrections and probation/parole as serious in communications or could they be even more prominent? Does the communications field demonstrate other similarities with

criminal justice professions in dealing with stress and reported job satisfaction? These are questions that future researchers should consider addressing.

Other researchers took more unique approaches to discussing stress in criminal justice. Pendergrass and Ostrove may have accidentally explained why more females can be found in dispatch than on patrol. Did gender stereotyping serve as a magnet for women from patrol duties to the less physical demands of dispatch? Pendergrass and Ostrove's civilian category (made up primarily of women) reported higher physiological consequences to stress. Could this be caused by a weaker gender that simply cannot cope with stressful environments or is it possible that the civilians have found themselves working in a more stressful office space than their patrol counterparts? Perhaps the administration has provided solutions to stressors found in patrol and that have not been as affective in other divisions. Additional research could address this potential phenomenon.

Patterson's research was interesting because it looked at years of service and reported stress. The employees with the highest reported stress were those with moderate years of service. These disenchanted employees not only reported the highest levels of stress, but they were also more likely to quit their jobs than the newcomers and old timers. This is an interesting finding considering the Florida research projects of the late 1990s. Both research teams led by Simmons and Byrd found that higher levels of stress resulted in lower levels of job satisfaction that further led to a greater likelihood of wanting to quit.

Dantzker's introduction of change and offer adds a little spice to the research mix. His work indicated that employees in criminal justice sometimes find themselves with an inner conflict. They like the work they do, but they dislike their current employer, policies, or position with the agency. This type of conflict has led to a phenomenon in police communications. It is the opinion of this author, that a population of dispatchers tends to migrate. They enjoy their jobs. They feed off helping others. Due to a perception of inter-agency problems, they find themselves drifting from one agency to another. They may stay at one agency for only a period of months or for a few years. However, once they reach Patterson's disenchantment period they tend to leave their employer for greener pastures. Then within a short time they realize the new agency is not that different from the older agency. This research will attempt to introduce and identify the severity of this problem in the Dallas/Fort Worth area.

Some research attempts have been made to compare policing or dispatching to other industries. Sigler and Wilson compared police officers to teachers and their work environments. Their research unintentionally identified a few similarities between teachers and dispatchers. The gender discrepancy found that more males were found in patrol and more females found in teaching. Females often outnumber males in dispatch. Patrol officers also retired earlier overall. Dispatchers can be found working their consoles well into their sixties, while this occurrence is less frequent with field patrol personnel.

Sewell and Crew introduced the similarities between communications and the air traffic control field. Both fields are burdened with high workloads and high

accuracy expectations. Although most of their report served as an introduction to the dispatch profession, they found similar levels of reported stress between the two groups. Their work provides a stepping-stone for future research in police communications.

A few researchers use their work to describe more intimately the aspects of policing which lead to stressful employees. Studies by Terry and the White et al. research group discussed in-depth the stress inducing problems found in policing. Terry mentions several stressful policing duties while White and colleagues look more closely at day-to-day job tasks in policing that impact stress levels. The respondents reporting the highest levels of physiological consequences to stress were those that suffered from problems such as: lack of interoffice support, poor equipment, and inadequate supervision. These are also common in the communications field.

Doerner, Holt, and Burke focus on describing stress in the dispatch center. Holt takes a more casual approach to describing dispatch-specific stressors and consequences of stress. He forms his list from personal experience, providing a close-up view of the lives of communications officers. He not only identifies the sources of stress in communications, but also provides suggestions for relieving these troubling aspects. Doerner describes in more detail the stress-inducing aspects of dispatch and how exactly they lead to feelings of anxiety. He mentions the potentially damaging environment that can occur when citizens and fellow officers take out frustrations on a dispatch center. Burke's study found that stress in dispatch was most strongly affected by low

status within the department, responsibility to others, and absence of formal training. This hazardous mix leaves the communications personnel with an enormous amount of anxiety and no clear methods of relieving the problem. He also suggested that future research focus on the relationship between stress and job satisfaction in the communications field.

Thesis research conducted by Clark identified several demographic trends in dispatch. Gender differences between patrol and dispatch were prominent, with most females in the communications sector. The older dispatchers, primarily found in his county agencies, also reported increased amounts of stress. If this group has reached the old-timer period discussed by Patterson and Violanti then Clark's findings would be in conflict with their research. If this group falls into the disenchanting period, then the findings support the previous research. Future research should attempt to reproduce the previous police postulations in the communications field.

With all of the interest pouring into the police field and stress, it was only a matter of time before the concept of job satisfaction would gain attention. As Burke suggested in his research, a void in research can be found in relating stress and job satisfaction and their combined consequences for criminal justice employees. One of the first researchers to tackle these subjects was Dantzker. He looked at employee loyalty by introducing the variables offer and change. Used along with his own modified job satisfaction scale, Dantzker confirmed an understandable relationship between stress and job satisfaction. As stress increased, job satisfaction decreased. And as job satisfaction decreases, the

likelihood of quitting the job increased. Deductive reasoning concludes that a work environment with elevated levels of stress can lead to an increased desire to quit.

Two research groups would later attempt to apply this idea to corrections and probation/parole fields. The Simmons group successfully supported this postulation in their research. Even though their research questions were significantly limited by the state governing body, they found organizational stressors as the most influential in the decision to leave an agency. These stressors, for the most part controlled by their employers, negatively impacted the employee's level of job satisfaction more than any other aspects of the employee's career. The research group led by Byrd gave similar results. Their investigation in corrections, addressed the relationship between stress and job satisfaction for environments similar to dispatch centers. Their results demonstrated a strong inverse relationship between job stress and satisfaction. They also mentioned findings that could exist in the communications field. It is the opinion of this author that a relationship may exist between stress and job satisfaction in communications, however, it may not always be a strong inverse relationship.

The previous research studies presented here can provide a great wealth of information regarding stress in policing and the importance of job satisfaction. While the investigations look closely at the patrol officer and other criminal justice professions, a dearth of interest has been given to the police communications field. A few investigators have recognized this unfortunate truth and have

attempted to scratch the surface of communications research. Previous studies provide a base of questions or problems that could also be found in police communications. Some studies only briefly describe the problems, while others provide lengthy definitions and examples of their effects on the employee.

Many problems found in patrol are also prevalent in corrections and probation/parole. It is not presumptuous to assume that similar problems could be found in communications. This information is a valuable tool when considering dispatch studies. Finding research that indicates poor equipment as a reported stressful work condition for patrol and probation/parole officers creates a curiosity to attempt to repeat this finding in communications. The previous studies provide a valuable launch pad for a study investigating stress and job satisfaction among police dispatchers.

While these research projects are useful they can also be very disappointing. The researchers go to some length discussing aspects of police work that sometimes make the occupation difficult. However they fail to recognize police dispatch as a career dealing with the exact same problems. Just as officers may deal with finding a deceased person, the dispatcher could deal with the emotional turmoil of speaking to an individual immediately after finding a deceased loved one. Officers may encounter hysterical or irate citizens in the field, but the unseen communications operator may prove an easier target for irate individuals to vent their frustrations.

Police communications is an area ripe for investigation. In the past few decades our society has become transformed by technology. This has forever

changed the career field of police dispatcher. Communications operators occupy a crucial link in the criminal justice process. What aspects, if any, are the most stressful aspects of communications? Are intrinsic aspects such as dealing with emergency situations more damaging to employees than extrinsic aspects or can problems such as low salary, a problem somewhat within the scope of management, have a greater impact on overall job satisfaction. What effect does gender have on job satisfaction or stress? Do females last longer in dispatch? Are they more prevalent than males? Do they report higher levels of stress? Is age a significant factor? If an agency requires a college degree or peace officer certificate to become a manager, do those agencies demonstrate lower stress levels and greater job satisfaction? Could the higher education requirement impact the overall division? Does a true migration phenomenon exist in police communications? Is there a portion of communications professionals drifting between employers because of low job satisfaction? There are so many questions that need addressing, even if only in an exploratory fashion. The research of this author may not directly answer all of these questions. However, this study and others like it can potentially open a vault of future research projects. As with any research arena, an introduction is needed. This research can serve as an exploration into an environment previously overlooked and misunderstood.

CHAPTER 3

METHODOLOGY

The Focus of the Research

As mentioned earlier, one research question and three hypotheses were addressed in this research project. The research question is actually quite simple, what are the reported levels of job satisfaction and job stress among agencies surveyed in the Dallas/Fort Worth area? The first hypothesis is that “No relationship exists between reported employee job satisfaction and stress in the 9-1-1 communications environment.” The second hypothesis is that “No independent variables exist within the 9-1-1 communications population that impact reported stress or job satisfaction.” The last hypothesis considered is that “Reported levels of stress or job satisfaction with the 9-1-1 communications environment have no relationship with an individual’s reported number of job changes.” The remainder of this chapter describes exactly how this study was conducted.

Selecting the Sample

Before the actual survey instrument is discussed in length, the process for selecting the sample should be addressed. An original population is drawn using information from the Texas Law Enforcement Telecommunications System (TLETS). TLETS is a computer resource available to criminal justice entities to assist in conducting day-to-day law enforcement operations. This system

provides users with information on Texas driver's license and identification cards. The state's motor vehicle registration records are also available through this system. Most importantly, this system holds records on stolen, felony, and warrant entries. If an officer in Texas needs to check a license plate to see if it is stolen, the information is requested through TLETS. Qualified users can also run checks on individuals and obtain driver's license or identification card information, active warrant records, computerized criminal histories, protective order files, and concealed handgun licenses. Both printers and computers are considered agency terminals of TLETS information.

TLETS users enjoy a variety of levels of access. The type of user can vary depending on their needs. Court agencies typically do not have 24-hour access since they do not work 24 hours a day. The same is true for probation/parole officers. Some police departments enjoy access during the day, but due to their size, have no need for 24-hour access. These agencies are typically smaller and may obtain TLETS information after hours from another source such as a county dispatch.

An example of one communications method is the dispatching arrangement in Denton County, Texas. The Denton County Communications Center is responsible for dispatching over a dozen municipal agencies that are too small or cannot afford their own center. This center is also responsible for over a dozen volunteer fire departments, paramedic units, and state officers such as state troopers and park rangers. Other entities such as round-the-clock police

agencies, sheriff's departments, and correctional facilities have 24-hour access to TLETS. For the purpose of this research, only those agencies listing a 24-hour terminal access with TLETS are included in the original population. Also due to time and expense constraints, this study does not include county agencies.

