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HUMAN RESOURCE MANAGEMENT CONTROL THEORY: TESTING THE USE OF INPUT CONTROL IN THE EMERGENCY MEDICAL SERVICES CAREER FIELD.

By
Robert E. Kasey

A DISSERTATION

Submitted to
School of Business and Entrepreneurship
Nova Southeastern University

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for the degree of

DOCTOR OF BUSINESS ADMINISTRATION

1999

A Dissertation
entitled

Human Resource Management Control Theory: Testing the Use of Input Control in the Emergency Medical Services Career Field

By

Robert E. Kasey

We hereby certify that this dissertation submitted by Robert E. Kasey conforms to acceptable standards, and as such is fully adequate in scope and quality. It is therefore approved as the fulfillment of the Dissertation requirements for the degree of Doctor of BUSINESS Administration.

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1999

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions or writings of another.

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Robert E. Kasey

ABSTRACT

HUMAN RESOURCE MANAGEMENT CONTROL THEORY: TESTING THE USE OF INPUT CONTROL IN THE EMERGENCY MEDICAL SERVICES CAREER FIELD

by

Robert E. Kasey

This work replicates and extends previous research in the theory of Human Resource Management Control, or modernly termed Performance Management Theory. This work specifically investigated the relationship between EMS organizations' use of input control and organizational effectiveness utilizing correlation analysis. Surveying 286 municipal government Emergency Medical Services personnel, the findings revealed a positive correlation between EMS organizations' use of training programs and selection processes and the organizations' performance appraisal processes and employee intent to leave the organization (turnover). The findings validate the selection of the Emergency Medical Services career field as possessing characteristics of a business population suitable for testing the input control quadrant of the Performance Management Theory. The implications for organizational managers operating in the input control environment suggests that performance appraisal training is a critical area for expeditious managerial intervention if weaknesses are identified.

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I thank the following people for their help and assistance in completing the journey for this terminal degree: First, I thank Almighty God and my Lord and Savior, Jesus Christ for blessing me and allowing me to have the desires of my heart (to graduate from Nova Southeastern University with a Doctorate in Business Administration). I understand that without God's help I could not have physically or mentally completed this journey.

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I thank my mother, Mary, for her love and prayers during this journey and the love and prayers of my brother, Allen, and my sister, Carol. I also thank my parents-in-law (James and Louise), my sisters-in-law (Jackie, Marion, and Fannie), and my niece and nephew (Jennifer and Jerry) for their love and support in helping me to relax and enjoy my extended family. I also thank my close friends in Greenville, N.C. (Anglene, Her Mother Shirley, and Bernita) and many friends in Goldsboro, N.C. (especially Thetis and Sigrid) and other parts of N.C. (especially John and Marsha) whose prayers supported me during times of discouragement and weak-health conditions.

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Finally, with these thanks gratefully conveyed, I also symbolically honor my deceased grandmother, Mrs. Lettie Reed, by dedicating this work to her. It was she who taught me at an early age the value of an education and helped me to understand who I am, where I come from, and what I am capable of accomplishing. With deepest gratitude and to her memory, I end these acknowledgments with words remembered over forty years ago from my childhood Bible studies with her taken from the Book of Proverbs 4:7; "Wisdom is the principal thing; therefore get wisdom: and with all thy getting get understanding."

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Complete Perfect → Incomplete Imperfect

Availability of Output Measures: Concrete → Ambiguous

BEHAVIOR/OUTPUT CNTL.

* Tin Can Plant
* Knowledge of transformation process known;
* Performance appraisal can be made by output
* Supervisor has the option of the control method used

OUTPUT CONTROL

* Life Insurance
* Mutually set performance targets; Appraisals based on achieved results
* Performance requires flexibility; Emphasis on goal accomplishment as meaning of effectiveness; Open system where standards are known

BEHAVIOR CONTROL

* Infielder
* Responsible for standardized & imposed top-down with an overriding concern for procedures & methods
* Most appropriate in closed system; stable task environment; knowledge of cause-effect relationship is complete

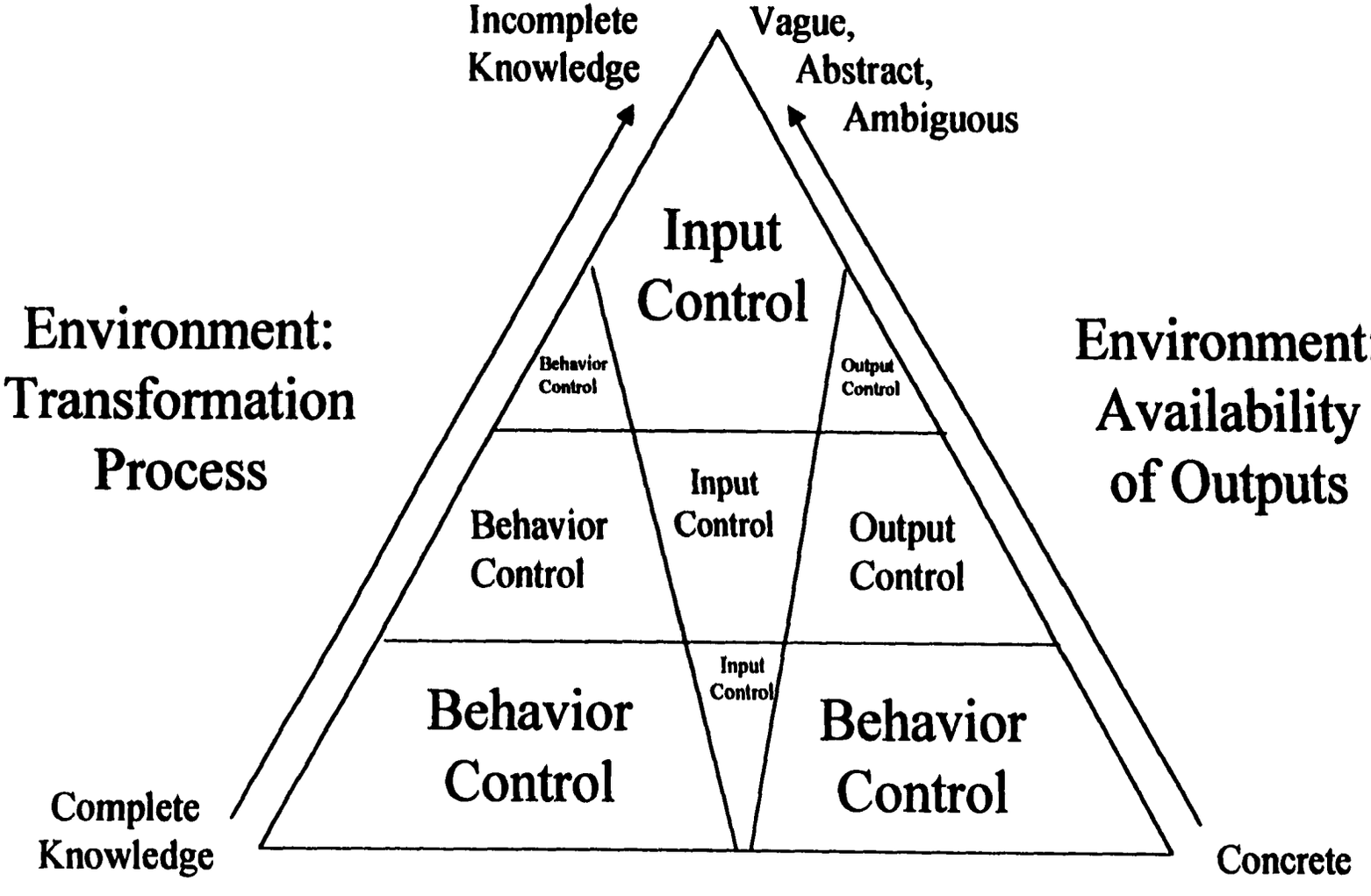
INPUT CONTROL

* U.S. Foreign Service or religious group
* Rigorous selection & training to socialize employees
* Ensure employees possess needed abilities
* Employees understand & internalize organizational values and goals
* Emphasize loyalty & commitment
* Create an environment of cooperation
* Most viable when performance standards are ambiguous & knowledge of transformation process is incomplete

(Ouchi, 1977; Jaegar & Baliga, 1985, ;Snell, 1992,1995)

Figure 1

HRM Input Control Model



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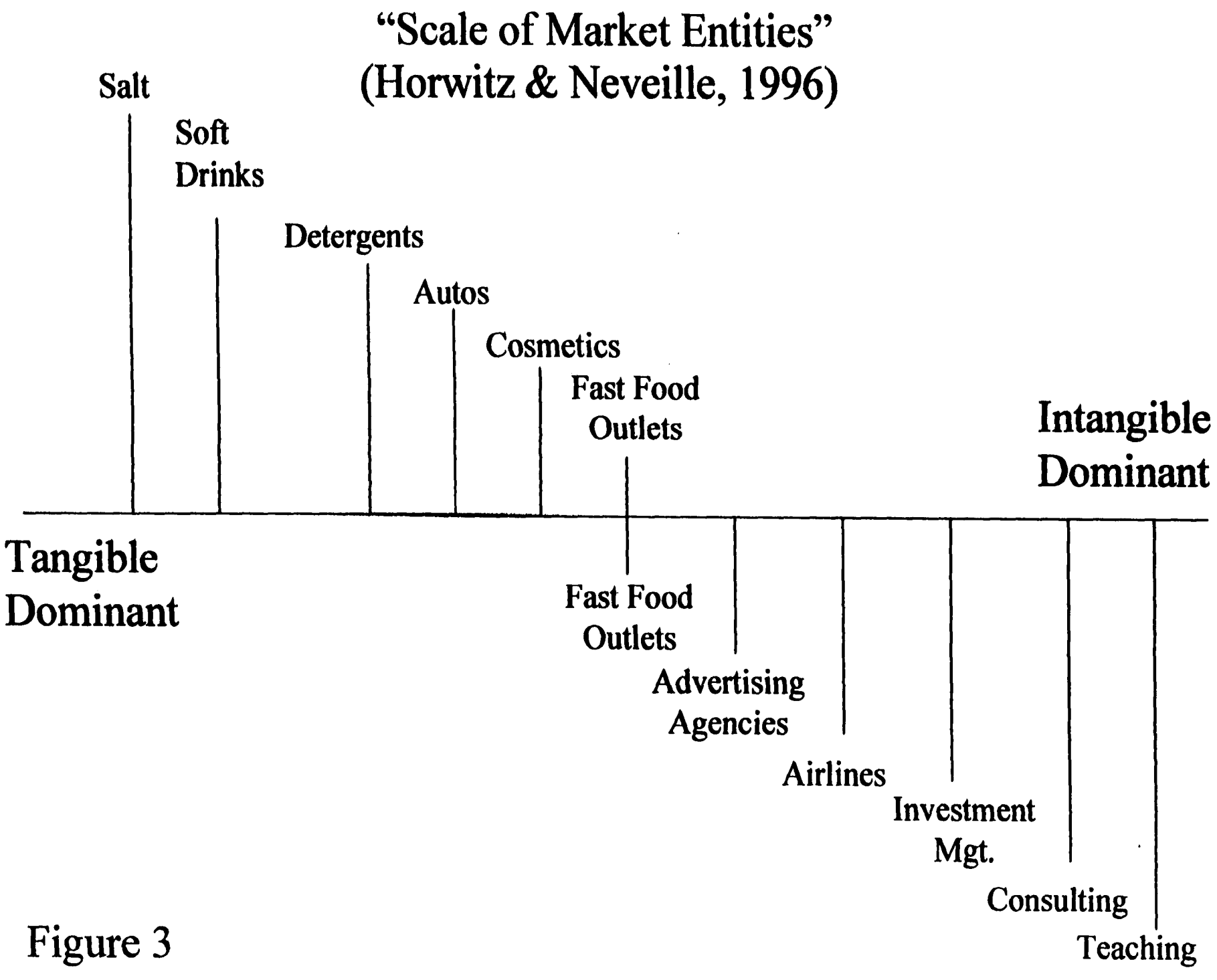
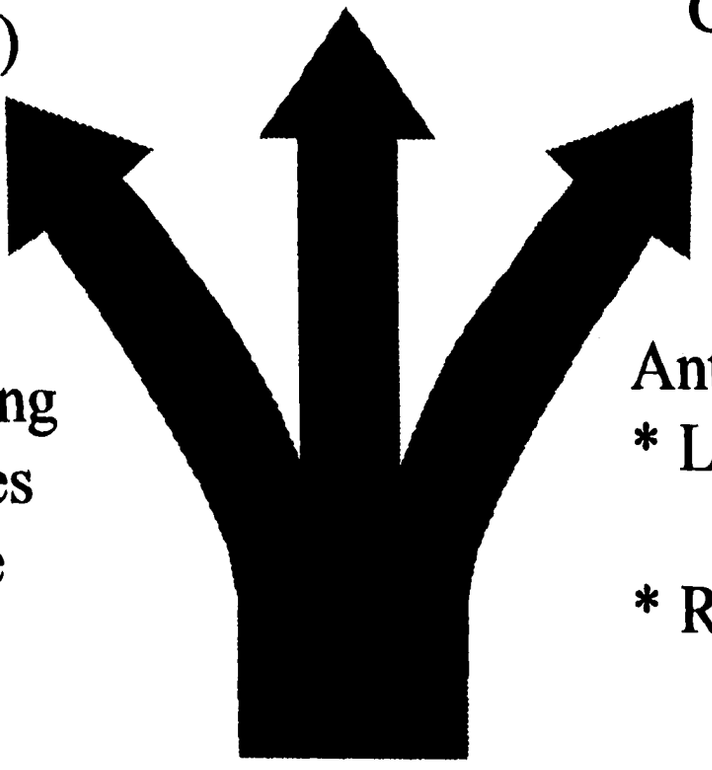


Figure 3

Normative Applications of HRM Input Control



Person-Organization Fit

Strategic HRM (Strategic Staffing)

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Antecedents:
* Goal Ambiguity
* Multiple/conflicting Goals/Objectives
* Skilled workforce

Antecedents:
* Lack of profit to establish standards
* Reliance on subjective factors for worker performance evaluation

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Figure 4

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Performance Appraisal Program

* Performance appraisal training
  - Supervisors
  - Non-supervisors
* Goal setting process

Organizational Culture

* Organizational Philosophy
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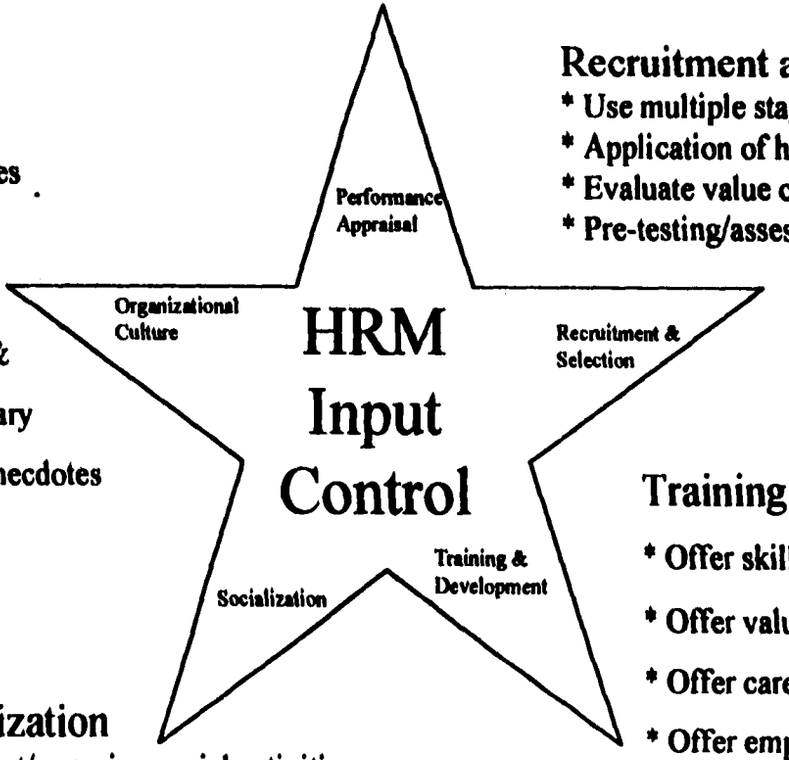
  - Vision statements
  - Organizational objectives
  - Core beliefs and values
  - Human capital theory
* Communication channels & organizational vocabulary
* Heroes, Models, Stories Anecdotes
* Social activities
* Organizational symbols



Recruitment and Selection

* Use multiple stages/steps
* Application of human capital theory
* Evaluate value congruency/self-efficacy
* Pre-testing/assessment

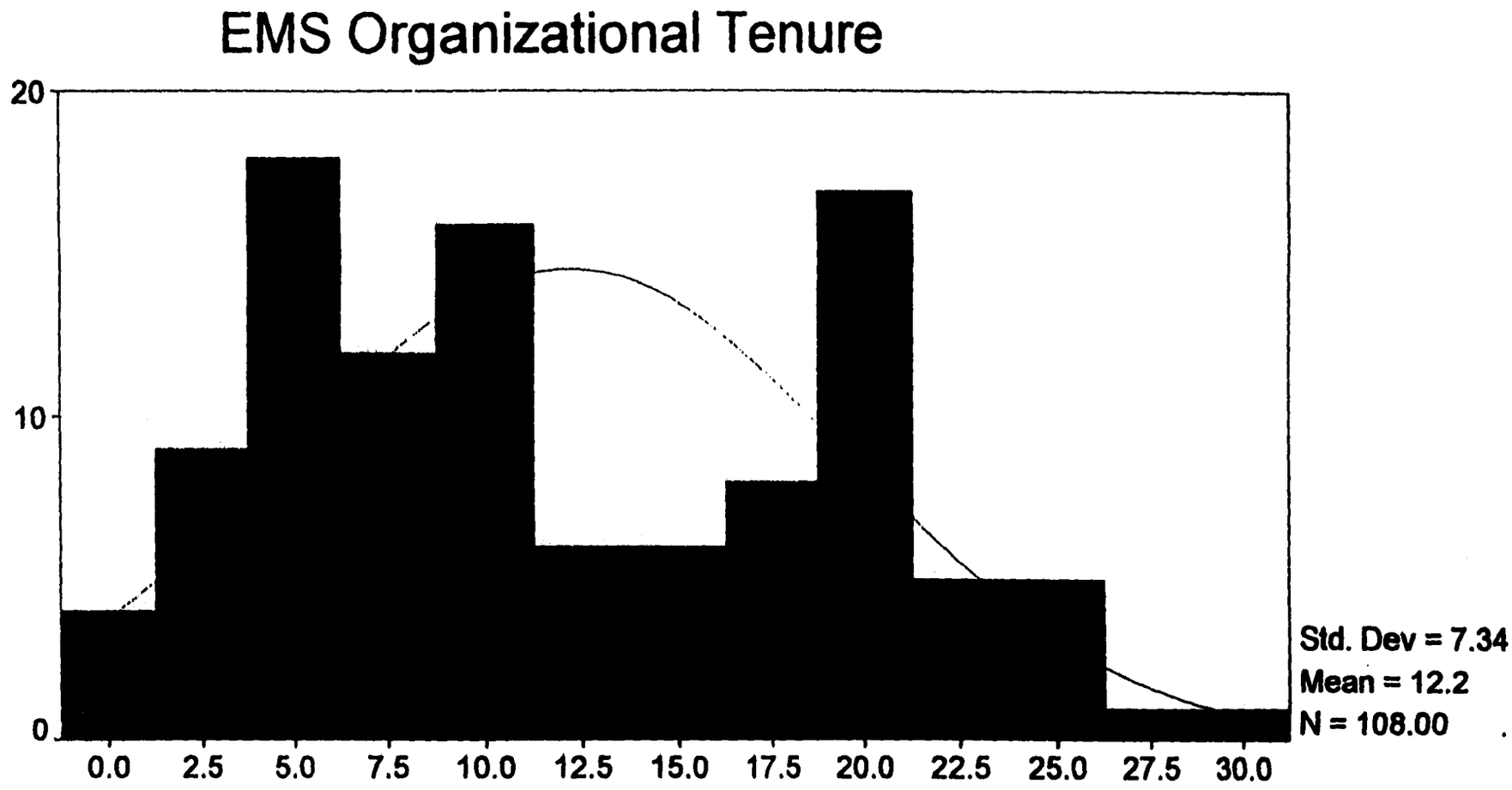
Training and Development Programs

* Offer skill-based training
* Offer values-based training
* Offer career development/enhancement training
* Offer employee-family based training
* Use professional trainers, teachers, or facilitators

Socialization

* Frequent/recurring social activities
* Mentoring program
* Sponsorship program
* Formalized orientation program

Figure 5



Key: X-Axis = Years in EMS; Y-Axis = Number of Responses for Year Group

Figure 6

North Carolina EMS: Managerial Use of Input Control Factors

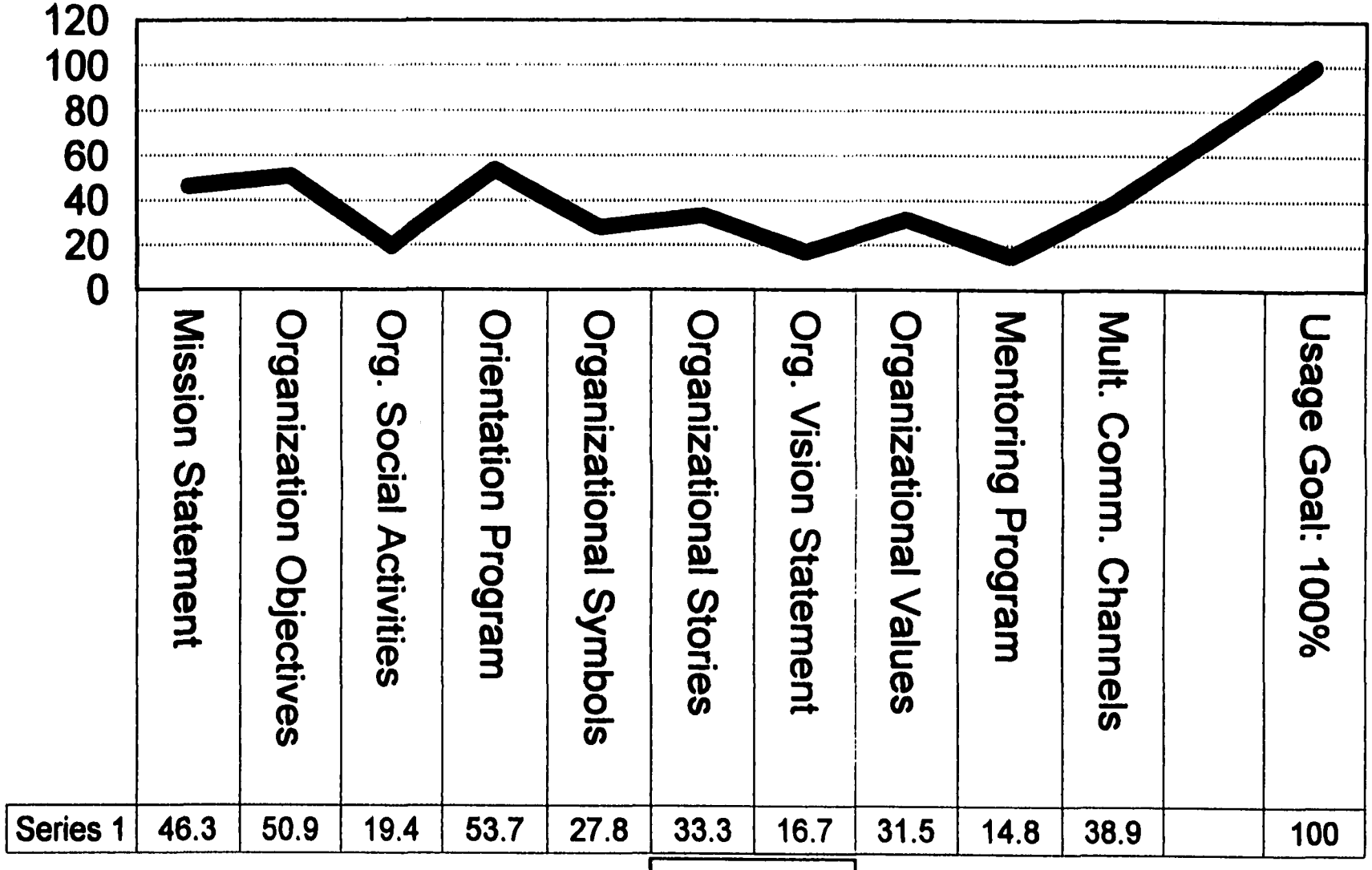


Figure 7

Human Resource Management
Control Theory:
Input Control

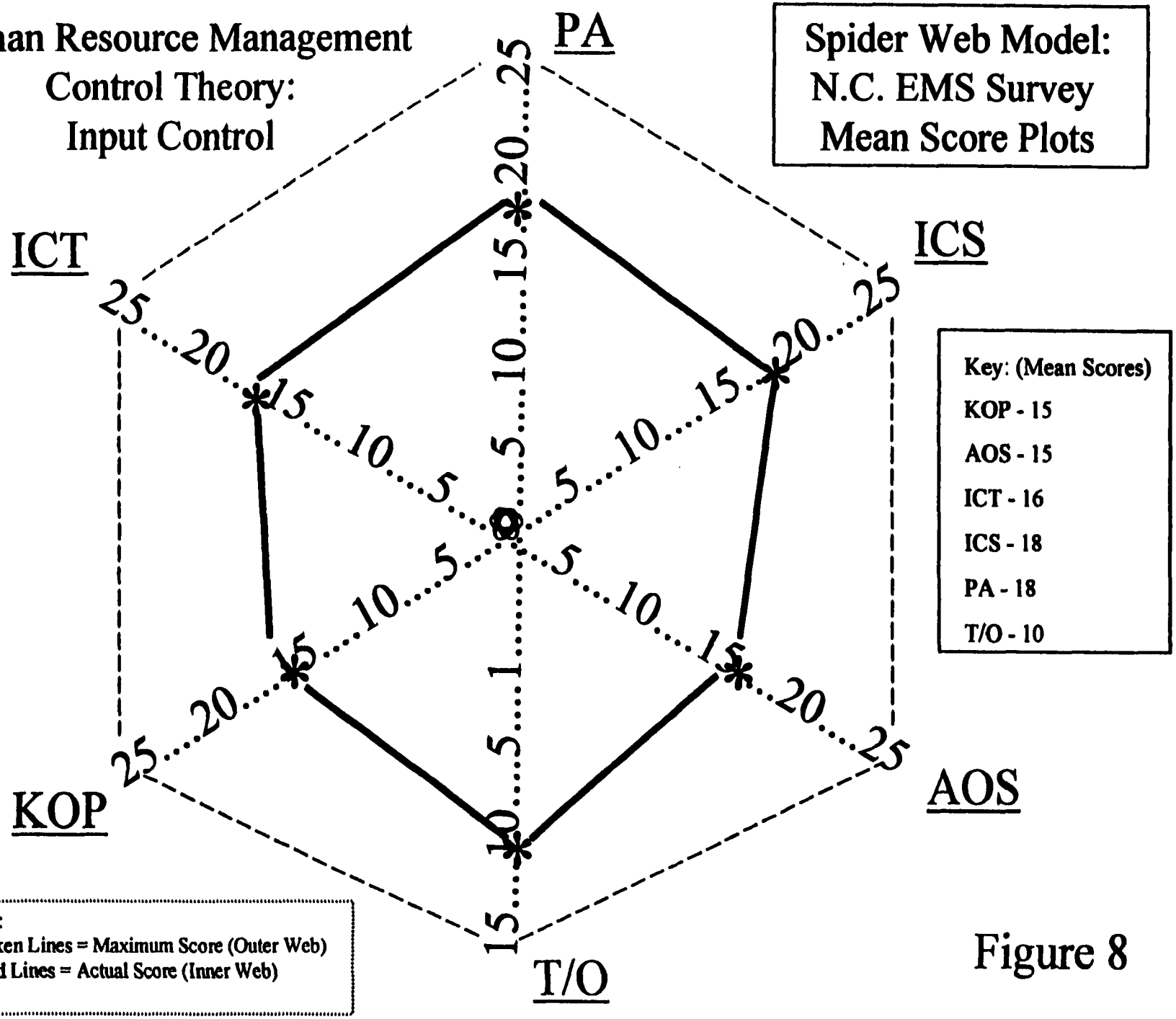


Figure 8

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HUMAN RESOURCE MANAGEMENT CONTROL THEORY: TESTING THE USE OF INPUT CONTROL IN THE EMERGENCY MEDICAL SERVICES CAREER FIELD.

CHAPTER I

INTRODUCTION.

Background and Statement of the Problem.

A review of any business news source will reveal numerous challenges facing corporate leaders as we approach the 21st century. Virtually no organization in the United States (U.S.) is untouched by dynamic and complex human resource (HR) issues. Headlines tell of such occurrences as sexual harassment (i.e. Mitsubushi Motors of America), employment discrimination (i.e. Texaco and Publix Super Markets), racial discrimination (i.e. Denny's Restaurants and Avis Rental Cars of North Carolina), and inappropriate and unethical behavior by junior and senior-level executives (i.e. the hazing rituals of the U.S. military and the scandal of the U.S. presidency). Not only is there a loss of prestige and public image when organizations become defendants and are found

guilty of such charges but as a result of these incidents, both they and their benefactors (i.e. stockholders, lending institutions, etc.) experience significant financial losses that may result in either long-term or permanent damage.

To deal with these problem issues, several prominent business scholars of the 20th century have advocated that progressive and proactive organizations abandon traditional methods in dealing with such HR issues in their quest to successfully compete in the global marketplace. An olio of "paradigm shift" options have been recommended including such notable suggestions as corporate reengineering (Hammer and Champy, 1993); becoming a learning organization (Senge, 1990), and empowering employees at all levels in the organization to embrace the concept of "service to others" via stewardship (Block, 1993). While all of these recommendations have been shown to have merit and are both commendable and worthy of diligent consideration, the common factor that is interwoven between all of them is conceptualized in one thought-provoking question: How can the executive forces, who are responsible for the growth and prosperity of the company best ensure worker compliance, regarding appropriate and effective workplace behavior which is necessary to achieve organizational goals and objectives, while at the same time meeting the needs of its workforce?

Theoretical Framework and Milieu of the Study.

Academically, the most widely publicized and advocated method of dealing with

this question has been through the prism lens of motivation and leadership. For the past decade, business consultants and well-known academicians and practitioners (i.e. Hersey and Blanchard, 1993; Downs, 1995; Spitzer, 1995; Kuczmarski and Kuczmarski, 1995; and Sherriton and Stern, 1997; Behr, 1998) have posited that motivation and leadership are the prime factors in getting workers to become more productive and cost conscious. Although motivational efforts are definitely a key component to organizational success, even astute academicians and practitioners would acknowledge that sustained motivation is based on the premise that the individual must be "intrinsically" driven to act appropriately. In this regard, management's efforts thus can be viewed as functioning as a "catalyst" for igniting that drive (Hersey and Blanchard, 1993; Einstein, 1994). Intrinsic motivation alone then is not enough. Perhaps there is another factor of performance management that is equally as important and is "extrinsically focused" that modern day researchers have failed to consider. Could it be a more fundamental aspect of management that compels behavior compliance that needs to be factored into the performance management equation? It is this author's contention that there is. This factor is the managerial function of "control".

Control: The Least Understood and Researched Management Function.

A review of almost any rudimentary textbook on the topic of management will reveal a brief discussion on the basic functions of management. However, very few, if

any, provide any detailed information on how to effectively utilize and apply the function of "control". It may be that the application of managerial "control", which is externally-focused from the worker's perspective, plays a significant part in gaining worker compliance and ultimately organizational effectiveness and efficiency. Although it is not a panacea for all of the challenges aforementioned, perhaps a better understanding of the theory behind the function of control will provide significant insight as to how organizations can more effectively manager their human resources.

Background on the Construct of Control.

The function of control is considered to be an executive activity. Barnard (1956) stated that:

> Control relates to directly, and in conscious application chiefly, to the work of the organization as a whole pattern rather than to the work of executives as such. But so heavily dependent is the success of the corporation upon the functioning of the executive organization that practically the control is over executives for the most part. If the work of an organization is not successful, if it is ineffective, if it cannot maintain the services of its personnel, the conclusion is that its "management" is wrong; that is that the scheme of communication or the associated personnel, or both, that is, the executive department directly related,

are at fault. (Barnard, 1956, p. 223).

Starkey (1998) additionally posits that current researchers frequently misinterpret Barnard's (1956) work and incorrectly equate control as a sub-function of leadership. Control is indeed traditionally viewed as a managerial function and the means by which control is administered is typically through an elaborate control system (Flamholtz, 1996). The foundation of a control system stems from the "cybernetic model" (Boulding, 1956), which posits that the operation of a business consists of several interconnected stages: input, process, output, and a monitoring process (Snell, 1992). Ouchi (1977) posits that it is the monitoring process which conceptualizes the construct of control.

Defining the Construct of Control.