This exclusion serves more than the purpose of saving time. County agencies more often than municipalities tend to provide a greater variety of services. This means a dispatcher in a municipality may dispatch police, fire, and emergency medical services (EMS) whereas the county dispatcher handles these tasks for numerous agencies while also completing tasks for state and county departments such as the medical examiner, the corps of engineers, and water authority agents. This mélange of duties is great enough to result in a significant difference between municipal and county dispatchers. To keep things simpler, only the municipal agencies are used in this study.

The 24-hour access requirement ensures several things. First it eliminates agencies that have administrative access during the day, but not after hours. If an agency is not available after hours, then it is safe to imagine the agency does not answer 9-1-1 calls at that office. Since 9-1-1 communication centers are the focus of this research, the other agencies are excluded. These requirements exclude almost every other law enforcement entity that has access to TLETS but does not operate its own 9-1-1 communications center.

Another useful feature of TLETS is the ability to send electronic messages from one terminal or agency to another. Every TLETS terminal (computer or printer) is given a unique electronic address called a mnemonic. This is a three or four character address. A mnemonic works in the same manner as an email address. Every terminal uses the mnemonic address to send and receive information via the TLETS system.

The main printer terminal within an agency is assigned the main printer mnemonic. In the routine activities of a law enforcement agency it may become necessary to send a teletype to a group of agencies because of their geographical location. An example could be an overdue motorist teletype sent to all terminals along Interstate 35. Using the electronic address IH35 the originating agency can quickly notify all of the terminals between Laredo and Gainesville, Texas that a motorist driving this highway has not arrived to a destination as expected. This allows the destination agencies to notify their patrol officers to be aware of the driver. If located, the person reporting the overdue motorist can be notified that the loved one has been found.

The teletype group address of DFW has been used in this research. The DFW mnemonic address routes the message to all main TLETS printer terminals within 15 counties that are in the immediate Dallas/Fort Worth area. These counties are Collin, Dallas, Denton, Ellis, Hood, Hunt, Jack, Johnson, Kaufman, Navarro, Palo Pinto Parker, Rockwall, Tarrant, and Wise. The original population considered in this study has been derived from a list of all police

terminals within this DFW group. Within this list exist a minority of agencies that have a terminal but do not utilize 24-hour access. They are such a minority it was unnecessary to remove them from the population before drawing the survey sample. The procedure for determining the access involves printing an agency detail sheet. This was completed for the agencies randomly selected however the process for finding the infrequent non-24-hour agencies is a waste of valuable time and physical resources. If an agency was up for selection in the final sample and it was determined that the agency was not a 24-hour access agency then that agency was excluded at that time.

Using this list and the previous definition of what agencies will be included, a reduced population was developed. This new list contained all police TLETS terminals that are located in the DFW teletype area (See Appendix 1). This record consists of 85 agencies. From this list, the population is divided into two categories: large departments and small departments. For an agency to qualify as a large department, the communications division must consist of at least 25 telecommunicators. All agencies operating with less than 25 telecommunicators are categorized as small for this study (See Appendix II). The staffing levels have been obtained through each agency's human resource division. A special exception to this requirement deals with the communities of De Soto, Duncanville, and Cedar Hill. These communities have pooled their financial resources into a joint communications effort. Their combined communications center is called Southwest Regional Communications. This center employs

approximately 25 communications personnel. Southwest Regional was included in the large department category and the individual cities it represents were removed from the potential population.

In each category the agencies were listed in alphabetical order. A volunteer was asked to select a number between one and eleven. A second volunteer was asked to select a number between one and 72. And a third volunteer was asked to select a number between one and five. None of the volunteers had knowledge of the purpose for their selections.

The first selection was six. The sixth item in the list is the starting point for selecting a random sample from the large department category. The second selection was 64 and was used as a starting point for selecting a random sample from the small department category. The third volunteer selected three. This number was used as a frequency of selection; every third agency was included in the final sample. Excluding the sixth agency listed in the large department category, every third agency was selected. Excluding the 64th agency listed in the small department category, every third agency was selected. During this process each of the agencies in each category had an equal opportunity for selection. The entire list for each category was exhausted to develop a new eligibility list (See Appendix 3). If an agency eligible for the study decided not to participate, then the next agency on the list was asked to participate.

Due to their size, only two of the large agencies were selected. After two large agencies agreed to participate, the number of potential respondents from

the large department category was determined. The number of potential respondents from the large departments impacts the number of small departments included in the sample. If the two large agencies consisted jointly of one hundred telecommunicators then the small department category would also need to consist of approximately one hundred potential respondents. This means that the number of small departments was not preset.

When an agency was next on the eligibility list, it underwent one final condition inquiry. The agency's type was double-checked using another feature of TLETS. TLETS allows users to obtain mailing and phone number information for any law enforcement agency in the United States. Printing the record for each agency is time-consuming and requires a significant amount of paper. For this reason, the printing of the information files was delayed until this point in drawing the sample.

The TLETS administrators audit all agencies with access to TLETS once every two years. This audit is used to locate possible errors with the agency's use of the system. The agency's information such as mailing address and telephone/fax numbers are also checked to ensure accuracy. If errors are located, the agency makes corrections to the record per TLETS requirements. An agency will list the agency name, mailing address, phone numbers, agency type, and access type in the TLETS database. When an agency became next up on the eligibility list, it was checked for the 24-hour access criteria. If an agency was found to be non-24-hour access, it was skipped and excluded in the study.

In the case of this research, none of the agencies encountered on the list needed to be excluded because of the 24-hour requirement. The addressing and contact number information listed in the TLETS system data was used when distributing the notice of the survey and the survey itself.

The Survey

Using the printed records, each agency was initially contacted by phone. The reason for this action was to obtain one more piece of information not available from TLETS: Who is the Communications Supervisor/Division Head? If this information could not be obtained from the communications center itself, contact was made with the payroll or human resources division of the agency to acquire the needed information. This information was used during the distribution phase of the survey. Whenever possible, most of the surveys were hand-delivered in the hopes of a higher response rate than by mail. Using the manager's name when addressing and delivering the documents was also used to reduce feelings of an impersonal mailing and to assist with any additional contacts that may have been needed later in the project.

An initial document was sent by mail to each of the centers addressed to the division head. This document was used to introduce myself, explain the purpose of the study, and give details about the upcoming survey materials. The need for anonymity in respondents was strongly stressed. The managers were instructed when to expect the survey. An offer for a copy of the final work was made for all agencies participating in the study. This is another attempt to

improve response rate. Some managers may find a study discussing the problems facing communications centers useful during their next budget season.

To identify the surveys individually when they were returned, a distinctive item was written at the top right hand portion of each page. The item consists of eight characters. The first four characters are the agency's main printer mnemonic. Unlike computer terminal mnemonics, the printer mnemonic almost always consists of four characters or digits. The second set of four characters in the item was the numbers assigned to the survey as the data is coded. Example: Azle Police Department's printer mnemonic is AZLP so the third survey from Azle to be coded was labeled AZLP0003.

The survey was divided between two groups: division head/manager and line crew. Any rank personnel between the manager and an entry-level position, such as a shift supervisor, were considered line crew. Each group received a cover sheet. The cover sheet briefly explained the survey and emphasized the requirement for anonymity. On the back of the cover sheet, the demographic data was requested. These questions included ethnicity, gender, age, years as dispatcher, total number of agencies worked for, and years with current agency.

The managers were asked demographic questions about themselves and additional questions about their agency. Questions include population size of jurisdiction and annual salary for an entry-level position. The managers were also asked if rank positions (middle management) exist between them and the entry-level employee. A question concerning the level of education needed was

also asked of the communications manager. Finally, a question regarding the number and type of agencies for which they provide routine services was added.

Line crew coversheets included additional questions as well. The responsibilities of line crew respondents can vary within the agency. Some personnel may only be responsible for phone duties. This means that questions regarding radio issues do not apply to them. To clarify their responsibilities, they were asked three yes/no questions regarding the duties their job involves. These questions are: Do your duties include radio dispatch? Do your duties include answering 9-1-1 emergency phone lines? And do your duties include answering non-emergency phone lines? The line crew coversheet also included a question to determine the education level of the respondent.

The body of the remaining survey consisted of four major sections. The first and third sections are used to measure the reported job satisfaction of the respondent. The second section is used as a whole to measure general job stress and then it is broken down into intrinsic and extrinsic questions. This allows a specific measured response for intrinsic and extrinsic stressors. The fourth and final section of questions is used to measure the reported levels of physical consequences to stress. The remainder of this chapter directly describes each section.

The first section is drawn from Dantzker's 1994 and 1996 studies. In his work, he used facet-free questions to test the respondent's general job

satisfaction. These seven questions and the possible responses are reprinted here with the permission of the author and publication:

- 1) My overall job satisfaction is...
 - a) Not satisfied at all (scored as 1)
 - b) Not too satisfied (scored as 1)
 - c) Somewhat satisfied (scored as 3)
 - d) Very satisfied (scored as 5)
- 2) If I could change police departments without losing seniority I would!
 - a) Strongly disagree (scored as 5)
 - b) Disagree (scored as 3)
 - c) Agree (scored as 1)
 - d) Strongly agree (scored as 1)
- 3) If I received a job offer for a better paying position outside of policing I would immediately accept it!
 - a) Strongly disagree (scored as 5)
 - b) Disagree (scored as 3)
 - c) Agree (scored as 1)
 - d) Strongly agree (scored as 1)
- 4) If you were free to go into any type of job you wanted, what would your choice be?
 - a) Would want the job you have now (scored as 5)
 - b) Would want to retire and not work at all (scored as 1)

- c) Would prefer some other job to the job you have now (scored as 1)
- 5) Knowing what you know now, if you had to decide all over again whether to take the job you now have, what would you decide?
- a) Decide without hesitation to take the same job (scored as 5)
 - b) Have some second thoughts (scored as 3)
 - c) Decide definitely not to take the same job (scored as 1)
- 6) In general how well would you say that your job measures up to the sort of job you wanted when you took it?
- a) Very much like the job I wanted (scored as 5)
 - b) Somewhat like the job I wanted (scored as 3)
 - c) Not very much like the job I wanted (scored as 1)
- 7) If a good friend of your told you they were interested in working in a job like yours for your employer, what would you say to them?
- a) Would strongly recommend it (scored as 5)
 - b) Would have doubts about recommending it (scored as 3)
 - c) Would advise the friend against it (scored as 1)

One of the questions listed above specifically addresses the respondent's perception of the respondent's level of job satisfaction. An additional two items are asked to identify the potential effect of offer and change. These items are also presented in Dantzker's study to determine how inclined the respondent could be to leaving the respondent's current employment. The purpose of these questions is to attempt to determine the degree of loyalty a respondent has

towards their current agency. Respondents who frequently change agencies may respond differently than those who have worked their entire careers with the same department. Each of the responses was used to gauge the overall or general job satisfaction level of each respondent.

The third section dealt with job satisfaction. This section consisted of 21 items adapted and modified from M.L. Dantzker's 1994 study of police officers. Although most items were taken directly from his survey, some items were modified to address communications/dispatch duties as opposed to specific police duties. A five point Likert-scale response is available for each of these items. In his study, Dantzker clearly provides the scoring method he used in his research. This modified version of his items has been scored using the exact same method. The answers available for selection and the related scores are: Not Satisfied at All (scored as 1), Not too Satisfied (scored as 2), Somewhat Satisfied (scored as 3), and Very Satisfied (scored as 5). The questions included in this section are reprinted here with the permission of the author and publication:

- 1) Current retirement program
- 2) Promotional system
- 3) Process and selection for inter-department transfers/vacancies
- 4) Supervisory support/backing
- 5) Availability of your immediate supervisor for "on-call" consultations
- 6) Willingness of your supervisor to help in problem solving and obtaining goals

- 7) Job evaluation/annual review system
- 8) Current appeal and grievance procedures
- 9) Departmental-community relations (the handling of complaints, commendations, etc)
- 10)Current base pay and salary increases
- 11)Current benefits: holidays, personal days, vacation time, etc.
- 12)Current insurance coverage
- 13)Compensation received for overtime, court time, etc
- 14)Current educational incentives
- 15)Availability of in-service training or outside schools
- 16)Current method for filing reports
- 17)Your present assignment
- 18)General job description/duties of your present position
- 19)Department's top administrators
- 20)Education requirements of new recruits
- 21)Quality of equipment (radios, phone systems, CAD) (this question was added for the benefit of addressing a specific communications issue)

The second section is the first part of the survey dealing with stress. For this study, these stress questions are later broken down into two types: intrinsic and extrinsic. In other research studies, the terms intrinsic and extrinsic could have varying definitions. This study uses unique definitions for each of these items. Intrinsic stressors are an expected part of communications. These

stressors can include dealing with hysterical individuals, making decisions which could affect life or death situations, dealing with the pain and grief of another person, etc. Each of these items could be described as part of the job. Extrinsic stressors are somewhat controlled by the administration or management. These stressors can include salary levels, racial and political pressures, equipment problems, and training concerns. If an administrator manipulated an extrinsic stressor it can be reduced or increased depending on the type and severity of the adjustment.

The survey contains forty-four stress-reporting items. For each item the respondent may choose between five possible answers. These Likert-scale answers range from 1 (*never*) to 5 (*all the time*). Most of these questions were taken from the jail employee study led by Byrd in 2000, an adaptation of Spielberg's Police Stress Survey. When examined, Spielberg's survey returned a 97% coefficient alpha reliability for overall reported police stress (Martelli et al., 1989). Questions listed in the appendix of that study have been combined with communications specific items to more accurately address the dispatch environment. These 16 intrinsic questions include topics such as dealing with death and experiencing out-of-control situations. These questions, so specifically tuned to the communications field, were modified from the previous work or created specifically for use in this study. The extrinsic questions are almost entirely taken from the Byrd et al. document. Very few grammatical adjustments were needed for their use in this study. With the

permission of the author and publication, the actual stress related questions and their category (intrinsic or extrinsic) are listed as follows:

- 1) Feeling that you have too little authority to carry out the responsibilities assigned to you (extrinsic)
- 2) Being unclear on just what the scope and responsibilities of your job are (extrinsic)
- 3) Not knowing what opportunities for advancement or promotion exist for you (extrinsic)
- 4) Not knowing what your immediate supervisor thinks of you, how he or she evaluates your performance (extrinsic)
- 5) The fact that you can't get information needed to carry out your job (extrinsic)
- 6) Having to decide things that affect the lives of individuals, people that you know (intrinsic)
- 7) Thinking that the amount of work you have to do may interfere with how well it gets done (extrinsic)
- 8) Feeling that you have to do things on the job that are against your better judgment (extrinsic)
- 9) Feeling that you may not be liked and accepted by the people you work with (extrinsic)
- 10) Feeling unable to influence your immediate supervisor's decisions and action that affect you (extrinsic)
- 11) Not knowing just what the people you work with expect of you (extrinsic)

- 12) Feeling that you have too heavy a work load, one that you can't possibly finish during an ordinary workday (extrinsic)
- 13) Thinking that you'll not be able to satisfy the conflicting demands of various people over you (extrinsic)
- 14) Feeling that you're not fully qualified to handle your job (extrinsic)
- 15) Dealing with aggressive individuals (intrinsic)
- 16) Handling situations that could result in injuries for a coworker (intrinsic)
- 17) Experiencing situations where deadly force could be used (intrinsic)
- 18) Feeling that you have too little authority to carry out the responsibilities assigned to you (extrinsic)
- 19) Having to make decisions that affect the lives of individuals, people that you know (intrinsic)
- 20) Knowing that your actions could save lives or cost others their life (intrinsic)
- 21) Feeling like your supervisor may not support your actions or decisions (extrinsic)
- 22) Feeling like your agency administration would abandon you if your actions resulted in the harm of someone else (extrinsic)
- 23) Fearing that you're not fully qualified/trained to handle your job (extrinsic)
- 24) Feeling like work would be simpler if you had more help (extrinsic)
- 25) Wanting to be able to reach through the phone or radio and provide hands-on assistance (extrinsic – modified for communications)

- 26) Experiencing delays because of poor equipment (extrinsic – modified for communications)
- 27) Feeling racial tension or pressure within the department (extrinsic)
- 28) Feeling racial tension or pressure exists in the community (extrinsic)
- 29) Feeling that political pressure is currently motivating the policies of the department (extrinsic)
- 30) Dealing with a person who is in pain (intrinsic – modified for communications)
- 31) Dealing with a person who is grieving (intrinsic – modified for communications)
- 32) Experiencing disturbing out-of-control events during a phone or radio transmission (intrinsic – modified for communications)
- 33) Feeling that your salary is inadequate (extrinsic)
- 34) Feeling that pay raises are not given fairly (extrinsic)
- 35) Fearing that your medical coverage is inadequate (extrinsic)
- 36) Fearing that your retirement needs are not being met (extrinsic)
- 37) Talking to people while they are experiencing a painful life event or loss (intrinsic – modified for communications)
- 38) Talking to people while they are experiencing life or death emergencies (intrinsic – modified for communications)
- 39) Talking to the elderly while they are experiencing painful life events that they may not completely understand (intrinsic – modified for communications)

- 40) Talking to children while they are experiencing painful life events that they may not completely understand (intrinsic – modified for communications)
- 41) Having an incident end in death, even though you could do nothing to prevent the outcome (intrinsic – modified for communications)
- 42) Having an incident end in death and feeling somewhat responsible (intrinsic)
- 43) Feeling that your job tends to interfere with your family life (extrinsic)
- 44) Feeling tired or ill because of shift changes (extrinsic – modified for communications)

The last section of questions was also extracted directly from the Byrd et al. document. This section consists of 17 True/False questions regarding the physical consequences of stress. This section is used to indicate the level of negative physical consequences related to working in a stressful environment being demonstrated by the respondent. Unfortunately there is no way to determine what is causing the negative reaction to stress. It is possible that aspects of work are the cause for a loss of sleep, but it is also possible that a pending divorce, bankruptcy, or other personal problem could result in sleep interruptions as well. None of the questions in this section were modified in any way. With the permission of the author and publication, the questions and Byrd's method of scoring is listed as follows:

- 1) My job tends to directly affect my health (True=1, False=2)
- 2) I work under a great deal of tension (True=1, False=2)
- 3) I have felt fidgety or nervous as a result of my job (True=1, False=2)

- 4) If I had a different job, my health would probably improve (True=1, False=2)
- 5) Problems associated with my job have kept me awake at night (True=1, False=2)
- 6) I often take my job home with me in the sense that I think about it when doing other things (True=1, False=2)
- 7) I am often bothered by acid indigestion or heartburn (True=1, False=2)
- 8) I sometimes feel weak all over (True=1, False=2)
- 9) I have experienced bouts of excessive hair loss or unexplained bald spots (True=1, False=2)
- 10) I have had trouble getting to sleep or staying awake (True=1, False=2)
- 11) I get irritated or annoyed over the way things are going (True=1, False=2)
- 12) I may now have an ulcer but I am not sure of it (True=1, False=2)
- 13) I would consider myself in good or excellent health (True=2, False=1)
- 14) I would consider myself in fair health (True=2, False=1)
- 15) I do not have very good health (True=1, False=2)
- 16) I wake up with stiffness or aching in joints and muscles (True=1, False=2)
- 17) I seem to tire quickly (True=1, False=2)

The final survey instrument entails three pages. For the managers, the demographics section consists of 18 potential items. The line crew coversheet has ten demographic questions. The remaining pages provide the 89 items addressing job satisfaction and stress in the communications field. The last

portion of the document provided respondents an opportunity to give comments regarding the survey.

Once the surveys were returned, each was labeled by agency mnemonic as detailed earlier in this chapter and coded into a data set on the SPSS system. The SPSS system was used to identify the statistically significant findings and patterns in the responses. Any unusable responses were excluded at this time. No unusable responses were identified using the criteria mentioned earlier in this chapter. This software was also used to identify disparities between varying demographic groups. The statistical discoveries identified with this system have been used to develop the Findings chapter of this study.

Response Rate

Twenty-three agencies (five large and 18 small) in the Dallas/Fort Worth area were approached to participate in the survey project. Heightened security precautions stemming from the September 11th disaster caused many agencies to disregard the request to participate in the project. Gaining access to the communication centers and persuading the managers to participate in the survey was made more difficult because of the new restrictions and agency access precautions. At least two participating agencies expressed an initial concern to the actual purpose of the study and the scope of access needed.