Ouchi (1977) stated that early theorists believed that organizational form or structure was the essence of control. He disagreed with this premise and posited that:

> The control system seems to consists of two parts: a set of conditions (means-end relationship) and the control system itself (efficiency tests, instrumental tests, social tests, etc.)...In controlling the work of people and of technologies, these are the only two phenomena which can be observed, monitored, and counted. (Ouchi, 1977, p. 96,97).

Jaeger and Baliga (1985) cited Tennenbaum (1968) in defining the construct, control: "Tennenbaum (1968) defines control as any process in which a person (or group of persons or organization of persons) determine or intentionally affects what another person, group or organization will do" (Jaeger and Baliga, 1985, p. 116). Lebas and Weigenstein (1986) defined control as "the process by which an organization ensures that its sub-units act in a coordinated and cooperative fashion, so that resources will be obtained and optimally allocated in order to achieve the organization's goals" (Lebas & Weigenstein, 1986, p. 25). Snell (1992) paraphrased and expanded Tennenbaum's definition of control by defining control as "any process that helps align the actions of individuals with the interest of their employing firm" (Snell, 1992, p. 293-294). He goes on to espouse that "Typically, firms use a 'cybernetic system' (Boulding, 1956) to model the control process, including (1) supervisor's intentions, (2) an influence mechanism, and (3) evaluation and feedback" (Snell, 1992, p. 294). Challagalla and Shervani (1997) defined the construct of control by stating, "Control, therefore, refers to the setting of goals, monitoring of process, providing feedback, and the administration of rewards and punishments in order to align individual and group behavior with the organization's objectives" (Challagalla and Shervani, 1997, p. 161). All of these definitions on the construct control define it in terms of the external actions of managers regarding the two antecedent conditions originally stated by Ouchi (1977) and the use of a supporting system.

For the purpose of this study and building on the works of Snell (1992) and

Challagalla and Shervani (1997), control is defined as the process by which management takes specific steps (i.e. via such means as goal setting, formal/informal feedback, rewards, punishments, recruitment, selection, training, development, and socialization processes) to align the actions of individuals or groups of individuals, to optimumly achieve organizational goals and objectives.

Scope and Limitations of this Study.

The scope of this study is to conduct empirical research regarding the theory of human resource management (HRM) control and, specifically, to expand the base knowledge on one particular facet of the theory, input control. Snell and Youndt (1995) stated that:

> In the past, the construct of control has been used as a lens for combining HRM practices (cf. Eisenhardt, 1985; Gupa and Govindarajan, 1991; Kerr, 1985; Lawler and Rhode, 1976; Snell, 1992.) The underlying premises of HRM control theory are: (1) organizations emerge, survive, and thrive because individuals can accomplish more collectively than they might on their own (Eisenhardt, 1985; Hrebiniak, 1978); (2) Individuals may act in ways that serve their self-interests, but detract from the organization as a whole (Barnard, 1938;

> Jensen and Meckling, 1976); (3) HRM is one of the principal mechanisms by which managers integrate the actions of individuals to keep them conformant to the interests of the firm (Goold and Quinn, 1990). (Snell and Youndt, 1995, p. 712).

The one aspect of the HRM control theory that has been investigated the least is that of "input control". Snell and Youndt's (1995) research work stated that:

> Specifically, it remains difficult to differentiate informal clan control (Ouchi, 1979 [sic]) from more formal aspects of staffing, training, and socialization...Future research is needed to better reconcile the practical and conceptual issues that go into measuring HRM as a whole (Jackson et al., 1989). From a rational perspective, it should be noted that an emphasis on input control, in and of itself, might not be as important as emphasizing the "correct" inputs required for the firm. (Snell and Youndt, 1995, p. 712).

While it is beyond the scope of this work to investigate in great depth the many various facets and branches associated with the input control segment of the theory, this study will attempt to shed new light in qualifying the applicable business environment, according to the theory, in which input control may be strategically utilized and to provide current information on the antecedents associated with utilizing this method of

control. In doing so, this research will also attempt to validate existing research, utilizing Snell's (1992) instrument by empirically testing a segment of the business population not previously researched or associated with the input control environment. The belief is that this research will significantly benefit our collective knowledge in this area of behavioral science research. Since the most prominent antecedent reported in the literature regarding the use of input control is via the vehicle of "organizational culture", this work must provide some detailed information on this construct as well.

Although organizational culture is commonly referred to in previous research works involving input control (Ouchi, 1975 Ouchi and Johnson, 1978, Ouchi, 1980, and Snell, 1992) it is beyond the scope of this work to conduct a complete and extensive investigation into organizational culture, which is a separate area of investigation in and of itself. Instead, regarding organizational culture as an antecedent of input control, this work will attempt to expand on the existing research in HRM control theory by following the recommendations of Snell and Youndt (1995) by identify the "correct inputs" associated with utilizing input control and specifically identifying the antecedents of organizational culture which allow for its use as part of the performance management process to obtain and maintain an organization's competitive advantage.

Additionally, there are limitations to this study. As previously noted in the highly respected and established academic research works of Snell (1992) and Snell and Youndt (1995) relating to this theory, the author also acknowledges that there are a host of factors other than those included in the theoretical model that may affect HRM control

(performance management utilization), administrative information, and employee development. While exogenous factors in the for-profit, non-profit, and service industry environments are beyond the scope of this study, their effect will be statistically removed to prevent any possible contamination or confounding of the findings (Snell and Youndt, 1995).

CHAPTER II

REVIEW OF THE LITERATURE

Pre-Human Resource Management Control Theory Era.

Control was typically viewed as an executive function and worker behavior was dictated by the firm's owners (Barnard, 1956). As the person taking the financial risk in starting and managing an entrepreneurial venture, even workers recognized the "sovereign authority" of the business owner(s) in deciding what work needed to be done and how it was to be accomplished. During the early years of behavioral science research, the focus was beginning to shift from the basic functions of management to understanding the management-worker relationship. Leaving the fundamental functions of management, this sovereign authority philosophy remained the prevailing perspective of organizational control until the early 1970s. Ouchi and Maguire's (1975) research on the nature of control in organizations provided the first real foundational work for control theory development.

From their research they deduced that there are only two types of control that can be utilized with workers: behavior control and worker output control.

> The study of control in organizations includes selection and training, socialization processes, bureaucracy, formalization and measurement of outputs. Much of this literature has dealt with two alternative modes of control, often called "personal versus impersonal" or "personal versus mechanical". It has been common to assume that these two modes of control are interchangeable, since both serve the same purpose...Studies have distinguished between control based on direct personal surveillance (Behavior control) and control based on the measurement of outputs (Output control). (Ouchi and Maguire, 1975, p. 559).

They cited and referenced Blau (1956), who stated that management frequently uses the evaluation of records or files as a substitute for the use of close supervision, and Rushing (1969) and Reeves and Woodard (1970), who suggested that personal control and impersonal control are opposite ends of a single continuum (Ouchi and Maguire, 1975). However, Ouchi and Maguire (1975) posited that the two forms of control may serve different purposes and occur independently of each other (Ouchi and Maguire, 1975).

Organizational Control: The Two Antecedents.

Ouchi's (1977) work in control advocated that "...two antecedent conditions can be specified, each a necessary condition for a rational application of each of the two

forms of control" (Ouchi, 1977, p. 97). The two antecedent conditions for utilizing a control method were: knowledge of the transformation process or the availability of standards (Ouchi, 1977; Ouchi and Johnson, 1979; Snell, 1992). Simply stated from an entrepreneurial perspective, since it is management that formulates the ideas and business plans for starting and operating a business, it is management which usually has the highest level or degree of knowledge for successfully running the business. As possessor of such intricate business knowledge and insight, managers would be expected to have the highest level of understanding of the transformation process regarding the manufacturing or production of a business's products/goods or provision of services (Ouchi, 1977; Snell, 1992).

This, then, was the primary means of providing control over workers in the early days of American business. All that was required of the manager or supervisor was that he or she be immediately available to provide the necessary direction to workers as to what and how the work needed to be done and to provide direct supervision to ensure worker compliance. However, as organizations began to flourish and businesses began to grow and expand, the entrepreneurial manager found that he or she was unable to effectively provide individualized directions or close supervision to large groups of people due their natural human limitations or their inability to physically oversee the behavior of vast numbers of workers simultaneously. In this instance, management found that providing and utilizing an established standard for worker productivity/output could be used to effectively accomplish the same degree or level of control that was

accomplished by behavior control. In fact, if the standard was precise and detailed enough to result in high quality products or services, management personnel did not necessarily have to possess expert or high levels of knowledge of the transformation process since the workers' output could be objectively compared to the established standard (Ouchi and Maguire, 1975; Ouchi, 1977; Ouchi and Johnson, 1979; Jaeger and Baliga, 1985; Snell, 1992; Snell and Dean Jr., (1992); Snell and Youndt, 1995). (Theoretically, this is the basic premise behind effective management when utilizing Statistical Process Control (SPC) in Total Quality Management (TQM) initiatives.) From this information, Ouchi (1977) posited the human resource management (HRM) control theory and the HRM control theory model.
(See Figure 1.)

Performance Management: The Human Resource Management Control Theory and Model.

The original model developed by Ouchi (1977) has been modified slightly as our understanding of the theory has evolved (Jaeger and Baliga, 1985; Snell, 1995). The revised model has replaced/renamed Ouchi and Maguire's (1975) "personal-impersonal" antecedent continuum with the "administrative antecedent" (Snell, 1992) which is referred to as "knowledge of the transformation process" continuum, while retaining the

"availability of standards" antecedent continuum. It is also interesting to note that the model provides for the use of a combination of both behavior and output control, which in practicality/empirical research, is probably the most commonly applied technique. Concerning this issue, Ouchi (1977) stated:

> Although each of the antecedent conditions is properly treated as a continuous variable and most organizations can be expected to use a mixture of behavior control and output control, all four variables are treated more simply for the purpose of exposition. (Ouchi, 1977, p. 98).

Govindarajan and Fisher (1990) in discussing the model posited that "The matrix presented here is normative, not just descriptive, implying that for effective performance, an organization should use the form of control specified" (Govindarajan and Fisher, 1990, p. 261). This point is especially relevant since the model is intended to provide specific aid and guidance to the practitioner in effectively applying organizational control.

Another perspective for viewing this model is from an empirical application perspective. From this perspective, the author proposes a model that provides a means of dissecting the business population and evaluating it from the iterativeness of the HRM control model quadrants and their appropriate antecedents. This model utilizes the traditional organizational pyramid but with a significant twist. The pyramid levels do not represent an organizational or managerial hierarchy but the most appropriate methods of

organizational control based on the changing antecedent conditions of the business environment. (See Figure 2). Organizations operating in an environment where it is simple to acquire expert knowledge in the transformation process would rely most heavily upon behavior control as the most effective and efficient method, signified by the bottom tier. Organizations operating in an environment where knowledge of the transformation process is moderate and standards are moderately available would rely upon either behavior or output control or both, as signified by the middle tier. In both of these instances, the use of input control is nominal as a means of controlling the worker. However, in an environment where there are limited standards and the transformation process is fluid, the use of input control is viewed as the prominent means of achieving control, as signified by the top tier. Behavior and output controls are utilized as "supporting methods" of control.

The sole purpose of figure two is to better explain empirical workings of the HRM control theory model. The following discussion is offered to briefly explain the antecedent conditions associated with each quadrant of the Ouchi (1977) model.

HRM Control Theory: The Behavior Control Quadrant.

The use of behavior control is posited to be most effective when managers have a fairly comprehensive and complete knowledge of the nature of the business and business environment (Snell, 1992). Since management should possess an extensive knowledge of

the transformation process, bureaucratic measures are often characteristic of this method of organizational control.

> With a bureaucratic framework, formal behavior control regulates the actions subordinates exhibit on the job. More generally, it structures the transformation process of work (Ouchi, 1977). Based on the assumption of a centralized hierarchy, behavior control is initiated top-down in the form of articulated operating procedures (Chenng and McKinley, 1984; Hitt, Hoskisson and Ireland, 1990). To ensure that subordinates adhere to procedures, superiors closely monitor and evaluate subordinates' actions over time (Ouchi, 1977; Ouchi and Maguire, 1975; Thompson, 1967). These appraisals tend to be subjective because they are based on the idiosyncrasies of the information that reaches superiors (Turcotte, 1974). (Snell, 1992, p. 294).

Likewise, feedback is viewed as a remedial, corrective tool to shape subordinate behavior into compliance or congruency as soon as any deviation from expected behavior occurs. Primarily due to the close proximity of the supervisor to the subordinate, the advantage of this method is its directness and immediacy. At the extreme high level of usage of this method, the subordinate learns to follow directions unquestionably. A major disadvantage of the extreme high-end use of this method, however, is the substantial amount of time and inefficient use of supervisory resources in providing direct

surveillance. Additionally, increases in span of control can greatly reduce the usefulness of this method as the number of subordinates increase to a level beyond the supervisor's ability to effectively manage them, making it an ineffective and unmanageable situation for the manager. Perhaps the most significant impact of the high-end extreme use of behavior control in a global competitive environment is the stifling, if not eradication, of subordinate initiative and creativity. The use of behavior control assumes that the supervisor is very knowledgeable of the "cause-effect" relationships regarding the subordinate's efforts and the assigned work tasks. This has also been referred to as "knowledge of the transformation process" (Ouchi, 1977). When these antecedent conditions are present, superiors tend to rely on and be prone to use behavior control. (Snell, 1992). As an example of the appropriate use of this control method, Ouchi (1977) suggested the actions of a baseball team manager in directing a double-play combination play. Subsequent researchers attempted to further define the quadrants of the model by identifying specific antecedents associated with it.

Jaeger and Baliga (1985) posited that bureaucratic control operates under the framework of rationality in the form of "norms". The most common "norm" is the use of Standard Operating Procedures (SOPs). SOPs provide the framework of acceptable behaviors which are normally written in the form of company policy or rules (Jaeger and Baliga, 1985). Snell (1992) also articulated other antecedents of the quadrant to include: "Centralization of authority or rule, articulated procedures, close supervision, and behavioral appraisal (Thompson, 1967; Ouchi, 1977, 1978)" (Snell, 1992, p. 295).

HRM Control Theory: The Output Control Quadrant.

The output control quadrant requires the establishment and utilization of standards or goals which can be objectively evaluated (Snell, 1992). Snell (1992) described this quadrant as follows:

> Output control differs from behavior control in that superiors do not translate intentions into standardized operating procedures but instead set targets, such as financial results, for subordinates to pursue (Hill and Hoskisson, 1987)...This form of control provides subordinates discretion in the means they use to achieve desired goals, thus decentralizing control. It does not allow them to choose goals, only the methods used to pursue established targets. Agency theory suggests that in the absence of close supervision output control might lead to "asymmetric information" or information that is withheld from supervisors, resulting in control loss (Williamson, 1975). In order to avoid this problem and induce performance that fulfills superiors' intentions, elaborate information systems are used that explicitly attach appraisal (Ouchi, 1977) and rewards (Kerr, 1985) to results achieved. A prevalent example of output control is "management by objectives" (Lawler and Rhodes, 1976).
>
> (Snell, 1992, p. 296).

There are several advantages and disadvantages associated with the use of output control. Advantages include: 1) Increased subordinate discretion regarding personal control and initiative. Since the manager, in most cases, recognizes the worker's skills and abilities to perform the work assignment with little to no immediate supervision, he or she has developed a degree of trust in the individual and believes that they possess the necessary intrinsic drive or performance desire that is consistent in achieving organizational goals or objectives. 2) An objective criterion for evaluating subordinate performance is provided. A significant aspect of the use of a criterion is that it's intent is to eliminate the subjective aspect of "judging" individuals based on information that may be vague and only known by the specific manager involved. In its most effective usage, workers at all levels in the organization are very knowledgeable of the criteria by which they will be evaluated and can easily articulate this understanding to others if they are so questioned. The disadvantages are: 1) When worker behavior or performance is unacceptable, management's response is reactive and corrective and not proactive since there are no means of preventing errors or mistakes until after they have occurred. 2) As previously mentioned regarding agency theory, subordinates may pursue specific goals to the exclusion of others based on their tolerance for risk and the expectancy of negative feedback or lack of rewards due to unsatisfactory performance. (Snell, 1992).

Snell (1992) also articulated the following antecedents associated with output control quadrant: "Decentralization (of authority or rule), results criteria, and performance-rewards link (Thompson, 1967; Ouchi, 1977, 1978)" (Snell, 1992, p. 295).

HRM Control Theory: The Behavior/Output Control Quadrant.

As aforementioned, the behavior/output control quadrant is normative of how most organizations in American society function (Snell, 1992). With very few exceptions, most managers possess a moderate degree of career field/specialty knowledge about their organization's transformation process so that they can adequately supervise their workers on an "as needed" basis. Additionally, managers in most successful organizations have established some level of standardization by which worker output can be "evaluated", if not "judged". Likewise, the workers are informed of this either indirectly or directly via rewards, punishments or sanctions. For these reasons, and based on the span of control concept; managers, in most organizations use a combination of both and may choose one and/or the other method with their subordinates based on their desired level of interaction with a specific worker (Ouchi and Johnson, 19778; Strober, 1990; Snell, 1992; Snell & Youndt, 1995).

HRM Control Theory: The Input Control Quadrant.

The least understood and researched aspect of this theory is the input control quadrant. Ouchi (1977) described the environment of this quadrant as a condition where management possesses incomplete knowledge of the transformation process and/or the

nature of the work task(s) is such that it is very difficult to establish concrete standards by which worker's output can be evaluated. If attempts to develop standards are made, the standards are so vague and stated in such nondescriptive terms that both management and workers experience difficulty in conveying or describing concretely or exactly what the intended outcome is of their work efforts. The closest normative examples Ouchi (1977) could use in explaining this category of work and work environment were the U.S. Foreign Service and the Japanese style of management which he later labeled "Theory Z" (Ouchi, 1980).

> From the perspective of Mayo (1945) and Barnard (1968), the fundamental problem of cooperation stems from the fact that individuals have only partially overlapping goals...Thus, industrial organizations can, in some instances rely to a great extent on socialization as the principle mechanism of mediator or control, and this "clan" form ("clan" conforms to Durkheim's meaning of an organic association which resembles a kin network but may not include blood relations, 1933, p. 175) can be very efficient in mediating transactions between interdependent individuals.
> (Ouchi, 1980, p. 130,132).

Since then, behavior science researchers have identified some antecedents associated with the use of input control. Ouchi and Johnson (1978), regarding Type Z organizations,

identified "long-term employment; collective decision making; individual responsibility; infrequent evaluations and promotions; implicit, informal evaluations; nonspecialized career paths, and wholistic concern for people" (Ouchi and Johnson, 1978, p. 294). Ouchi's (1980) work regarding the input control quadrant of the theory renamed the construct "clan" control, taken from the Japanese business culture, to "people treatment" regarding American business culture. In doing so, he identified two significant and specific antecedents: the selection/screening process and training (Ouchi, 1980 and Jaeger and Baliga, 1985). Ouchi (1980) also identified normative requirements of "reciprocity, legitimate authority, and common values and beliefs" (Ouchi, 1980. p. 137). Jaeger and Baliga (1985) also classified the "shared sets of values and beliefs a cultural control system" and expanded on Ouchi's (1977) analysis by adding "skill" and "values" under the training antecedent (Jaeger and Baliga, 1985, p. 117). Additionally they identified, common vocabulary, shared organizational stories, and the extensive publication of organizational philosophy as important attributes (Jaeger and Baliga, 1985). Snell (1992) identified the additional antecedents of: "rigorous staffing (processes), training and development (programs), and socialization" (Snell, 1992, p. 295). Snell and Dean Jr. (1992) and Snell and Youndt (1995) identified: selective staffing, comprehensive training, and developmental performance appraisal (i.e. investments in human capital) as key factors associated with input control. Obviously, several antecedents have been identified that can guide research in this area.

As a means of organizational control, Ouchi (1980) in attempting to further describe the type of organization and business environment associated with the use of input control said:

> In this sense, an occupational group which has organic solidarity may be considered a clan. Thus, a professional , a labor union, or a corporation may be a clan, and a professionalized bureaucracy may be understood as a response to the joint need for efficient transactions within professions (clan) and between professionals (bureaucracy). (Ouchi, 1980, p. 136).

However, not every behavioral scientist agreed with Ouchi (1980) that clan control is an effective method of control of itself. Govindarajan and Fisher's (1990) work refutes his position.

> Control through socialization, which Ouchi (1981) referred to as clan control, attempts to minimize the divergence of preferences among group members. Following Nelson and Quick (1985), we considered socialization control a form of behavior control...(Note 3) In our empirical data, very few respondents used socialization control. There are at least two explanations for this finding: (1) Socialization control is a form of behavior control and is properly classified under this category

> (Nelson and Quick, 1985) and; (2) Since monitoring systems can make output or behavior observable, organizations rarely rely exclusively on socialization control. We deleted data from the few responses indicating the use of socialization control, but the results were the same as if these respondents had been coded as using behavior control.
> (Govindarajan and Fisher, 1990, p. 260-261)

Govindarajan and Fisher's (1990) work with regard to input control can also be questioned in that they specifically noted that they disregarded information that, according to Ouchi's (1977) theory, that may actually have shown the existence of such organizational use by their research population. It may be that for the purpose of their research, the result of this segment was not statistically significant, however, it goes not invalidate its existence. Ouchi and Johnson's (1978) work stated that Type Z organizations were not extensively commonplace in American society and specifically commented on this point in the recommendations section of their 1978 work.

> Thus we conclude that the form of control which evolves is contingent on certain aspects of the environment, particularly the rate of inter-firm mobility and society's attitudes toward individualism and collectivism. We conclude that according to the principle of isomorphism, there must exist within the United States varied micro environments which

> support the Type A (American) and the Type Z (Japanese) organizations. (Ouchi and Johnson, 1978, p. 296).

The fact that the identification of this segment of the business population has been so elusive and difficult to identify also demonstrates that as our knowledge and understanding the field of management evolves, we may be able to better identify this elusive business environment in the near future. Even in the Japanese business culture, the business environment is not exempt from political and financial changes and challenges. Lux (1997) in discussing the Japanese management style today after the Japanese business economy experienced severe financial losses in 1997 stated that "motivating people who are used to security and no specific performance objectives to take the plunge into personal initiative and specific goals is a long-term, hazardous process" (Lux, 1997, p. 39). The same logic may be applied in identifying the input control environment.

The Need for Additional Research into the Use of Input Control in American Businesses.

Thus far, research regarding the HRM control theory in general has investigated such segments of the business population as: retail department stores (Ouchi, 1977); electronics and apparel manufacturers (Ouchi and Johnson, 1978); automobile manufacturers (Jaeger and Baliga, 1985); specialty stores in shopping centers

(Eisenhardt, 1985); Strategic Business Unit (SBU) general managers of Fortune 500 companies (Govindarajan and Fisher, 1990); single business units with an established HRM function (Snell, 1992; Snell and Youndt, 1995); manufacturing firms from the metal-working industry (Snell and Dean Jr., 1992); and salespeople from industrial product divisions of Fortune 500 companies (Challagalla, Goutam, and Shervani, 1997). Although all of these research works have significantly contributed to the knowledge and understanding of the HRM control theory and the model, all of them are also somewhat limited in evaluating the input quadrant of the model. This is because of the selected business entities' ability to provide either a high degree of direct supervision (i.e. as in a manufacturing or production environment) or the availability of concrete or quantifiable standards or outputs (i.e. as in sales force organizations operating at the medium-scale range of the service industry continuum). In this work, the author proposes to extend this research into the public sector, which is located at the upper-scale range of the service industry continuum (Horwitz and Neveille, 1996).

Public, Service, and Nonprofit Organizations: An Input Control Environment of the Business Population.

As the least understood and researched facet of the HRM control theory, a better understanding of the environment associated with the use of input control and some of its

key antecedents may shed significant insight regarding how management can effectively utilize this method of control to increase their organizational effectiveness. In almost every case, the nature of the business environment from the previous research works could be classified as: 1) Managers possessing moderate to high levels of knowledge of the transformation process and 2) The availability and use of concrete or quantifiable standards for evaluating worker output. These antecedent (administrative) conditions would then not support the significant use of input control as advocated by the model. Perhaps the problems still remain in identifying that segment of the business population where the antecedent conditions make the use of input control more favorable. This then becomes one of focal points of this research.

Ouchi (1977) provided the quintessential foundation for identifying the input segment of the American business population by his example of the U.S. Foreign Service. A current look at the U.S. Foreign Services career field still reveals that selection and training processes are an essential part of their workforce control method.

> Approximately 4,000 Foreign Service Officers of the Department of State serve as administrative, consular, economic/commercial and political officers in more than 250 U.S. embassies and consulates in more than 170 countries and in Washington, D.C....The Department of State and the United States Information Agency (USIA) require newly hired Foreign Service Officers to select a "Functional Area of specialization" or "cone"

> Upon entry into the Foreign Service. The State Department Foreign Service cones are: Administrative, Consular, Economic, and Political. USIA constitutes its own cone. (www.state.gov/www/careers/rfsofficer.html, 1999).

The selection and training processes are uniquely designed due to the nature of the work of foreign service officers.

> A recent job analysis identified certain knowledge, skills and abilities (KSAs) which prospective Foreign Service Officers should possess prior to entry into the Foreign service. The KSAs are considered essential for success on the job regardless of which cone is selected. Knowledge of the following areas was identified as essential for success on the job across all cones: proper English usage, world geography, historical antecedents of international affairs, the U.S. Constitution, government and the political systems, major events, institutions, and movements in U.S. history.
>
> In addition, Administrative, Consular, and Economic Officers should know basic accounting and mathematics. Economics Officers should know cost/benefit principles, basic economic principles... The job analysis also identified the following skills and abilities as

> important to the work of a Foreign Service Officer across all cones: strong interpersonal skills, adaptability and flexibility, good judgment and common sense, integrity, ability to work independently and on a team, ability to set priorities, a sense of humor, interest in foreign cultures and foreign languages, and self-confidence and a positive attitude. (www.state.gov/www/careers/rfsofficer.html, 1999).

Additionally, new officer orientation and training are also stressed.

> All new Foreign service Officers participate in a seven week orientation program designed to introduce new officers to the Foreign Service. The orientation program focuses on the operation of the Department of State, the foreign affairs community, and life of a diplomat abroad. The program consists of lectures, discussions, writing and speaking exercises, and visits to other government agencies.
>
> Once officers are assigned, they will receive additional training specific to their post of assignment. Junior officers typically language instruction, attend seminars on the country or region to which they have been assigned, and take courses to provide them with specific skills and knowledge they will need

to perform effectively. (www.state.gov/www/careers/rfsofficer.html, 1999).

As the literature will show, some of these same essential requirements are identified in the other career fields in the public sector, making the use of input control an effective means of employee control.

Organizational-behavior researchers have long debated whether there are significant differences between the private and public sectors of business when it comes to management. Ouchi (1977) indirectly suggested that the public sector, nonprofit sector, and/or "select" service organizations may indeed be the appropriate business environment regarding the use of input control. Solomon (1986) wrote of the differences between the private and public sectors of the business populations stating:

> Following Thompson's (1962) notion, effectiveness depends on matching the internal structure to the demand of the task environment; it would therefore appear that effective functioning of the private and public organizations would depend on different criteria, because each must adapt to different environmental contingencies. (Solomon, 1986, p. 247).

He goes on to identify some of the environmental factors that necessitate the need for adapting to environmental challenges.

> Among the environmental factors most often cited in the literature as differentially affecting organizations in the two sectors, are differences in the degree of market exposure and sources of funding (Lindbolm, 1977; Turk, Walmsley, and Zald, 1979: Walmsley and Zald, 1973)...Managers in the public sector are required to maintain constituencies, seek multiple goals, and obtain through an appropriation process, which is susceptible to political influences (Porter and Van Maanen, 1970; Rainey et al., 1976). (Solomon, 1986, p. 247).

Perry and Rainey's (1988) work offered some interesting insight into the public sector of the business population and cited several organizational behavior theorists who have considered the differences in environmental characteristics to be significant.

> The potential theoretical significance of the public-private distinction has also attracted attention from scholars. Meyer (1979, 1982) argued that inattention to differences between profit-oriented firms and public agencies can lead to over generalization in organizational theory. A related contention is that organization theorists have paid too little attention to unique characteristics of public bureaucracies, where as political scientists have applied too few of the concepts of organization theory to the study of public bureaucracy (Hood and

> Dunsire, 1981; Meyer, 1979; Pitt and Smith, 1981; Warwick, 1975). Fottler (1981) and Whorton and Worthley (1981) argued that distinctions between the two sectors involve important differences in organizational environments, incentives, and culture, which should be incorporated into theory. (Perry and Rainey, 1988, p. 182).

Additionally, Rainey's (1989) work also provides significant insight into understanding some of the unique qualities of the public/nonprofit sectors that tend to validate the existence of an input control environment.

> Many scholars in political science and economics treat public bureaucracies as markedly distinct from business organizations. Some economists posit that the absence of an economic market for the outputs of a public agency induces inefficiency (Niiskanen, 1971) and rigidity (Downs, 1967). Political scientists typically regard bureaucracies as subject to unique external political influences, but until recently paid limited attention to the managerial characteristics of those bureaucracies (Allison, 1983; Meier, 1987; Rourke, 1984; Seidman and Gilmour, 1986). In the last decade, however, numerous books and articles noted the gap between managerial theory and theory in political science and economics (Gortner, Mahler, and Nicholson, 1979; Pitt and Smith, 1981; Rainey, Backoff, and Levine, 1976; Rehfus, 1988; Warwick, 1975). A growing

> emphasis in organization theory on external power, control, and institutions moves in a similar direction (Scott, 1988). (Rainey, 1989, p. 230).

Specifically, Rainey's (1989) research provided the following summary of the distinctive characteristics of the public sector environment:

> I.1 Absence of economic markets for outputs and reliance on governmental appropriations for financial resources.
>
> II.1 ...Outputs are not readily transferable on economic markets at a market price.
>
> II.2 ...Government has unique sanctions and coercive powers, and is often the sole provider [of services].
>
> III.1.a. [There exists] Greater goal ambiguity, multiplicity, and conflict.
>
> III.2. Distinctive features of general managerial roles. [There is more] ...intervention by external interest groups, and political authorities, more crisis management and "fire drills"...)
>
> III.3.c. High-level public managers show greater reluctance to delegate authority and a tendency to establish more levels of review and approval, and make greater use of formal regulations to control (guide) lower levels.

III.6.b. ...The studies indicate that there may be some compensating effect of service and other intrinsic incentives for public employees...

III.7.a. A number of studies have found different work-related values on the part of public managers and employees, such as lower valuation of monetary incentives, and higher levels of public service motivation. (Rainey, 1989, p. 232-233).

The public-sector environment is often equated as also operating in a nonprofit environment. Nonprofit organizations have an environment which is very similar in nature to the public-sector environment in that businesses in this segment of the business population operate, to a large extent, under the same business constraints as public organizations. They also must deal with some of the same issues such as multiple goals, objectives ambiguity, and governmental regulations (Pappas, 1996). Pappas (1996), in defining the characteristics of the nonprofit sector, listed six distinct characteristics:

1. Formally constituted/institutionalized. Nonprofit organizations have bylaws and are legally constituted entities with their own IRS classification.
2. Private, as opposed to governmental. The federal government and state and municipal entities have a different IRS classification and are considered in the public domain. Nonprofits, on the

other hand, are often considered to be a third sector after government and the corporate world.

3. Not profit distributing. If a nonprofit organization generates an excess of revenues over expenditures (profit) in any given year, the profits must be plowed back into the organization to support its fundamental mission. Profits cannot be distributed to the organization's founders, managers, leaders, volunteers, or staff.

4. Self-governing. Each nonprofit has a board of directors or trustees that holds the organization's assets in public trust. To this end, the directors/trustees have a fiduciary and legal responsibility for the entity. There are codes of conduct that call for board members to refrain from conflicts of interest and personal self-aggrandizement.

5. Voluntary. Perhaps one of the most distinguishing characteristics of this sector is its dependence on the goodwill and countless hours of contributed services provided by volunteers. The giving of one's time for the greater good is an extraordinary asset that allows the nonprofit sector to provide services and programs at less than their true or total cost.

> 6. Of public benefit. The nonprofit sector encourages individual initiative for the public good, just as businesses and corporations encourage individual and collective action for the private good or profit motive. (Pappas, 1996, p. 1-2)

Of these six items formally constituted/institutionalized; not profit distributing; self-governing; volunteers (i.e. municipal governments) , and of public benefit are also applicable, for the most part, to public (governmental and bureaucratic) organizations.

Not only are the two closely related with regards to environment, one of the largest economic sources for the nonprofit sector is the government (public sector). "Government (is) the second largest source of (nonprofit) income. Grants, contracts, and reimbursements reflect partnerships and alliances between government and the nonprofit sector in carrying out public purposes from the delivery of health care to the provision of education" (Pappas, 1996, p. 9).