A total of 164 surveys were distributed during the project. Of those, 87 surveys were returned. This resulted in a 53% response rate. This response rate is much higher than originally anticipated. If each of the agencies

approached were included in this figure the response rate would have been drastically lower. The agencies that did elect to participate were the only agencies to actually receive surveys and for the most part they were very excited about the project.

Regarding the Agencies Themselves

A total of ten agencies agreed to participate in the study and completed surveys. Two agencies (Hurst Police Department and Wylie Police Department) did not complete a manager's survey; therefore their agency demographic information is unavailable. The responses from dispatcher surveys submitted by Hurst are included later in this chapter. To protect anonymity, Wylie's single respondent is not specifically discussed in the findings; this respondent's data is included in the overall population findings. Eight of the agencies responding were labeled small for the purpose of this study. These agencies are Westover Hills, Bridgeport, Balch Springs, Hurst, Flower Mound, Lewisville, Wylie, and The Colony. The two large agencies were Irving and Southwest Regional Dispatch. As the tables illustrate, the responding agencies provided interesting results (see Tables 1.1 and 1.2).

CHAPTER 4

FINDINGS REVIEW

Findings Reporting Method

In this chapter the actual findings are discussed in detail. The demographics section provides the chance to compare all of the participating agencies and the vast differences in population and pay scale. The managers are discussed in greater detail, providing a window into who is responsible for the participating agencies. And then the dispatchers' demographics are provided. Since it is a common practice (especially in small agencies) for managers to regularly work a dispatch console the responses from each group were combined into overall population scores (see Table 1.2). All subsequent analysis is based on the combined responses of the managers and dispatchers. The overall population scores are discussed and later compared to the scores of the individual agencies.

The results of the job satisfaction and job stress questions are listed for each agency follow a basic format. First, the scores from Dantzker's seven facet-free job satisfaction questions are provided. Next, the scores for the facet-specific questions are given. The job stress or "bothered by" questions are first provided as a combined score and then they are broken down into the individual category scores (intrinsic, extrinsic, neither or both). And lastly, the reported physical consequences of stress are mentioned.

Demographics

The agencies range in jurisdiction size from a population of 700 to 200,000. Starting pay ranges from \$21,777 to \$30,096 per year. The average starting pay was reported as \$26,770. Half of the agencies responding utilize middle management staff between the line dispatchers and the division manager. Most agencies do not require managers to hold a peace officer's license or have a college degree. All of the agencies participating in the survey project provide dispatch services for police departments. Some also dispatch for at least one fire department or emergency medical services (EMS). None of the agencies participating in the survey project currently dispatches for a sheriff's office, state agency, or federal agency. One agency, Southwest Regional Dispatch, dispatches police, fire, and EMS services for three separate jurisdictions (Desoto, Duncanville, and Cedar Hill).

The Managers

Information was provided for eight of the ten responding agencies regarding their managers. Two of the managers were male, while the other six responding managers were female. All of the managers responding were white. The average age reported was approximately 41-years-old. The years of dispatch experience reported by the managers ranged from zero to 22 years. The average years of dispatch experience was approximately seven years. The managers averaged over nine years of experience at their current agency. The reason for this discrepancy appears to be related to the promotion process for at

least two of the responding agencies. For these agencies, promotions are typically made outside of the Communications Division as a previously planned route for officers desiring upper administrative positions. This provides the candidates for upper administration a more intimate knowledge of the varying divisions at the agency. Regarding their education level, most held an associates degree or spent some time in college. No manager reported post-graduate studies. So that the exact managers cannot be later identified, due to a guarantee of confidentiality of responses, no specific survey results of the manager will be discussed.

The Dispatchers

Seventy-nine dispatchers responded to the survey request. None of the submitted surveys were excluded due to 20% or more unanswered questions. Sixty-one of the dispatchers were female while 13 were male. Thirteen respondents declined to answer the gender question. Looking at ethnic backgrounds, 60 respondents answered White, four responded Black, nine responded Hispanic, and one responded Other. This sample population demonstrates that a considerable majority of individuals, over 62%, in the communications profession are white females. None of the respondents could be categorized as a black male.

While the ages range from 20-years-old to 62-years-old, the average age is roughly 35-years-old. Three of the respondents exceed 53 years of age, placing these respondents outside ± 2 standard deviations. The ± 2 standard

deviations are a benchmark used in criminal justice research. Being outside the ± 2 standard deviations means being outside 95% of the overall results. A score outside 95% is generally considered significant in criminal justice research. The average years of dispatch experience was approximately 7.83, slightly higher than the managers' average. The average years working for their current agency was 5.92 years, less than the managers' average.

This discrepancy can possibly be explained when looking at the data of two of the managers. While one manager has 17 years experience within his or her department, however, he or she is not a dispatcher. Likewise, another manager has worked for his or her department for 25 years, however he or she also has no experience as a dispatcher. One of the managers has experience as a police officer and working within his or her department's detention facility. This manager's promotion to Communications Manager is part of a well-established promotional track within the department. Another manager has spent a majority of his or her tenure in the patrol division. This manager's survey answers of "zero years experience as a dispatcher" drives the managers' total average down while the years working for their departments (17 and 25 years) drives the total years experience with the current agency average back up.

Forty-one respondents have never changed agencies, however, forty-two respondents have changed agencies at least once. Considering the ± 2 standard deviations for this variable, three respondents answered outside of the 95% benchmark for criminal justice statistics. One respondent has changed agencies

four times. Another second respondent reported changing agencies five times. And the third respondent reported changing agencies a total of seven times.

Regarding the educational background of the respondents, only 3% of the respondents declined to provide information. A majority of the respondents, over 60%, reported an education level ending with at least some college experience (an associates degree or some college experience). Approximately 12% reported having a bachelor's degree or four years of college education. A significant portion, only three respondents, reported a postgraduate education.

Approximately 53% of the respondents work for agencies labeled small and 47% of the respondents work for large agencies. From this group, approximately 80% reported that their job duties include working radio dispatch. Almost 5% of the respondents are not currently required to work a radio position. This group works for a large agency that utilizes call-taker only positions. Typically these positions receive a slightly smaller annual pay. Approximately 87% of the respondents answer 9-1-1 calls while slightly fewer said they answer administrative lines.

Responses to Job Satisfaction Questions

The first job satisfaction measure derives from Dantzker's 1994 and 1996 studies. As mentioned earlier, Dantzker's work provided specific scores for the answers to each question. The first seven questions deal with how satisfied the respondent feels and how likely the respondent would be to change jobs if given the opportunity. Using the same coding method as described in Dantzker's work,

roughly 80% of all respondents reported they were satisfied with their current employment. Close to 19% reported that they were not satisfied and approximately 2% did not answer this section of the survey.

The second job satisfaction measure derives from Dantzker's 1994 study. This group of 21 questions deals with how satisfied the respondent feels about specific aspects of the respondent's employment. Items in this section address issues such as employee benefits, promotion and evaluation procedures, and support from the administrative staff. Using Dantzker's coding method for these questions, (taken directly from his study) approximately 68% of all respondents reported that they were satisfied with aspects their employment. Slightly more than 32% of the respondents reported that they were not satisfied with aspects of their employment. Job satisfaction responses for each agency are discussed and compared to the overall scores later in this chapter.

Responses to Job Stress Questions

The largest portion of the survey deals with reported job stress and the physical consequences related to that stress. For a closer review of the items in this section, the questions are categorized into two types of stressor, intrinsic and extrinsic. Many of these questions are taken from the 2000 Byrd et al. study on job stress. Some questions were added that dealt specifically with dispatch situations such as dealing with the death of a coworker. In this section the respondent is asked, "how bothered are you by" specific stressful situations. Before taking an in-depth look at this portion of questions, the section taken as a

whole provided the following data. Regardless of the type of stressor, only 42% of the respondents reported that the surveyed items bother them at least some of the time. This leaves a slight majority (57.5%) of the total participating dispatch population reporting that the aspects listed on the survey do not bother them.

When the stressors are broken down into intrinsic and extrinsic groups the following statistics can be found. The respondents reported similar responses to both types of stressors. When asked, 60% of the respondents reported that the intrinsic stressors did not bother them. And 60% reported that the extrinsic stressors did not bother them. Looking more closely at the answers, 41% of the respondents are not bothered by either intrinsic or extrinsic stressors.

Respondents who were bothered at least some of the time by intrinsic stressors only made up 18% of the total while another 19% reported to be bothered at least some of the time by extrinsic stressors only. Almost 21% of the respondents reported that they are bothered at least some of the time by both types of stressor.

The second section of questions related to job stress addresses the physical consequences often related to a stressed individual. These questions look at problems with sleeping, eating, and how they feel about themselves physically. This section of questions is taken from the Byrd et al. study of job stress. Using the coding method from that study, 67% of the respondents reported that they were not feeling the physical consequences of stress. This leaves one out of every three respondents reported feeling some level of physical

problems related to stress. The survey is incapable of determining specifically if the physical problems are due to stress at work or if other aspects of the respondent's life are contributing to the respondent's physical problems.

This concludes the combined findings from the survey responses. The combined demographic data for all respondents is provided in Table 1.2 for comparison. The next section of this chapter discusses each of the individual agencies, how they responded to the surveys and how they compare to the combined findings.

The Large Agencies

Irving Police Department

Irving Police Department was given 50 surveys to complete and they returned 30 of the surveys (60% response rate). Irving's response rate was better than the overall response rate of all respondents (52%). Irving Police Department reported the highest starting pay rate at \$30,096 and the largest jurisdiction population of 200,000. Irving requires that the Communications Manager hold a peace officer's certificate and there are levels of supervisors between the manager and the line dispatchers.

Overall the Communications Division in Irving responded positively to the Job Satisfaction questions. For the first set of seven questions Irving reported all of the respondents are satisfied with their jobs. For the second block of job satisfaction questions only 10% of the respondents reported that they are not satisfied with some aspects of their job. Compared to the combined findings

previously discussed, Irving's response indicates their dispatchers are reporting more job satisfaction than the combined respondents.

When looking at the job stress questions, Irving also responded with encouraging answers. While the combined responses of the entire dispatch population indicated at least 42% of the respondents were bothered at least some of the time, only 23% of the Irving respondents reported that they were bothered at least some of the time. When exploring these questions and dividing them into specific stressors, 13% reported that only extrinsic stressors bothered them at least some of the time. This was lower than the 19% combined findings rate. However 26% of the Irving respondents reported that they were bothered at least some of the time by only intrinsic stressors. This statistic was higher than the 18% reported in the combined findings. Given the larger size of Irving's population, this is a reasonable result. As the population size of the jurisdiction increases, so does the call volume for the department. If Irving is experiencing a higher call volume, there is a greater chance of intrinsic stressors such as exposure to violent incidents on the phone and radio. While the combined findings reported both types of stressors bothered 21% of respondents, Irving reported both types of stressors bothered only 10% of their respondents.

When looking at the physical consequences of stress, Irving fared slightly better than the combined findings. Approximately 76% of the respondents reported that they are not experiencing the negative physical consequences of stress. This leaves one out of every four Irving dispatchers reported some

physical problems due to stress. As mentioned earlier, it is unclear if the stress is caused by their employment or by other factors in their life.

Southwest Regional Dispatch

The Southwest Regional Dispatch center was given 26 surveys to complete and they returned 11 (42% response rate). New dispatchers at this center earn \$29,772.00 to start and serve a population of approximately 110,000. Southwest Regional Dispatch services three police agencies, three fire departments, and three ambulance or EMS departments. The manager for this department is required to have a college background and mid-level supervisor positions exist between the manager and line crew.

For the first set of Job Satisfaction questions, Southwest Regional Dispatch reported approximately 78% of the dispatchers are satisfied with their jobs. This response to the first block of questions is almost identical to the combined findings score of 80%. The second block of questions, which are more in-depth than the first, indicated only 45% of the respondents are satisfied with their jobs. Compared to the combined findings score of 68% this would indicate that Southwest Regional Dispatch is experiencing less satisfaction than the total population reports.

The Job Stress questions indicated that this center is experiencing more stress than the combined findings reported. Almost 64% of Southwest Regional Dispatch respondents reported that they were bothered at least some of the time compared to only 42% of the total responding population. Breaking this block of

questions down to specific types of stressors the following discovery was made. The extrinsic stressors bother an overwhelming majority of the respondents; this group represents almost 55% of the department's respondents. This is a much higher percentage when compared to the combined findings group of 19%. This is possibly due to the fact that the center covers three separate jurisdictions. Three police chiefs, three fire chiefs, and three town managers or mayors are vying for authority over dispatch policies and procedures. It is highly probable that the administrators for these jurisdictions do not agree 100% of the time. The possibility of a struggle in communications management to meet the needs of the separate administrations could possibly contribute to an increase in extrinsic stress. The group reporting that only intrinsic stressors bother them at least some of the time makes up approximately 18% of the respondents. Almost 9% reported that both types of stressor bothered them. Neither type of stressor bothered approximately 18% of the respondents. So effectively, neither type of stressor bothers almost one in every five dispatchers.

A slight majority of the respondents at Southwest Regional Dispatch are also reporting they feel the negative results of stress. Approximately 55% of the respondents reported they are feeling the negative physical consequences related to stress. This result is higher than the finding for the combined population (33%). Over 80% of the Southwest Regional respondents reported that they feel they work under a great deal of tension and that they get irritated or annoyed over the way things are done. This could possibly be attributed to the

unique working environment of combining the needs and wants of more than one chief or town manager.

The Small Agencies

Balch Springs Police Department

Nine surveys were given to the Balch Springs Police Department Communications Division. Three surveys were returned resulting in a 33% response rate. Balch Springs offers a starting annual pay rate of \$23,643 and services a population of 20,000. Balch Springs does not require a peace officer's license or college experience for the management position. There are no mid-level supervisors between the manager and the line dispatchers.

Each of the respondents reported satisfaction with their jobs on the first set of job satisfaction questions. In the second portion of job satisfaction questions, two of the three remained in the satisfied category. The third respondent who reported not satisfied was also the only respondent to report that she was feeling the negative physical consequences of stress.

When looking at the stress categories only one of the respondents reported being "Not Bothered" by the stress related items in general. This respondent reported that intrinsic stressors bothered her some of the time, however extrinsic stressors do not bother this respondent. Each of the respondents was bothered at least some of the time by intrinsic stressors. Only one respondent reported being bothered by both intrinsic and extrinsic stressors.

This respondent did not report having experienced the negative physical consequences of stress.

Bridgeport Police Department

Five surveys were distributed to the Bridgeport Police Department Communications Division. Three of the surveys were completed and returned with a response rate of 60%. The starting pay at Bridgeport is \$21,777 and a jurisdiction population of 5095 citizens. The division is responsible for dispatching Police, Fire and EMS units. No mid-level supervisors exist between the manager and the line crew. The manager is not required to be a police officer or have education beyond High School.

All three of the respondents reported that they were satisfied with their jobs on the first set of job satisfaction questions. Only one of the respondents reported that she might leave Bridgeport for another agency if she would not lose the benefit of her seniority. The second block of job satisfaction questions yielded the same results. These results indicate a reasonably satisfied group of employees compared to the total population of dispatchers.

Byrd's "bothered by" questions demonstrated a contradictory trend for the Bridgeport communications center. Only one of the respondents indicated not being bothered at least some of the time by the items listed in the survey. Looking more closely at the types of stressor, all of the respondents reported that the intrinsic aspects of their jobs bother them at least some of the time. This is a significantly higher result than the combined findings score. In the combined

findings, roughly 40% of the respondents indicated that they were bothered at least some of the time by intrinsic stressors. The extrinsic stressors provided a brief hint of relief for the department. One of the respondents reported that the extrinsic items did not bother her at least some of the time. However one of the extrinsic items (“I am bothered by feeling that my salary is inadequate”) was the only question in this section to receive a unanimous response of “rather often.”

Given these responses towards the stressors of dispatch it was somewhat surprising to find that only one of the respondents reported feeling the negative consequences of stress. What was even more puzzling was the fact that this respondent was the only respondent to report that the extrinsic stressors didn't bother him or her at least some of the time. This would cause one to speculate that the cause of her stress might not be work related, but rather the result of other aspects in her life.

Flower Mound Police Department

Fourteen surveys were distributed to the Flower Mound Police Department Communications Division. Ten of the surveys were returned with a response rate of over 71% (tying with The Colony PD for the highest response rate overall). The starting pay at Flower Mound is \$28,898 and the jurisdiction population of approximately 60,000. The Communications Division dispatches units for the Flower Mound Police, Fire, and EMS Departments. The dispatchers are all responsible for radio operations as well as emergency and non-emergency phone lines. Flower Mound utilizes mid-level supervisors between

the line employees and the manager. The manager is not required to hold a peace officer's license or have college experience.

Seventy percent of the respondents reported that they were satisfied with their jobs on the first set of job satisfaction questions. In the second portion of job satisfaction questions 60% of the respondents remained in the satisfied category. Compared to the combined findings score of 68%, the Flower Mound dispatchers are slightly less satisfied than the total population of dispatchers surveyed.

When looking at the stress categories 60% of the respondents reported that they were "Not Bothered" by the stress related items in general. The same percentage reported that they are "Not Bothered" by either type of stressor, intrinsic or extrinsic. The remaining respondents were divided evenly, 20% reported that extrinsic stressors bothered them and intrinsic stressors bothered the remaining 20% of the respondents. Thirty percent of the respondents reported they experienced the negative physical consequences of stress. These findings are almost identical to the total population results.

Hurst Police Department

Eleven surveys were distributed to the Hurst Police Department Communications Division. Five surveys were returned resulting in a 45% response rate. The Communications Manager survey was not completed therefore no manager demographic information is available. Of the five respondents, the manager may have completed and returned a survey, however

the agency demographic information (such as population size and starting pay) was not included in the dispatcher survey materials. Without this manager survey, the agency demographics cannot be included. The five surveys retrieved provided the following information.

Eighty percent of the respondents reported that they were satisfied with their jobs on the first set of job satisfaction questions. This percentage also reported satisfaction in the second portion of job satisfaction questions. Their responses to this section of questions indicate Hurst dispatchers are as satisfied or slightly more satisfied than the total population of dispatchers surveyed.

When looking at the stress categories 80% of the respondents reported that they were “Not Bothered” by the stress related items in general. The same percentage reported that they are “Not Bothered” by extrinsic stressors. Sixty percent of the respondents reported that they are “Not Bothered” by intrinsic stressors. Both types of stressor bothered none of the respondents. These results were all slightly better than the combined finding scores. None of the respondents reported they experienced the negative physical consequences of stress.

Lewisville Police Department

Twenty-two surveys were distributed to the Lewisville Police Department Communications Division. Fifteen of the surveys were completed and returned with a response rate of 68%. The starting pay at Lewisville is \$29,773 and they have a jurisdiction population of approximately 83,850. The Communications

Division dispatches units for the Lewisville Police, Fire, and EMS Departments. All of the dispatchers are responsible for radio operations as well as emergency and non-emergency phone lines. Lewisville reported they do not utilize mid-level supervisors between the line employees and the manager. The manager is required to hold a peace officer's license and also have college experience.

Over 66% of the respondents reported that they were satisfied with their jobs on the first set of job satisfaction questions. This is slightly lower than the overall combined findings. In the second portion of job satisfaction questions, the results were almost evenly split. Almost 47% of the respondents reported they were satisfied. Weighed against the combined findings score of 68%, the Lewisville dispatchers reported that they were less satisfied than the total population of dispatchers surveyed.

The "bothered by" questions demonstrated a slightly more stressed group of respondents. Over 66% of the respondents reported that they were bothered at least some of the time by some type of stressor. When breaking down these stressor questions into the separate categories, the following results were found. One out of every three respondents (33.3%) reported that neither type of stressor bothered them. Only one respondent reported that only intrinsic stress bothered them, accounting for just over 6% of the group. Twenty percent of the respondents reported that only extrinsic stressors bothered them. However twice that number (40%), reported that both types of stressors bother them at least

some of the time. This response is twice the reported level of the total population of respondents.

Given this result, it was not surprising to find over half of the respondents reporting experiencing the negative consequences of stress. Eight out of the 15 respondents reported feeling stressed. Two specific questions in the physical consequences section received an affirmative response from 80% of the respondents. This group of respondents agreed that they “work under a great deal of tension” and that they “get irritated or annoyed over the way things are done” at their center.