McLeish (1995) noted that nonprofit organizations are somewhat different in the area of appropriations and support in that they must focus on no less than four different constituents simultaneously. He stated that:

> In today's climate of change, nonprofit organizations must serve four distinct groups: clients, constituents, volunteers, and donors. Clients are the individuals who the nonprofit organization serves

> directly and who are the immediate beneficiaries of its output. Constituents represent the consuming public that purchases some of the output from the organization - perhaps a book. Volunteers and donors (also called supporters by some organizations) supply or lend the nonprofit organization different types of resources: time, money, knowledge, encouragement, or facilities...The problems in serving these groups include their increasing lack of sustained loyalty to a cause as well as increasing concern about how nonprofit organizations run their day-to-day operations...Traditional nonprofit networks are changing as well. Nonprofit organizations can no longer assume that certain individuals or corporations will supply volunteers, money, and publicity for their causes and activities just because they've done so in the past. (McLeish, 1995, p. 5).

From this discussion, it can be reasonably construed that there is a high degree of congruence between these segments of the American business population.

The segment of the "for-profit" sector of the business population that has an environment which appears to closely resembles the characteristics of the public/nonprofit sector organizations can be identified at the upper-end of the services industry continuum (Powers, 1995). Horwitz and Neveille (1996) describe a market entity continuum in which businesses operating in the service industry can be categorized

by service attributes ranging tangible to intangible. (See Figure 3). Types of business included at the intangible range included such businesses as investment management, business consulting, and teaching.

> The service component of any entity have a number of unique characteristics which distinguish them from the more tangible aspects of the product (Berry, 1980). These make the consistent delivery of excellent service more difficult to plan and manage...The degree to which these characteristics (which are discriminators in the perceptions of the customer) apply to the attributes of any market entity will determine the position of the market entity in the tangible/intangible continuum...
> They (intangible characteristics of the service industry) include:
>
> * The intangible nature of the service component themselves; They cannot be seen, felt, tasted, or touched; They are consumed but not possessed.
> * The simultaneous production and consumption of service components such as delivery and installation; They cannot be inventoried.
> * The considerable potential for high variability in the performance of services (Note: This is due to the human capital assets).
> * The perishable nature of service components, such as after-sales care. If the facilities (i.e. service contract/warranty) in place are not

> utilized at any given moment in time, then the opportunity to use these facilities is lost forever and cannot be recovered at a later date. (Horwitz and Neveille, 1996, p. 473).

In discussing the importance of matching management style and control to developing an organizational culture, Horwitz and Neveille (1996) argue that:

> It is imperative that through its actions and behaviors management engenders a culture characterized by a willingness to help customers and to provide prompt service. This culture can be achieved through top management attention to service issues and high level of contact between management and customers and between management and customer and contact employees - not just when things go wrong. (Horwitz and Neveille, 1996, p. 485).

Interim Summary of Public, Service and Nonprofit Organizations: Segments of the Business Population Exhibiting Input Control Characteristics.

From this discussion, we can reasonably conclude that these sectors (public organizations, nonprofit organizations, and high-end service organizations) of the business population may be adequately correlated with an input control environment. It is specifically the antecedent factors of: 1) Goal/objective ambiguity, 2) Multiple, and sometimes conflicting, organizational goals and/or objective, 3) Heavy dependence on the effective performance of skilled workers in meeting the multiple, and often diversified, needs of constituents, 4) Lack of the profit motive as a means of establishing a quantifiable standard and 5) Heavy reliance upon subjective factors of others as a mean of evaluating and determining the performance effectiveness of workers, that would make the use of input control an effective and efficient method of controlling worker behavior. (See Figure 4).

Having then identified segments of the business population which are hypothesized as being the primary "proving grounds" for input control research, the remaining issue is to identify the key antecedents necessary to effectively utilize input control (Snell, 1992, 1995).

Input Control Antecedent: Organizational Culture.

The most prominent factor in discussing the antecedents of input control is organizational culture (Ouchi and Johnson, 1978; Ouchi 1980; Jaeger and Baliga, 1985; Snell, 1992; Snell and Dean Jr., 1992; Snell and Youndt, 1995). As a construct, organization culture has many different meanings and interpretations. For example, some scholars would advocate that all organizations possess a "culture" in that they possess general norms regarding the behavior of workers in that organization. However, for the purpose of organizational culture to function as a means of intentionally controlling behavior (a strategic management concept), the definition of this construct must be more concrete (Powers, 1995). Again, although it is beyond the scope of this research to thoroughly research the theory of organizational culture, this work does review a substantial portion of the prominent literature in identifying the key attributes needed in developing and implementing organizational culture as a strategic advantage mechanism relating to its use as an input control antecedent. Lebas and Weigenstein (1986) in their work entitled "Management Control: The Roles of Rules, Markets and Cultures" declared that "Culture is thus an especially desirable control approach where the causal model is unclear, uncertainty is high, communication is difficult with other actors, and the cycle of action and consequences is compressed" (Lebas and Weigenstein, 1986, p. 265). This explanation of the use of culture is especially significant in that it essentially further

validates the antecedents of the input control environment previous advocated in the HRM Control model. They specifically defined the construct "organizational culture" as:

> ...(Organizational) Culture sets forth a philosophy, whose values are shaped and fine-tuned to conform to the organization's economic and business environment. These beliefs and values are conveyed to the organization at all levels, initially through the recruitment and socialization process, and subsequently through training and development (i.e. rules (or principles) communication) and both formal and informal communication channels. The organization's vocabulary, the design of its buildings, beliefs about the use and distribution of power and privilege, and the myths which legitimate those distributions also represent to itself and form part of culture. Lastly (organizational) culture is embodied through company heroes who personify the organization's values and serve as role model, sending a clear message to managers about desired behavior. The stories and anecdotes which grow over time also send cultural messages, as do the ritual ceremonies which dramatize the organization's progress toward its goals. (Lebas and Weigenstein, 1986, p. 264-265).

Regarding the issue of organizational philosophy, Morrison's (1996) work on

Organizational Citizenship Behavior (OCB) advocated that:

> An organization's human resource philosophy refers to its overarching beliefs and values with respect to how employees should be treated (Schuler, 1992)...Research has found that employees form generalized beliefs about the extent to which their organization values their contributions, and cares about their well-being, and that these beliefs lead to higher OCB (Eisengerger, Huntington, Hutchison, and Sowa, 1986; Witt, 1991). (Morrison, 1996, p. 503).

Academicians and practitioners of organizational behavior theories and management principles support the belief that the individual(s)s normally responsible for developing the organization's philosophy, vision, and core values is the head of the organization or the executive staff (Barnard, 1956; Hersey and Blanchard, 1993; Pant and Lachman, 1998) and organizational members who were recognized as playing a significant part in the initial success of the organization. Lebas and Weigenstein's (1986) definition of this construct is also very similar to those utilized by other theorists and researchers (Harris and Mossholder, 1996; Boxx, Odom, and Dunn, 1991; Chatman, 1991; O'Reilly, Chatman, and Caldwell, 1991; Harmon, 1996; Schein, 1996; Conkling, 1997).

Collins & Porras (1996) advocated that a well-conceived organizational vision

consists of two major components: Core ideology and an envisioned future. Portrayed as the Japanese symbols of "Yin" and "Yang", core ideology consists of an organization's core values and core purpose. Core values are defined as a small set of timeless guiding principles which have a intrinsic value and importance to those inside the organization. These values do not stem from market requirements or changing business fads but from the inner beliefs of the founding fathers of the organization (Collins & Porras, 1996). As examples, they related the following:

> William Gamble and James Proctor didn't instill in P&G's culture a focus on product excellence merely as a strategy for success but as an almost religious tenet. And that value has been passed down for more than 15 decades by P&G people... Service to the customer - even to point of subservience - is a way of life at Nordstrom that traces back to 1901, eight decades before customer service programs became stylish...The point is that a great company decides for itself what values it holds to be core, largely independent of the current environment, competitive requirements, or management fads.
> (Collins & Porras, 1996, p. 66,67).

One of the key points they stressed was that an organization should not change its core values in response to market changes. Instead, marketing principles advocate that it

should change markets, if necessary, to remain true to its core values. Collins and Porras (1996) defined "core purpose" as the organization's reason or justification for being in existence which reflects the people's idealistic motivations for doing the company's work. Core purpose relates to the organization's strategic mission statement which proclaims to society its intention of providing goods or services for the "common good" of mankind (Collins & Porras, 1996). As examples, they provided the following examples of core purposes for some Fortune 500 companies:

> 3M: To solve unsolved problems innovatively.
>
> Hewlett-Packard: To make technical contributions for the advancement and welfare of humanity.
>
> Mary Kay Cosmetics: To give unlimited opportunity to women.
>
> Merck: To preserve and improve human life.
>
> Nike: To experience the emotion of competition, winning, and crushing competitors.
>
> Wal-Mart: To give ordinary folk the chance to buy the same things as rich people.
>
> Walt Disney: To make people happy. (Collins & Porras, 1996, p. 69).

Collins and Porras (1996) emphasized that core purpose should not be confused with an organization's intent to develop specific goals or business strategies. They advocate that

core purpose cannot be fulfilled; it is equivalent to a guiding star on the horizon which is forever pursued but never reached. Here then is where core purpose significantly differs from core values. Whereas core values never change; core purpose is intended to inspire change in an organization (Collins and Porras, 1996). The second part of their model, "Envisioned Future", advocates an organization developing 10-to-30-Year BHAGs (pronounced Bee-hags which stands for Big, Hairy, Audacious Goals) and a vivid description. According to them, BHAGs should not be based on a high degree of certainty that the organization will achieve these goals. As designed, an organizations should have perhaps only a 50 percent to 70 percent chance of successfully reaching these goals. However, the organization must fervently believe that it can reach the goal anyway by requiring extraordinary effort from every member of the organization. Whereas core purpose is the reason why the organization exists, BHAGs are clearly articulated goals which are reachable (Collins & Porras, 1996). Collins & Porras (1996) provide the following example of an organizational leader providing a vivid description of envisioned future:

> For example, Henry Ford brought to life the goal of democratizing the automobile with this vivid description: I will build a motor car for the great multitude...It will be so low in price that no man making a good salary will be unable to own one and enjoy with his family the blessing of hours of pleasure in God's great open spaces...When I'm through,

> everyone will be able to afford one, and everyone will have one. The horse will have disappeared from our highways, the automobile will be taken for granted...(and we will) give a large number of men employment at good wages. (Collins & Porras, 1996, p. 74).

They emphasized that "envisioned future" should be so exciting in its own right that it would continue to keep the organization motivated even if the organization leadership, who originally set the goals, were no longer with the organization (Collins & Porras, 1996).

According to Collins & Porras (1996), to identify your organization's core values, executives should push with relentless honesty to define what values are truly central. They believe that if you articulate more than five or six, then you may be confusing core values with operating practices, business strategies, or cultural norms. According to them, once you have drafted what you believe to be core values, put them to the test by asking a simple question: If the circumstances change and penalize us for holding these values, would we still keep them? (Collins & Porras, 1996). As an example of the power of honestly answering this question, Collins & Porras (1996) provided this example:

> A high-technology company wondered whether it should put quality on its list of core values. The CEO asked, Suppose

> in ten years quality doesn't make a hoot of difference in our markets. Suppose the only thing that matters is sheer speed and horsepower but not quality. Would we still want to put quality on our list of core values? The members of the management team looked around at one another and finally said no. Quality stayed in the "strategy" of the company, and quality-improvement programs remained in place as a mechanism for stimulating progress; but quality did not make the list of core values. (Collins & Porras, 1996, p. 67).

Desphande and Webster Jr. (1989), in discussing the application of organizational culture and the marketing function, defined the construct as "...a fundamental shared set of beliefs and values that put the customer in the center of the firm's thinking about strategy and operations..." (Desphande and Webster Jr., 1989, p. 3) They also noted that some scholars and practitioners often confuse the constructs organizational culture and organizational climate. They stated that:

> Distinguishing between the terms "culture" and "climate" a used in the organizational behavior literature is important because some theorists have confused the two. Culture is a set of shared assumptions and understandings about organizational functionings. Organizational climate is a related but different concept. Climate relates to members'

> perceptions about the extent to which the organization is currently fulfilling their expectations. (Desphande and Webster Jr., 1989, p. 5).

Barney (1986) and Toulson and Smith (1994) build on the foundation of the previous definition and attempt to qualify some of the factors necessary in sustaining organizational culture for strategic competitive advantage. Barney (1986) explains:

> In this work, organizational culture typically is defined as a complex set of values, beliefs, assumptions, and symbols that define the way in which a firm conducts business. In this sense, culture has pervasive effects on a firm because a firm's culture not only defines who its relevant employees, customers, suppliers, and competitors are, but it also defines how a firm will interact with these key actors (Louis, 1983). This conception of organizational culture blurs classical distinction between an organization's culture and its structure and strategy (Tichy, 1983) because these attributes of a firm are direct manifestations of cultural assumptions about what business a firm is in and how to conduct that business. (Barney, 1986, p. 657).

Barney (1986) identified three factors of organizational culture that are necessary to sustain an organization's strategic competitive advantage and achieve superior financial

performance: 1) The organizational culture must be valuable in that it enables an organization to do things and behave in ways that lead to organizational effectiveness and efficiency; 2) The organizational culture must be rare in that its attributes and characteristics are not common to other organizations in the industry; and 3) The organizational culture must be such that organizations can not easily imitate it and if they try, the imitating organization will be at some disadvantage (i.e. reputation, experience, etc.) (Barney, 1986).

Toulson and Smith (1994) took a slightly different perspective in defining organizational cultures by focusing on the interaction between management and employees.

> Organizational culture consists of managerial and employee beliefs and values that define the ways in which the business of the organization is conducted...An organization's culture dictates what people have to know and the ways that things are done. Core values, about how to treat employees, customers, suppliers, and others, are thought to lead to sustained superior financial performance in organizations with strong cultures...Since culture defines the way the organization conducts business, it strongly affects management practice. In fact organizations with strong cultures go to great lengths to socialize new members into the prevailing beliefs and values that determine how things are done in

> the organization, and this may be a major feature in employee orientation and induction practices in such organizations. Highly successful organizations tend to have strong cultures (Peters and Waterman, 1982). (Toulson and Smith, 1994, p. 456).

Bharadwaj, Varadarajan, and Fahy (1993) found that organizational culture can be a very viable entity in achieving a high degree of organizational effectiveness and efficiency. They relate how organizational culture is a significant factor in the service environment.

> The strong culture hypothesis suggests that firms that have strong distinctive traits, values, and shared belief patterns will out-perform organizations that are weak on these dimensions (Dennison, 1984). Strong cultures can: (1) help attain a shared vision and goal congruence among employees to meet organization goals (Wilkens and Ouchi, 1983); (2) Empower employees to be flexible and achieve organizational goals (Pascale, 1985); and (3) energize the employees of an organization. (Bharadwaj, Varadarajan, and Fahy, 1993, p. 92).

Value congruence is a significant factor if organizational culture is to be utilized strategically. This congruency, from the individual perspective, is based on the concept of self-efficacy (Lucas, Wanberg, and Zytowski, 1997). Lucas et al (1997) stated:

> Self-efficacy refers to an individual's perceptions of his or her ability to organize and execute actions required for designated types of performances (Bandura, 1986). Lent, Brown, and Hackett (1994) wrote that self-efficacy percepts influence "one's choice of activities and environments, as well as one's effort expenditure, persistence, thought patterns, and emotional reactions when confronted by obstacles" (1994, Page 83)... Hacket and Betz (1981) and Betz and Hacket (1981) were the first to apply the concept of self-efficacy to career development research. Their research has shown that self-efficacy is an important topic of research when studying careers because it has been found to be a predictor of career choice and may regulate whether a person will initiate and maintain certain career behaviors. (Lucas et al, 1997, p. 432-433).

Self-efficacy then, is a factor that management has no control over prior to the individual being selected and indoctrinated into the organization. Likewise, the decision to terminate employment, whether it is voluntary on behalf of the individual or involuntary as a choice made by the organization, is usually strongly associated with the issue of value congruence

in the input control environment. It is for this reason that the strategic utilization of organizational culture and the other antecedents of input control may have a significant impact on an organization's turnover rate (O'Reilly III, Chatman, and Caldwell., 1991; Huselid, 1995; Snell 1992).

Bharadwaj, Varadarajan, and Fahy (1993) went on to state that their research reveals that the combination of effective management practices and organizational culture can result in superior organizational performance.

> A recent study reports that firms with cultures that emphasize key managerial constituencies (customers, stockholders, and employees) and leadership (at all levels) out-performed by a large margin firms that did not have those cultural traits (Ketter and Heskett, 1992). Another recent study focusing on culture types as determinants of performance (Deshpande, Farley, and Webster, 1993) reports that Japanese companies with corporate cultures stressing competitiveness (markets) and entrepreneurship ("Adhocracies") out-performed those dominated by internal cohesiveness (clans) or rules (Hierarchies). Services being primarily delivered by employees, the "people" component of service delivery as perceived by customers plays an important role in service determination. Hence, a critical factor that endows a service organization with a competitive

> edge is its employees, and the way they are influenced by the culture of the organization. (Bharadwaj, Varadarajan, and Fahy, 1993, p. 92).

There is very little, if any, difference between these definitions of organizational culture when discussing public, service or nonprofit organizations. Regarding nonprofit organizations, Pappas (1996) notes that five external factors are also very important in shaping a nonprofit organization's organizational culture.

> Nonprofit organizational culture results from, is reinforced by, and/or modified by five major factors: The organization's history; its structure and reporting relationships; its management practices or ways of doing business on a day-to-day basis; the manner in which it supports communication between and among its volunteers, staff, and board; and its reward systems, be they performance appraisal systems of individual incumbents or incentives for managing fiscal resources prudently. (Pappas, 1996, p. 16).

Interim Summary of Input Control Antecedent: Key Attributes of Organizational Culture.

In order for organizational culture to be used effectively from an input control perspective, the organization's leadership must first clearly identify and be able to

effectively articulate the organization's mission statement, core values, and core beliefs (Pappas, 1996; Block, 1993, and Flamholtz, 1996). It is from this foundation that the appropriate organizational structure will evolve and become solidified. In most cases, these attributes are identified by senior-level management and/or key subordinates, past or present, responsible for making significant contributions to the growth and development of the organization. The key attributes of this antecedent are: Organizational philosophy (which consists of a combination of organizational mission statement, vision statement, core values, core beliefs, and ethical application of sound human capital theory); identification of organizational objectives, development of an organizational vocabulary and communication channels; identification of organizational heroes/role models/stories and anecdotes; use of organizational ceremonies and organizational symbols.

The story is commonly told in academic settings of Lee Iacocca becoming the CEO of Chrysler Motors Corporation when the organization was on the verge of total collapse and dissolve. Some scholars say it was his charisma and leadership which was the pivotal point to the organization's turnaround. Other scholars, including the author, who have taken a much more detailed analysis of this phenomena point to the power of the Pygmalion effect in re-developing and re-energizing an organization's culture. In just a few short years, he was able to regenerate a dormant work ethic among Chrysler workers to produce one of America's greatest automobile innovations in decades, the mini-van. It was not enough for just the leader to possess the vision of Chrysler's turnaround but for the entire organization to believe it, talk about it, and achieve it. This

is the essence of understanding how to implement organizational culture to an organization's strategic and competitive advantage.

Horwitz and Neveille (1996) declare that:

> Management attention to the values which guide an organization will impact upon the empathy which the organization shows for its customers in its dealings with them and the appropriateness, standards, and quality associated with the tangible aspects of any market entity. Role models at all levels, seen to be "living the values", continuously communicating high standards, and giving feedback on performance are vital...These values must be clearly understood by all in the organization and be reflected in the style employed by management and the systems designed by them.
> (Horwitz and Neveille, 1996, p. 487).

Jaeger and Baliga (1985) state that "Cultural control systems rely on internalization of and moral commitment to the norms, values, objectives and ways of doing things of the organization...Motivation in cultural systems is more of a function of internal forces. Performance is viewed as a social obligation rather than a response to an externally imposed control system" (Jaeger and Baliga, 1985:119). They also advocated that cultural control relies upon three factors: 1) Degree of congruence between individual

and organizational values and norms; 2) The generation and use of a common vocabulary to transmit organizational intent (socialization); and 3) The use of organizational stories to illustrate management philosophies in concrete terms throughout the hierarchy (Jaeger and Baliga, 1985).

From the author's twenty years of organizational-behavior experience, one of the most effective means of disseminating mission, values, and beliefs information is via the use of formalized training and development programs. When the designated training and development professionals are provided frequent and open access to senior-level executives and included in the planning sessions for drafting, planning, coordinating, and implementing the organization's strategic culture, they become excellent advocates and promoters of organizational culture.

An effective counterpart to disseminating this information is via the use of organizational stories by executive leaders. These stories and anecdotes, which relate real-life examples of the organization's workers exhibiting expected and superordinate behavior from which a moral can be derived and can be re-told throughout the organization and at all levels, allow all levels of employees to make a clear cognitive connection between organizational values and valued behavior (Armstrong, 1992).

Dauphinais and Price's (1998) work also provides a supporting perspective to this attribute.

It's very well to create mission statements and articulate values,

> but CEOs want to see concrete evidence of behavior that reflects those values...That's why we see IBM's Lou Gerstner spending more than a third of his time visiting and interacting with customers, and GE's jack Welch personally engaged in running a top-management training program. They're doers and they want to be seen as such, not as some guy in their corporate stratosphere working the levels of power. (Dauphinais and Price's , 1998, p. 10,11).

Input control: Organizational culture - The growth of three schools of thought.

From this antecedent alone, at least three schools of thought have emerged which focus on the use of organizational culture as the main focus in achieving organizational effectiveness and competitive advantage: Strategic Human Resource Management (Snell, 1992: Guthrie and Datta, 1998), Person-to-Organization Fit (Chatman, 1991; O'Reilly, Chatman, and Caldwell, 1991; Lucas, Wanberg, and Zytowski, 1997), and Organizational Citizenship Behavior (OCB) (Morrison, 1996). (See Figure 4). All three of these schools of thought are firmly grounded in the core theory of human resource management control, which the author suggests may more modernly be termed "Performance Management Theory", and are utilizing some, if not all, of the remaining antecedents associated with input control. Again, although it is beyond the scope of this work to go into great detail

on these emerging schools of thought, Morrison's (1996) sheds the most light in support of why organizational culture can be most effective in the input control environment.

> Over the past decades, the U.S. economy increasingly has become a service economy (Albrecht and Zemeke, 1985). Services account for three-fourths of the gross national product and nine out of ten new jobs in service capacities (Zeithaml, Parasuraman, and Berry, 1990). The prototypical service has three defining features: (1) It is intangible and does not exist until provided to the customer; (2) It is produced and consumed simultaneously with the customer observing and participating in the production process (Bowen and Greiner, 1986; Czepiel, Solomon and Surprenant, 1985; Vroman and Luchsinger, 1994). (Morrison, 1996, p. 484).

He goes on to emphasize the importance of scrutinizing the personnel selected to work in such an environment:

> The intangibility of services also means that <u>how</u> a service is delivered is a critical factor in the evaluation of quality (Czepiel et al., 1985; Schneider and Bowen, 1992; Vroman and Lechsinger, 1994; Zeithaml et al., 1990). In other words, service quality

> depends heavily on the effectiveness with which front-line employees deal with customers and clients. (Morrison, 1996, p. 495).

Morrison (1996) concludes his work by identifying five distinct dimensions of organizational citizenship behavior that are very similar to the antecedents already identified as organizational culture:

> Researchers have identified five distinct dimensions of organizational citizenship behavior: (A) conscientiousness or discretionary behavior that goes well beyond minimum role requirements; (B) Altruism, or helping a specific other person with organizationally-relevant task or problem; (C) Civic virtue, which is behavior indicating a willingness to responsibly participate in the life of the company; (D) Sportsmanship, which is any behavior demonstrating tolerance of less than ideal circumstances without complaining; and (E) Courtesy, or efforts to prevent work-related problems with others (Organ, 1988; Podsakoff, Mackenzie, Moorman, and Fetter, 1990). (Morrison, 1996, p. 497).

Input Control Antecedent: Comprehensive Recruitment and Selection Processes.

Two other important antecedents of input control are employee recruitment and selection processes. Although the concepts of employee recruitment and selection are not new concepts, from an input control perspective, organizations operating in an input control environment would be wise to exercise great assiduousness in designing and implementing these processes. Little (1998) emphasized that "a major challenge facing companies today is workplace alignment. Simply put, this means placing the right person in the right job...Fundamentally and economically, successful workplace alignment translates into business survival" (Little, 1998, p. 43). As an example, he discussed the process and reasoning behind the City of Charlotte, North Carolina's staffing procedures utilized in filling municipal government staff vacancies. Before a decision is made to begin the external recruitment process, several steps have to be taken which included: Evaluation of the need to maintain the position or to combine the workload into another position; If filling the vacancy is not a pressing issue, the decision to fill the position is intentionally delayed for approximately 90 days or until the need to fill the position (i.e. severely heavy workload) is approaching the critical stage; Conducting outside recruitment only after an internal search for candidates reveals no acceptable candidates are available (Little, 1998). Obviously then, organizational culture has a significant impact on the recruitment and selection process.

Caudron's (1998) qualitative research on the strategic use of "organizational

culture" referred to "organizational culture" in the 1990's vernacular of organizations being "cool". She identified six antecedent conditions that newly hired employees stated that they considered as the most important in their decision to join their prospective organization:

> 1) Respect for (employee) work/life balance; 2) A sense of purpose ("In these companies, employees are energized by the sense that they're somehow making a contribution...Employees feel connected to the product, to the corporate mission or the overall vision of the industry"); 3) Diversity (..."Cool companies are a part of the world, rather than apart from the world"); 4) Integrity ("Integrity refers to the ability of a company to communicate the truth to employees - whatever that truth may be...Integrity also refers to a company's ability to care about the quality of its products and services... Companies with integrity also allow employees to stand-up for what they believe"); 5) Participative management; and 6) Learning environment (..."Cool companies promote lifelong learning"). (Caudron, 1998, p. 54, 56, 58).

The processes of recruitment and selection can range on a continuum from a single-stage (utilizing a single interviewer) to multiple-stages and techniques before making the

selection decision. Based on the literature, one would expect that organizations operating in the input environment would tend to operate near the multiple-stages end of the continuum. Woodall (1997) in discussing the screening process utilized by one service industry organization stated that:

> Because companies cannot be sure that someone who has expressed interest and applied from thousands of miles away will show up and meet expectations, most (ski) resorts will not hire workers sight unseen. Whistler Mountain sets up a recruitment center in a large facility in September to begin screening the 5,000 applicants it gets each year.
>
> Once they identify a desired job, prospects follow several interview steps. A front-line screener finds out their general intentions and whether they will commit to working the full ski season. In the next few weeks, up to two more group interviews are scheduled for applicants who pass each stage. At each step, candidates are given cards with a phone number and date to check on the hiring process.
>
> To eliminate the "cattle-herding perception", applicants are given a two question form asking about their experiences with customer service, teamwork, or problem solving. Three or four

> similar questions are later asked at screening interviews...The questions are assigned point values, and screeners are trained to filter out "pat" responses and draw out the best answer. The resort's questions are based on the "Descriptive Behavior" theory that past experiences will determine how applicants will react in a new situation. To formulate the questions, star employees were quizzed about what made them good at their jobs. (Woodall, 1997, p. 85-86).

Jaeger and Baliga's (1985) work supported previous works by Ouchi (1977; Ouchi and Johnson, 1980; Ouchi, 1980) and further validated and identified employee selection and training as key antecedents. In their discussion of these two antecedents, they concluded that:

> Selection is basically input control. Entrants are screened and only those who are most likely to behave as desired with the organization are let into the system. Training provides organizational members with the necessary abilities to be functional in the organizational. The component of training which ultimately has the greatest impact on control is value training or socialization (Etzioni, 1961). This is an interpersonal process of informally or implicitly teaching organizational values and

> behavior expectations to organizational members to bring them into line with what is required for successful participation within the organization. (Jaeger and Baliga, 1985, p. 118).

As an empirical example, Hallowell (1996) related the unique accomplishments and growth of Southwest Airlines as an example of this antecedent being put into practice. Referring to an interview with Southwest's CEO, Herb Kelleher, Kelleher was quoted as saying "At Southwest, hiring is a religious experience". He then proceeded to list the following items as part of their selection and philosophy process:

> Look for energetic employees who are caring and desire to 1) Serve others, and 2) Have FUN; Use attitude-based selection procedures (does the person's attitude reflect their (Southwest's) core value of service to others); Use peer selection; Involve customers in the interview process; Willingness to ensure employee fit through active use of one year probationary employee periods (Employee long-term commitment). Self selection occurs via peer pressure for high productivity (organizational culture & socialization). (Hallowell, 1996, p. 523).

Harris and Mossholder (1996) cite Koberg and Chusmir's (1986) work in

discussing how an organization's culture can have a significant impact on the selection process. They stated that Koberg and Chusmir's (1987) research revealed three separate antecedent climates for three different classes of cultures. They found individuals with a high need-level for power congruent with organizations having a bureaucratic culture; those with a high need-level for achievement congruent with organizations having an innovative culture; and individuals with a high need level for affiliation congruent with organizations having a strong supportive culture. In these situations, employee satisfaction was considered high and intent to leave the organization was low (Harris and Mossholder, 1996).

Morrison (1996) in discussing selection regarding organizational citizenship behavior (OCB) noted that employee selection and socialization process are very important in organizational development.

> An organization's selection and socialization practices also play important roles in establishing the tone of the employee-employer relationship (Shore and Tetrick, 1994). Selection is the process of bringing new employees into the organization. During this process, employers and prospective employees go through a period of informal exchange and negotiation...Hence, a selection process will be more apt to ensure OCB to the extent that it emphasizes broadly defined obligations and long-term

> commitment on the part of the organization and conveys to perspective employees that they are entering into a social exchange relationship...Another way in which an organization can enhance OCB is by ensuring identification with organizational objectives. Identification can be ensured by selecting employees based on how well they fit into the organization's overall culture rather than solely on the basis of how qualified they are for the specific job they will be assuming. This has been referred to as person-organization fit. Chatman (1991), for example, showed how in addition to selecting employees based on job-related characteristics, the selection process can also focus on the compatibility between recruits' personalities and the organization's dominant values. She found that person-organization fit enhances both satisfaction and retention. (Morrison, 1996, p. 503, 504).

All of these researchers identified positive aspects associated with the use of a thorough and detailed recruitment and selection process. The central theme in these works is that people have value which they bring to an organization in being hired. This typically defines the construct, human capital. Snell (1992) stated that "human capital is that people possess skills, experience, and knowledge that have economic value to firms" (Snell, 1992, p. 468). He further elaborated on how organizations strategically increase

their human capital stock:

> One of the most obvious ways firms enhance their stock of human capital is through the individuals they hire (Parnes, 1984). Firms... in which more advanced and specialized skills are required will be likely to use more selective staffing practices to find the best and brightest workers" (Koheler and Schultz-Wild, 1983). (Snell, 1992, p. 473).

Brown (1998) and Steward (1997) stated that companies of the 21st century will not be able to successfully compete in the service industry unless they learn to effectively utilize their intellectual capital. This, he declares, will require three things: "1) Assess your organization's intellectual value; 2) Deploy it (intellectual capital) to your maximum advantage; and 3) Profit from it, internally as well as externally" (Brown, 1998, p. 47). Elaborate and well-developed recruitment and selection processes are then indeed significant antecedents of input control. However, it is also recognized that when these factors are utilized unscrupulously, they can produce a management paradox (Nagle and Pascarella, 1997) at the least or open "Pandora's Box" (i.e. open themselves up to the explicit and implicit advocation and sanction of a multitude of unethical behaviors among its workers) at the worse (Snell, 1992; Snell and Youndt, 1995).

For example, the use of input control via the recruitment and selection processes can be

adversely affected by the negative, counter-productive application of human capital theory as cited in Strober's (1990) work. Although it is beyond the scope of this work to thoroughly discuss the key facets of human capital theory, in essence, he explains Becker's (1964) human capital theory by stating that it declares that employers will utilize four concepts or processes (hypotheses) in filtering and selecting employees: 1) Screening (The belief that educated workers will outperform uneducated workers); 2) Statistical discrimination (Avoiding the selection of minorities and women for "key positions" in the organization based on the statistical probability that they will not perform as well as Caucasian males); 3) Signaling (The belief that employers are willing to pay higher educated workers more than less educated workers. Higher educated workers will then strongly promote the "business value" of education to their family members and friends. Once the desired educational level is obtained, the prospective employee then signals their education level and academic accomplishments to prospective employers via such vehicles as resumes, applications, and written referrals); and 4) Efficiency wages (The managerial philosophy of beginning workers' salaries at a low range or scale and then gradually increase it as their value to the company increases. This is repeated to a point where the company believes that the worker has a vested interest in avoiding termination from the company. Since starting with a new company will usually result in beginning at an entry-level salary or wage, experienced workers are less likely to self-terminate their employment due to an organization's low pay or dissatisfying working conditions (Strober, 1990).

The problem, which has been recognized by other researchers and acknowledged by the author, is that management's use of parts of the human capital theory combined with input control can also provide the opportunity for an organization's downfall in some circumstances regarding worker recruitment and selection. This issue is most prevalent in the 1990s regarding workforce diversity issues and employment discrimination lawsuits against employers. In a majority of the publicly reported cases of employment discrimination, organizations which develop and practice the negative aspects associated with human capital theory (statistical discrimination and signaling), diminish not only the morale of workers in their organization but can also severely financially impact the organization and stigmatize it socially from a societal perspective. By applying a statistical discrimination philosophy to recruitment and selection practices (e.g. eliminating minorities and women as viable candidates for senior-level leadership positions), the organization's culture becomes one of perpetuating employment discrimination and racial biases either consciously or unconsciously. As a result, the inappropriate use of input control via recruitment and selection processes can have a negative impact on an organization. The stigma of organizational employment practice bias, even when it is unjustified and invalid, can be perpetuated in society for decades.

DiIulio (1994), in discussing the cultural biases of behavior in a federal government bureaucracy, used the principled agent theory as a means of making this point. The principal-agent problem exists whenever one individual (management) depends on the action(s) of another. The person taking the action (worker), is the agent;

the party dependent on the action, (manager or supervisor), is the principal. The problems stems from the fact that rarely are the circumstances where principals can perfectly or costlessly monitor the agents' actions or independently assess what agents believe and value. DiIulio (1994) states that this condition, relative to the model, is referred to as "informational asymmetries". This makes the problem especially significant in the public/nonprofit environment according to DiIulio (1994), who states:

> For the leaders of most governmental bureaucracies, the problems bred by informational asymmetries supposedly are amplified by the existence of civil service personnel protections. Civil service systems make it especially difficult to detect and penalize workers who shirk, subvert, or steal on the job. Thus, in the rational choice logic, it follows that governmental bureaucracies are especially prone to attract, hire, retain, and promote persons who are highly disposed to shirk, subvert, or steal on the job...Or, in other words, they tend to repel people who want meaningful job challenges, not just job security, and who desire extra rewards for efforts rather than small but certain pay increases governed by length of service or time in position. (DiIulio, 1994, p. 279)

He declares that the commonly accepted reason given by those not working in the public sector for this type of behavior is that civil service personnel protections are tantamount to insurance policies that indemnify employees for such "negligent" on-the-job behavior. However, his empirical research showed that this "negative view of the principled agent" in the public sector does not hold true for the majority of civil service workers, especially in research regarding the Bureau of Prisons (BOPs).

Based on his research findings, he further declares that the principal-agent model alone is not enough to explain why most civil service workers do not meet the description aforementioned earlier (e.g. perform to the highest levels of productivity and accountability instead of low levels of productivity and accountability). Instead, he suggests that a rational model may be more explanatory and even more strongly advocates that there are qualitative factors that explain this disparity which most private-sector researchers overlook (DiIulio, 1994). Specifically, he cites Chester I. Barnard, the author of "The Functions of the Executive" (1939) and states that most organizational-behavior practitioners:

> ...missed his crucial points about the efficacy of social and moral rewards in building and sustaining what is now generally referred to as "strong-culture organizations". As Barbara Levitt and James G. March have observed: "In modern terms, Barnard proposed that an executive create and sustain a culture

> of beliefs and values that would support cooperation. The appeal is not to exchanges - Pareto optimality, or the search for incentive schemes; it is to the construction of a moral order in which individual participants act in the name of the institution...because they identify with the institution and are prepared to sacrifice some aspects of themselves for it. (Levitt & March 1989, 13; also see Pfeffer, 1989, 72-74)... (DiIulio, 1994, p. 283).

DiIulio (1994) hypothesized that organizations with a strong-culture possess a sense of mission, character, distinctive competence, essence, reputation, sharing a strong belief in the rightness of their tasks; and that the workers share expectations about when cooperation and teamwork are appropriate and how they are to be reciprocated and rewarded in the long-run. In essence, some academicians have called this phenomenon "professionalism" and still others may refer to it as "esprit de corps". Regardless of the name used, organizational culture, when properly utilized and implemented, can have successful and lasting impact on organizational effectiveness and efficiency.

Additionally, person-organization fit utilized as a means of intentional, illegal discrimination in employment selection practices can become a major problem and financial albatross if combined with the application of human capital theory and applied unrestrained (Snell, 1992; Snell and Youndt, 1995; Dililio, 1994). Senior-level organizational officials desiring to strategically use organizational culture should also

consider their human capital philosophy and its impact with regard to person-organizational fit as it pertains to women and minorities in key managerial positions. Lovelace and Rosen (1996) in discussing person-organization fit suggested that:

> To date empirical research that explicitly examines person-organization fit has not considered differences in fit based on sex or race. Minorities in a predominately white institution in the U.S. may simply feel that they do not fit. This may be especially true if they find themselves to be "token" minorities (Kanter, 1977). Compared to their white colleagues, they may have different outside interests (Davis and Watson, 1982), different definitions of career success (Thomas and Alderfer, 1982), less access to interaction networks (Ibarra, 1993) and less participation in extracurricular (business-related) activities (Bell, 1990; Thomas and Alderfer, 1990)...Similarly, many women may perceive they fit less well in a predominately white male environment than do their male colleagues, because they have different outside interests, different definitions of appropriate work-family balance (Schwartz, 1989), different communication styles (Tannen, 1990), and different definitions of career success (Miguel, 1993). Women and minorities also

> may perceive a poor organizational fit based on slow organizational advancement. (Lovelace and Rosen, 1996, p. 704).

Another example of the public sector utilizing extensive recruitment and selection processes is in the air traffic control (ATC) industry. Fisher and Marciano (1997) stated in their research that since the 1980s, the U.S. air traffic controller work force has significantly declined and that throughout the world, countries are experiencing shortages of qualified air traffic controllers. Countries participating in their research included: France, Germany, Switzerland, Japan, Canada, and the United States (U.S.). Their research revealed that:

> Obtaining new hires can be fairly complicated and expensive. Because ATC agencies pay to develop the human capital of controllers over long periods of time, they have an incentive to maximize the effectiveness and efficiency of recruitment and selection. Major ATC agencies typically include interviews with (perspective) controllers in the latter stages of the recruitment and selection process to provide realistic job previews to reduce costly premature quits resulting from poor information about ATC work. (Fisher and Marciano, 1997, p. 294).

In their work, they stated that American candidates must successfully complete a series of selection steps prior to beginning "pre-training" "American candidates must pass a civil service examination prior to taking the (ATC) selection tests (usually a minimum of three) for their aptitude for ATC...In other stages (would-be) controllers are required to gain medical and security clearances" (Fisher and Marciano, 1997, p. 310). Since each fully qualified controller is the equivalent of a strategic business unit (SBU) of a major corporation in that once assigned a control position they, and they alone, are totally responsible for the safe movement of tens of thousands of human lives and billions of dollars of airline companies' assets each day, the organizations tend to be highly selective in accepting new organizational members. Fisher and Marciano (1997) also noted the ATC industry's unique selection criteria also demonstrates how human capital theory is applied in this industry:

> ATC requires special aptitudes rarely found in the general population: It is a younger person's activity that involves complex monitoring (of the work situation by the active controller), rapid and accurate decision making, precise spatial visualization (mental acuity), numerical reasoning skills, and around-the-clock shift work. In the 1980s, only one in 70 qualified applicants became fully qualified controllers in Canada and only one in 100 in the U.S. (SMI, 1990);

> Subcommittee, 1990). Because of statistical comparisons of the historical pass rates for different age groups, ATC agencies are permitted to hire candidates between the ages of 19 and 26 exclusively (Collins et al., 1990). Hiring from this target age group enables ATC agencies to recoup the highest pay off from their three-to-five year investments in the training of controllers. (Fisher and Marciano, 1997, p. 295).

One final aspect of the selection process associated with ATC is the amount of effort the organization and industry requires to ensure the selection of personnel who possess the potential to successfully complete and endure sustained, constant, long-term training. As a professional air traffic controller for 16 years and having held the position of Chief of ATC training for over 8 years in the U.S. Air Force, the author can personally validate this issue of extensive selection and training processes. It is not unusual from a full performance qualified controller in an air traffic control facility to undergo up to eighteen months or more of extensive training and "go-no go' evaluations by trainers, supervisors, and certification and standardization specialists to become certified in just one control position upon relocating to a new air traffic control location or facility. In their work, they also declared the following as an example of the comprehensive selection process associated with ATC:

> Except for France, all agencies sampled have improved their selection tests and introduced some form of work simulation selection... The FAA's Pre-Training Screen is a three-day assessment center where candidates are given practice in directing aircraft through a simulated airspace on a computer-driven work station. An assessment is made of the candidates potential workplace skills and mental/emotional adaptability (due to the ambiguous and dynamic work environment). The score achieved on the fourth day determines the candidate's selection for official in-depth ATC training (which typically takes several years to complete). (Fisher and Marciano, 1997, p. 295).

Interim Summary of Input Control Antecedent: Key Attributes of Comprehensive Recruitment and Selection Processes.

From this discussion of the recruitment and selection processes as antecedents of input control, organizational culture was identified as a guiding point in determining the quality and caliber of candidate the organization wants to recruit. This process will

fundamentally mirror the human capital philosophy that the senior-management leaders have or espouse regarding minorities and women. Additionally, this philosophy will be conveyed explicitly or implicitly throughout the managerial and supervisory levels and can be expected to be reflected in employment decisions. With regard to selection process, the literature revealed that the more advanced and higher skill levels required to function effectively in the input control environment, the more likely the organization will utilize elaborate and multiple stages of screening prior to making a selection decision. Finally, once the prospective candidate(s) is shown to meet the required technical qualifications, in the input control environment, the hiring decision will usually also incorporate an evaluation of the candidate's self-efficacy with regards to its congruency with recognized key organizational values and beliefs. Although this step is listed as the final stage, it is by no means the least of the considerations. In fact, due to the ambiguity of the work environment and the degree of trust and integrity delegated to the candidates (i.e. principal-agent relationship), this is perhaps the most crucial step of the selection process.

Input Control Antecedent: Training and Development Programs.

As previously mentioned, Ouchi's (1980) work identified training as a vital antecedent when utilizing input control. In this work, training referred specifically to

skills training and organizational values training. From an organizational development perspective, academia teaches that training and development programs are two very different but important tools available to organizations to maintain their competitive advantage. Although the two programs are often discussed as being synonymous, each program is designed to fulfill a specific function. Training programs are designed to deal with current, present-day worker situations and/or circumstances by teaching and facilitating the development of skills that will be utilized now. Development programs are designed to take a longer range perspective by teaching and developing worker skills which may not be utilized presently but may be used some time in the near future as a result of promotions, reorganizations, reengineerings, employee empowerment initiatives, etc.

Horwitz and Neveille (1996) stated that "Skills refers to an understanding of the key attributes [of work] - what the organization must do to compete and how it can do this differently from or better than the competition." (Horwitz and Neveille, 1996, p. 487). They also state that training frequently is a designated responsibility of line managers but is most appropriately delegated to training professionals.

> Ideally, line managers should provide training supported by training and development specialists; a key area is training employees how to deal with customers in different situations (for example, difficult or abusive people). Managers need to underline the importance of both core and peripheral or support service roles

to provide total customer satisfaction. (Horwitz and Neveille, 1996, p. 487).

Training professionals can play a vital role in conveying organizational values such as appropriate customer service behavior, effective interpersonal communications between colleagues and customers, effective conflict resolution strategies, and optimal problem solving and decision making strategies. However, to effectively function in this capacity, it is imperative that they be included in the strategic planning processes of the organization and that they be supported by senior-level personnel, especially the head of the organization. Often view as change agents, they should be frequently informed of long-term goals and/or strategic initiatives as well as any changes in the overall mission or vision of the organization or its core leadership. Training and development programs then are intended to function as the "glue" in building and binding together an organization's human capital as long-term assets. Morrison (1996), in discussing organizational citizenship behavior (OCB), explained the training and development connection this way:

> There are many ways in which organizations can convey that they value their employees as long-term assets. They can do so by offering ongoing education and development programs, promotional opportunities, and supportive benefits such as employee assistance programs, family leave, and child support. Although these practices have been emphasized by both HR

> scholars and practitioners (Korman, 1994), their potential impact on OCB, and hence service quality has been largely overlooked. (Morrison, 1996, p. 503).

Snell and Dean Jr. (1992) argued that "Training is a traditional focus of human capital theory (Schultz, 1960), which suggests that firms invest in skill development when they expect increased employee productivity to offset such training costs as paying an instructor, buying materials, and down time" (Snell and Dean Jr. (1992, p. 473-474). In an input control environment, the recognition of the need for ongoing training is apparent. For example, Hallowell (1996) in discussing the one of the key reasons for Southwest Airline's success in the highly competitive, and dynamic commercial aviation industry stated that Herb Kelleher is almost fanatical about training at every level throughout the organization and listed the following key points of their training/development programs:

* FAA-mandated training for many employees.
* Other formal training including leadership training for managers and supervisors stressing coaching over policing.
* Customer care training for all customer contact employees, including pilots.

> * Informal training includes induction into the culture: Development of shared expectations regarding value to be received from the organization and value to be delivered through effort. (Hallowell, 1996, p. 523).

Fisher and Marciano's (1997) work regarding air traffic control (ATC) also provides useful information about public organizations operating in an input control environment. Although the nature of the ATC job can be literally equated as "life and death situations" which merit in-depth selection stages, the training process is equally important. This training process, which typically takes years, also has significant costs. "Since controller training is very expensive (Table 1), [costing approximately $123,00 per person for undergoing the Pre-Training Screen (PTS) alone], taking steps to ensure that those trainees selected, have the highest probability of successfully completing training is critically important." (Fisher and Marciano, 1997, p. 295).

Interim Summary of Input Control Antecedent: Key Attributes of Training and Development Programs.

The nature of the input control environment almost mandates that organizations operating in this segment of the business population develop and utilize some type(s) of

ongoing training and development programs for its workforce. Because of the ambiguity of the environment, the programs should address an variety of topics/subjects. Additionally, research shows that those organizations that have been the most successful have ensured that employees at all levels in the organization, including senior-level personnel, receive some type of ongoing training on a regular or recurring basis. To the extent possible, this training should be provided by trained, professional trainers, facilitators, and teachers. However, the literature also correctly acknowledges that the ultimate responsibility for providing for the training or training opportunity rests with the immediate supervisor.

Input Control Antecedent: Socialization Processes.

The next-to-last of the input control antecedents to be discussed in this work is the socialization process. Chatman (1991) defined organizational socialization as "... the process by which an individual comes to understand the values, abilities, expected behaviors, and social knowledge that are essential for assuming an organizational role and for participating as an organizational member (Louis, 1980)" (Chatman, 1991, p. 462). She also states that one obvious method often associated with the socialization process is the training experience.

Formal training programs are also considered significant

> socialization training experiences (Van Maanen, 1977);
> Although socialization is conceptualized as an ongoing process in organizations, members are particularly susceptible to the organization's influence in the early stages of membership (Berlew and Hall, 1966). (Chatman, 1991, p. 463).

She also finds in her research that socialization has strong connective relationships to organizational culture attributes:

> Research shows that occupational socialization affects individual values (Mortimer and Lorence, 1979)...The more rigorously an organization attempts to influence its members, the more similar members' values become to the organization's since effective socialization inspires individuals to think and act in accordance with organizational interests (Reicher, 1987). (Chatman, 1991, p. 462).

Additionally, in her work, she identified specific attributes of socialization that were pivotal to using socialization as a means of utilizing it as input control:

> Past research provides clues about specific activities that

> may influence person-organization fit. Louis (1980, 1990) proposed that interaction with members facilitates sense making, situational identification and acculturation among recruits. This interaction may occur during firm-sponsored social activities or in mentoring programs where recruits are encouraged to establish relationships with senior organizational members who do not directly supervise their work (Louis, Posner, and Powel, 1983). To the extent that participation in social activities leads to greater integration, new member will begin to rely on the values of incumbents as reference points for their own actions (Terborg, Casstore, and Deninno, 1976).
>
> Mentor relationships contribute to person-organization fit because senior members can provide cultural information about the broader organization and its historical contexts. (Chatman, 1991, p. 462-463).

The essence of her discussion is that for socialization to be effective in the input control context, there must be a deliberate and intentional purpose for the interacting and comraderie activities. This purpose is to promote the core values and beliefs necessary for building a strongly knit and interwoven framework of relationships. It is this ongoing

antecedent that facilitates the internalization of values which eventually becomes a "silent governor" or a "silent collective conscious" which compels individuals to self-control their behavior on the job accordingly. It is these socialization activities, coupled with peer-pressure and pride derived from one's career field professionalism, that become the cornerstones added to the foundation of organizational culture. Three excellent examples of public entities exhibiting this concept are the U.S. Armed Services, federal, state, and municipal government law enforcement agencies, and college fraternities and sororities. All three of these entities rely heavily upon customs, courtesies, organizational pride, and organizational honor in establishing their cherished socialization activities.

Hallowell (1996) also relates in his example of Southwest Airlines how this organization has built on its organizational culture and formalized segments of its socialization process.

> The vehicles for non-economic need fulfillment at Southwest are what the company calls "LUV" and "FUN". LUV refers to one of the company's core values involving the way individuals treat each other. LUV includes respect for individuality and genuine caring for others. In practice, LUV reflects the adage, "Do unto others as you would have them do unto you"; others are defined as members of the Southwest organization including customers...However, LUV (at least at Southwest) is not blind.

> Employees who consistently fail to meet the organization's standards are asked to leave. Customers behaving unacceptably are invited to fly on other airlines...FUN is exactly what its name suggests...Neither FUN nor LUV happens inadvertently. Southwest's selection processes screen out the dull, pompous, and uncaring by asking interview questions such as "What was your most embarrassing moment?" Boring or self-centered responses quickly separate the majority from the few likely to fit...LUV and FUN are embedded into the Southwest culture and reflected in the company's operating policies. (Hallowell, 1996, p. 520).

For some organizations, socialization may be as simple as walking through the different departments or sections of the organizations, an informal orientation program (usually conducted by the immediate supervisor or a designated co-worker (a.k.a., "Buddy System"), or a much more elaborate orientation program (usually conducted by the Human Resources Department (HRD)) consisting of several days complete with detailed meetings with each senior-level executive, a review of organizational history, and the incorporation of a required training program/curriculum to introduce the new employees to core organizational values and beliefs (Morrison, 1996). Morrison (1996) discussed in detail why and how socialization occurred in organizations utilizing organizational citizenship behavior (OCB):

Socialization occurs after a new employee joins an organization. It is the process by which a firm instills into new employees the knowledge, attitudes, and behaviors they need to effectively carry out their roles (Van Maanen and Schein, 1979). Like the selection process, socialization typically conveys information about the nature of the employee-employer relationship and what employees can expect to contribute and receive within this relationship (Shore and Tetrick, 1994)...In other words, orientation programs may have symbolic value beyond their instructional benefits. The socialization process an also help to create identification with organizational goals and objectives by conveying the organization's values and objectives (Chatman, 1991; Van Maanen and Schein, 1979)

Socialization practices can also play an important role in establishing the empowerment that is necessary for OCB. Organizations vary considerably in the specific tactics they use to socialize new employees (Van Maanen and Schein, 1979). These range from highly institutionalized tactics where newcomers are segregated from others and provided with explicit information and a common learning experience, to highly individualized tactics where they are left largely on their own to learn through on-the-

> job experiences and informal interactions with peers (Jones, 1986). The extent to which a socialization process is institutionalized or individualized has important implications for employee attitudes and behavior. (Morrison, 1996, p. 505).

Interim Summary of Input Control Antecedent: Key Attributes of Socialization Processes.

To be effective in an input control environment, a organization must consciously and deliberately craft its socialization process. The literature to date reveals four key attributes: 1) The frequent and recurring use of formal social activities (i.e. parties and picnics), customs, and ceremonies. The purpose of these ceremonies has more to do with the teaching of acceptable organizational behavior by demonstration rather than fulfilling a social obligation. It is during these activities that management has the golden opportunity to relate specific accomplishments, heroic behaviors, and efforts "beyond the call of duty" which develop pride in organizational membership and teamwork/team spirit. 2) The establishment of a formalized orientation program. To the extent that the organizations views this activity more that just a formality in "officially putting the individual on the payroll and benefits package", this activity allows the individual to truly understand the nature of the work environment and to observe the types of behavior which results in "super stardom". 3) To the extent possible, the organization should

develop mentoring programs to help newly hired individuals adapt and internalize the organizational culture. 4) Develop sponsorship programs to identify "potential super stars". To the extent possible, the organization should provide them with the necessary motivation, interpersonal communication skills, and value systems training to promote the continuance of the organization and its culture. These individuals should be recommended for developmental programs and encouraged to develop long-term working relationships with key senior-level management personnel to gain both exposure and experience in understanding and conceptualizing the "big picture" of the mission and vision of the organization for effective leadership and the handling of power and responsibility.

Input Control Antecedent: The Performance Appraisal Process.

One additional antecedent of input control which had not been identified and discussed until recently is performance appraisal (Snell and Dean Jr., 1992; Flamholtz, 1996). Although this antecedent is most often viewed as a beneficial tool in some organizations, the ambiguous nature of the public sector business environment regarding the use of input control makes this attribute more likely than not to be viewed as "a necessary evil" in most public and service organizations. Snell and Dean Jr. (1992) state that:

> Performance appraisal is typically seen as having two purposes:
>
> Administration, comprising such actions as determining job assignments, raises, promotions and terminations and; Development, consisting of providing feedback, coaching, and identifying training needs (Latham and Wexley, 1981). Human capital theory suggests that a firm's investment in employee development depends on the potential economic impact of the employee's performance, ...(Michell, 1989).
> (Snell and Dean Jr., 1992, p. 474.).

Flamholtz (1996) argues that the central purpose of performance appraisals is to provide a means of measurement and feedback and sees the performance measurement function as part of the core control system. In his work, he states that in most measurement systems, the system is based on the traditional paradigm of quantitative measures. However, the author believes that the nature of a most work tasks in the input control environment makes this system impractical. Flamholtz's (1996) work proposes a revised framework, called a "Psycho-Technical System (PTS)", which would allow for behavioral influences.

> According to the PTS model, measurement has two basic

> elements: (1) the numbers produced and (2) the act of measurement itself. The numbers produced are the outputs of the measurement system and perform two subfunctions:
> a) they provide information for decision-making, and
> b) feedback information for performance evaluation. The act of measurement itself, termed measurement's process function, performed four related subfunctions; it serves as:
>
> a) a criterion for decision-making (by management),
> b) a catalyst for systematic planning,
> c) a way of influencing a decision-makers set, and
> d) a mechanism for motivating attention to relevant performance (or result) areas.
>
> A measurement subsystem plays a vital role in the functioning of an overall core control system. (Flamholtz, 1996, p. 67).

Although Flamholt's (1996) view is not exceptionally relevant to this research work, it does add to the relevance of an organization's management being responsible for ensuring that workers are knowledgeable of what work activities they are being evaluated or judged on. It also supports the view that a formalized system is more beneficial than an "ad hoc" system.

It is not the specific performance appraisal instrument itself that is important to

the use of input control but rather two significant attributes associated with the performance appraisal process: First, top level management must sincerely believe in the fair and honest appraising of worker performance for the benefit of the organization and the individual. Specific steps are taken using, either in-house training programs or one-on-one detailed discussions between subordinate and supervisor, to ensure that employees are aware of the two purposes of the performance appraisal process: administrative and developmental. Traditionally, formal performance appraisals provide management a means of administratively monitoring and tracking an employee's work performance. They also are used as employee developmental tools by identifying areas where worker performance can be improved or by identifying when an employee is ready and capable of handling higher levels of organizational responsibility/accountability) (Snell, 1992; Snell and Youndt, 1995). This is significant because in order for management to effectively increase the value of its human capital (and especially the intellectual capital of its human assets in such career fields as air traffic control (ATC) or the Central Intelligence Agency (CIA)), then the organization must ensure that all employees are thoroughly aware of what attributes they possess or lack that are of value to the organization and the organization's future needs, and the expected future value of these attributes. Armed with such knowledge and understanding, the employee is empowered to make a conscious choice as to whether to exhibit the necessary internal motivation or drive to acquire or increase their knowledge or skill level in the area(s) which will benefit the organization. Obviously, all of the aforementioned antecedents and

their attributes work "hand-in-hand" with the performance appraisal process.

Secondly, both subordinates and supervisory personnel must be properly trained on how to utilize goal setting in establishing "good goals" (Hersey and Blanchard, 1993). Hersey and Blanchard (1996) believe that the process of goal setting can be broken down to a simplified process by following the S.M.A.R.T goal setting process. Each letter of the SMART acronym represents a specific function the subordinate and supervisor should consider in the goal setting process. "S" denotes that the goal should be specific regarding the area of interest and methods/steps to be taken. "M" denotes that whenever possible, the goal should be stated in some form of quantitative terms (i.e. quantity, cost, time, etc.). "A" denotes that the goal should be attainable for the individual and not overly difficult. The belief is that goals that challenge the individual's mental, physical, and/or emotional/psychological capacity motivate them. However, overly difficult goals tend to set the individual up for failure with demotivates all parties involved. "R" denotes that both the subordinate and supervisor need to be able to articulate the relevance of the goal to the organization, department, section, or immediate supervisor and to the individual subordinate. In essence, this step is answering the question of "What's in for me?" (Einstein, 1994). The "T" denotes that the goal needs to be articulated in such a manner that allows it to be trackable by both parties involved. In this context, trackable is referring to the designation of a specific time period by which the goal(s) are to be reached. The intent is that this attribute allows for either party to take an active role in monitoring the individual's progress and to take the necessary corrective actions to

enable the individual to succeed in reaching the goal(s) (Hersey and Blanchard, 1996).

Since the nature of the input control environment tends to make this difficult, if not extremely difficult, in most public, nonprofit, and upper-end service organizations; the need for formalized training in this area is paramount. However, it may be that most mid-level manager and supervisors of public, nonprofit, and upper-end service organizations have never received any "formalized training" on how to evaluate, write or conduct a performance appraisal interview.

Summary of Literature Review.

The literature review on the theory of human resource management control theory (a.k.a.., performance management theory) to this point reveals that three of the four quadrants of the theory's model have been thoroughly researched and tested. However, researchers to this point have not been successful in adequately identifying segments of the business population where the use of input control, as a significant means of HR control, can be adequately tested. Within the input control context of the theory, five antecedents have been identified: organizational culture; recruitment and selection processes; training and development programs; socialization processes; and performance appraisal processes.

In this work, specific attributes have been identified for each antecedent. (See

Figure 5). The more dynamic the work environment and the more ambiguous the work standards, the more likely that an organization in this environment will tend to establish and rely heavily upon these antecedents to control its workforce. From this literature review, it can be concluded that in the appropriate business environment, successful organizations will employ and consider more of these antecedents as being vital in their business operations than unsuccessful organizations and therefore obtain higher operating effectiveness.

Discussion of Target Population.

The Emergency Medical Services (EMS) career field was selected as the target population for conducting this research. The primary employers of EMS personnel are municipal governments and hospitals. The nature of the EMS technician's job is one of being fast-paced, involving high stress and high tolerance for ambiguous situations, and requiring split-second accuracy in diagnosis and treatment. Although most municipalities have fire units and sometimes rescue units, not all of them have EMS units. This is primarily due to the extensive amount of training required, the cost of the training, and the legal liabilities associated with incorrect diagnosis and treatment by EMS personnel. For those municipalities which do provide emergency medical services, each EMS professional or EMS team functions as an independent agent of the Fire-Rescue or

Rescue department. Typically, functioning without direct supervision, they are expected to exhibit the appropriate behavior based on training, applicable regulatory statutes, and the "spirit" of "civil service" of the organization (organizational culture). In other words, they are functioning under the "principal-agent" theory. Additionally, because of the very ambiguous nature of the types of conditions under which an EMS unit may be called upon to respond, one would expect that municipal governments offering this service would exercise due diligence in selecting personnel and ensure that ongoing training and performance appraisal is a vital part of their operating norms.

CHAPTER III

METHODOLOGY

Research Questions.

The research questions to be considered are: In a dynamic business environment, 1) what is the correlation between an organization's use of input control and its organizational effectiveness and 2) what is the correlation between an organization's use of input control and its business environment? From these research questions, two hypotheses are developed. Building on the work of Snell (1992), Snell and Youndt (1995) and O'Reilly, Chatman, and Caldwell (1991), this research explored the relationship between the combination of independent and moderating variables, and dependent variables.

The independent variable is input control. This construct was operationalized via the antecedents of organizational training and the selection processes as previously applied by Snell (1992). The moderating variable is the business environment, which Snell (1992) called administrative factors. This construct was operationalized as management's knowledge of the work processes/activities and the availability and use of

concrete standards. The dependent variable is organizational effectiveness. This construct was operationalized as previously applied by Snell (1992) and O'Reilly et al (1991) in this research regarding EMS personnels' evaluation of the organization's performance appraisal process and EMS personnels' intent to leave the organization (employee turnover) as applied by O'Reilly et al (1991) regarding EMS personnel.

Human Resource Management Control Theory states that when the work environment is such that management lacks complete knowledge of the work/transformation process and the work does not allow for the use of concrete, quantifiable standards, then management will rely upon input control techniques to ensure effective worker performance. Although numerous variables have been identified relating to input control techniques, the most commonly utilized antecedents in research of this theory have been the evaluation of organizational selection processes and their use of training. Thus, to the extent that management of EMS personnel engage in detailed and elaborate selection processes and provides training not only on work-related subjects but on the organizational values, customs, mission, vision, etc. of the organization as well as other training areas to its EMS personnel, the organization's EMS employees should evaluate their performance appraisal process as being effective.

Likewise, the combination of the organization's selection processes and training should have a positive effect on employee retention in this career field, as moderate by the business environment. The amount of money and time needed to properly train EMS personnel to achieve the necessary certification levels represents a significant investment

in an organization's human capital. The loss of personnel due to voluntary or involuntary separation also represents a significant financial loss for that organization. As stated in the literature review, this fact can have a special meaning in the nonprofit sector of the economy. Nonprofit organizations have to rely upon either charitable donations or the political allocation process to meet their operational needs. Each turnover of EMS personnel then may be viewed by the organization and the general public respectively as a loss of return on investment and an inappropriate and inefficient allocation of taxpayer money.

Research Hypotheses.

Based on Human Resource Management Control Theory, it is hypothesized that those EMS employees who are performing satisfactorily on the job in this work environment would be less likely to harbor a desire to leave the organization based on normal employer-employee interaction pertaining to specific job activities. Statistical analysis should reveal that there is a positive correlation between the three sets of variables. This then leads to research and null hypotheses number 1.

Research hypothesis #1: There is a positive correlation between EMS personnels' evaluation of an organization's performance appraisal process and their intent to leave and the organization's selection process and use of training as moderated by their perception of management's knowledge of the work activity and the availability/use of concrete standards.

Null hypothesis #1: There is no correlation or a negative correlation between EMS personnel's evaluation of an organization's performance appraisal process and their intent to leave and the organization's selection process and the use of training as moderated by their perception of management's knowledge of the work activity and the availability/use of concrete standards.

$$DV \neq (f)\ A + B$$

Perhaps an equally important aspect of understanding this theory, as it relates to the use of input control from an empirical perspective, is understanding the relationship between the independent and moderating variables. As theorized, the reason management utilizes and relies heavily on such techniques as selection processes, training, mission statements, organizational culture, and etc. is that the nature of the business environment

is such that management lacks either the time, resources, or initiative to master and remain proficient in all aspects of the work activities to provide consistent, constant, direct supervision over their employees. Additionally, the work environment is such that it is extremely difficult to establish consistent, concrete standards by which employees can be evaluated. In those cases where quantitative standards may be developed, the use and/or enforcement of such standards may have an undesirable impact on the quality of product or service provided. For example in the EMS career field, management could establish a quantitative quality standard of having EMS personnel stick a patient with a needle no more than two times when attempting to administer an intravenous (IV) feeding. Although most people are not particularly fond of having needles inserted into them two or more times, however, the last thing EMS management or a person needing the medication or injection wants to worry about is whether or not the EMS personnel is reluctant or hesitant to administer the IV because they are concerned about the number of attempts it will take them to locate a collapsed vein and how they will be evaluated for repeated attempts. If the Human Resource Management Control Theory holds true, it is hypothesized that there should be a negative or inverse correlation between the independent and moderating variables. This means that the greater the degree of ambiguity or lack of organizational standards and managements' lack of understanding of the work processes of its employees, the greater the need for the organization to rely upon input control techniques to ensure effective employee behavior. Alreck and Settle (1995) discussed statistical correlation this way:

> The plus or minus sign on the correlation coefficient indicates the direction of correlation. If the correlation is positive, the two [variables] move in the same direction. If it's negative, they move in the opposite direction. In other words, the plus or minus indicates a direct or an inverse relationship between the two variables. (Alreck and Settle, 1995, p. 298).