The Colony Police Department

Seven surveys were distributed to The Colony Police Department Communications Division. Five of the surveys were completed and returned with a response rate of 71% (tying with Flower Mound for the highest response rate). The starting pay at The Colony is \$26,208 and they are responsible for a population of 35,000 citizens. The Communications Division dispatches units for the Police, Fire and EMS departments. All of the dispatchers are responsible for radio operations as well as emergency and non-emergency phone lines. There are no mid-level supervisors between the Communications Manager and the line crew. The manager is not required to be a police officer or have college experience.

The results to the first set of job satisfaction questions indicate a slight majority of the respondents are not satisfied with their jobs. Only 40% of the

respondents reported that they were satisfied with their jobs. Compared to the combined findings score of 80%, The Colony's 40% is considerably lower. In the second portion of job satisfaction questions the results were exactly the same. Forty percent of the respondents reported being satisfied, while the remaining 60% were not. Compared to the combined findings score of 68% satisfied, The Colony dispatchers reported that they were less satisfied than the total population of dispatchers surveyed.

In the "bothered by" categories, only 40% of the respondents reported that they were "Not Bothered" by the stress related items in general. The same percentage reported that they are "Not Bothered" by either type of stressor, intrinsic or extrinsic. A single respondent (20% of the score) reported being bothered by only extrinsic stressors. Both types of stressor bothered the remaining 40%. Three of the five respondents are not feeling the negative physical consequences of stress. This score is very similar to the level of physical ailments experienced by the overall population.

Westover Hills Police Department

Eleven surveys were distributed to the Westover Hills Police Department Communications Division. Four of the surveys were completed and returned with a response rate of just over 36%. The starting pay at Westover Hills is \$24,000 and they have a jurisdiction population of approximately 700 citizens. The Communications Division dispatches units for the Westover Hills Police Department only. They do not have Fire or EMS responders. A larger

department in their area provides Fire and EMS services. This is a common practice for agencies of a similar small size. All of the dispatchers are responsible for radio operations as well as emergency and non-emergency phone lines. Westover Hills reported they utilize mid-level supervisors between the line employees and the manager. The manager is not required to hold a peace officer's license nor have college experience.

The results were evenly split when responding to the first set of job satisfaction questions. This score (50%) is considerably lower than the overall combined findings (80%). In the second portion of job satisfaction questions, the facet-specific questions, the results were the same. Half of the respondents reported being satisfied, while the other half were not. Compared to the combined findings score of 68%, the Westover Hills dispatchers reported that they were less satisfied than the total population of dispatchers surveyed.

When looking at the stress categories, three quarters of the respondents reported that they were "Not Bothered" by the stress related items in general. The same percentage reported that they are "Not Bothered" by either type of stressor, intrinsic or extrinsic. A single respondent (25% of score) reported being bothered by both extrinsic stressors and intrinsic stressors. This same respondent was the only individual reporting the negative physical consequences of stress. These findings indicate that Westover Hills experiences slightly better physical consequences to stress than the overall population reported.

Wylie Police Department

Five surveys were distributed to the Wylie Police Department Communications Division. Only one of the surveys were completed and returned with a response rate of 20%. This was the lowest response rate for the research project. The respondent did not return a manager's survey so the demographic information is not available for this agency. The respondent did report that they are responsible for emergency and non-emergency phones as well as radio dispatch.

Since only one respondent participated in the study it would be improper to report the job stress and job satisfaction results. The possibility of identifying this single respondent and losing their anonymity for participation outweighs the benefit of discussing the Wylie results. The data provided by this respondent is included in the overall population results only.

The Hypotheses Revisited

This research project was designed to address three hypotheses. The first hypothesis is that "No relationship exists between reported employee job satisfaction and stress in the 9-1-1 communications environment." The second hypothesis is that "No independent variables exist within the 9-1-1 communications population that impact reported stress or job satisfaction." The last hypothesis considered is that "Reported levels of stress or job satisfaction with the 9-1-1 communications environment have no relationship with an individual's reported number of job changes."

An overall average job satisfaction score was generated using the responses to both sets of job satisfaction questions provided on each survey. When comparing this overall job satisfaction score to the stress related questions, negative relationships were found. As the reported job satisfaction increased the reported level of job stress generally decreased. The general “bothered by” items borrowed from Byrd’s study demonstrated a $-.623$ Pearson correlation with the overall job satisfaction of the respondents. The intrinsic “bothered by” items demonstrated a $-.236$ Pearson correlation with the overall job satisfaction. However, the extrinsic “bothered by” items produced a $-.724$ Pearson correlation with overall job satisfaction. This would indicate a much stronger negative relationship occurs between overall job satisfaction and extrinsic stress. The physical consequences also demonstrated a Pearson correlation of $-.503$ with overall job satisfaction.

An overall average job stress score was generated using the responses provided on each survey as well. Comparing this score with the two job satisfaction scales similar results were also produced. Dantzker’s seven-question scale demonstrated a $-.465$ Pearson correlation with overall job stress. The larger scale derived from Dantzker’s work demonstrated a $-.549$ Pearson correlation with job stress. These findings would indicate that the hypothesis “No relationship exists between reported employee job satisfaction and stress in the 9-1-1 communications environment” is not true. The relationship varies

depending on the method of measurement. The strongest relationship found in this population was between extrinsic stress items and overall job satisfaction.

Six independent variables were identified for the second hypothesis, “No independent variables exist within the 9-1-1 communications population that are related to reported stress or job satisfaction.” These variables were gender, ethnicity, age, level of experience, level of education, and migration. Comparing these variables with the general job satisfaction score and job stress score demonstrated very weak Pearson correlations. The highest positive relationship was discovered between gender and general job satisfaction with a Pearson correlation of .201. The highest negative relationship (-.156 Pearson correlation) was found between general job stress and migration. These findings would indicate that none of the independent variables demonstrated a significant impact on job stress or satisfaction in general.

The last hypothesis considered is that “Reported levels of stress or job satisfaction with the 9-1-1 communications environment have no relationship with an individual’s reported number of job changes.” This research found only three respondents indicating a tendency to migrate (having changed agencies more than three times). Two of the respondents reported satisfaction on both scales and were not reporting feelings of general job stress. The remaining respondent did not indicate satisfaction on either scale however, just as the other two migrants reported, this respondent did not demonstrate a problem with feelings of general stress. Given the small population of migrant dispatchers in this study,

determining a noteworthy correlation of migration to job stress or job satisfaction is not practical. This is an area of research that may require more investigation to determine if a relationship does exist.

CHAPTER 5

CONCLUSION

Comparing this Study with Previous Research

In the literature review chapter of this document several previous studies were discussed. Some of the conclusions discussed in previous research may be supported or opposed by the findings in this study. One of the previous studies (Brooks and Piquero, 1998) suggested that agency generated stress (extrinsic stress) is more pronounced in larger agencies. Their suggestion is not supported in the findings of this study. The two larger agencies participating in this study were split when looking at extrinsic stress problems. Only 23% of the Irving respondents reported being bothered by extrinsic items, while extrinsic items bothered 64% of the respondents from Southwest Regional Communications. In three of the smaller agencies, (Bridgeport, Lewisville, and The Colony) results indicate over 50% of the respondents were bothered by extrinsic stressors.

The research project completed by Jacqueline W. White, et. al found a relationship between feelings of inadequate supervision, poor equipment, and weak interoffice support with feelings of physical stress. Looking at the responses from this communication study, a similar result was found. Three of the variables included in the communications study addressed feelings towards

poor equipment and support from the administration or supervisors. The current study found slightly more than 20% of the respondents who were bothered by the supervision and equipment also reported experiencing the physical consequences of stress.

As mentioned in the Literature Review section, Violanti's work in the early 1980s focused on the relationship between feeling stress and length of service for the employee. Dividing the dispatchers from the current study into three groups by length of service and comparing these groups to reported stress did not reproduce Violanti's findings. Violanti found intermediate experience level employees reported the highest levels of stress. Twelve of the rookies, 13 of the intermediates, and 14 of the veteran dispatchers of the current study reported feeling stressed. This almost completely balanced result does not support Violanti's work.

Survey questions taken directly from M.L. Dantzker's 1996 job satisfaction study produced similar results when given to the dispatchers in this study. Dantzker's study consisted of two parts: a facet-free job satisfaction scale and a more detailed facet-specific job satisfaction scale. Dantzker found that job satisfaction was reported stronger in the facet-free scale. There were, however, only seven facet-free questions. The facet-specific questions were much more in-depth and generally demonstrated lower levels of job satisfaction. This survey of communications officers resulted in a similar findings. While four out of five

dispatchers reported job satisfaction for the facet-free scale only three out of five were satisfied based on the facet-specific scale.

The detention officers surveyed in the Byrd et al. study of 2000 indicated that the least satisfied group were the veteran detention officers. A strong majority of the communications officers surveyed in this study reported to be generally satisfied with their jobs. Of those who reported to be dissatisfied with their jobs, the veteran communications officers outnumbered the rookie communications officers more than two to one. This lends some support to the work conducted by Byrd and his team.

The research implications

Ultimately this research found that two out of every three dispatchers responding were generally satisfied with their jobs even when specific job related questions were raised. Dantzker's facet-free questions, including those regarding offer and change, demonstrated higher levels of job satisfaction, however, this measure is based solely on seven questions. The facet-specific questions look more closely at the aspects of the job and their relative satisfaction. While having a majority of the dispatchers satisfied with their jobs is an encouraging finding, researchers should consider identifying any aspects of the job that reduced job satisfaction for this population.

Considering stress, only 40% of the respondents reported that the items surveyed did not bother them. Both stress items, intrinsic and extrinsic, bothered 20% of the respondents. An almost equal number of respondents who reported

being bothered only by intrinsic stress items reported being bothered by only extrinsic stress items. So then, neither type of stress is a greater problem in this surveyed population. However, only 57% of the total surveyed population reported that they were not generally bothered by stress on the job. This indicates a large population of the public safety dispatchers is bothered, in some way, by stress in their profession. Identifying the causes of stress in this industry is one reasonable step to relieving the problem.

Reducing the physical symptoms of stress, even without understanding their exact cause, should also be a top concern for researchers and public safety professionals. A third of the respondents in this research group are feeling physical consequences related to stress. Even though we cannot clearly attribute their jobs as being the sole cause of the stress, it would be inappropriate to disregard their jobs as a likely cause of the physical problems reported. Research identifying the exact causes of these physical problems and finding methods of effectively reducing stress would be very beneficial to the public safety industry as a whole.

The most obvious implication from the research conducted here is a need for more in-depth study of police communications. This study only scratched the surface of a working environment that is ripe for additional research. From this study certain trends in police communications were found. A majority of the respondents of this study reinforced the stereotype of communications officers being primarily Caucasian females. However one out of every three respondents

did not fit this stereotype. Is this discrepancy caused by a change in the industry or was the stereotype incorrect from the beginning? How would geography affect the stereotype? Is it presumptuous to expect dispatchers on the west coast to demonstrate the same demographics as dispatchers in the northeast?

Another stereotype of communications officers is that they are primarily secretarial types with only a basic education or training. As the industry of police communications shifts from primarily secretarial tasks to increasingly computerized and technical tasks so will the need increase for more highly skilled employees. Some suggestions have been made by the Texas Commission on Law Enforcement Officer's Standards and Education (TCLEOSE) to further specialize the industry by requiring dispatchers to become licensed by the state. This type of requirement could begin to change many opinions towards communications personnel in the public safety community.

This research indicates that additional investigation is necessary for the field of public safety communications. Comparing the findings of this study to similar research is vital to determining the true impacts of stress and job satisfaction on this group of professionals. This research demonstrates that communications personnel simply cannot be compared equally to police officers, detention officers, or probation/parole officers. The diversities in public safety are far too great for such comparisons to be applicable.

Table 1.1

Agency Demographics

Agency	Starting Pay	Population	Mid-Level Supvs	Mgr must be a Cop?	Mgr must have a Degree ?	Depts Dispatched
Irving	\$30,096	200,000	Y	Y	N	1 PD 0 FD 0 EMS
SW Regional	\$29,772	110,000	Y	N	Y	3 PD 3 FD 3 EMS
Balch Springs	\$23,643	20,000	N	N	N	1 PD 1 FD 0 EMS
Bridgeport	\$21,777	5095	N	N	N	1 PD 1 FD 1 EMS
Flower Mound	\$28,898	60,000	Y	N	N	1 PD 1 FD 1 EMS
Hurst	Data Not Available					
Lewisville	\$29,773	83,850	N	Y	Y	1 PD 1 FD 1 EMS
The Colony	\$26,208	35,000	N	N	N	1 PD 1 FD 1 EMS
Westover Hills	\$24,000	700	Y	N	N	1 PD 0 FD 0 EMS
Wylie	Data Not Available					

Table 1.2

Combined Responses (Managers and Dispatchers)

Response Rate	Gender	Ethnicity	Average Age	
52%	77% Female 17.2% Male 5.7% Did Not Answer	78% White 4.6% Black 10.3% Hispanic 1.1% Other 5.7% Did Not Answer	35	
Average Years Exp as a Dispatcher	Average Years with current Agency	Education Level	Number of Agency Changes	
8.86	6.26	23% H.S. or GED 57.5% Assoc or Some College 13.1% Bach or 4 Yrs College 3.4% Graduate Work	47.1% "0 times" 19.5% "1 time" 16.1% "2 times" 9.2% "3 times" 1.1% "4 times" 1.1% "5 times" 1.1% "7 times"	
The Facet-Free Questions	The Facet-Specific Questions	"Bothered by" Questions	Job Stress Questions by Category	Physical Consequences
80% Satisfied 19% Not Satisfied 2% declined to answer	68% Satisfied 32% Not Satisfied	57% Not Bothered 42% Bothered	21% bothered by both 18% bothered by Intrinsic only 19% bothered by Extrinsic only 41% not bothered by either	67% feel fine 33% are affected

APPENDIX A
ORIGINAL "DFW" POPULATION

ADDISON
ALLEN
ARLINGTON
AZLE
BALCH SPRINGS
BEDFORD
BENBROOK
BLUEMOUND
BRIDGEPORT
BURLESON
CARROLLTON
CEDAR HILL
CLEBURNE
COCKRELL HILL
COLLEYVILLE
COPELL
CORSICANA
CROWLEY
DALLAS
DALWORTHINGTON
GARDENS
DE SOTO
DECATUR
DENTON
DUNCANVILLE
ENNIS
EULESS
EVERMAN
FARMERS BRANCH

FERRIS
FLOWER MOUND
FOREST HILL
FORNEY
FORT WORTH
FRISCO
GARLAND
GLENN HEIGHTS
GRANDBURY
GRAND PRAIRIE
GRAPEVINE
GREENVILLE
HALTOM CITY
HIGHLAND PARK
HIGHLAND VILLAGE
HURST
HUTCHINS
IRVING
KAUFMAN
KEENE
KELLER
KENNEDEALE
LAKE DALLAS
LAKE WORTH
LANCASTER
LEWISVILLE
MANSFIELD
MCKINNEY
MESQUITE

MIDLOTHIAN
MINERAL WELLS
NORTH RICHLAND
HILLS
PANTEGO
PLANO
RED OAK
RICHARDSON
RICHLAND HILLS
RIVER OAKS
ROANOKE
ROCKWALL
ROWLETT
SACHSE
SAGINAW
SANSOM PARK
SEAGOVILLE
SOUTHLAKE
SPRINGTOWN
TERRELL
THE COLONY
WATAUGA
WAXAHACHIE
WEATHERFORD
WESTOVER HILLS
WESTWORTH VILLAGE
WHITE SETTLEMENT
WILMER
WYLIE

APPENDIX B
DEPARTMENTS CATEGORIZED BY SIZE

LARGE DEPARTMENTS	DALWORTHINGTON	MANSFIELD
ARLINGTON	GARDENS	MCKINNEY
CARROLLTON	DECATUR	MIDLOTHIAN
DALLAS	DENTON	MINERAL WELLS
FORT WORTH	ENNIS	NORTH RICHLAND
GARLAND	EULESS	HILLS
GRAND PRAIRIE	EVERMAN	PANTEGO
IRVING	FARMERS BRANCH	RED OAK
MESQUITE	FERRIS	RICHLAND HILLS
PLANO	FLOWER MOUND	RIVER OAKS
RICHARDSON	FOREST HILL	ROANOKE
SOUTHWEST	FORNEY	ROCKWALL
REGIONAL COMM	FRISCO	ROWLETT
	GLENN HEIGHTS	SACHSE
	GRANBURY	SAGINAW
SMALL DEPARTMENTS	GRAPEVINE	SANSOM PARK
ADDISON	GREENVILLE	SEAGOVILLE
ALLEN	HALTOM CITY	SOUTHLAKE
AZLE	HIGHLAND PARK	SPRINGTOWN
BALCH SPRINGS	HIGHLAND VILLAGE	TERRELL
BEDFORD	HURST	THE COLONY
BENBROOK	HUTCHINS	WATAUGA
BLUEMOUND	KAUFMAN	WAXAHACHIE
BRIDGEPORT	KEENE	WEATHERFORD
BURLESON	KELLER	WESTOVER HILLS
CLEBURNE	KENNEDALE	WESTWORTH VILLAGE
COCKRELL HILL	LAKE DALLAS	WHITE SETTLEMENT
COLLEYVILLE	LAKE WORTH	WILMER
COPPELL	LANCASTER	
CORSICANA	LEWISVILLE	WYLIE
CROWLEY		

APPENDIX C
DEPARTMENTS LISTED IN ORDER OF ELIGIBILITY

LARGE DEPARTMENTS	MINERAL WELLS	EVERMAN
	RICHLAND HILLS	GREENVILLE
PLANO	ROWLETT	LAKE DALLAS
ARLINGTON	SEAGOVILLE	NORTH RICHLAND
FORT WORTH	THE COLONY	HILLS
IRVING	WESTWORTH VILLAGE	SANSOM PARK
SOUTHWEST	ALLEN	WHITE SETTLEMENT
REGIONAL COMM	BLUEMOUND	CLEBURNE
GARLAND	COPPELL	FOREST HILL
RICHARDSON	DENTON	HUTCHINS
GRAND PRAIRIE	FERRIS	MIDLOTHIAN
DALLAS	GRANBURY	SPRINGTOWN
MESQUITE	HIGHLAND VILLAGE	BEDFORD
CARROLLTON	KELLER	ENNIS
	MANSFIELD	KEENE
SMALL DEPARTMENTS	PANTEGO	ROANOKE
	ROCKWALL	WILMER
WESTOVER HILLS	SOUTHLAKE	FORNEY
WYLIE	WAXAHACHIE	MCKINNEY
BALCH SPRINGS	ADDISON	WEATHERFORD
BRIDGEPORT	BURLESON	FRISCO
COLLEYVILLE	CROWLEY	SACHSE
DALWORTHINGTON	FARMERS BRANCH	DECATUR
GARDENS	GRAPEVINE	TERRELL
EULESS	KAUFMAN	LAKE WORTH
FLOWER MOUND	LANCASTER	HIGHLAND PARK
GLENN HEIGHTS	RED OAK	RIVER OAKS
HALTOM CITY	SAGINAW	CORSICANA
HURST	WATAUGA	BENBROOK
KENNEDALE	AZLE	
LEWISVILLE	COCKRELL HILL	

APPENDIX D
SURVEY CONSENT FORM

Purpose of the study and how long it will last:

Your agency has been selected to participate in 9-1-1 Communications research project. This research is focused entirely on the dispatch environment. The purpose of this study is to learn about stress and job satisfaction in Communications. This survey is available at your agency for approximately the next 10-14 days. The drop box provided will show the exact date the surveys are due.

Description of the study including the procedures to be used:

The answers you provide in this survey will be used to measure the levels of stress and job satisfaction that you are currently experiencing. Your answers will be compared statically to answers provided by other agencies in the DFW area. Comparisons will be made regarding the size of the agencies and the demographic make-up of the departments (ratio of male operators to female operators, varying levels of experience, varying types of duties assigned, etc). While you may feel your agency is under a great deal of stress, you may find that other agencies are experiencing higher levels than your department. Description of procedures/elements that may result in discomfort or inconvenience:

Because the resources and needs of each agency differ, I know that some of you have varying responsibilities. If you encounter a question that does not apply to you or makes you too uncomfortable, skip the question. But please, answer every question that you can. Any survey that is returned with 20% or more unanswered questions will not be included in the study.

Description of the procedures/elements that are associated with foreseeable risks:

No foreseeable risk is involved in completing this survey. If, while completing the survey, you decide you do not wish to participate simply throw the materials away. You are not obligated to finish the survey.