According to the theory, it would seem likely then that there should be an inverse relationship between the independent and moderating variables. As mentioned earlier, the nature of most EMS units in North Carolina is that the EMS personnel function either as a team or as individual members based on their classifications. As such, some units will have a designated supervisor specifically for the EMS units while others may function under the supervision of the Fire Chief. In either case, the position of supervisor is normally associated with or considered an "office position" and this individual is responsible for handling administrative tasks and interpersonal duties between the organization, its EMS units, and citizens. As management staff, they are usually not "working supervisors" and in general may not possess the same level of proficiency or expertise as those accomplishing day-to-day EMS activities. This then leads to research and null hypotheses number 2.

Research hypothesis #2: There is a negative correlation between EMS personnel's perception of management's complete knowledge of their work activities and availability/use of concrete standards and an organization's selection process and training.

Null hypothesis #2: There is no correlation or a positive correlation between EMS personnel's perception of management complete knowledge of their work activities and the availability/use of concrete standards and an organization's selection process and training.

$$(f)\ B \neq (f)\ A$$

Research Design.

A correlational design was used, in which the organization's selection processes and training and management's knowledge of the work process/activities and availability/use of concrete standards were correlated with EMS personnels' perception of the performance appraisal processes and employee intent to leave the organization (See cross-break #1); A correlation design was also used, in which the organization's selection processes and training are correlated with EMS personnel's perception of management's knowledge of the work process/activities and the availability and use of concrete standards (See cross-break #2).

Cross-Break #1

Input Control & Business Environment	Organizational Effectiveness	
	Employee Appraisal	Employee Intent to Leave
Training		
Selection		
Knowledge of work		
Availability of Standards		

Cross-Break #2

Input Control	Business Environment	
	Knowledge of Work/Activities	Availability/Use of Concrete Standards
Training		
Selection		

With regards to the statistical methodology utilized in this study, previous researchers have utilized either canonical correlation analysis or regression analysis. This study seeks to identify the relationship between three sets of variables. For this research,

the author believes that correlation analysis is the most appropriate statistical method to employ. Specifically, the author seeks to analyze the results of the two dependent variables (employee development and turnover intent) with the two independent variables (selection and training) and two moderating variables (job knowledge and availability of standards).; and the relationship between the moderating variables (job knowledge and availability of standards) to the independent variables. In performing these analyses, the author sought to determine the strength of the relationships between the independent and dependent variables and between the independent and moderating variables.

Discussion of Participants.

The author sampled EMS personnel in the State of North Carolina (N.C.). Similar to the air traffic control career field and the military fighter pilot career fields, this segment of the public sector population tends to treat each EMS specialist or EMS team as a detached and separate strategic business unit (SBU). In the State of North Carolina, EMS personnel must be certified by the State. EMS personnel can be certified in one of three categories: EMT, EMT - I, and EMT - P. An EMT is classified as a technician. An EMT technician is certified by medical authorities to perform advanced first aid, make patient assessments, and administer oxygen. An EMT - I is classified as an instructor: An individual classified as an EMT - I is certified to perform all of the functions of an

EMT plus administer limited electrical therapy and administer limited drugs and intravenous (IV) applications. The highest level of certification is the EMT-P. An EMT - P is classified as a paramedic. As a paramedic, this individual is certified to perform all of the functions of an EMT and EMT-I plus administer over 40 different medications and to conduct limited life-saving procedures to include such advanced medical procedures as needle decompressions. Each of these certifications requires the individual to successfully complete a specified number of both classroom and hand-on practical training. This training includes a minimum number of hours of training under the supervision of a physician before the individual can become certified.

In some municipal governments in North Carolina, all EMS personnel are not required to obtain any of the advanced certifications (i.e. EMT - I or EMT - P). In other municipalities, even the certification and obtainment of an EMT certification is a personal, voluntary decision and may be at the individual's own expense. Still other municipalities mandate some or all of their personnel obtain the basic EMT certification and then encourage them to voluntarily seek still higher levels of certification at their discretion. A few municipalities require all EMS personnel to obtain the basic EMT certification and then allocate a specific number of positions within the organization and require higher certification levels for career advancement. In the latter two cases, such organizations will tend to use the attainment of higher levels of certification in their performance appraisal process. Such organizations may routinely identify personnel to receive training for these higher certification levels as manpower changes dictate and pay

for their training.

The survey population consisted of all EMS certified personnel only, regardless of their classification and whether they are supervisor or non-supervisory qualified. Some researchers may question whether or not the survey instrument utilized in this research is applicable for this type of research. The history of research on this theory is indeed robust. Ouchi and Maguire (1975) in their work reported the following:

> Following two sets of interviews with 40 respondents, a questionnaire was prepared and administered to all individuals in the 197 department stores. Of the 2,875 questionnaires distributed, 2,398 (83 percent) were returned and usable. Of these 329 (a response rate of 84 percent) were managers, who were the focus of the this study. They ranged over four level of hierarchy, from assistant department manager to store manager. Some data are also reported for the non managers (others) who comprise the bottom level of the hierarchy. Questionnaires returned by one corporate president and by 13 corporate vice-presidents were excluded from the study.
> (Ouchi and Maguire, 1975, p. 560).

Additionally, some researchers may question the validity of testing the public sector with this instrument since these instruments have been used testing the private sector. First, the originator of the theory validates this robust testing. Ouchi (1977) in his study of non-

discount retail department store companies stated the following of his survey population:

> It should be noted that retail department stores are different from other work organizations in some important ways. First, the majority of employees (55 percent in this sample) are sales people who directly engage the firm's clients but are at the first or bottom, level of the hierarchy. Second, although a great deal of specialization takes place between merchandise categories, the task specialization by department is probably not as great as that which exists in a manufacturing organization. There are perceived differences between and the resulting bifurcation of interests. However, the "notions" department was widely felt to be quite different from the women's ready-to-wear departments and both of those quite different in task from the sales of major appliances and furniture. Nevertheless, it can be argued that since all of these departments are engaged in selling that they are not very different and therefore should not require very much integration.
>
> It should be noted that all of the variance in control type was not expected to be explained by the structural variance. Indeed, another paper (Ouchi and Maguire, 1975) demonstrated that approximately 25 percent of the variance in output control and behavior control is explained through characteristics of the job. In addition to these

> individual-level variables, it is likely that department-level variables will explain another large portion of the variance in control type. Nevertheless, a significant portion of the variance in control type can be expected to be related to structural variables with the organization as the unit of analysis. (Ouchi, 1977, p. 101).

Both of these studies by the theory's originator denote the fact that the nature of the theory is strong and equally allows for simultaneous research of both management and nonmanagement personnel and may be equally applied to all segments of the business population. In fact, it wasn't until Eisenhardt's (1985) work that research regarding the focus of this theory became predominately focused at the managerial level. Obviously from Ouchi's earlier works (1975 and 1977), the two groups can be surveyed together. The question of testing the public sector is answered via the theory. The theory clearly postulates that there should be a segment of the business population in which input control can be studied and possibly validated. It is the author's belief that Ouchi in this 1977 work correctly identified the factors necessary to be considered to research the input control quadrant of the theory: "...a significant portion of the variance in control type can be expected to be related to structural variables with the organization as the unit of analysis" (Ouchi, 1977, p. 101).

This research takes into consideration not only the structural variables of the organization but also the dynamics of the work environment as postulated by the theory.

Because the nature of the environment and the work processes of EMS personnel is one of a principal-agent format, it is both logical and rational that the public sector is a viable candidate for researching this theory and both groups of employees (managers and non-managers) may be included in the study. As a final point of validation, this researcher contacted Snell (1992 and 1995), the most prominently recognized and highly-esteemed researcher of this theory and the instrument developer, concerning the issue of simultaneous multi-level testing of both managers and nonmanagers. His perspective is that the theory does not state that it is solely applicable to the managerial level. The fact that previous researchers have chosen to test the theory at the managerial level in no way invalidates testing of the theory at the nonmanagerial level or even at the multi-level perspective. In his 1992 research, nonmanagers are the principle focus of the research.

Managerial and nonmanagerial data was collected as demographic and research information in this study. This study allowed for a more valid sampling and hopefully a statistical analysis with broader general application of the theory. The size of the target population is estimated to be approximately 600 people.

Sampling Strategy.

A stratified sample of EMS departments was selected from a pool of municipal governments in North Carolina (N.C.). Since every municipality in N.C. does not have an EMS department, the author limited the survey population pool to only those

municipal governments which have them. Additionally, since the nature of the job requires a high level of professionalism and training, the pool of likely candidates was further stratified by population size. Those municipalities with a population of 40,000 people or more are significantly more likely than not to meet a majority of the environmental factors posited in the theory. Those municipalities which do not provide EMS service normally rely upon the county in which the city resides to provide EMS service or rely upon private contract services or the hospital. These segments of the population were excluded for the following reasons: 1) The county EMS units were excluded because the county government units are typically less-well staffed due to funding and reliance upon the city governments to handle the greatest volume of service. Additionally, some county and town EMS units are volunteer units which are composed of city personnel. 2) By eliminating this segment of the population, the error of redundance in reporting will be avoided. Likewise, hospital and contract EMS units are frequently considered a part of the for-profit population. Management of for-profit firms typically views EMS units as a significant revenue producing source for funding part of the business operations. 3) Since the medical field in America is undergoing significant changes regarding the number of hospitals transitioning from nonprofit to for-profit organizations, their EMS units/personnel were eliminated to better focus the research on the public sector as postulated in the literature review. In doing so, we have eliminated the possibility of cross contamination of for-profit and public sector business. Additionally in doing so, we also maintain the focused of the research on public

businesses as the business environment theorized as being among the most descriptive of employing input control as their primary source of worker control.

Sampling Apparatus.

The author contacted Snell (1992) and Caldwell (O'Reilly et al, 1991) and received their permission to use their survey instruments for this research. (See Attachments 1 and 2). Because this research work dealt with only one aspect or segment of the human resource management control theory, the author chose not to utilize Snell's entire instrument in this research work. (See Attachment 1 - Survey Instrument.) The original instrument supplied to the author was an in-depth survey instrument whose target group was the manufacturing sector of business. In his 1992 work, Snell (1992) utilized a shortened version of this original instrument and stated in the published research (Snell 1992) that selecting staffing data was obtained by utilizing a 7-item scale; comprehensive training data from an 8-item scale, and development appraisal data from a 9 item scale, all of which were reported in the 1992 work. Researchers evaluating this research work should note that Snell's (1992) work does not include all of the survey questions shown on the original survey instrument provided to the author.

It is obvious that having validated the reliability and validity of the survey items, the usage of a reduced number of survey items in no way adversely affected the validity or reliability of the instrument and restructuring it to the target population does not

significantly adversely impact the validity or reliability of the survey apparatus. The parts of Snell's (1992) survey instrument which the author has specifically excluded refer to the testing of the existence of behavior and output controls which are not germane to this research work which focuses solely on the testing of and existence of the use of input control and the input control environment.

Retaining and utilizing these segments (behavior and output control) of the original apparatus for use in this research would adversely affect the research in two significant ways: First, it would have made the survey instrument unnecessarily long by adding the additional survey items. This would have negatively impacted the likelihood of receiving completed responses back from the EMS sample population due to the time necessary to complete the survey with regards to their dynamic work environment. (For example, in a municipality of approximately 40,000 people, a typical EMS force will average 200 emergency responses per week. The time needed to adequately respond to these emergency situation can vary from 15 minutes to approximately 45 minutes including processing the necessary paperwork and briefing medical staff of their actions.) Secondly, the survey instrument would have collected information which will not be used in this study or have any relevance to the narrowly defined research topic area.

Some researchers may argue that in not utilizing the entire original survey instrument, the author is altering the instrument and thus may be adversely affecting its validity and reliability. To the contrary, the author counter-argues that this is not true. The survey apparatus utilized in this research is the exact same instrument

(questions/statements), to include the key section concerning the administrative factors which refer to the business environment, utilized in Snell's (1992) work. Additionally, Snell (1992), himself, utilized a shortened version of the original instrument in testing a nonmanufacturing population. Regarding the wording of some survey statements, only minor editorial wording changes have been made to the original survey instrument to: 1) Make comprehension of the survey apparatus more comprehendible by EMS personnel; and 2) Eliminate the need for reverse scoring, which is a popular statistical approach in the 1990s. All of the variables (both independent and dependent variables) are continuous.

Additionally to further address concerns by my research colleagues, S. A. Snell (personal communications, October 15, 1998) was contacted regarding his opinion concerning the elimination of two segments (behavior and output control questions) of the original survey apparatus and its affect on its reliability and validity. It is his opinion that as long as the administrative factors, which the author refers to in this work as business environment, are included in the apparatus; there should is no problem in using the survey instrument as intended for testing nor should it have any effect on the instrument's reliability or validity since the instrument itself, as developed, has not be altered.

What this means to other researchers is that the survey apparatus was developed and predicated on the identification of antecedents associated with each control method (behavior, output, and input) with regards to the administrative factors (management's

knowledge of the transformation of the transformation process and the availability/use of standards) as stated in the theory. As such, for research purposes, each grouping of questions pertaining to a specific quadrant, excluding the behavior/output combination quadrant, can be viewed as independent of the others and capable of individualized testing. Since the focus of this research is to expand the collective knowledge regarding specifically the input control quadrant, the questions relating to the other two quadrants (behavior and output) are not applicable and may be duly excluded. This procedure in no way alters nor changes the original intent or focus from the original survey instrument.

The O'Reilly et al (1991) instrument regarding employee turnover intent has been incorporated exactly as listed in their 1991 published research work.

Demographics Data Collection.

As part of the demographics information, the respondents were also asked some binary-type questions (yes or no) relating to the use or existence/non-existence of some of the attributes and antecedents identified in the literature review as key factors for organizations intending to use input control as a viable means of maintaining worker control. It is recognized that management may espouse a particular organizational philosophy but employees may apply an entirely different philosophy, the demographics portion of the survey only asks the participant to check the items, if any, that they feel or perceive the organization is utilizing to obtain effective employee behavior on the job.

The items are: mission/vision statements, organizational objectives, organizational social activities, formal orientation program, organizational symbols, organizational values/beliefs, mentoring/sponsorship programs, multiple communication channels, and stories, anecdotes of employees as role models who exhibit superior performance, and the use of mentoring/sponsorship programs.

Additionally, binary-type information was collected regarding whether or not the individuals received any training (formal or informal) concerning the performance appraisal processes, employee status, EMS classification status, and EMS tenure. This group of information was used as statistical summary data as to frequency (mean and mode) in qualifying these features as being effectively utilized in the sample populations. Additionally, this information was useful in explaining and analyzing the correlated statistics.

Research Procedure.

Four municipal governments with EMS divisions were randomly selected from the stratified pool of seven municipalities. In the event that the four candidates refused to participate in the research or if a sufficient response rate was not received from the four initial candidates, the remaining pool of candidates would be contacted. Since a sufficient number of responses were received from the initial candidates, it was not necessary to contact the remaining pool municipalities. Fire Chiefs from each of the selected

municipalities in North Carolina with a population of 41,000 people or more, were first contacted via telephone. The author requested permission to survey their EMS personnel for research in support of a doctoral dissertation. The Fire Chiefs were then asked the number of EMS certified personnel, including supervisors, at their facility meeting the testing (certification) criteria. The appropriate number of surveys were sent via U.S. mail with the instructions for either the Fire Chief or his/her designated representative to distribute the surveys to personnel willing to voluntarily participate in the research, collect and return the surveys to the author. A self-address, stamped envelop/box was provided for the mass return of any completed surveys. The return envelop/box contained the author's return address to ensure that the author could ensure their anonymity in collecting the data and in reporting the findings. Each organization was asked to return any completed and unused surveys within three weeks after they receive them. The surveys provided each participant information explaining the purpose of the survey and reassurance to the participants that no demographic information or any information identifying the organizations who participated will be published or included in the summary of the research.

Statistical Design.

The statistical software package used for this analysis was SPSS version 6.1. A bivariate correlation analysis was conducted using the Kendall Tau-b methodology.

Kendall Tau-b is a nonparametric measure of the association for ordinal variables. Since the survey instrument utilized collected social science ordinal data, this methodology was determined to be the most appropriate. The SPSS help section specified that with this methodology, the sign of the coefficient indicates the direction of the relationship and the absolute value indicates the strength of the factors correlated, with the larger absolute values indicating the greater strength of the relationships. Possible values range from -1 to +1. A value of zero indicates that there is no linear correlation relationship between the variables. In such cases, the null hypothesis would be accepted if utilizing a two-tailed test. A value of +1 means that the variables are perfectly correlated. A value of -1 means that the variables are perfectly correlated but as the values of one variable increases, the values of the other decreases. A two-tailed significance test was performed to test the null hypotheses.

An additional concern for some researchers may be the validity of utilizing correlation analysis as an appropriate methodology instead of linear regression. Multiple regression is a general statistical technique used to analyze the relationship between a single dependent variable and several independent variables. The objective of which is to predict the effect of the independent variables on the dependent variable. The intent of this research is not to predict or establish causation reference the variables but to validate and quantify the existence of a co-relationship between multiple sets of independent and dependent variables as theorized. Canonical correlation analysis deals with the association between composite sets of multiple dependent and independent variables. The

goal of correlation analysis is to quantify the strength of these relationships. Since previous researchers have noted difficulty in identifying and testing the input control quadrant of the theory, the author chose to test the existence of the use of input control in this segment of the business population and to validate and quantify the relationships, if they existed, instead of predicting the associations of the relationships among the variables. Therefore, having operationalized the independent and moderating variables as four continuous variables and the dependent variable as two continuous variables, correlation analysis and not multiple regression is deemed the more appropriate methodology to utilize. As such, there is no assumption made as to causation of movement among the variables in this work. To further validate the appropriateness of this methodology, the author again contacted S. A. Snell (personal communication, September 13, 1999) to gain his opinion regarding the appropriateness of use of this methodology in this research. His response was that in his 1992 work he began his statistical analysis by doing an canonical correlation analysis, which provided a general overview of the relationships between the variables and then used regression analysis for predicting the future outcomes based on these correlations. Since the intent of this research is not to predict future outcomes but to investigate if there was indeed a relationship between the variables with regards to this specific target population, and if so, to what degree was there co-relationship movement, canonical correlation analysis would be the appropriate methodology to use.

The statistical model designed for this research utilized the following keys in the coding and loading of the demographic and survey data: 1) For job classification, a basic EMT was coded as 1, EMT-I was coded as 2, and EMT- P was coded as 3. 2) For supervisory status, personnel who responded as "other" or who omitted this section were coded as "0" (zero). Personnel who classified themselves as supervisor qualified but not currently holding a supervisory position were coded as "1". Personnel holding a supervisor/crew leader position were coded as "2". Personnel holding section coordinator/section director/EMS Chief were coded as "3". 3) Organization and career tenure data was coded as a one or two-digit number for the actual number of years. Some respondents provided whole and fractional years. Responses with fractional numbers were rounded downward to the nearest whole year. 4) Performance appraisal training was coded as binary data. Personnel who reported having never received performance appraisal training or having received only informal training were coded as "0" (zero). Personnel who reported receiving formal performance appraisal training from classroom or organizational-sponsored training were coded as "1". 5) Demographic information pertaining to the individuals' perceptions as to whether or not their organization was effectively using any of the ten listed input control factors/features to control employee behavior was also coded as binary data. If the individual reported that they felt the feature was being effectively utilized to control employee behavior, it was coded as a "1". If the item was not checked, it was coded as a "0" (zero).

The main portion of the survey instrument contained 29 questions. The first 26 questions utilized a Likert-type scale and ranged from one to five with the number one representing a response of "strongly disagree" and the number five representing a response of "strongly agree". Questions 1-26 reflected a response sequence that progressed from the least favorable response to the most favorable response . Questions 27 through 29, the Caldwell (O'Reilly et al, 1991) instrument, are worded so that an individual responding in a positive manner would respond with low-scaled response instead of a high-scaled response. This original scale, as designed and utilized by the original author of the instrument, is a reverse pattern in comparison to the previous 26 questions. In order to provide for a uniform evaluation of the statistical data, the responses for questions 27 through 29 were reverse-scored as follows: Not at all = 5, Slight extent = 4, Moderate extent = 3, A great extent = 2, and A very great extent = 1.

Coding for the 29 survey question areas for correlation purposes was a follows: knowledge of the work process as "kop", availability of standards as "aos", input control - training as "ict", input control - selection as "ict", performance appraisal processes as "pa", and employee intent to leave the organization as "to".

CHAPTER IV

ANALYSIS AND PRESENTATION OF FINDINGS

Survey Responses.

A total of 286 surveys were distributed. The cities included in the research findings had populations ranging in size from approximately 41,000 to 152,000 people. Of the surveys distributed, 117 were returned for a response rate of 40.9 percent. Of the 117 surveys received, 9 surveys were missing one or more responses to the 29 survey questions. These surveys were excluded from statistical analysis. This left a pool of 108 surveys for analysis which equaled a response rate of 37.76 percent. Of the 108 participants who completed the surveys, 54 possessed the basic EMT qualifications, 24 were EMT-I qualified, and 30 were EMT - P qualified. (See Appendix A)

Demographic Data Analysis.

Of the 108 respondents, 45 were not supervisor qualified, 14 were supervisor qualified but not currently holding a supervisor position, and 49 were supervisors. The mean years of organizational tenure of the respondents was 12.287 years with the median

and mode being ten years. The median year of EMS experience was also ten years, however, there were multiple modes of 8 and 20 years respectively. A histogram analysis (See Figure 6) showed the majority of the respondents fell within these two modes with fewer segments of the sample population falling outside of the two mode points. The x-axis represents the number of years in the EMS career field and the y-axis represents the number of respondents who reported that year of EMS experience tenure. There was a slight skewness to the left which shows a portion of the sample population, with five years or more, approaching the eight-year point.

The first significant preliminary finding from the demographic data deals with the issue of performance appraisal training. As previously mentioned, of the 108 respondents, 63 individuals indicated that they were supervisor qualified. Surprisingly, 46.3 percent of the 108 respondents reported having "no training" or only "informal training" on performance appraisals. The empirical significance of this finding will be discussed later.

Next, of the ten factors listed on the survey which relate to input control factors at the discretion of senior-level management that an organization could effectively use to obtain and ensure effective employee behavior from personnel working in an input control environment, only two factors were reported with a 50 percent response rate or higher. 53.7 percent of the respondents listed their organization's orientation program as being effectively utilized in controlling employee behavior. (See Figure 7). 50.9 percent listed organizational objectives as being utilized as an effective behavior control factor.

46.3 percent listed their organization's mission statement as being significant in controlling employee organizational behavior. The remaining factors are listed by percentages in descending order as follows: multiple communication channels (38.9%), organizational stories (33.3%), organizational values (31.5%), organizational symbols (27.8%), organizational social activities (19.4%), organization vision statement (16.7%), and the use of mentoring programs (14.8%).

Findings Regarding Null Hypothesis Number One.

Null hypothesis number one, which stated that there is no correlation or a negative correlation between the independent and moderating variables and the dependent variables, is rejected based on the two-tailed significance test for the correlation between these variables. The SPSS program provided the matrix output in the following format: statistical correlation coefficients, number of cases computed, and the two-tailed statistical significance level. (See Appendix B). The SPSS help text listed in the program stated that the statistical significance level represents the probability that the pattern observed and calculated in the sample data matrix would exist if the null hypothesis is true. If the probability is sufficiently low, one rejects the null and conversely if the probability is significantly high, one accepts the null hypothesis. The results of this research revealed that for each of the independent, moderating, and dependent variable matrices, at least five significant positive correlations were found. A majority of the factors examined in this study revealed a statistical significance

probability level ranging between .001 and .295 with the exception of the following matrices whose significance level is shown in parentheses: ict3/to1(.392), kop3/to1 (.401), kop5/pa3 (.669), kop5/pa5 (.897), ict3/to2 (.905), and ics1/to1 (.929). The author considered these matrices to be in the null hypothesis acceptable range and were excluded from further detailed statistical analysis. A detailed review of Appendix B clearly shows that the exclusion of these few matrices is both rational and prudent in determining whether or not to accept or reject the null hypothesis. By taking this conservative perspective, in comparison to a more liberal approach where those matrices with a level as high as .499 might be deemed acceptable by some researchers, the remaining matrices clearly exhibit valid evidence in support of the research hypothesis and revealed important statistical significance probability level information which clearly supports the rejection of the null hypothesis. Stated differently, these correlations can easily be seen as representing a significantly high probability, at least 70 percent or higher, that the reported findings do, in fact, support the research hypothesis.

Additionally, in cases ict3/to1, ict3/to2, and kop5/pa5, the correlation coefficients for these matrices reflected a negative correlation which denotes an inverse relationship which is a factor in considering the acceptance of the null hypothesis. Interestingly, the statistical significance level for these matrices indicates that there is a strong probability that this pattern would be observed in the null hypothesis which further strengthens their support for their acceptance of the null hypothesis and rejecting this segment relating to the research hypothesis.

However, this small, limited number of matrices, even when taken together, in no way provides a strong justification or grounds for the overall acceptance of null hypothesis number one. Even utilizing the conservative approach aforementioned, the number of positive statistical significance levels for all of the remaining correlation matrices far and in excess out number the few correlations that did support the null hypothesis. Although all of the remaining matrices were positively correlated, a detailed analysis of each and every correlation matrix would make this dissertation excessively technical and more redundant than necessary in several areas. For thess reasons, only the most prominent matrices will be discussed and analyzed in detail in this work.

Findings Regarding Training Matrices Correlation.

The research data reveals some interesting correlations concerning the use of input control in the EMS career field and the performance appraisal programs utilized and voluntary manpower turnover (employee intent to leave the organization). In the area of training, the strongest correlation (.2758) was shown to exist between how well the organization formalized or structured its training processes and the employee's supervisor's approach used to discuss employee performance during evaluations. (See Appendix B) A total of 56.5 percent of the respondents viewed their organization's training program as ranging from being "moderately structured" to "formal" compared to

a total of 23.1 percent of the respondents who viewed their organization's program as ranging from "unstructured/informal" to "weakly structured". The most commonly reported supervisor approach utilized to discuss employee performance during evaluations was the "tell and listen" approach. Although this approach is considered to be a two-way communication process, employee feedback may be given little to no credence since supervisor's intent as to how the feedback will be viewed or utilized remains unknown to the employee. The survey responses revealed that 49.1 percent of the supervisors utilized this approach. On the other hand, only 17.6 percent utilized "a joint problem solving" approach. The joint problem solving approach is also a two-way communication technique. In contrast, this approch not only solicits employee feedback but also seeks to incorporate this feedback into a mutual agreement as to what actions and/or interactions each party agrees to take to help the employee achieve the intended outcome.

The next significant matrix correlation (.2706) was shown to exist between the extensiveness of the organization's training program and how frequently supervisors discussed an employee's performance with them. A total of 77.8 percent of the respondents described their organization's training program as ranging from "moderately extensive" to "very extensive" with 49.1 percent of these respondents describing their training program as "moderately extensive". This was correlated with 48.1 percent of the respondents reporting that their supervisor discussed their performance with them on a

"quarterly" basis and 25 percent of the supervisors engaged in such discussions on an "annual" basis. Only 5.6 percent responded that their supervisor "rarely" discussed their performance with them.

With regards to the specific different kinds of training programs available and how much effort was given to measuring employee performance, this matrix correlation coefficient was .2665. In this association mix, 50 percent of the respondents described their organization as having "some variety" in training programs which were made available to them. Only 18.5 percent responded having a "wide variety" of training program available. In comparison, a total of 23.1 percent responded that "little" to "very little" effort was given to measuring employee performance and 45.4 percent reported that only a "moderate amount" of effort was given.

With regards to how the respondents felt employee training was viewed in their organization and its relationship to performance appraisals and rewards, the matrix correlation coefficient was .2499. The data showed that a total of 39.8 percent of the responding individuals felt that employee training was viewed more of "a cost" than as "an equal cost/investment opportunity". 29.6 percent felt that it was viewed "equally as a cost and an investment". Only 21.3 percent felt that employee training was viewed "solely as an investment" opportunity. These results were positively correlated with data showing that 34.3 percent felt that raises, promotions, merit increases, etc. are "somewhat related" to performance appraisals while only 20.4 percent feeling that they are "very

closely related" to performance appraisals. This last statistic is especially interesting when it is compared with the demographic data which shows that 46.3 percentage of the EMS survey population has received "no" or "only informal" performance appraisal training.

The last training area matrix to be discussed has a significant matrix correlation of .2426 and shows a positive correlation with how the respondents felt employee training was viewed in their organization and the employee's specific intent to leave the organization. Whereas a total of 39.8 percent of the respondents felt that employee training was viewed more as "a cost" than as "an equal cost/investment opportunity", this was correlated with a total of 11.1 percent of the respondents who indicated that they either "certainly would not" or "probably would not" be working for their current organization three years from now. An additional 15.7 percent reported "not being sure one way or the other" as to whether or not they would be with the organization three years from now. The empirical significance of this correlation will be discussed in detail later.

Findings Regarding Selection Matrices Correlation.

In the area of selection, the strongest matrix correlation (.2822) related the degree of importance the organization places on the staffing process and the employee's specific

intent to leave the organization. A total of 21.3 percent of the respondents reported feeling that the organization placed "very little" to "little" importance on the staffing process. This was correlated with a total of 11.1 percent of the respondents who stated that they either "certainly would not" or "probably would not" be working for their current organization three years from now. Conversely, of the 20.4 percent of the people who felt that the organization placed "a great deal" of importance on the staffing process, this was correlated with only 47.2 percent who stated that they "certainly would" be with the organization three years from now. It is also interesting to note that regarding the demographics of the survey population, 2 modes were identified regarding the number of years of experience the respondents had in the EMS career field, 8 and 20 years respectively. It may be that this factor provides an important insight into the correlation between the staffing processes and employee turnover which will be discussed later.

Regarding the matrix correlation (.2738) between the degree of importance the organization places on the EMS staffing process and to what extent employees participate in the goal setting and the performance appraisal processes, a total of 78.8 percent reported that their organization places "a moderate" to "a great deal" of importance on the staffing process for EMS personnel. This correlates with a total of 58. 3 percent who stated that they participate "moderately" to "a great deal" in the goal setting and performance appraisal process. These statistics also appear to compliment the correlation matrix (.2736) between the EMS personnel's perception of the extensiveness of the

selection process and how often EMS supervisors discussed employee performance with them. A total of 81.5 percent of the respondents stated that they felt that the staffing process was "moderately extensive" to "very extensive", compared to a total of 69.4 percent who stated that their performance is discussed with them "occasionally" to "daily". Again, the demographic data relating to the percentage of EMS personnel who have received formal performance appraisal training may be viewed as playing an important input control factor as to the quantity and quality of performance feedback that the individuals receive.

A critical finding relating to the staffing process is revealed in the correlation matrix (.2614) between EMS personnel's perception of the importance of selecting the best person for a position in their organization and the employee's specific intent to leave the organization. Whereas a total of 39.8 percent of the people felt that a "moderate" or "slightly higher" degree of importance was placed on selecting the best person for a position in their unit, 44.4 percent indicated that they felt it was "very important" to select the best person for a position. This was correlated with a total of 73.4 percent of the respondents who reported that they either "certainly would" or "probably would" still be with their organization three years from now.

Findings Regarding the Knowledge of the Work Process Matrices Correlation.

With regards to correlations between supervisory knowledge of the work processes, performance appraisal processes, and voluntary separation, there were also some significant findings. The strongest matrix correlation (.2729) was found regarding the relationship between the level of ease to which a supervisor can predict in advance how successful an employee will be as a consequence of their actions and the amount of effort a supervisor places on measuring employee performance. Whereas a total of 25.9 percent of the respondents "disagreed" to some degree with the statement that it was "easy" for their supervisor to predict in advance how successful they would be as a consequence of their actions, only 1.9 percent "strongly agreed". 29.6 percent "agreed" with the statement that it was "easy" for their supervisor to predict in advance how successful they would be as a consequence of their actions . Interestingly, a large percentage, 42.6 percent, of the respondents were undecided or neutral in their response as how easy was for their supervisor to predict in advance how successful they would be as a consequence of the actions. This factor of "ease of prediction" was correlated with a total of 23.1 percent of the respondents who felt that their supervisor gave "very little" to "little" effort to measuring employee performance. Only 8.3 percent responded that their supervisor gave "a great deal" of effort to measuring employee performance. 45.4 percent of the EMS personnel who responded reported that they felt their supervisor gave only "a

moderate amount" of effort in measuring employee performance.

The next significant matrix correlation (.2698) related to EMS supervisors' ability to distinguish between effective and ineffective employees by continually watching them and an employee's specific intent to leave the organization. In response to this question, a total of 25 percent of the people who responded "disagreed" to some degree that their supervisor distinguished between effective and ineffective employees by continually watching them. 38.9 percent were unsure whether or not the their supervisor distinguished between effective or ineffective employees by continually observing them. Only 31.5 percent "agreed" with the statement that their supervisor could distinguish between effective and ineffective employees by continually observing them while only 4.6 percent "strongly agreed" with this statement. The specific relevance of the question relates to the nature of the input control environment. The theory states that in this type of environment, the work of the supervisor neither allows them the opportunity nor the time to extensively engage in "behavior control"-type actions. If those who were "unsure" were counted with the total of those who "disagreed" to some degree with the statement, the percentage of respondents who believed that their supervisor did not distinguish between effective and ineffective employees solely by observations would equal a response rate of 63.9 percent. This factor of distinguishing between effective and ineffective employees by observation is positively correlated with the responses to the question of the respondents' intent to leave the organization. Whereas 47.2 percent

responded that they "certainly would" remain with the organization, a total of 52.8 percent responded expressing some doubt as to whether or not they would continue to remain with the organization three years from now.

The supervisor's ability to distinguish between effective and ineffective EMS personnel by continual observation was also positively correlated (.2596) with the individual's preference for a more ideal job other than EMS. Whereas a total 63.9 percent of the EMS personnel expressed some doubt or disagreement as to their supervisor's ability to distinguish between effective and ineffective employee behavior by continual observation, this correlated with a total of 47.2 percent who responded in the range "not at all" to "a slight extent" with regards to preferring a more ideal job. 24.1 percent responded that they would to "a slight extent" prefer a more ideal job and 23.1 percent reported that they would "not at all" prefer a more ideal job. (The importance of this correlation may be not in the total of 63.9 percent who expressed some doubt about their supervisor distinguishing between effective and ineffective employees by observations but in the total of 36.1 percent who felt that their supervisor "did distinguish" between effective and ineffective employees by "continually observing them" and the 12 percent who reported that to a "very great extent" they would prefer a more ideal job and for the 8.3 percent who reported at the "great extent" preference they would prefer a more ideal job. It may be these individuals are seriously considering voluntary separation to a greater or less extent based on EMS supervisors' excessive use of "behavior control"

when the more appropriate approach is to use an input control technique or factor.)

The last knowledge of work process area matrix to be discussed has a significant matrix correlation of .2467 and shows a positive correlation between the respondents' answers to the statement that EMS employees often act in the same ways to achieve the same outcome and the degree of supervisory effort given to measuring employee performance. A total of 36.1 percent of the EMS respondents "disagreed" to some degree with the statement that EMS employees often act in the same ways to achieve the same outcome compared to only 25.9 percent "agreed" with the statement to some degree. Interestingly, 39.8 percent of the EMS respondents were uncertain as to whether or not they agreed with the statement. This uncertainty may be attributed to at least two probably conditions: 1) due to the wording of the question or 2) to the fact that although a lot of EMS taskings are generally standardized in nature, different techniques may be taught by different trainers in following general process and no one technique is more "correct" than the other. If those who expressed some degree of uncertainty were added to those who expressed some degree "disagreed", this would account for a total of 75.9 percent who felt that the nature of the EMS job is such that there are "multiple ways" of EMS personnel performing their job and obtaining the same outcome. This factor was positively correlated with a total of 68.5 percent who felt that supervisors placed "very little" to only "a moderate" degree of effort to measuring employee performance.

Findings Regarding the Availability of Standards Matrices Correlation.

With regards to correlations between the availability of standards, performance appraisal processes, and voluntary separation, there were significant findings as well. The strongest matrix correlation (.2702) was found between the availability of quantifiable performance measures in EMS work activity and how closely raises, promotions, merit, etc. are tied to performance appraisals. A total of 32.4 percent "disagreed" to some degree with the statement that EMS employees perform jobs for which quantifiable performance measures are used. Only 18.5 percent "agreed" with the statement and not (1) one EMS person "strongly agreed" with the statement. Interestingly, 49.1 of the respondents provided answers at the middle range of the scale, expressing doubts as to whether or not they agreed or disagreed with the statement. If a presumption is made that any answer other than "agreement" can be viewed as a negative response or "disagreement", this response rate could be interpreted as a total of 81.5 percent of the EMS respondents felt that they performed jobs for which "quantifiable performance measures are not easily used or available for use". This factor was correlated with 34.3 percent who felt that there was only "somewhat" of a relationship between raises, promotions, merit, etc. and performance appraisals. Whereas a total of 38.9 percent felt that there was "little" to "very little" connection between organization rewards and performance appraisals, only 20.4 percent felt that there was a "very close" relationship.

Again, if a presumption is made that those who responded with "somewhat" were

combined with those who responded "little" to "very little", this would show that a total of 73.1 percent of the EMS respondents felt that there was "only a modest relationship" between organizational rewards and the performance appraisal processes. If one accepts this viewpoint, the statistics suggests that the lack of a connection between organizational rewards and EMS worker performance can be attributed to the lack of availability of a sufficient amount of quantifiable measures to effectively evaluate EMS worker performance for performance appraisal purposes.

The next significant matrix correlation (.2699) was between how well defined behavior standards are on performance evaluations forms and employee specific intent to leave the organization. A total of 33.4 percent "disagreed" to some degree that the behavioral standards currently used are well-defined compared to a total of 24.1 percent who "agreed" to some degree that they currently are well-defined. 42.6 percent of the respondents were in the undecided area and neither agreed nor disagreed. Again, if a presumption is made that any answer other than "agreement" can be viewed as a negative response, this would show that 75.9 percent of the EMS respondents felt that there was "some apprehension or concern" as to how standards are defined on the evaluation forms. This factor was positively correlated with four performance appraisal factors: 1) employee's specific intent to leave the organization (.2699), 2) the supervisor's approach used to discuss employee performance (.2454), 3) the how organizational rewards are tied to performance appraisals, and 4) to what extent employees participate in

the goal setting and performance appraisal processes (.2400).

The correlation between performance standards and intent to leave revealed that only 47.2 percent of the respondents indicated with "certainty" they would be with the organization three years from now. Regarding the correlation between performance standards and supervisor's approach, 18.5 percent reported that their supervisor was more likely to use a one-way type of communication approach, 49.1 percent utilizing a limited two-way type of communication approach, and only 17.6 percent utilizing a joint problem solving approach. Regarding the correlation between performance standards and the connection between organizational rewards and performance appraisals, at total of 73.1 expressed a degree of relatedness ranging from a "very little" connection to "somewhat" of a connection. Lastly, only 15.7 percent reported "moderate" or higher participation in the goal setting and performance appraisal processes.

The last availability of standards area matrix to be discussed has a significant matrix correlation of .2592 and shows a positive correlation regarding the extent results measures, such as output, number of EMS response calls, skill performance, etc., accurately depict effective employee performance and the supervisor's approach used to employee performance during evaluations. A total of 35.2 percent of the respondents indicated that they "disagreed" to some degree with the statement that their organization's results measures accurately depict how well EMS employee perform. A total of only 30 percent responded that they "agreed" to some degree (agreed or strongly

agreed) with the statement. 38.9 percent of the individuals responded in the middle of the scale or in the undecided or uncertain range as to whether they agreed or disagreed. Once again, if a presumption is made that any answer other than "agreement" can be viewed as a negative response, this would show that a total of 74.1 percent of the EMS respondents indicated that the results measures utilized were "less than accurate" in depicting how well EMS performed. This component was also positively correlated with at least 3 other performance appraisal factors and at least one other voluntary separation factor: how frequently employee performance is discussed with the employee (.2453), the relationship between organizational rewards and performance appraisals (.2185), to what extent employees participate in the goal setting and performance appraisal processes (.2125), and the employee's specific intent to leave the organization (.2414).

Findings Regarding Null Hypothesis Number Two.

Research hypothesis number two predicted that there would be an inverse (negative) relationship between the independent and moderating variables. The correlation results provided some interesting findings. Null hypothesis number two, which stated that there is no correlation or a positive correlation between the independent and moderating variables, is accepted based on the two-tailed significance test for correlation between the independent and moderating variables. (See Appendix C). With

the following exceptions, positive correlations, and not negative correlations as hypothesized, were found between each of the variable matrices. Regarding the negative correlation matrices that follow, the first number represents the statistical significance coefficient and the second number represents the two-tailed significance: ict5/kop5 (-.0162/.841), ict3/kop4 (-.0086/.917), ict3/aos1 (-.0195/.814), ict3/aos4 (-.0179/.831), ics2/kop3 (-.0506/.535), ics3/kop3 (-.0207/.800), and ics4/kop5 (-.0267/.752). In each of these cases, although there was a negative correlation, the two-tailed statistical significance level probability was sufficiently strong as to indicate, to this author, grounds for rejecting even partial acceptance of the research hypothesis.

This does not mean that an intuitive researcher can not learn from hypotheses which are not accepted. As an "after the fact" finding, the correlation matrices provided some very intriguing correlation information regarding the relationship between the independent and moderating variables. For example, there was a significant positive correlation between the respondents' perception of the organization's view of training and: 1) the establishment of quantifiable performance measures (.2708), 2) how accurately results measures depict how well EMS personnel have performed (.2745), 3) how well- defined behavior performance standards are exhibited on appraisal forms (.2638), and 4) whether or not employees believe that supervisors distinguish between effective and ineffective employees by observation of their actions on the job (.2638). The managerial implications of these correlations are significant based on the fact that a total of 39.8 percent of the respondents felt that their organization viewed training "more

as a cost" factor rather than as a combination cost/opportunity or as an opportunity only. It appears that the lack of emphasis on training is associated with other areas of organizational effectiveness as it relates to supervisors' knowledge of the work process and the lack of availability of clearly-defined performance standards.

Also of interest was the positive correlations between respondents' perception the degree of importance their organization places on the staffing process and: 1) the extent to which EMS personnel perform jobs for which quantifiable measures are used (.2690), 2) to what extent EMS personnel believe behavior standards are performance are well defined on performance appraisal forms (.2578), and 3) to what degree EMS respondents agreed that results measures utilized in their organization accurately depict how well EMS personnel perform (.2407). The managerial implications of these positive correlations are significant based on the fact that a total of 59.3 percent of the respondents felt that their organization placed a "moderate or less" degree of importance in staffing the unit. It appears that to the extent that the moderating variable are determined to be strongly felt in the organization, they function as a catalyst in further supporting the use of more and better independent variables.

CHAPTER V

SUMMARY AND CONCLUSIONS

The EMS Career Field and the Input Control Environment.

The first point to be emphasized in summarizing this research work's findings is that the primary utility of these findings, based on the statistical methodology utilized, is that of identifying significant correlations between the research variables and the statistical significance links between those variables and not in its ability to make broad, predictive outcomes or in identifying causal relationships (Levine, 1977). With this said, nevertheless, inferences can be and are made regarding the associations of these findings and the managerial implications for researchers, organizational executives, and operational managers in providing generalized guidance and in addressing areas of identified weaknesses in effectively controlling a workforce in a input control environment. As stated earlier, the intent of the first research hypothesis was to test the human resource management control theory, specifically the input control quadrant of the theory, in the Emergency Medical Services (EMS) career field in an attempt to validate

that this career field is indeed a section of American business utilizing input control techniques to effectively control their workforce. This validation would be established based on the degree of extensiveness that organizations in the career field were utilizing or attempting to utilize the techniques and factors identified in the literature review. It was hypothesized that an organization operating an input control environment would rely heavily upon employee training and selection processes as a central means of maintaining worker control.

Specific research findings revealed that EMS personnel reported receiving "moderate" to "extensive" training in "moderately structured" established and ongoing training programs. 93.5 percent of the people in the sample population reported receiving 20 or more hours of formal training annually. They also reported that typically, between "six" to "twenty or more" applicants are screened for each EMS personnel to be hired in their organization. The data supports the author's contention that the EMS is most probably an organization operating in the input control environment and relying upon the use of input control in controlling worker behavior.

As hypothesized, there is a positive correlation between EMS management's use of input control methods and tactics and its organizational effectiveness. The research results revealed several important findings for management to consider with regards to increasing its organizational effectiveness and reducing the probability of increases in voluntary manpower turnover.

Use of Input Control Factors Under EMS Management's Control.

First, of the ten input control factors identified in the literature review under EMS management's control that can be utilized to build and develop a strong organizational culture, only two of the ten factors are being utilized to any significant degree to provide effective control of employees in their organization. These two factors are organizational orientation programs and the use of organizational objectives. Of the respondents' answers, 53.7 percent indicated that their organization's orientation program was viewed as an effective factor in controlling EMS employees. 50.9 percent of the respondents indicated that organizational objectives were an effective factor in employee behavior control. A significant implication of this demographically derived data is that while an organization's employee orientation program is generally considered to be a "once-in-an-organizational-lifetime" event, it was perceive as having an more prominent long-term effect on the respondents than those who indicated organizational objectives, which in some cases may be an "annual" to "bi-annual" event. The significant implications of this data and the associations that can be rationally derived from it is that even these factors could be greatly enhanced if senior-level management in these organizations placed greater emphasis on efforts to advertise, promote, and demonstrate the type of culture necessary and required for this line of work.

Additionally, senior-level management may be allowing valuable opportunities for further developing their organizational culture and building "esprit de corps" among its EMS personnel slip away by not assertively using the other input control factors at their disposal. For example only 16 percent of the respondents indicated that the organization's vision statement was an effective controlling factor. Similarly, only of 27.8 percent of the respondents identified their organizational symbols as a factor in controlling behavior. Although both of these factors offer an equal opportunity for further developing and promoting the organization's culture, management should not view them as holding a equal juxtaposition with regards to in their degree of allocation of managerial-level intervention effort and involvement. The establishment of organizational vision is an executive/executive staff responsibility. It requires effective leadership, forethought and long-term commitment. Although in the municipal government environment, the executive body is composed both elected and appointed executives, the appointed officials are usually the individuals who have the greatest probability of being "long-term players" at the executive level and therefore should and probably do shoulder most of the responsibility in developing an effective vision statement for guiding organizational behavior and its impact on the use of input control. The executive staff, in turn, functions as the driving force in supporting and carrying out the vision. As such the EMS units's vision may be a subordinate, rather than a superordinate, vision. However, in the case of the use of organizational and departmental symbols, the executive staff, specifically the EMS managerial and leadership staff, have

the power to make significant contributions from this input control factor. The literature review suggests that an effective strategy would be for EMS leaders to utilize their department's rich history and stories of valor, courage, honor, and devotion to duty in designing and promoting such symbols. Then, EMS supervisors should utilize every available opportunity to indoctrinate new organizational members and encourage tenured members to frequently reflect upon the values and standards symbolized by the wearing of the insignia and the uniform. Organizational vision is typically closely associated with organizational values yet only 31.5 percent of the respondents listed organizational values as a behavior controlling factor. Again, the concept of control relates to specific actions that management takes to ensure appropriate behavior of others. Organizational values are not the by-product of executive-level brain-storming activities or as an after-thought list of items from an executive meeting to be "handed down" to organizational workers and to be placed on office walls as decorations. Organizational values are the clearly recognized, prominent, historical, collective employee beliefs and business principles that are deeply felt and routinely acted upon as guiding forces which make an organization standout as being unique, different, and hopefully, better than its competition. In a governmental environment which is very dynamic, it would seem unrealistic for managers and supervisors to really believe that they could be effective in controlling highly-trained, quick-reacting EMS workers with excessive use of behavior control or the use of poorly drafted quasi-quantitative standards. Organizational values

must be routinely and regularly advocated and promoted throughout the organization, but especially in the EMS divisions, to increase organizational effectivness.

This then provides EMS management the opportunity to use another factor in further developing their organizational culture: the use of organizational stories. Only 33.3 percent of the respondents reported that this method was being utilized as a controlling factor. The U.S. Armed Forces may be the premier input control organization to effective utilize this technique. No veteran of the armed services who has endured the hardships and struggles of military service to our country from a reference point of tenured experience in a foreign country can deny the impact of "war stories of valor, courage, and personal sacrifice in the call of duty" on impressionable minds and waning spirits. Private sector leaders like David Armstrong of Armstrong International, and Southwest Airline's CEO, Herb Keller, have learned the value of organizational stories in building a culture of customer service and service to others. If executives are not willing to "perform" as story tellers, then other tools of input control are still available and viable. For example, only 38.9 percent of the respondents indicated that multiple communication channels were being utilized as effective means of control. The key here is a not heavy reliance just upon one-way, downward communications but also an ample use of two-way communications. Although organizational social activities can serve this purpose, regular mandatory meeting, sometimes in the military/air traffic control career field referred to as "Come to Jesus Meetings", can be very beneficial in disseminating

information, eliminating rumors, and clarifying and explaining the results as to why the results of "selecting the best candidate" resulted in the outcomes that it did. For example, after grumpling over a candidate selection for a key position, a meeting may clear the air of misconceptions by notifying everyone that there may have been more qualified individuals for a position but only a few candidates were willing to undergo the rigors of a comprehensive and detailed assessment center process, and that all eligible individuals were given the opportunity to undergo the assessment. This may be substantiated by the correlations and demographic data findings.

Another important and significant finding from the demographic data is the percentage of EMS personnel in the organizations who have received formal performance appraisal training (only 53.7 percent). Empirically, what this means is as an EMS worker, you have just slightly better than a 50/50 chance of working for a supervisor who has received formal performance appraisal training. This individual will supervise you and manage your career opportunities based on their understanding of or their lack of training regarding the formal performance appraisal processes. Likewise, if you are an EMS manager, you have just slightly better than a 50/50 chance of promoting an EMS line worker with no formal performance appraisal training, regardless of their technical ability, to a supervisory position. Presuming that you selected a non-performance appraisal trained worker, you have now delegated that individual the responsibility of motivating and leading a crew of EMS workers. Additionally, you are expecting him or her to properly utilize the organization's performance appraisal processes (i.e. setting

goals, effectively praising and reprimanding employees, effectively documenting worker performance, administering performance reward funds, explaining the organization's performance appraisal systm to new workers, etc.) to develop the EMS workers under their authority, positively impact the voluntary manpower separation rate, and promote the congruency between work performance and organizational values by engaging their subordinates in meaning performance evaluations sessions. What do you suppose is the probability of their success if you, the EMS manager, also have only received informal performance appraisal training? If he or she doesn't work out, you still have a pool of potential supervisors to select from and in each instance you will still have just slightly better than a 50/50 chance of selecting a properly trained one. This one demographic factor has the potential of having a profound impact on overall organizational effectiveness.

Training Matrices Findings Implications.

The results findings relating to organizational training and selection have profound significance to managers, supervisors, and workers in the EMS career field. First regarding training, it is evident from the research that performance appraisal training is a significant weakness in the EMS organizations responding to the survey. The data relating to the training program in EMS units provides a valuable tool for both

supervisors and workers. To the extent that performance appraisal training is incorporated into the training program, and to the extent that senior-level management supports and emphasizes the importance of this training as it relates to the nature of the work process, availability of standards, and the effectiveness of administering organizational monetary rewards, the organizations can expect to see significant corresponding reduction in employee voluntary terminations.

The empirical significance of the point may be seen in comparing the EMS tenure data results with the statistical analysis data for training. It is the author's contention that the two modes identified in the demographics data are characteristic of the training and selection patterns of organizations operating in the input control environment. Partly due to the length of time associated with the training process and partly due to the culture of the organization, there appears to a five to seven year lag time between when the individual is hired and when the individual makes the decision to voluntarily leave the organization. (See Figure 6) Therefore, one tends to see "peaks" in tenure followed by "lulls" and then "peaks" again. The severity or magnitude of the "peaks" and "lulls" may be greatly modified by a host of factors to include the effective management/supervisor interpersonal communications and the quality of the input control selection process utilized during that year. To the extent that particular year was extremely successful, the entire group may gradually move throughout the organizational tenure cycle period with only minimal personnel losses from that year's recruitment group whereas the less intensified input control selection processes may tend to reflect greater losses in

manpower and reduction of "peaks" over time.

Regarding training and supervisors' approaches to training, there is a positive correlation between the training programs' structure and the supervisor's approach utilized in discussing employee performance during evaluations. The more structured and formalized the training programs, the greater the probability that the majority of the supervisors will utilized a more two-way type of communications in performance appraisal discussions. Again, with the demographic data regarding supervisory performance appraisal training, an increase in the use of two-way communications will most probably directly associated with the degree of emphasis and support originating from the senior-level management tier.

As training program extensiveness increases, the probability of the frequency of employee performance discussions may also increase. However, in this sample population, program extensiveness was not as robust as it could be. Correspondingly, only 48.1 percent of the respondents reported discussions with their supervisor on a "quarterly" basis. This percentage represents an opportunity for management to focus on improving supervisor-employee communications and expanding its EMS training program.

Next, the statistical results also suggests that how management perceives the value of training, whether primarily as a "cost" or as an "opportunity", and how strongly this perception is conveyed, either indirectly through nonverbal messages or directly as formal or informal discussion of the organization's performance appraisal processes to

lower-level supervisors, has a significant impact on the how a majority of supervisors and employees make associations about the organization's performance appraisal and the organization's performance reward processes. To the extent that training is viewed "solely as a cost" by the organization and/or by the immediate supervisor, the greater the probability that the supervisor will view such employee requests for extensive training as inconsequential or from a negative reference point. This may be especially true if the employee's request was for performance appraisal training and their supervisor has not received formal performance appraisal training themselves. As a result, statistics supports the probability that the organization also faces a greater risk of compounding the problem if neither the supervisors nor the employees see a clear connection between effective employee performance and the organization's reward processes. The outcome of this "double negative" is that both supervisors and employees may tend to view the organization's performance appraisal and reward processes as lacking clear connections as to what behaviors should be rewarded and what behaviors should not. The fact that most municipal governments utilize some form of a merit system only further complicates the performance-rewards connection and intensifies the "double negative" effect.

One solution to the dilemma is for executive management to mandate performance appraisal training for all organizational employees, including the executives as a means of demonstrating the seriousness of the issue, and especially EMS personnel. Mandatory performance appraisal training for all EMS personnel has the potential of

"clearing the fog" of confusion and solidifying the process of standardize appraisal processes even if the standards used are somewhat ambiguous. Additionally as a by-product of the training, where the standards remain ambiguous, the supervisor and employee can begin to utilize a joint problem solving approach in identifying mutually agreed upon standards for worker performance evaluation instead of relying totally upon the supervisor to accomplish this task.

Lastly regarding the correlation between the different kinds of training available and the effort given in measuring employee performance, one-half of the respondents reported "some variety" in training. However, supervisors currently appear to utilize "very little" effort in measuring employee performance. Whether this is a factor of the lack of available concrete standards or a lack of supervisory training, it is unclear from the results from the survey responses. However, the demographics data which shows that 46.3 percent of the respondents lacked formal performance appraisal training may be an important indicator in explaining the low perception of the amount of supervisor effort expended regarding performance measurement and the degree of difficulty some supervisors are facing in trying to effectively utilize the organization's performance appraisal processes.

Selection/Staffing Matrices Findings Implications.

The statistics show that there is a positive correlation between the degree of importance the organization places on the staffing process and the employee's intent to leave the organization. As the degree of staffing importance is manifested and utilized throughout the selection/staffing processes, the greater the probability that the employees will remain with the organization, at least during the short-term. The statistics clearly show that management's efforts in exercising due care in its staffing process is being perceived by the workers as being a necessary and beneficial endeavor. Again, this reflects well on management's efforts in attempting to adequately utilize an input control strategy. A total of 78.8 percent of the respondents reported that they believed that their organization places "a moderate" to "a great deal" of importance on the initial selection process.

However, the perception appears to be "dulled" slightly as employee perception of the level of care being utilized in "selecting the best person for an EMS position" received a lower percentage of positive responses, only 39.8 percent. It may be that this shift is a natural occurrence as workers become oriented to the nature of the input control environment, or it may signify a more ominous condition. It may also signify that management begins to relax its level of intensity in utilizing effective input control techniques or tactics with employees the longer they are with the organization. Which of the conditions is actually the contributing factors can not be determined from the

statistics. However, it is the author's opinion based on 20 years of empirical experience in an input control environment that it is most probably the latter. As management relaxes it emphasis on maintaining its integrity to organizational values, mission, and vision in subsequent staffing processes, organizational politics may begin to slowly influence the process and begin to erode the positive associations it initially established. If this is the case, the problem may be eradicated by the use of frequent, open, honest discussions ("Come to Jesus Meetings") between senior-level management, supervisors, and employees involved in the processes of "selecting the best person for a vacant position". This openness will tend to re-energize and re-focus the importance of maintaining and promoting the organization's commitment to reflecting a strong connection between organizational values and personnel selections.

Another important factor is the extent to which employees participate in the goal setting and performance appraisal processes. Although a total of 78.8 percent of the respondents reported to some extent that they believed that their organization placed a moderate or higher level of importance in selecting the best candidate for the job, only a total of 58.3 percent stated that their participation in the goal setting and performance appraisal processes ranged from "moderately" to "a great deal". With only 17.6 percent of the supervisors utilizing a joint problem solving approach in discussing employee performance, there appears to significant room for improvement in interpersonal communications and the use of goal setting by supervisors in this career field. To the

extent that employees are trained on the technique, they become "active" rather than "passive" partners in the process.

Knowledge of Work Process Findings Implications.

Regarding the correlations between knowledge of work processes, the findings provide the following insights: First, there is a clear connection between the difficulty an EMS supervisor experiences in predicting effective employee behavior and their ability to quantitatively associate this with evaluating and measuring employee performance. This difficulty may be further complicated by the fact that: 1) a large portion of EMS personnel have not received performance appraisal training, 2) very few supervisors utilize the goal setting (performance appraisal training may greatly enhance supervisors' skills in developing clear qualititative goals when quantitative criteria is not available), 3) most supervisors tend to utilize a limited two-way method of communications rather than a more appropriate joint problem solving approach/technique, and 4) the nature of EMS work does not provide abundant sources of quantitative activities and concrete standards by which to fairly and effectively evaluate EMS worker performance. Regarding this last issue, senior-level management may be very beneficial in providing some possible qualitative areas for consideration which can be linked directly to the organization's

mission, vision, and/or culture.

Next, there is a clear connection between the difficulty of EMS supervisors in distinguishing effective and ineffective behavior and employees' intent to leave the organization. Although this correlation is not specific as to which groups or categories of EMS personnel are effected, the author believes that the demographic statistics provides some useful insight. (See Figure 6). The two modes identified in the EMS tenure grouping may also indicates that eight years has a specific significance to the EMS input control cycle. One might expect that it is during the first seven years that a majority of EMS workers come to the realization that the organization or the career field is not right for them since EMS qualification training tends to be a somewhat lengthy time process. If this in fact is the case, the degree of turnover is probably also significantly associated with the quality and quantity of supervisor-employee interactions regarding performance appraisals and the quality of candidates EMS management has to select from to become supervisors after the eight-year point. These supervisors, selected after the eight-year point, then also impact how the performance appraisal processes are viewed and implemented/conducted. As the difficulty in determining effective employees increases with each additional year of organizational/EMS career filed tenure, the probability of short-term EMS employee turnover also increases. Last but not least in this area, a significant correlation was found between the degree of uniformity of EMS personnels' actions and outcomes and supervisor effort in measuring employee performance.

A total of 36.1 percent of the respondents felt to some degree that it was

necessary for EMS employees to perform differently to achieve the same outcome. This correlation supports the author's belief that the EMS career field is representative of a business operating in an input control environment. As a result of this correlation, it is probably necessary for senior-level EMS managers to exercise due care in establishing performance standards and to ensure supervisory personnel are well-trained and competent in administering the organization's performance appraisal and reward processes. This level of flexibility can be utilized to a supervisor's advantage in determining effective employee behavior, with proper training, and reduce their excessive reliance upon behavior control techniques.

Availability of Standards Implications.

Regarding the correlations between the availability of standards, performance appraisal processes, and employee turnover, only 18 percent of the survey respondents "agreed" with the statement that they performed jobs for which quantifiable standards are used. No one, zero percent, "strongly agreed" with this statement. Again, this statistic clearly provides grounds for accepting the conclusion that EMS career personnel are operating in an input control environment. Since the work environment does not allow ample opportunities for the exercise of behavior control or output control, input control appears to be the control technique which offers the highest opportunity for achieving organizational effectiveness.

The connection between availability of quantifiable performance standards and the administration of organizational rewards is clear. In a majority of the cases reported in this study, EMS personnel, whether supervisors or not, experienced "difficulty" in either clearly seeing or making clear associations between the required behavior for effective performance appraisal and the distribution of organizational rewards. The research findings suggest that to a greater extent, a significant contributor to this difficulty is the behavior standards, or the lack there of, on the performance evaluation forms. Approximately one-third of the respondents can be said to have clasified the standards on the forms as "ill-defined". Only approximately one-quarter of them can be said to have classified the standards as "well-defined". Stated differently, approximately 75 percent of the respondents felt that there were "problems" associated with the standards listed on their organization's performance appraisal forms. The correlation revealed that this factor impacts organizational effectiveness in four ways: 1) retention, 2) supervisor-employee interpersonal communications regarding performance appraisal discussions, 3) the ability of personnel to clearly see the connection between effective behavior and organizational rewards, and 4) employee participation in the goal setting and performance appraisal processes. This last factor is further supported by the statistics which show that the results measures used in evaluating employee performance may not accurately depict effective EMS employee performance. Clearly there is a need to address standards identified on the EMS performance appraisal form(s). Senior-level management intervention and supervisor training are, at the minimum, a necessary

starting point.

As an overall summary, Figure 8 graphically represents the overall mean responses to each of the surevy responses for each major category of questions. Although as a whole the organizations are approximately moderately positioned in the web, there is room for improvement in all areas. The closer a group moves to the center of the web, the less organizational effectiveness exhibited. The closer a group moves to the outer-edges of the web, the greater their organizational effectiveness.

Limitations of the Study.

The author acknowledges that the statistical methodology utilized in the research provides only the rudimentary statistical research in the area. As such, the ability to make far-reaching predictions and causal projections based on this research work's findings is well beyond the scope of the statistical method utilized. However, the work is significant in that it validated positive correlations between the variables which where espoused by the theory has being interrelated and it positively identified a segment of the American working population to adequately test the input control quadrant of the theory thereby providing a target area for further research. Additionally, this research provides is a solid foundation upon which other researchers and practitioners can begin to explore and validate the identified principles and inferences detailed in the implications section with a fairly high level of confidence as it relates to the general application of human resource

management control or performance management theory principles.

Readers are, nevertheless, recommended not to rely extensively on this work for predictive or causational purposes but are encouraged to pursue additional research and readings in this area. The author also again acknowledges that there are a host of other factor that may have impacted the findings. The author also acknowledges that the correlation coefficients found indicate that the correlations are not extremely strong. Nevertheless, their moderate degree of strength signifies that the findings indeed provide a grounds for making rational inferences from the scientific investigation and the demographic data provides significant credence to the author's inferences as it relates to this quadrant of the theory.

The author further acknowledges that the sample population may have had an impact on the resulting correlations. For example, the author used a stratified sample population from which to draw a sample. It may be that a more robust population may have provided different results which would have better tested the second hypothesis.

Although one research hypothesis was accepted, the other research hypothesis was rejected. In accepting the second null hypothesis, a possible new relationship may be hypothesized regarding the positive preliminary correlations and there by offer a area for further research. For example, it appears that an appropriate hypothesis may be that there is a positive correlation between the moderating and independent variables. If so, it may be important to test the relationship between the two variables, and these two variables alone, on a larger sample population. Or, it may be that understanding the relationship

between the independent and moderating variables is not as important as determining the effect of the ten listed input control factors on organizational effectiveness by conducting a before and after study on an input control environment organization as it attempts to incorporate the additional factors.

Conclusion.

Human resource management control theory, or as the author modernly terms as Performance Management Theory, attempts to explain the different approaches available for controlling workers in a business environment. According to the theory, one technique of controlling workers may be more effective than others. The task of determining which technique to apply is not a simple task. The theory advocates that two management factors, knowledge of the work processes and the availability of standards, results in four possible techniques or approaches. Effective management requires that the appropriate techniques be utilized to ensure that there is some congruency between the preferred technique utilized by the organization and the type workers employed to achieve maximum worker productivity and to reach organizational goals and objectives.

Empirical experience clearly shows that the most commonly used technique, the combination of behavior and output controls, is the most widely accepted approach utilized in American business. But is it necessarily the most effective and appropriate for

all types of organizations? The theory advocates that it is not, especially in an input control environment where management's knowledge of the work process is incomplete and the performance standards are ambiguous. Of all the research conducted in this theory thus far, this work attempted to provided a small but usable foundation for exploring the uncharted waters of the input control environment and the organizations that strive, and in some case die, in it. The acceptance of research hypothesis number one provide this foundation. The implications for organizational managers operating in the input control environment suggests that performance appraisal training is a critical area for expeditious managerial intervention if weaknesses are identified.

Finally, Performance Management Theory is still in its infancy from an input control quadrant research perspective with regards to our understanding of its application and its impact on organizations in America and as American businesses enters into the 21st century. The central problem still remains that of identifying appropriate career fields which fit the "input control profile" and identifying appropriate strategies and techniques for enabling executives, managers, supervisors, and workers to become more effective in the workplace. Once such organizations have been identified, the challenge is to identify which factors, if any, are critical for managers to utilize to achieve organizational effectiveness.

Emergency Medical Services is but one career field now validated to exist in this environment and to apply the techniques characteristic of this quadrant of the theory.