Benefits to the subjects or others:

There is no financial compensation for your participation. While I strongly encourage everyone to participate, your only compensation is knowing that your answers will be used in a study focusing entirely on your environment and the feelings of stress or job satisfaction you are experiencing. Each participating agency will be given a complementary copy of the final research document demonstrating how the agencies responded with regards to stress and job satisfaction. Using this document your division may be able to demonstrate to others in your city government that more attention is needed to combat stress and improve job satisfaction in your communications center.

Confidentiality of research records:

Before beginning the survey it is important that you understand all participation is strictly voluntary. I encourage all of you to participate however no one can force or pressure you into completing the survey. All who respond will remain anonymous. There are no questions on the survey asking your name. This will allow you the freedom to respond with unrestrained honesty.

Once you have completed the survey tear off this consent form and keep a copy for your records. Place the survey in the provided drop box and then simply mail the signed consent form in the addressed envelopes (also provided). The University of North Texas requires that each survey participant consent to the study. These consent forms will be kept as a record of your willing and informed participation. Besides myself, only the academic staff of the University of North Texas will have access to these materials. Unless directed by a court order, none of the survey materials will be available to other parties.

Feel free to copy and keep any of these materials for your own records. The contact information below is provided in case you have any question regarding this study or incur any research related injury. The survey consists of four pages (including this cover sheet) front and back. It should take approximately 20-30 minutes to complete. Your participation is deeply appreciated.

Thank you

I understand that I do not have to take part in this study, and my refusal to participate or to withdraw will involve no penalty or loss of rights or benefits or legal recourses to which I am entitled.

Print Participants Name

Participants Signature

Date

Witness Signature

Date

Research Investigator: Lavona Burgess

Faculty Advisor:

Tori Caeti, Ph.D.
Department of Criminal Justice
University of North Texas
940 565-4941

APPENDIX E

DEMOGRAPHIC PAGES - MANAGERS AND DISPATCHERS

Questions for Communications Division Head Only

Demographic Information

Select one answer for each of the following:

Gender Male Female

Ethnic Background White Black Hispanic Other

Please list:

_____ Age

_____ Years as a Dispatcher

_____ How many times have you changed agencies?

_____ Years with current Agency

Level of Education (circle the answer which best describes your education level):

No High School Diploma or GED	High School Diploma or GED	Associates Degree or some college	Bachelors Degree or 4 yrs college	Graduate Degree
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_____ What is the starting annual pay for an entry-level position as a Dispatcher for your agency?

_____ What is the approximate population within your jurisdiction?

Yes No Do positions of rank exist between you and the entry-level workers such as shift supervisors, designated lead operators, etc?

Yes No Is there a requirement that employees in your position hold a peace officer's license?

Yes No Is there a requirement that employees in your position hold a college degree?

For how many of the following does your center routinely dispatch:

Sheriff Depts _____ Police Depts _____ Fire Depts _____

EMS Depts _____ State Depts _____ Federal Depts _____

Questions for Communications Personnel

Demographic Information

Select one answer for each of the following:

Gender Male Female

Ethnic Background White Black Hispanic Other

Please list

_____ Age

_____ Years as a Dispatcher

_____ How many times have you changed agencies?

_____ Years with current Agency

Yes No My responsibilities include radio dispatch

Yes No My responsibilities include answering 9-1-1 calls

Yes No My responsibilities include answering non-emergency
phone calls

Level of Education (circle the answer which best describes your education level):

No High School Diploma or GED	High School Diploma or GED	Associates Degree or some college	Bachelors Degree or 4 yrs college	Masters or Doctorate
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APPENDIX F

THE SURVEY

Adapted with permission from the
Society for Police and Criminal Psychology
(Dantzker, 1994, 1996)

Communications Survey – Page 1

Mark your answer				
My overall job satisfaction	Not satisfied at all	Not too satisfied	Somewhat satisfied	Very Satisfied
If I could change police departments without losing seniority I would!	Strongly Disagree	Disagree	Agree	Strongly Agree
If I received a job offer for a better paying position outside of policing I would immediately accept it!	Strongly Disagree	Disagree	Agree	Strongly Agree
If you were free to go into any type of job you wanted, what would your choice be?	Would want the job you have now	Would want to retire and not work at all	Would prefer some other job to the job you have now	
Knowing what you know now, if you had to decide all over again whether to take the job you now have, what would you decide?	Decide without hesitation to take the same job	Have some second thoughts	Decide definitely not to take the same job	
In general how well would you say that your job measures up to the sort of job you wanted when you took it?	Very much like the job I wanted	Somewhat like the job I wanted	Not very much like the job I wanted	
If a good friend of your told you they were interested in working in a job like yours for your employer, what would you say to them?	Would strongly recommend it	Would have doubts about recommending it	Would advise the friend against it	

How frequently are you <i>bothered</i> at work by...	Never	Rarely	Sometim es	Rather Often	Nearly all the time
Feeling that you have too little authority to carry out the responsibilities assigned to you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being unclear on just what the scope and responsibilities of your job are	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not knowing what opportunities for advancement or promotion exist for you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not knowing what your immediate supervisor thinks of you, how he or she evaluates your performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The fact that you can't get information needed to carry out your job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having to decide things that affect the lives of individuals, people that you know	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thinking that the amount of work you have to do may interfere with how well it gets done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling that you have to do things on the job that are against your better judgment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling that you may not be liked and accepted by the people you work with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling unable to influence your immediate supervisor's decisions and action that affect you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not knowing just what the people you work with expect of you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Communications Survey – Page 2

How frequently are you <i>bothered</i> at work by...	Never	Rarely	Sometim es	Rather Often	Nearly all the time
Feeling that you have too heavy a work load, one that you can't possibly finish during an ordinary workday	○	○	○	○	○
Thinking that you'll not be able to satisfy the conflicting demands of various people over you	○	○	○	○	○
Feeling that you're not fully qualified to handle your job	○	○	○	○	○
Dealing with aggressive individuals	○	○	○	○	○
Handling situations that could result in injuries for a coworker	○	○	○	○	○
Experiencing situations where deadly force could be used	○	○	○	○	○
Feeling that you have too little authority to carry out the responsibilities assigned to you	○	○	○	○	○
Having to make decisions that affect the lives of individuals, people that you know	○	○	○	○	○
Knowing that your actions could save lives or cost others their life	○	○	○	○	○
Feeling like your supervisor may not support your actions or decisions	○	○	○	○	○
Feeling like your agency administration would abandon you if your actions resulted in the harm of someone else	○	○	○	○	○
Fearing that you're not fully qualified/trained to handle your job	○	○	○	○	○
Feeling like work would be simpler if you had more help	○	○	○	○	○
Wanting to be able to reach through the phone or radio and provide hands-on assistance *	○	○	○	○	○
Experiencing delays because of poor equipment *	○	○	○	○	○
Feeling racial tension or pressure within the department	○	○	○	○	○
Feeling racial tension or pressure exists in the community	○	○	○	○	○
Feeling that political pressure is currently motivating the policies of the department	○	○	○	○	○
Dealing with a person who is in pain *	○	○	○	○	○
Dealing with a person who is grieving *	○	○	○	○	○
Experiencing disturbing out-of-control events during a phone or radio transmission *	○	○	○	○	○
Feeling that your salary is inadequate	○	○	○	○	○
Feeling that pay raises are not given fairly	○	○	○	○	○

Communications Survey – Page 3

How frequently are you <i>bothered</i> at work by...	Never	Rarely	Someti mes	Rather Often	Nearly all the time
Fearing that your medical coverage is inadequate	○	○	○	○	○
Fearing that your retirement needs are not being met	○	○	○	○	○
Talking to people while they are experiencing a painful life event or loss *	○	○	○	○	○
Talking to people while they are experiencing life or death emergencies *	○	○	○	○	○
Talking to the elderly while they are experiencing painful life events that they may not completely understand *	○	○	○	○	○
Talking to children while they are experiencing painful life events that they may not completely understand *	○	○	○	○	○
Having an incident end in death, even though you could do nothing to prevent the outcome	○	○	○	○	○
Having an incident end in death and feeling somewhat responsible	○	○	○	○	○
Feeling that your job tends to interfere with your family life	○	○	○	○	○
Feeling tired or ill because of shift changes *	○	○	○	○	○

How Satisfied are you with...	Very satisfied	Somewhat satisfied	Not too satisfied	Not satisfied at all
the current retirement program	○	○	○	○
the promotional system	○	○	○	○
the process and selection for inter-department transfers/vacancies	○	○	○	○
supervisory support/backing	○	○	○	○
availability of your immediate supervisor for “on-call” consultations	○	○	○	○
the willingness of your supervisor to help in problem solving and obtaining goals	○	○	○	○
the job evaluation/annual review system	○	○	○	○
the current appeal and grievance procedures	○	○	○	○
departmental-community relations (the handling of complaints, commendations, etc)	○	○	○	○
current base pay and salary increases	○	○	○	○
current benefits: holidays, personal days, vacation time, etc.	○	○	○	○

How Satisfied are you with...	Very satisfied	Somewhat satisfied	Not too satisfied	Not satisfied at all
current insurance coverage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
compensation received for overtime, court time, etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
current educational incentives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the availability of in-service training or outside schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the current method for filing reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
your present assignment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the general job description/duties of your present position	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the department's top administrators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the education requirements of new recruits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the quality of equipment (radios, phone systems, CAD) *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mark your answer True or False

T	F	My job tends to directly affect my health
T	F	I work under a great deal of tension
T	F	I have felt fidgety or nervous as a result of my job
T	F	If I had a different job, my health would probably improve
T	F	Problems associated with my job have kept me awake at night
T	F	I often take my job home with me in the sense that I think about it when doing other things
T	F	I am often bothered by acid indigestion or heartburn
T	F	I sometimes feel weak all over
T	F	I have experienced bouts of excessive hair loss or unexplained bald spots
T	F	I have had trouble getting to sleep or staying awake
T	F	I get irritated or annoyed over the way things are going
T	F	I may now have an ulcer but I am not sure of it
T	F	I would consider myself in good or excellent health
T	F	I would consider myself in fair health
T	F	I do not have very good health
T	F	I wake up with stiffness or aching in joints and muscles
T	F	I seem to tire quickly

Thank you for your participation.

Any and all comments regarding this survey are welcome

* Questions added or modified specifically for this study. All other questions are reprinted here with the permission of the original authors and publications.

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