Organizations such as the special, elite military forces, the U.S. Marshal Service, the FBI, the CIA, the hospitality industry or the air traffic control industry are all possible candidates for future testing of this quadrant of the theory. Performance Management Theory, is more than just performance appraisal training, it involves selection/staffing processes, organizational culture, values systems, visioning, leadership, and managerial courage and integrity. This work expands our collective knowledge about what managers and supervisors, at all levels but especially at the senior-level, can do to begin to achieve a high level of organizational effectiveness by effectively controlling their talented workforce in a dynamic business environment.

SURVEY DEMOGRAPHICS SUMMARIES

KOP1 Distinguish between Effec/Effic.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	7	6.5	6.5	6.5
	2	20	18.5	18.5	25.0
	3	42	38.9	38.9	63.9
	4	34	31.5	31.5	95.4
	5	5	4.6	4.6	100.0
	Total	108	100.0	100.0	

Mean	3.093	Median	3.000	Mode	3.000
Std dev	.972				

Valid cases 108 Missing cases 0

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KOP2 Observe Duties

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	10	9.3	9.3	9.3
	2	23	21.3	21.3	30.6
	3	42	38.9	38.9	69.4
	4	31	28.7	28.7	98.1
	5	2	1.9	1.9	100.0
	Total	108	100.0	100.0	

Mean	2.926	Median	3.000	Mode	3.000
Std dev	.974				

Valid cases 108 Missing cases 0

KOP3 Continually Observe Actions

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	13	12.0	12.0	12.0
	2	31	28.7	28.7	40.7
	3	43	39.8	39.8	80.6
	4	18	16.7	16.7	97.2
	5	3	2.8	2.8	100.0
	Total	108	100.0	100.0	

Mean	2.694	Median	3.000	Mode	3.000
Std dev	.981				

Valid cases 108 Missing cases 0

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KOP4 Same Outcome

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	9	8.3	8.3	8.3
	2	30	27.8	27.8	36.1
	3	41	38.0	38.0	74.1
	4	24	22.2	22.2	96.3
	5	4	3.7	3.7	100.0
	Total	108	100.0	100.0	

Mean	2.852	Median	3.000	Mode	3.000
Std dev	.984				

Valid cases 108 Missing cases 0

KOP5 Predict success via actions

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	8	7.4	7.4	7.4
	2	20	18.5	18.5	25.9
	3	46	42.6	42.6	68.5
	4	32	29.6	29.6	98.1
	5	2	1.9	1.9	100.0
	Total	108	100.0	100.0	

Mean	3.000	Median	3.000	Mode	3.000
Std dev	.927				

Valid cases 108 Missing cases 0

AOS1 Defined standards

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	14	13.0	13.0	13.0
	2	22	20.4	20.4	33.3
	3	46	42.6	42.6	75.9
	4	22	20.4	20.4	96.3
	5	4	3.7	3.7	100.0
	Total	108	100.0	100.0	

Mean	2.815	Median	3.000	Mode	3.000
Std dev	1.024				

Valid cases 108 Missing cases 0

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AOS2 Objective sources

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	10	9.3	9.3	9.3
	2	26	24.1	24.1	33.3
	3	36	33.3	33.3	66.7
	4	31	28.7	28.7	95.4
	5	5	4.6	4.6	100.0
	Total	108	100.0	100.0	

Mean	2.954	Median	3.000	Mode	3.000
Std dev	1.045				

Valid cases 108 Missing cases 0

AOS3 Results measures

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	9	8.3	8.3	8.3
	2	29	26.9	26.9	35.2
	3	42	38.9	38.9	74.1
	4	26	24.1	24.1	98.1
	5	2	1.9	1.9	100.0
	Total	108	100.0	100.0	

Mean	2.843	Median	3.000	Mode	3.000
Std dev	.949				

Valid cases 108 Missing cases 0

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AOS4 Quantifiable measures

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	12	11.1	11.1	11.1
	2	23	21.3	21.3	32.4
	3	53	49.1	49.1	81.5
	4	20	18.5	18.5	100.0
	Total	108	100.0	100.0	

Mean	2.750	Median	3.000	Mode	3.000
Std dev	.887				

Valid cases 108 Missing cases 0

AOS5 Concrete goal/objectives

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	20	18.5	18.5	18.5
	2	24	22.2	22.2	40.7
	3	48	44.4	44.4	85.2
	4	15	13.9	13.9	99.1
	5	1	.9	.9	100.0
	Total	108	100.0	100.0	

Mean	2.565	Median	3.000	Mode	3.000
Std dev	.979				

Valid cases 108 Missing cases 0

ICT1 Extent of training

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	7	6.5	6.5	6.5
	2	17	15.7	15.7	22.2
	3	53	49.1	49.1	71.3
	4	21	19.4	19.4	90.7
	5	10	9.3	9.3	100.0
	Total	108	100.0	100.0	

Mean	3.093	Median	3.000	Mode	3.000
Std dev	.991				

Valid cases 108 Missing cases 0

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ICT2 Formal/structured training

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	11	10.2	10.2	10.2
	2	12	11.1	11.1	21.3
	3	61	56.5	56.5	77.8
	4	13	12.0	12.0	89.8
	5	11	10.2	10.2	100.0
	Total	108	100.0	100.0	

Mean	3.009	Median	3.000	Mode	3.000
Std dev	1.028				

Valid cases 108 Missing cases 0

ICT3 Training hours

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	1	.9	.9	.9
	2	6	5.6	5.6	6.5
	3	36	33.3	33.3	39.8
	4	19	17.6	17.6	57.4
	5	46	42.6	42.6	100.0
	Total	108	100.0	100.0	

Mean	3.954	Median	4.000	Mode	5.000
Std dev	1.036				

Valid cases 108 Missing cases 0

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ICT4 Kinds of training

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	8	7.4	7.4	7.4
	2	11	10.2	10.2	17.6
	3	54	50.0	50.0	67.6
	4	15	13.9	13.9	81.5
	5	20	18.5	18.5	100.0
	Total	108	100.0	100.0	

Mean	3.259	Median	3.000	Mode	3.000
Std dev	1.105				

Valid cases 108 Missing cases 0

ICT5 View of training

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	26	24.1	24.1	24.1
	2	17	15.7	15.7	39.8
	3	32	29.6	29.6	69.4
	4	10	9.3	9.3	78.7
	5	23	21.3	21.3	100.0
	Total	108	100.0	100.0	

Mean	2.880	Median	3.000	Mode	3.000
Std dev	1.439				

Valid cases 108 Missing cases 0

ICS1 Extensive selection process

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	13	12.0	12.0	12.0
	2	7	6.5	6.5	18.5
	3	41	38.0	38.0	56.5
	4	26	24.1	24.1	80.6
	5	21	19.4	19.4	100.0
	Total	108	100.0	100.0	

Mean	3.324	Median	3.000	Mode	3.000
Std dev	1.214				

Valid cases 108 Missing cases 0

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ICS2 Select best person

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	9	8.3	8.3	8.3
	2	8	7.4	7.4	15.7
	3	26	24.1	24.1	39.8
	4	17	15.7	15.7	55.6
	5	48	44.4	44.4	100.0
	Total	108	100.0	100.0	

Mean	3.806	Median	4.000	Mode	5.000
Std dev	1.307				

Valid cases 108 Missing cases 0

ICS3 People involved selection

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	4	3.7	3.7	3.7
	2	16	14.8	14.8	18.5
	3	46	42.6	42.6	61.1
	4	12	11.1	11.1	72.2
	5	30	27.8	27.8	100.0
	Total	108	100.0	100.0	

Mean	3.444	Median	3.000	Mode	3.000
Std dev	1.155				

Valid cases 108 Missing cases 0

ICS4 Number screened

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	1.9	1.9	1.9
	2	5	4.6	4.6	6.5
	3	28	25.9	25.9	32.4
	4	15	13.9	13.9	46.3
	5	58	53.7	53.7	100.0
	Total	108	100.0	100.0	

Mean	4.130	Median	5.000	Mode	5.000
Std dev	1.069				

Valid cases 108 Missing cases 0

ICS5 Importance of staffing process

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	12	11.1	11.1	11.1
	2	11	10.2	10.2	21.3
	3	41	38.0	38.0	59.3
	4	22	20.4	20.4	79.6
	5	22	20.4	20.4	100.0
	Total	108	100.0	100.0	

Mean	3.287	Median	3.000	Mode	3.000
Std dev	1.223				

Valid cases	108	Missing cases	0

PA1 Measuring performance importance

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	12	11.1	11.1	11.1
	2	13	12.0	12.0	23.1
	3	49	45.4	45.4	68.5
	4	25	23.1	23.1	91.7
	5	9	8.3	8.3	100.0
	Total	108	100.0	100.0	

Mean	3.056	Median	3.000	Mode	3.000
Std dev	1.066				

Valid cases 108 Missing cases 0

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PA2 Description of standards

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	11	10.2	10.2	10.2
	2	8	7.4	7.4	17.6
	3	61	56.5	56.5	74.1
	4	20	18.5	18.5	92.6
	5	8	7.4	7.4	100.0
	Total	108	100.0	100.0	

Mean	3.056	Median	3.000	Mode	3.000
Std dev	.984				

Valid cases 108 Missing cases 0

PA3 Employee participation

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	28	25.9	25.9	25.9
	2	17	15.7	15.7	41.7
	3	46	42.6	42.6	84.3
	4	12	11.1	11.1	95.4
	5	5	4.6	4.6	100.0
	Total	108	100.0	100.0	

Mean	2.528	Median	3.000	Mode	3.000
Std dev	1.131				

Valid cases 108 Missing cases 0

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PA4 Discussion of performance

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	6	5.6	5.6	5.6
	2	27	25.0	25.0	30.6
	3	22	20.4	20.4	50.9
	4	52	48.1	48.1	99.1
	5	1	.9	.9	100.0
	Total	108	100.0	100.0	

Mean	3.139	Median	3.000	Mode	4.000
Std dev	.990				

Valid cases 108 Missing cases 0

PA5 Rewards connection

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	29	26.9	26.9	26.9
	2	13	12.0	12.0	38.9
	3	37	34.3	34.3	73.1
	4	7	6.5	6.5	79.6
	5	22	20.4	20.4	100.0
	Total	108	100.0	100.0	

Mean	2.815	Median	3.000	Mode	3.000
Std dev	1.435				

Valid cases 108 Missing cases 0

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PA6 Supvr's approach

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	12	11.1	11.1	11.1
	2	8	7.4	7.4	18.5
	3	53	49.1	49.1	67.6
	4	16	14.8	14.8	82.4
	5	19	17.6	17.6	100.0
	Total	108	100.0	100.0	

Mean	3.204	Median	3.000	Mode	3.000
Std dev	1.158				

Valid cases 108 Missing cases 0

TO1 Another job preference

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	13	12.0	12.0	12.0
	2	9	8.3	8.3	20.4
	3	35	32.4	32.4	52.8
	4	26	24.1	24.1	76.9
	5	25	23.1	23.1	100.0
	Total	108	100.0	100.0	

Mean	3.380	Median	3.000	Mode	3.000
Std dev	1.266				

Valid cases 108 Missing cases 0

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TO2 Changing organizations

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	15	13.9	13.9	13.9
	2	10	9.3	9.3	23.1
	3	31	28.7	28.7	51.9
	4	22	20.4	20.4	72.2
	5	30	27.8	27.8	100.0
	Total	108	100.0	100.0	

Mean	3.389	Median	3.000	Mode	3.000
Std dev	1.352				

Valid cases 108 Missing cases 0

TO3 Involun. separation

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	4	3.7	3.7	3.7
	2	8	7.4	7.4	11.1
	3	17	15.7	15.7	26.9
	4	28	25.9	25.9	52.8
	5	51	47.2	47.2	100.0
	Total	108	100.0	100.0	

Mean	4.056	Median	4.000	Mode	5.000
Std dev	1.126				

Valid cases	108	Missing cases	0

DEMO1 EMT classification

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	54	50.0	50.0	50.0
	2	24	22.2	22.2	72.2
	3	30	27.8	27.8	100.0
	Total	108	100.0	100.0	

Valid cases 108 Missing cases 0

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DEMO2 Supvr Status

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	45	41.7	41.7	41.7
	1	14	13.0	13.0	54.6
	2	42	38.9	38.9	93.5
	3	7	6.5	6.5	100.0
	Total	108	100.0	100.0	

Valid cases 108 Missing cases 0

DEMO3 Org tenure

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	6	5.6	5.6	5.6
	2	5	4.6	4.6	10.2
	3	7	6.5	6.5	16.7
	5	9	8.3	8.3	25.0
	6	10	9.3	9.3	34.3
	8	3	2.8	2.8	37.0
	9	5	4.6	4.6	41.7
	10	11	10.2	10.2	51.9
	11	5	4.6	4.6	56.5
	12	3	2.8	2.8	59.3
	13	2	1.9	1.9	61.1
	15	2	1.9	1.9	63.0
	16	3	2.8	2.8	65.7
	17	4	3.7	3.7	69.4
	18	3	2.8	2.8	72.2
	19	4	3.7	3.7	75.9
	20	4	3.7	3.7	79.6
	21	1	.9	.9	80.6
	22	4	3.7	3.7	84.3
	23	3	2.8	2.8	87.0
	24	8	7.4	7.4	94.4
	25	2	1.9	1.9	96.3
	26	1	.9	.9	97.2
	28	1	.9	.9	98.1
	29	1	.9	.9	99.1
	30	1	.9	.9	100.0
	Total	108	100.0	100.0	

Mean	12.287	Median	10.000	Mode	10.000
Std dev	8.004				

Valid cases 108 Missing cases 0

DEMO4 EMS tenure

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	4	3.7	3.7	3.7
	2	5	4.6	4.6	8.3
	3	4	3.7	3.7	12.0
	4	3	2.8	2.8	14.8
	5	8	7.4	7.4	22.2
	6	7	6.5	6.5	28.7
	7	3	2.8	2.8	31.5
	8	9	8.3	8.3	39.8
	9	6	5.6	5.6	45.4
	10	6	5.6	5.6	50.9
	11	4	3.7	3.7	54.6
	12	3	2.8	2.8	57.4
	13	3	2.8	2.8	60.2
	14	1	.9	.9	61.1
	15	2	1.9	1.9	63.0
	16	3	2.8	2.8	65.7
	18	8	7.4	7.4	73.1
	19	4	3.7	3.7	76.9
	20	9	8.3	8.3	85.2
	21	4	3.7	3.7	88.9
	22	2	1.9	1.9	90.7
	23	3	2.8	2.8	93.5
	24	2	1.9	1.9	95.4
	25	3	2.8	2.8	98.1
	27	1	.9	.9	99.1
	29	1	.9	.9	100.0
	Total	108	100.0	100.0	

Mean 12.167 Median 10.000 Mode 8.000
Std dev 7.344

* Multiple modes exist. The smallest value is shown.

Valid cases 108 Missing cases 0

DEMO5 PA training

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	50	46.3	46.3	46.3
	1	58	53.7	53.7	100.0
	Total	108	100.0	100.0	

Valid cases 108 Missing cases 0

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DEMO6 Mission Statement

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	58	53.7	53.7	53.7
	1	50	46.3	46.3	100.0
	Total	108	100.0	100.0	

Mean .463 Median .000 Mode .000
Std dev .501

Valid cases 108 Missing cases 0

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DEMO7 Org objectives

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	53	49.1	49.1	49.1
	1	55	50.9	50.9	100.0
	Total	108	100.0	100.0	

Mean .509 Median 1.000 Mode 1.000
Std dev .502

Valid cases 108 Missing cases 0

DEMO8 Org social

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	87	80.6	80.6	80.6
	1	21	19.4	19.4	100.0
	Total	108	100.0	100.0	

Mean	.194	Median	.000	Mode	.000
Std dev	.398				

Valid cases 108 Missing cases 0

- -

DEMO9 Orientation pgrm

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	50	46.3	46.3	46.3
	1	58	53.7	53.7	100.0
	Total	108	100.0	100.0	

Mean	.537	Median	1.000	Mode	1.000
Std dev	.501				

Valid cases 108 Missing cases 0

DEMO10 Org symbols

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	78	72.2	72.2	72.2
	1	30	27.8	27.8	100.0
	Total	108	100.0	100.0	

Mean	.278	Median	.000	Mode	.000
Std dev	.450				

Valid cases 108 Missing cases 0

- -

DEMO11 Org stories

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	72	66.7	66.7	66.7
	1	36	33.3	33.3	100.0
	Total	108	100.0	100.0	

Mean	.333	Median	.000	Mode	.000
Std dev	.474				

Valid cases 108 Missing cases 0

DEMO12 Vision statemt

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	90	83.3	83.3	83.3
	1	18	16.7	16.7	100.0
	Total	108	100.0	100.0	

Mean	.167	Median	.000	Mode	.000
Std dev	.374				

Valid cases 108 Missing cases 0

- -

DEMO13 Org values

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	74	68.5	68.5	68.5
	1	34	31.5	31.5	100.0
	Total	108	100.0	100.0	

Mean	.315	Median	.000	Mode	.000
Std dev	.467				

Valid cases 108 Missing cases 0

DEMO14 Mentor prgm

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	92	85.2	85.2	85.2
	1	16	14.8	14.8	100.0
	Total	108	100.0	100.0	

Mean	.148	Median	.000	Mode	.000
Std dev	.357				

Valid cases 108 Missing cases 0

- -

DEMO15 Mult comm chnl

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	0	66	61.1	61.1	61.1
	1	42	38.9	38.9	100.0
	Total	108	100.0	100.0	

Mean	.389	Median	.000	Mode	.000
Std dev	.490				

Valid cases 108 Missing cases 0

STATISTICAL CORRELATION MATRICES: HYPOTHESIS NUMBER 1

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

ICT2	.5992					
	N(108)					
	Sig .000					
ICT3	.2994	.1554				
	N(108)	N(108)				
	Sig .000	Sig .063				
ICT4	.3717	.3058	.3495			
	N(108)	N(108)	N(108)			
	Sig .000	Sig .000	Sig .000			
ICT5	.3454	.3232	-.0090	.2051		
	N(108)	N(108)	N(108)	N(108)		
	Sig .000	Sig .000	Sig .912	Sig .011		
ICS1	.2784	.3058	.1517	.0760	.3184	
	N(108)	N(108)	N(108)	N(108)	N(108)	
	Sig .001	Sig .000	Sig .065	Sig .348	Sig .000	
ICS2	.2246	.1711	.1580	.1700	.1215	.2382
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .006	Sig .037	Sig .056	Sig .037	Sig .129	Sig .003
ICS3	.1928	.2434	.1311	.1905	.0042	.2510
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .019	Sig .003	Sig .115	Sig .020	Sig .959	Sig .002
ICS4	.1653	.0713	.1472	.1480	.0785	.2155
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .048	Sig .397	Sig .083	Sig .077	Sig .338	Sig .009
ICS5	.2858	.2264	.2060	.2100	.2509	.3633
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .005	Sig .012	Sig .009	Sig .002	Sig .000
KOP1	.2549	.2073	.1087	.1713	.2638	.1156
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .002	Sig .012	Sig .191	Sig .037	Sig .001	Sig .154
	ICT1	ICT2	ICT3	ICT4	ICT5	ICS1

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

	ICT1	ICT2	ICT3	ICT4	ICT5	ICS1
KOP2	.2870	.2597	.1436	.2564	.2944	.1425
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .002	Sig .084	Sig .002	Sig .000	Sig .079
KOP3	.2161	.1854	.1852	.2338	.3336	.1396
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .008	Sig .024	Sig .026	Sig .004	Sig .000	Sig .085
KOP4	.1082	.1228	-.0086	.2536	.2270	.2652
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .186	Sig .135	Sig .917	Sig .002	Sig .005	Sig .001
KOP5	.1372	.0443	.0126	.1278	-.0162	.0362
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .096	Sig .593	Sig .881	Sig .121	Sig .841	Sig .658
AOS1	.0627	.0577	-.0195	.1342	.2308	.1060
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .442	Sig .482	Sig .814	Sig .100	Sig .004	Sig .189
AOS2	.3527	.2506	.2335	.3395	.2901	.3067
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .002	Sig .005	Sig .000	Sig .000	Sig .000
AOS3	.2272	.1975	.0520	.2260	.2745	.2536
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .006	Sig .017	Sig .532	Sig .006	Sig .001	Sig .002
AOS4	.1792	.1949	-.0179	.2417	.2708	.1989
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .030	Sig .019	Sig .831	Sig .003	Sig .001	Sig .015
AOS5	.3516	.3212	.0402	.1489	.3248	.3641
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .000	Sig .629	Sig .070	Sig .000	Sig .000
PA1	.3877	.3775	.1466	.2665	.4190	.2880
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .000	Sig .076	Sig .001	Sig .000	Sig .000

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

PA2	.3705	.2237	.1776	.3007	.1625	.1199
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .007	Sig .034	Sig .000	Sig .045	Sig .143
PA3	.3386	.2985	.0693	.2172	.4303	.2855
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .000	Sig .403	Sig .008	Sig .000	Sig .000
PA4	.2706	.1357	.2141	.2155	.1854	.2736
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .001	Sig .105	Sig .011	Sig .009	Sig .023	Sig .001
PA5	.1527	.1321	.0963	.0569	.2499	.2926
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .059	Sig .105	Sig .241	Sig .482	Sig .002	Sig .000
PA6	.3431	.2758	.1420	.2257	.2957	.0982
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .001	Sig .087	Sig .006	Sig .000	Sig .225
TO1	.0860	.0760	-.0699	.1357	.1033	.0071
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .286	Sig .349	Sig .392	Sig .092	Sig .191	Sig .929
TO2	.1672	.2095	-.0098	.1557	.1588	.1293
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .038	Sig .010	Sig .905	Sig .053	Sig .044	Sig .104
TO3	.1168	.2174	.0853	.1719	.2426	.2348
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .157	Sig .009	Sig .308	Sig .037	Sig .003	Sig .004

	ICT1	ICT2	ICT3	ICT4	ICT5	ICS1
ICS3	.3427					
	N(108)					
	Sig .000					
ICS4	.0773	.2463				
	N(108)	N(108)				
	Sig .354	Sig .003				

	ICS2	ICS3

(Coefficient / (Cases) / 2-tailed Significance)

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- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

ICS5	.1570	.2265	.2343			
	N(108)	N(108)	N(108)			
	Sig .051	Sig .005	Sig .004			
KOP1	.0709	.1285	.0797	.1735		
	N(108)	N(108)	N(108)	N(108)		
	Sig .386	Sig .117	Sig .341	Sig .032		
KOP2	.0935	.1359	.1053	.2937	.5227	
	N(108)	N(108)	N(108)	N(108)	N(108)	
	Sig .253	Sig .097	Sig .209	Sig .000	Sig .000	
KOP3	-.0506	-.0207	.0408	.2127	.4250	.5854
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .535	Sig .800	Sig .625	Sig .008	Sig .000	Sig .000
KOP4	.0557	.1113	.1218	.1448	.1847	.2951
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .494	Sig .173	Sig .144	Sig .072	Sig .024	Sig .000
KOP5	.1624	.1503	-.0267	.0898	.3166	.2797
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .048	Sig .068	Sig .752	Sig .269	Sig .000	Sig .001
AOS1	.0915	.0537	.1108	.2578	.3349	.2855
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .261	Sig .510	Sig .183	Sig .001	Sig .000	Sig .000
AOS2	.2272	.1452	.1485	.2916	.3236	.4246
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .005	Sig .074	Sig .074	Sig .000	Sig .000	Sig .000
AOS3	.1951	.2008	.0268	.2408	.4029	.3727
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .017	Sig .014	Sig .749	Sig .003	Sig .000	Sig .000
AOS4	.0876	.1709	.2208	.2690	.2857	.4229
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .288	Sig .039	Sig .009	Sig .001	Sig .001	Sig .000
	ICS2	ICS3	ICS4	ICS5	KOP1	KOP2

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

	ICS2	ICS3	ICS4	ICS5	KOP1	KOP2
AOS5	.1806	.1130	.0709	.1709	.2878	.2857
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .027	Sig .169	Sig .397	Sig .035	Sig .000	Sig .001
PA1	.2631	.2389	.1316	.4071	.3272	.3592
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .001	Sig .003	Sig .114	Sig .000	Sig .000	Sig .000
PA2	.2132	.1241	.1022	.1803	.0868	.1028
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .010	Sig .134	Sig .227	Sig .027	Sig .295	Sig .215
PA3	.1194	.1267	.2101	.2738	.3593	.3236
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .143	Sig .121	Sig .012	Sig .001	Sig .000	Sig .000
PA4	.2011	.2756	.2595	.3716	.1833	.1202
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .015	Sig .001	Sig .002	Sig .000	Sig .028	Sig .148
PA5	.1191	.1515	.1553	.2592	.1394	.1124
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .140	Sig .061	Sig .060	Sig .001	Sig .085	Sig .165
PA6	.1939	.1702	.0969	.1902	.3608	.2900
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .017	Sig .037	Sig .246	Sig .018	Sig .000	Sig .000
TO1	.1553	.0844	.2064	.1547	.2596	.1359
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .053	Sig .295	Sig .012	Sig .052	Sig .001	Sig .092
TO2	.1005	.0897	.1425	.1416	.1915	.1895
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .210	Sig .264	Sig .082	Sig .074	Sig .017	Sig .019
TO3	.2614	.1958	.2103	.2822	.2698	.1577
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .001	Sig .018	Sig .012	Sig .001	Sig .001	Sig .056

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

KOP4	.2608					
	N(108)					
	Sig .001					
KOP5	.2177	.1820				
	N(108)	N(108)				
	Sig .008	Sig .027				
AOS1	.2555	.2749	.2787			
	N(108)	N(108)	N(108)			
	Sig .002	Sig .001	Sig .001			
AOS2	.3277	.2403	.2842	.3757		
	N(108)	N(108)	N(108)	N(108)		
	Sig .000	Sig .003	Sig .001	Sig .000		
AOS3	.3709	.2042	.2412	.2199	.3240	
	N(108)	N(108)	N(108)	N(108)	N(108)	
	Sig .000	Sig .013	Sig .004	Sig .007	Sig .000	
AOS4	.3416	.3004	.2544	.2766	.3307	.5759
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .000	Sig .002	Sig .001	Sig .000	Sig .000
AOS5	.3491	.1804	.1798	.2409	.3977	.3899
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .028	Sig .030	Sig .003	Sig .000	Sig .000
PA1	.3172	.2467	.2729	.3980	.3664	.3736
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .002	Sig .001	Sig .000	Sig .000	Sig .000
PA2	.1568	.1673	.2995	.2086	.2428	.1882
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .058	Sig .043	Sig .000	Sig .011	Sig .003	Sig .023
PA3	.3439	.1687	.0352	.2325	.3555	.2125
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .039	Sig .669	Sig .004	Sig .000	Sig .009
	KOP3	KOP4	KOP5	AOS1	AOS2	AOS3

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

PA4	.1954	.1361	.1446	.1561	.2941	.2453
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .018	Sig .101	Sig .084	Sig .059	Sig .000	Sig .003
PA5	.1338	.1746	-.0124	.2400	.1023	.2185
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .098	Sig .031	Sig .879	Sig .003	Sig .203	Sig .007
PA6	.3407	.1429	.1848	.2454	.2252	.2592
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .080	Sig .025	Sig .003	Sig .006	Sig .002
TO1	.0676	.0745	.1012	.2961	.1720	.1775
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .401	Sig .354	Sig .213	Sig .000	Sig .032	Sig .028
TO2	.1740	.1796	.1196	.2806	.2530	.1241
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .030	Sig .025	Sig .139	Sig .000	Sig .002	Sig .123
TO3	.1368	.1263	.1240	.2699	.2121	.2414
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .096	Sig .125	Sig .135	Sig .001	Sig .010	Sig .003

	KOP3	KOP4	KOP5	AOS1	AOS2	AOS3
AOS5	.4395					
	N(108)					
	Sig .000					
PA1	.3983	.4031				
	N(108)	N(108)				
	Sig .000	Sig .000				
PA2	.2965	.2909	.4297			
	N(108)	N(108)	N(108)			
	Sig .000	Sig .000	Sig .000			
PA3	.2493	.3931	.4674	.2588		
	N(108)	N(108)	N(108)	N(108)		
	Sig .003	Sig .000	Sig .000	Sig .002		

	AOS4	AOS5	PA1	PA2

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

PA4	.1872	.1874	.3856	.3256	.3291	
	N(108)	N(108)	N(108)	N(108)	N(108)	
	Sig .026	Sig .024	Sig .000	Sig .000	Sig .000	
PA5	.2702	.2144	.2710	.1700	.2942	.1200
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .001	Sig .008	Sig .001	Sig .038	Sig .000	Sig .144
PA6	.1844	.2409	.4493	.3379	.3578	.3973
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .025	Sig .003	Sig .000	Sig .000	Sig .000	Sig .000
TO1	.2672	.1708	.2028	.2094	.2467	.1382
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .001	Sig .034	Sig .012	Sig .010	Sig .002	Sig .091
TO2	.2171	.2073	.2272	.2129	.1465	.0747
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .007	Sig .010	Sig .005	Sig .009	Sig .068	Sig .360
TO3	.1988	.1733	.3029	.0843	.1179	.2412
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .017	Sig .036	Sig .000	Sig .312	Sig .151	Sig .004

	AOS4	AOS5	PA1	PA2	PA3	PA4
PA6	.1839					
	N(108)					
	Sig .023					
TO1	.1785	.2240				
	N(108)	N(108)				
	Sig .025	Sig .005				
TO2	.2529	.2565	.5275			
	N(108)	N(108)	N(108)			
	Sig .001	Sig .001	Sig .000			
TO3	.2622	.2427	.4239	.3782		
	N(108)	N(108)	N(108)	N(108)		
	Sig .001	Sig .003	Sig .000	Sig .000		

	PA5	PA6	TO1	TO2

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

STATISTICAL CORRELATION MATRICES: HYPOTHESIS NUMBER 2

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

ICT2	.5992					
	N(108)					
	Sig .000					
ICT3	.2994	.1554				
	N(108)	N(108)				
	Sig .000	Sig .063				
ICT4	.3717	.3058	.3495			
	N(108)	N(108)	N(108)			
	Sig .000	Sig .000	Sig .000			
ICT5	.3454	.3232	-.0090	.2051		
	N(108)	N(108)	N(108)	N(108)		
	Sig .000	Sig .000	Sig .912	Sig .011		
ICS1	.2784	.3058	.1517	.0760	.3184	
	N(108)	N(108)	N(108)	N(108)	N(108)	
	Sig .001	Sig .000	Sig .065	Sig .348	Sig .000	
ICS2	.2246	.1711	.1580	.1700	.1215	.2382
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .006	Sig .037	Sig .056	Sig .037	Sig .129	Sig .003
ICS3	.1928	.2434	.1311	.1905	.0042	.2510
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .019	Sig .003	Sig .115	Sig .020	Sig .959	Sig .002
ICS4	.1653	.0713	.1472	.1480	.0785	.2155
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .048	Sig .397	Sig .083	Sig .077	Sig .338	Sig .009
ICS5	.2858	.2264	.2060	.2100	.2509	.3633
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .005	Sig .012	Sig .009	Sig .002	Sig .000
KOP1	.2549	.2073	.1087	.1713	.2638	.1156
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .002	Sig .012	Sig .191	Sig .037	Sig .001	Sig .154
	ICT1	ICT2	ICT3	ICT4	ICT5	ICS1

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

KOP2	.2870	.2597	.1436	.2564	.2944	.1425
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .002	Sig .084	Sig .002	Sig .000	Sig .079
KOP3	.2161	.1854	.1852	.2338	.3336	.1396
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .008	Sig .024	Sig .026	Sig .004	Sig .000	Sig .085
KOP4	.1082	.1228	-.0086	.2536	.2270	.2652
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .186	Sig .135	Sig .917	Sig .002	Sig .005	Sig .001
KOP5	.1372	.0443	.0126	.1278	-.0162	.0362
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .096	Sig .593	Sig .881	Sig .121	Sig .841	Sig .658
AOS1	.0627	.0577	-.0195	.1342	.2308	.1060
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .442	Sig .482	Sig .814	Sig .100	Sig .004	Sig .189
AOS2	.3527	.2506	.2335	.3395	.2901	.3067
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .002	Sig .005	Sig .000	Sig .000	Sig .000
AOS3	.2272	.1975	.0520	.2260	.2745	.2536
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .006	Sig .017	Sig .532	Sig .006	Sig .001	Sig .002
AOS4	.1792	.1949	-.0179	.2417	.2708	.1989
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .030	Sig .019	Sig .831	Sig .003	Sig .001	Sig .015

	ICT1	ICT2	ICT3	ICT4	ICT5	ICS1
ICS3	.3427					
	N(108)					
	Sig .000					
ICS4	.0773	.2463				
	N(108)	N(108)				
	Sig .354	Sig .003				

	ICS2	ICS3

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

ICS5	.1570	.2265	.2343			
	N(108)	N(108)	N(108)			
	Sig .051	Sig .005	Sig .004			
KOP1	.0709	.1285	.0797	.1735		
	N(108)	N(108)	N(108)	N(108)		
	Sig .386	Sig .117	Sig .341	Sig .032		
KOP2	.0935	.1359	.1053	.2937	.5227	
	N(108)	N(108)	N(108)	N(108)	N(108)	
	Sig .253	Sig .097	Sig .209	Sig .000	Sig .000	
KOP3	-.0506	-.0207	.0408	.2127	.4250	.5854
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .535	Sig .800	Sig .625	Sig .008	Sig .000	Sig .000
KOP4	.0557	.1113	.1218	.1448	.1847	.2951
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .494	Sig .173	Sig .144	Sig .072	Sig .024	Sig .000
KOP5	.1624	.1503	-.0267	.0898	.3166	.2797
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .048	Sig .068	Sig .752	Sig .269	Sig .000	Sig .001
AOS1	.0915	.0537	.1108	.2578	.3349	.2855
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .261	Sig .510	Sig .183	Sig .001	Sig .000	Sig .000
AOS2	.2272	.1452	.1485	.2916	.3236	.4246
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .005	Sig .074	Sig .074	Sig .000	Sig .000	Sig .000
AOS3	.1951	.2008	.0268	.2408	.4029	.3727
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .017	Sig .014	Sig .749	Sig .003	Sig .000	Sig .000
AOS4	.0876	.1709	.2208	.2690	.2857	.4229
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .288	Sig .039	Sig .009	Sig .001	Sig .001	Sig .000
	ICS2	ICS3	ICS4	ICS5	KOP1	KOP2

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - - - K E N D A L L C O R R E L A T I O N C O E F F I C I E N T S - - -

KOP4	.2608					
	N(108)					
	Sig .001					
KOP5	.2177	.1820				
	N(108)	N(108)				
	Sig .008	Sig .027				
AOS1	.2555	.2749	.2787			
	N(108)	N(108)	N(108)			
	Sig .002	Sig .001	Sig .001			
AOS2	.3277	.2403	.2842	.3757		
	N(108)	N(108)	N(108)	N(108)		
	Sig .000	Sig .003	Sig .001	Sig .000		
AOS3	.3709	.2042	.2412	.2199	.3240	
	N(108)	N(108)	N(108)	N(108)	N(108)	
	Sig .000	Sig .013	Sig .004	Sig .007	Sig .000	
AOS4	.3416	.3004	.2544	.2766	.3307	.5759
	N(108)	N(108)	N(108)	N(108)	N(108)	N(108)
	Sig .000	Sig .000	Sig .002	Sig .001	Sig .000	Sig .000
	KOP3	KOP4	KOP5	AOS1	AOS2	AOS3

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

RESEARCH INSTRUMENT

Management-Employee Interaction Survey

Instructions: The following survey is designed to gather information about the interactions of management and EMS employees in your organization. Using the scale(s) below, circle the number immediately below the numbered statements that most closely represents your opinion to the survey questions.

Scale:

Strongly Disagree				Strongly Agree
1	2	3	4	5

1. My supervisor(s) distinguish between effective and ineffective employees by continually watching their actions on the job.
   1 2 3 4 5

2. My supervisor(s) usually observe most of the duties their employees perform.
   1 2 3 4 5

3. My supervisor(s) are continually in a position to see exactly what actions their employees take to achieve the results they do.
   1 2 3 4 5

4. EMS employees often act in the same ways to achieve the same outcome.
   1 2 3 4 5

5. It is easy for my supervisor(s) to predict in advance how successful an employee will be as a consequence of the actions an employee takes.
   1 2 3 4 5

6. Behavioral standards of desired performance on evaluation forms are well defined.
   1 2 3 4 5

7. My supervisor(s) have several sources of objective data available that indicate how well each of their employees is performing.
   1 2 3 4 5

8. Results measures (e.g. output, number of responses, skills performance, etc.) accurately depict how well employees have performed.
1 2 3 4 5

9. Employees perform jobs for which quantifiable (e.g. numbers) performance measures are used.
1 2 3 4 5

10. Performance goals and objectives for employees are concrete, specific, non-ambiguous.
1 2 3 4 5

11. How extensive is the training (e.g. technical, managerial/supervisory, etc.) for members of your work unit?
(e.g. 1 = Not extensive, 3 = Moderately extensive, 5 = Very extensive)
1 2 3 4 5

12. How formal or structured is the training process?
(e.g. 1 = Very unstructured/informal, 3 = Moderately structured/formal, 5 = Very structured/formal)
1 2 3 4 5

13. On average, how many hours of formal training (e.g. technical, managerial/supervisory, etc.) does a typical member of your unit receive per year?
(e.g. 1 = 0 hours 3 = Between 20-30 hours, 5 = Over 60 hours)
1 2 3 4 5

14. How many different kinds of training programs (e.g. technical, managerial/supervisory, customer service, etc.) are available for members of your unit to attend?
(e.g. 1 = Very few, 3 = Some variety, 5 = Wide variety)
1 2 3 4 5

15. Do you feel employee training is viewed as a cost or an investment?
(e.g. 1 = Viewed as a cost, 3 = Cost and investment equally, 5 = Viewed as an investment)
1 2 3 4 5

16. How extensive is the employee selection process for a job in this unit?
(e.g. 1 = Not extensive, 3 = Moderate, 5 = Very extensive)
1 2 3 4 5

17. How important is it to select the best person for an position in this unit?
(e.g 1 = Not important, 3 = Important, 5 = Very important)
1 2 3 4 5

18. How many people are involved in the selection decision/ process?
(e.g. 1 = 1 person, 3 = 4 persons, 5 = 7 or more persons)
1 2 3 4 5

19. How many applicants are screened for each person hired for a position in this unit?
(e.g. 1 = 1, 3 = 6-8 people, 5 = 20 or more people)
1 2 3 4 5

20. How much importance is placed on the staffing process in this unit?
(e.g. 1 = Very little, 3 = A moderate amount, 5 = A great deal)
1 2 3 4 5

21. How much effort is given to measuring employee performance?
(e.g. 1 = Very little, 3 = Moderately amount, 5 = A great deal)
1 2 3 4 5

22. How would you describe the performance standards in your unit?
(e.g. 1 = Fixed, 3 = Moderately flexible, 5 = Flexible)
1 2 3 4 5

23. How much do employees participate in goal setting and performance appraisal?
(e.g. 1 = Very little, 3 = Moderate amount, 5 = A great deal)
1 2 3 4 5

24. How often is performance discussed with employees?
(e.g. 1 = Rarely, 2 = Annually, 3 = Occasionally, 4 = Quarterly, 5 = Daily)
1 2 3 4 5

25. How closely are raises, promotions, merit, etc. tied to performance appraisals?
(e.g. 1 = Very little, 3 = Somewhat related, 5 = Very closely related)
1 2 3 4 5

26. How would you describe the your supervisor's approach used to discuss employee performance during evaluations?
(e.g. 1 = Tell you & Sell you, 3 = Tell you & Listen to you,
5 = Joint Problem Solving)
1 2 3 4 5

Instructions: The following scale applies to questions 27 to 28.

Scale:

Not at all	Slight extent	Moderate extent	Great extent	Very great extent
1	2	3	4	5

27. To what extent would you prefer another more ideal job than the one you now work in?
1 2 3 4 5

28. To what extent have you thought seriously about changing organizations since beginning to work here?
1 2 3 4 5

29. If you have your own way (e.g. no involuntary separation by the organization), will you be working for this organization three years from now?

(Scale:
1 = Certainly; 2 = Probably, 3= Not sure one way or the other,
4 = Probably not 5 = Certainly not)

1 2 3 4 5

LIST OF ATTACHMENTS:

Attachments:

P.O. Box 2662
Greenville, N.C. 27836
November 3, 1997

The Pennsylvania State University
Smeal College of Business Administration
417 Beam Business Administration
University Park, PA. 16801

Dr. Snell:

I am a doctoral degree student with Nova Southeastern University and I have a research interest in the area of human resource management control. I am requesting a copy of your survey instrument(s) and permission to use it in my research. In appreciation, I will provide you information on my survey results which you may of course use at your discretion. On behalf of my committee chair, Dr. Al Bolton, and myself, thank you in advance for your assistance and any recommendations you may have on the survey's administration.

Sincerely,

Robert E. Kasey

cc:

Dr. Al Bolton, Committee Chair
Cluster Coordinator, Nova Southeaster University
Averette College, Danville, Virginia

Robert—
Good luck with your research.
Attached is a copy of the questionnaire
I used for the work on control in HR.
The AMJ '92 paper and the JOM '95
paper have an appendix of the items that
make up each scale. Give me a call if you
want to talk about any of this

Regards,
Scott Snell

SECTION 4: Listed below are a series of statements that possibly describe the way you select, train, evaluate and reward your subordinate managers. Please circle the number (1 = strongly disagree to 7 = strongly agree) indicating the extent to which you agree or disagree with each statement.

	STRONGLY DISAGREE						STRONGLY AGREE	
	1	2	3	4	5	6	7	
1	2	3	4	(5)	6	7		My managers assume responsibility for setting their performance goals.
2	(1)	3	4	5	6	7		Performance targets for my managers are "written in stone."
3	1	2	3	4	(5)	6	7	When I evaluate my subordinate managers, I place primary weight on the effectiveness of their behavior.
4	1	2	3	(4)	5	6	7	When I evaluate my team of managers, I place primary weight on their documented results and objective achievements.
5	1	2	(3)	4	5	6	7	To evaluate my managers, I contrast their past with their present performance records.
6	1	2	(3)	4	5	6	7	I use pre-established standards as the benchmark for evaluating my managers' performance.
7	1	2	3	4	(5)	6	7	I make relative comparisons across each of my managers in order to evaluate who is performing best.
8	1	2	3	(4)	5	6	7	Members in our firm receive frequent information about their performance.
9	(1)	2	3	4	5	6	7	A sizable amount of my subordinates' pay consists of performance-based rewards (bonuses, profit sharing, etc.).
10	1	2	3	4	(5)	6	7	I require that my managers have a great deal of closely related experience before they can be hired for their jobs.
11	1	2	3	4	(5)	6	7	My subordinate managers receive substantial training before they assume much responsibility on their new jobs.
12	1	2	3	4	5	(6)	7	My managers and I consult with one another in setting their performance goals.
13	1	2	3	4	5	(6)	7	My managers' performance objectives are designed to allow for flexibility and change.
14	1	2	3	4	5	(6)	7	My managers are held accountable for their actions, regardless of whether their performance results are good or bad.
15	1	2	3	(4)	5	6	7	I use numerical records of my managers' performance as the chief indicator of their effectiveness.
16	1	2	3	4	5	(6)	7	I give higher ratings to those managers who show performance improvement over time.
17	1	2	3	4	5	(6)	7	Those managers who do not reach their objectives receive lower performance ratings.
18	1	2	(3)	4	5	6	7	To assess the contribution of each manager, his or her performance is compared to some referent other(s).
19	(1)	2	3	4	5	6	7	Long lag periods are required in order to trace performance trends and give feedback to my managers.
20	1	2	3	(4)	5	6	7	Most of the differences in pay among my managers represent differences in their performance levels.
21	1	2	3	4	(5)	6	7	I have gone to great lengths to develop the best staffing procedures possible.
22	1	2	3	4	(5)	6	7	Even after my managers have been on the job for years, they still are involved in many skill development activities.
23	(1)	2	3	4	5	6	7	Performance goals for my managers are more likely to be imposed top-down rather than negotiated with them.
24	1	(2)	3	4	5	6	7	Performance objectives are established initially as a starting point, but are modified frequently.
25	1	2	3	(4)	5	6	7	I do not generally concern myself with the particular procedures and methods my managers use on the job.
26	1	2	3	4	(5)	6	7	Regardless of what my managers may be like personally, their performance is judged by the results they accomplish.
27	1	2	3	(4)	5	6	7	The prior accomplishments of my managers have very little affect on my appraisal of their present performances.
28	1	2	3	(4)	5	6	7	Regardless of their absolute accomplishments, I appraise my managers mostly on whether they reach their goals.
29	1	2	3	4	(5)	6	7	Evaluations of my managers are made independently of how well anybody else has performed.
30	1	2	3	4	(5)	6	7	I arrange frequent meetings with my managers to discuss performance problems and issues.
31	1	2	3	(4)	5	6	7	The rewards my managers receive are linked to their concrete results.
32	1	2	3	4	(5)	6	7	My subordinates must undergo a series of evaluations before they can be hired into their jobs.
33	1	2	3	4	5	(6)	7	My team of managers are given ample opportunity to broaden their range of talents.
34	1	2	3	(4)	5	6	7	It is infeasible to try to lock my managers into a fixed set of performance targets.
35	1	2	3	4	(5)	6	7	My team of managers are paid primarily on straight salary.
36	1	2	3	4	5	(6)	7	I take pride in the fact that I hire the very best people for the job.
37	1	2	3	4	5	(6)	7	I have a strong commitment to training and developing highly skilled managers.

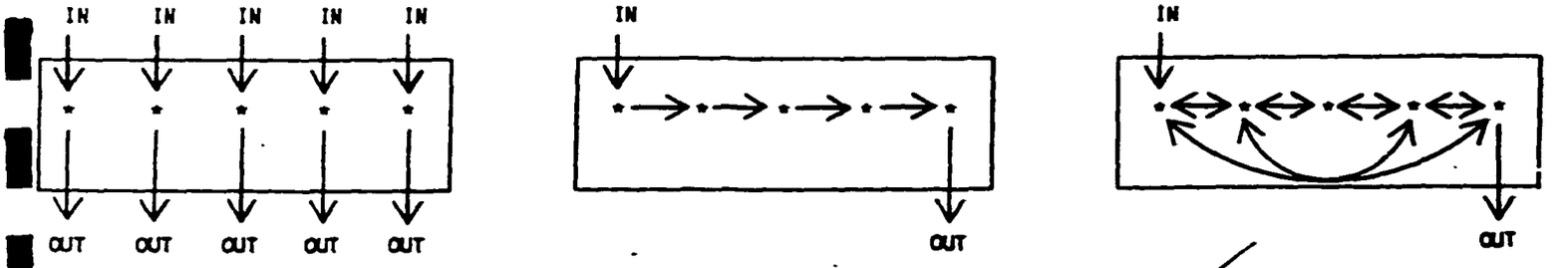
CTION 1: Firms position themselves in different ways, none of which is inherently "good" or "bad." Listed below are a number of atements that might potentially describe your firm. Please consider your company as a whole and circle the number (1 = strongly disagree to 7 = strongly agree) indicating the extent to which you agree or disagree with these statements.

	STRONGLY DISAGREE						STRONGLY AGREE	
(1)	2	3	4	5	6	7		Our firm offers a narrow range of products.
	2	3	4	5	6	(7)		Our firm establishes and maintains a stable posture in our product-market.
1	2	3	4	5	(6)	7		When our customers purchase from us, they tend to buy many different things.
	2	3	4	(5)	6	7		Our firm is at the forefront of innovation and development.
	2	3	4	5	6	7		The characteristics of our products differ a great deal from one another.
1	2	3	(4)	5	6	7		Our business procedures have changed several times over the last few years.
1	2	3	4	5	(6)	7		Our firm sells to a wide variety of customers.
		(3)	4	5	6	7		The characteristics of our products and services are modified frequently.
	2	3	4	5	(6)	7		The needs of our customers are very similar to one another.
1	(2)	3	4	5	6	7		The needs of our customers vary quite a bit from one year to the next.
		3	4	(5)	6	7		Our firm offers many different services to customers.

S TION 2: Listed below are a number of statements about the possible conditions you may face in managing your immediate team of s ordinate managers. Please circle the number (1 to 7) indicating the degree to which you agree or disagree with each statement.

	STRONGLY DISAGREE						STRONGLY AGREE	
1	(2)	3	4	5	6	7		I find it difficult to monitor the behavior of my subordinate managers.
1		(3)	4	5	6	7		The relationship between the actions my subordinates take and the outcomes they achieve changes over time.
1	2	3	4	5	(6)	7		I have several sources of objective data available that indicate how well each of my subordinates is performing.
1	2	3	4	5	6	(7)		I can usually distinguish between effective and ineffective managers by watching their actions on the job.
1		3	4	5	(6)	7		My subordinates must often act in very different ways in order to achieve the same outcome.
1		(3)	4	5	6	7		My managers do not perform jobs for which there are quantifiable measures.
1	(2)	3	4	5	6	7		At the time they occur, I cannot usually observe most of the duties my subordinate managers perform.
1		3	4	(5)	6	7		Cause-effect relationships are stable in my subordinate managers' jobs.
1		(3)	4	5	6	7		Results measures (e.g., sales, output, profits) accurately depict how well my subordinates have performed.
1	2	3	4	5	(6)	7		I sacrifice detail of supervision for breadth/scope of managing.
	2	(3)	4	5	6	7		It is difficult to predict in advance how successful my managers will be as a consequence of the actions they take.
		3	4	5	6	7		I am not in a position to see exactly what actions my managers take to achieve the results they do.
		3	(5)	6	7			It is infeasible to try to formulate a set of "tried and true" standardized procedures for my managers to follow.
	(2)	3	4	5	6	7		I am unable to personally gauge the entire range of my managers' behavior.

E ION 3: Work can flow through an organization in several different ways. Three of these ways are depicted in the following l strations. Place a check under the diagram which best depicts the overall flow of work through your firm.



A. _____ Work does not flow between units

B. _____ Work flows between units but in only one direction.

C. ✓ Work flows between units in a reciprocal manner.

SANTA CLARA UNIVERSITY

ORGANIZATION ANALYSIS AND MANAGEMENT

October 15, 1998

TO: Robert Kasey
252.329.4313

RE: Use of the OCP

You have our permission to use the OCP and instructions as published in the *Academy of Management Journal.*

David F. Caldwell
Professor

[illegible] FAX (408) 554-5295

P.O. Box 2662
Greenville, N.C. 27836
April 30, 1999

Chief Raymond Carney:

Thank you for allowing me to survey the EMS personnel in your department. Enclosed are the surveys. For research confidentiality, any information which identifies the cities which participate in this research will not be included in the final summary report. However, I will provide each fire chief a brief review of the research work and the findings as token of my appreciation for your assistance. Please have someone administer the surveys and return them to me in the container provided.

Thank you again for your help in my quest for this terminal degree.

Sincerely,

Robert E. Kasey

128 Surveys

REFERENCES:

Alreck, Pamela L. And Settle, Robert B. (1995). The survey research handbook. Irwin: Chicago.

Armstrong, David M. (1995). Managing by storying around: A new method of leadership. New York: Doubleday.

Barnard, Chester I., (1956). "The Functions of the Executive.", Boston: Harvard University Press

Barney, Jay B., "Organizational culture: Can it be a source of sustained competitive advantage?" Academy of Management Review, 1986, Volume 2, Number 3, Pages 656-665.

Behr, Thomas, "Acting from the center", Management Review, Volume 87, Number 3, March 1998, Pages 51-55.

Bharadwaj, Sundar G., Varadarajan, P. Rajan, and Fahy, John., "Sustainable competitive advantage in service industries: A conceptual model and research propositions.", Journal of Marketing, Volume 57, October 1993, Pages 83-99.

Blau, Peter M., (1956) "Bureaucracy in Modern Society.", Randon House

Block, Peter. (1993). Stewardship: Choosing service over self-interest. San Francisco: Barrett-Koeehler Publishers.

Boulding, K.E., "General systems theory - The skeleton of science", Management Science, Volume 2, 1956, Pages 197-208.

Boxx, W. Randy, Odom, Randall Y., and Dunn, Mark G., "Organizational values and value congruency and their impact on satisfaction, commitment, and cohesion: An empirical examination with the public sector.", Public Personnel Management, Volume 20, Number 1, Spring 1991, Pages 195-205.

Brown, Tom, "Ringing up intellectual capital.", Management Review, Volume 87, Number 1, January 1998, Pages 47-51.

Caudron, Shari, "Be cool! Cultivating a cool culture gives HR a staffing boost.", Workforce, Volume 77, Number 4, 1998, Pages 50-52,54,56,58,61.

Challagalla, Goutam, N. and Shervani, Tasadduq A., "A measurement model of the dimensions and type of output and behavior control: An empirical test in a sales force context." Journal of Business Research, Volume 39, Number 3, July 1997, Pages 159-172.

Chatman, Jennifer., "Matching people and organizations: Selection and socialization in public accounting forms.", Administrative Science Quarterly, Volume 31, September 1991, Pages 459-484.

Conkling, Jackie, "A firm reaches for and achieves excellence.", Workforce, Volume 76, Number 5, 1997, Pages 87-88,90.

Dauphinais, G. William and Price, Colin, "The CEO as psychologist.", Management Review, Volume 87, Number 8, September 1998, Pages 10-15.

Deshpande, Rohit and Webster Jr., Frederick E., "Organizational culture and marketing: Defining the research agenda.", Journal of Marketing, Volume 53, Number 1, 1989, Pages 3-15.

DiLuilio Jr., John D., "Principled agents: The cultural bases of behavior in a federal government bureaucracy.", Journal of Public Administration research and Theory, Volume 4, Number 3, July 1994, Pages 277-318.

Downs, Alan. (1995). Corporate executions: The ugly truth about layoffs-how corporate greed is shattering lives, companies, and communities. New York: AMACOM.

Durkheim, Emile. (1933)., "The Division of labor in Society"., New York: Free Press.

Einstein, Walter O. (1994). The challenge of leadership intrinsic motivation: The key to a successful reward strategy or be a pathfinder instead of a firefighter. Unpublished manuscript, University of Massachusetts at Dartmouth.

Eisenhardt, Kathleen M., "Control: Organizational and economic approaches.", Management Science, Volume 31, Number 2, February 1985, Pages 134-149.

Fisher, Edward George and Marciano, Vitor, "Managing human resource shortages in a unionized setting: Best practices in air traffic control.", Journal of Labor Research, Volume 18, Number 2, Spring 1997, Pages 287-311.

Flamholtz, Eric., "Effective organizational control: A framework, applications, and implications." European Management Journal, Volume 14, Number 6, 1996, Pages 596-611.

Flamholtz, Eric G. (1996). Effective management control: Theory and practice. Boston: Kluwer Academic Publishers.

Govindarajan, V. and Fisher, Joseph., "Strategy, control systems, and resource sharing: Effects on business-unit performance.", Academy of Management Journal, Volume 33, Number 2, 1990, Pages 259-285.

Guthrie, James P. and Datta, Deepak K., "Corporate strategy, executive selection, and firm performance.", Human Resource Management, Volume 37, Number 2, Pages 101-115.

Hallowell, Roger, "Southwest airlines: A case study linking employee needs satisfaction and organizational capabilities to competitive advantage.", Human Resource Management (Journal), Volume 35, Number 4, Winter 1996, Pages 513-534.

Hammer, Michael and Champy, James. (1993). Reengineering the corporation: A manifesto for business revolution. New York: Harper Business.

Harmon, Fredrick G. (1996). Playing for keeps: How the world's most aggressive and admired companies use core values to manage, energize, and organize their people, and promote, advance, and achieve their corporate missions. New York: John Wiley and Sons, Inc.

Harris, Stanley G. And Mossholder, Kevin W., "The affective implications of perceived congruence with culture dimensions during organizational transformation.", Journal of Management, Volume 22, Number 4, 1996, Pages 527-547.

Hersey, Paul and Blanchard, Kenneth H. (1993). Management of organizational behavior: Utilizing human resources. Englewood Cliffs, New Jersey: Prentice Hall.

Horwitz, Frank M. And Neville, Mark A., "Organization design for service excellence: A review of the literature.", Human Resource Management (Journal), Volume 35, Number 4, Winter 1996, Pages 471-492.

Huselid, Mark A., "The impact of human resource management practices on turnover, productivity, and corporate financial performance.", Academy of management Journal, Volume 38, Number 3, 1995, Pages 635-672.

Jaeger, Alfred M. and Baliga, B. R., "Control systems and strategic adaption: Lessons from the Japanese experience.", Strategic Management Journal, Volume 6, 1985, Pages 115-134.

Kuczmarski, Susan S. And Kuczmarski, Thomas D., (1997). Values-based leadership: Rebuilding employee, commitment, performance, and productivity. New Jersey: Prentice Hall.

Lebas, Michael and Weigenstein, Jane., "Management control: The roles of rules, markets, and culture.", Journal of Management Studies, Volume 23, Number 3, May 1986, Pages 259-272.

Levine, Mark S. (1977). Canonical analysis and factor comparison. California: Sage Publications, Inc.

Little, Patrick J., "Selection of the Fittest", Management Review, Volume 87, Number 7, (July/August) 1998, Pages 43-47.

Lovelace, Kay, and Rosen, Benson, "Differences in achieving person-organization fit among diverse groups of managers.", Journal of Management, Volume 22, Number 5, 1996, Pages 703-722.

Lucas, Jennifer L., Wanberg, Connie R., and Zytowski, Donald G., "Development of a career task self-efficacy scale: The Kruder task self-efficacy scale.", Journal of Vocational Behavior, Volume 50, 1997, Pages 432-459.

Lux, Wolfgang, "Japanese management evolves again.", Management Review, Volume 86, Number 6, June 1997, Pages 36-39.

Mayo, Elton. (1945)., "The Social Problems of an Industrial Civilization.", Boston; Harvard University Press

McLaughlin, Thomas A. (1995). Streetsmart financial basics for nonprofit managers. New York, New York: John Wiley and Sons, Inc.

McLeish, Barry J. (1995). Successful marketing strategies for nonprofit organizations. New York, New York: John Wiley and Sons, Inc.

Morrison, Elizabeth Wolfe, "Organizational citizenship behavior as a critical link between HRM practices and service quality.", Human Resource Management (Journal), Volume 35, Number 4, Winter 1996, Pages 493-512.

Nagle, Bernard A. and Pascarella, Perry, "The service-profit paradox", Management Review, Volume 86, Number 11, December 1997, Pages 16-19.

O'Reilly III, Charles A., Chatman, Jennifer, and Caldwell, David F., "People and organizational culture: A profile comparison approach to assessing person-organizational fit.", Academy of Management Journal, Volume 34, Number 3, 1991, Pages 478-516.

Ouchi, William G., "The relationship between organizational structure and organizational control", 1975, Working Paper.

Ouchi, William G., "The relationship between organizational structure and organizational control.", Administrative Science Quarterly, Volume 22, March 1977, Pages 95-113.

Ouchi, William G., "Markets, Bureaucracies, and Clans.", Administrative Science Quarterly, Volume 25, March 1980, Pages 129-145.

Ouchi, William G. and Johnson, Jerry B., "Types of organizational control and their relationship to emotional well being.", Administrative Science Quarterly, Volume 23, June 1978, Pages 293-317.

Ouchi, William G. and Maguire, Mary Ann. "Organizational control: Two functions.", Administrative Science Quarterly, Volume 20, December 1975, Pages 559-569.

Pant, P. Narayan and Lachman, Ran., "Value incongruency and strategic choice.", Journal of Management Studies, Volume 35, Number 2, March 1998, Pages 195-212.

Pappas, Alceste T. (1996). Reengineering your nonprofit organization: A guide to strategic transformation. New York: John Wiley & Sons, Inc.

Perry, James L. and Rainey, Hal G., "The public-private distinction in organization theory: A critique and research strategy.", Academy of Management Review, Volume 13, Number 2, 1988, Pages 182-201.

Powers, Thomas (1996). Nova Southeastern University Lecture in Marketing Strategies (CSA 6120). Unpublished lecture. University of Alabama-Birmingham Alabama.

Rainey, Hal G., "Public management: Recent research on the political context and managerial roles, structures, and behaviors.", Journal of Management, Volume 15, Number 2, 1989, Pages 229-250.

Reeves, T. Kyanston, and Woodard, Joan, "The study of managerial control", In Joan Woodard (ed.), Industrial Organization: Behavior and Control, 1970, Pages 37-56.

Rushing, William A., "Organizational size, rules, and surveillance.", In Joseph A. Literer (ed.), Organizations: Structure and Behavior, Volume 1, 1969, Pages 432-440.

Schein, Edgar H., "Culture: The missing concept in organizational studies.", Administrative Science Quarterly, Volume 41, 1996, Pages 229-240.

Senge, Peter M. (1990). The fifth discipline: The art and practice of learning organizations. New York: Currency Double.

Sherriton, Jacalyn and Stern, James L. (1997). Corporate culture-team culture: Removing the hidden barriers to team success. New York: AMACOM.

Snell, Scott A., "Control theory in strategic human resource management: The mediating affect of administrative information.", Academy of Management Journal, Volume 35, Number 2, 1992, Pages 292-327.

Snell, Scott A. and Dean Jr., James W., "Integrated manufacturing and human resource management: A human capital perspective." Academy of Management Journal, Volume 35, Number 3, 1992, Pages 467-504.

Snell, Scott A. And Youndt, Mark A., "Human resource management and firm performance: Testing a contingency model of executive controls.", Journal of Management, Volume 21, Number 4, 1995, Pages 711-737.

Solomon, Ester E., "Private and public sector managers: An empirical investigation of job characteristics and organizational climate.", Journal of Applied Psychology, Volume 71, Number 2, 1986, Pages 247-259.

Spitzer, Dean R. (1995). Super-Motivation: A blueprint for energizing your organization from top to bottom. New York: American Management Association (AMACOM).

Starkey, Ken, "Durkheim and limits of corporate culture: Whose culture? Which Durkheim?", Journal of Management Studies (University of Nottingham England), Volume 35, Number 2, 1998, Pages 125-135.

Steward, Thomas A. (1997). Intellectual capital: The new wealth of organizations. New York, New York: Doubleday/Currency

Strober, Myra H. "Human capital theory: Implications for HR managers." Industrial Relations, Volume 29, Number 2, Spring 1990, Pages 214-239.

Toulson, Mark and Smith, Mike, "The relationship between organizational climate and employee perceptions of personnel management practices." Public Personnel Management, Volume 23, Number 3, Fall 1994, Pages 453-468.

Watson, Douglas J. and Burkhalter, Bettye B., "Developing a Theory Z culture in government." Public Personnel Management, Volume 21, Number 3, Fall 1992, Pages 401-409.

Woodall, Christopher, "Play it again Sam! Effective recruitment, training-and fun- keep seasonal employees returning to jobs at resorts and vacation sites." HR Magazine, Volume 42, Number 5, 1997, Pages 84-87.

www.state.gov/www/careers/rfsofficer.html, 1999; U.S. Foreign Service Information.

Bibliography:

Albrecht, Karl. (1990). Service within: Solving the middle management leadership crisis. Homewood, Illinois: Business One Irwin.

Beekim, Rafik I., Stedham, Yvonne, and Young, Gary J., "Board characteristics, managerial controls and corporate strategy: A study of U.S. Hospitals.", Journal of Management, Volume 24, Number 1, 1998: Pages 3-19.

Burgeois, L.J., "Performance and Consensus", Strategic Management Journal Vol. 1, 1980, Pages 227-248.

Fitz-Enz, Jac, (1997). The 8 practices of exceptional companies. New York: AMACOM.

Harris, Jim. (1996). Getting employees to fall in love with your company. New York: AMACOM.

Horn, Mirian., "Sex at the top.", U.S. News and World Report, Volume 125, Number 1, July 6, 1998, Pages 32, 34-37, 40.

Jamieson, David and O'Mara, Julie. (1991). Managing workforce 2000: Gaining the diversity advantage. San Francisco: Jossey-Bass Publishers.

Janis, Irving L., 91989). Crucial decisions: Leadership in policymaking and crisis management. New York: Free Press.

Kesner, Idalene F. and Dalton, Dan R., "Top management turnover and CEO succession: An investigation of the effects of turnover on performance." Journal of Management Studies, Volume 31, Number 5, 1994, Pages 701-713.

Kushell, Gerald. (1994). Reaching the peak performance zone: How to motivate yourself and others to excel. New York: AMACOM.

Lavelle, Marianne., "Rules of harassment." U.S. News and World Report, Volume 125, Number 1, July 6, 1998, Pages 30-31.

Levering, Robert and Moskowitz, Milton. (1994). The 100 best companies to work for in America. New York, New York: Plume (penguin Group).

McCune, Jenny, "That elusive thing called trust.", Management Review, Volume 87, Number 7, (July/August) 1998, Pages 10-16.

Pucik, Vladimar, and Katz, Jan Hack., "Information, control, and human resource management in multinational firms.", Human Resource Management, Volume 25, Number 1, Spring 1986. Pages 121-132.

Russell, J.S., Terborg, J.R., Powers, M.L., "Organizational performance and Organizational Level Training and Support", Personnel Psychology, Vol. 38, 1985, Pages 849-863.

Schneider, B., "People make the place", Personnel Psychology, Vol. 40, 1987, Pages 437-453.

Stone, Florence M. and Sachs, Randi T. (1995). The high-value manager: Developing the core competencies your organization demands. New York: AMACOM.

Tanaka, Jennifer, "The Barrett traverse", Newsweek, Volume CXXXI, Number 16, April 20, 1998, Page 46.

Ting, Yuan., "Determinants of job satisfaction of federal government employees.", Public Personnel Management, Volume 26, Number 3, Fall 1997, Pages 313-334.