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Public Safety Directors' Leadership Role for the Implementation of the National Incident Management System

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2011

Abstract

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MA, Tiffin University, 2004

BA, Myers University, 2003

Dissertation Submitted in Partial Fulfillment of the
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Abstract

The National Incident Management System (NIMS) is the result of Homeland Security Presidential Directive 5 (HSPD-5). NIMS requires the Secretary of Homeland Security to develop a national policy template for state, local, regional, and federal agencies to work together during emergencies. One difficulty with NIMS is that state and local agencies interpret and implement NIMS requirements differently. Using Lusier & Achua's theory of integrative leadership and Burns, Bass, Kouzes, and Posner's concept of transformational leadership, this study examined the relationship between the leadership provided by city public safety directors (CPSDs) and effective NIMS implementation at the local level. Two research questions were posed to determine if education, experience, leadership, competency, or knowledge of their position, impacted the required NIMS implementation. The Delphi technique was used to develop 30 survey statements that formed the basis for a survey of 25 CPSDs in a Midwestern state. Data were analyzed using chi-square as a test of association. Results indicated that NIMS knowledge is inconsistent among CPSDs, the cause of which is likely lack of training in NIMS emergency response requirements and not lack of knowledge about leadership styles or techniques. Therefore, the conclusion of this study is that CPSDs have the leadership skills required to lead emergency management organizations, but may lack the specific technical skills related to implementing the NIMS requirements. The results of this study could promote positive social change in NIMS implementation by helping decision-makers to creating training opportunities related to NIMS implementation and to allocate resources more appropriately to protect people from natural and human catastrophic events.

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Chapter 1: Introduction to the Study

Introduction

On September 11, 2001, the vulnerability of the federal, state, and local governmental mechanisms was revealed, as was public policy administrators' inability to manage catastrophic events. On this date, a small number of terrorists killed more than 3,000 people, including 450 emergency responders; demolished prime commercial property; destroyed four passenger airliners; and initiated massive defensive measures (Howard & Sawyer, 2006, p. 391). In the aftermath of September 11, President George W. Bush sought to correct deficiencies in the federal government's processes and improve its coordination with state and local governments when faced with national security threats.

Within a month of September 11, 2001, President Bush issued Executive Order 13228 (October 8, 2001), creating the White House Office of Homeland Security. In June 2002, the Office was elevated to Cabinet Department status with four areas of responsibility: "Border and Transportation Security; Emergency Preparedness and Response; Chemical, Biological, Radiological, and Nuclear Countermeasures, and Information Analysis and Infrastructure Protection" (Parachini, Davis, & Liston, 2003, p. 1). Of these four divisions, the area of emergency preparedness and response is responsible for addressing issues among critical emergency first responders as well as policy administrators at the federal, state and local level (Jackson, et al., 2002, p.ix).

Homeland Security Presidential Directive/HSPD-5, released on February 28, 2003, established the office of Secretary of Homeland Security, pursuant to the Homeland Security Act of 2002. One of the Secretary's responsibilities is to "(1) To enhance the ability of the United States to manage domestic incidents by establishing a single,

comprehensive National Incident Management System (NIMS)" (Homeland Security Presidential Directive/HSPD-5, 2003, February 28).

This directive recognized that the responsibility for initially managing emergency incidents generally falls on state and local authorities and it requires the Secretary of Homeland Security to ensure that training, equipment, and planning are adequate for effective response through the development of the National Incident Management System (NIMS). However, constitutional constraints mean that local and state governments' adoption of NIMS is optional: It is only mandatory for federal departments. For this reason, starting in the 2005 fiscal year, HSPD-5 provided financial assistance opportunities as an incentive to state and local governments to adopt NIMS. In Ohio, the federal incentive was given as one of the reasons the state adopted NIMS: HSPD-5, and NIMS require federal departments and agencies to make state, tribal and local organizations adopt NIMS as a condition for federal preparedness assistance beginning in federal fiscal year 2005" (Ohio Department of Public Safety, 2005, p. 14).

This statement in Ohio's NIMS adoption proclamation indicates the state government's recognition that they needed to have access to federal financial assistance. They needed the money to protect citizens by providing for emergency preparedness and training of first responders in a direct response to deficiencies in the states' public safety agencies that were brought to light by September 11.

Ohio recognized that federal resources would be necessary to implement NIMS under a state constitution that allows multiple forms of local government. These local forms of government in Ohio include 88 county, 253 township, 620 village, and 256 city entities (Baskin & O'Bryant, 2004). Among the main classification units of county,

township, village, and cities are administrative agencies of state government that specify a commission form of local governance. Townships are subdivisions of the county, governed by a three board members and a clerk, who serves as the fiscal officer. A village is established whenever a majority of landowners achieve approval from the county commissioners after petitioning for village status. Villages automatically become cities whenever their population reaches 5,000 or more resident voters. Townships must have a minimum of 25,000 residents and the approval of the electorate to incorporate as a city. Ohio's constitution grants villages and cities the right to become municipalities and allows broad, local authority over such services as police, fire, utilities, education and public facilities. Therefore, these are the entities achieving the most immediate and personal influence on Ohio's citizens.

Ohio cities represent the epitome of self-governance (Baskin & O'Bryant, 2004, p. 99). The broad powers that Ohio's constitution affords these entities is usually a positive empowerment; however, there is an important exception when cooperation is needed among Ohio's multiple forms of government (Baskin & O'Bryant, 2004, p. 102). This point was emphasized by Baskin and O'Bryant as they list two major liabilities attributed to home rule in cities:

> (1) Home rule means that there is no official governmental basis for cooperation or for assisting cities that face economic decline.
>
> (2) Home rule means that cities have no responsibilities toward neighboring jurisdictions. None. When cooperation or assistance occurs, it is usually the result of political jockeying. (Baskin & O'Bryant, 2004, p. 102)

This variety of governmental forms affects the state's ability to successfully implement NIMS and presents a critical coordination issue.

For each municipality, the state offers three options for choosing their form of governance. One option is the mayor and council form of governance. The second option provides for the choice of alternative governance types including the city manager form, the commission form, or other federal forms. The third option allows the adoption of a Home Rule Charter. This third option acknowledges considerable autonomy for self-governance (Baskin & O'Bryant, 2004, pp. 96, 97, & 99).

A high percentage of Ohio's cities have Home Rule Charters and 6,676,687 Ohioans living in these cities, representing 58.88% (The Year 2007: Community Profiles Directory of, 2007 and List of Cities in Ohio, 2008) of Ohio's total population of 11,353,140, as of the 2000 Federal Census (Baskin & O'Bryant, 2004, p. 600).

In a May 2005 Ohio Department of Public Safety Implementation Guidance Document initiating a strategy for implementing NIMS, the department required a unified and collaborative response from both state and local governments. In support of this requirement for coordination among state and local governments, section 5502.28 of the Ohio Law noted that the governor was to use all the existing agencies, buildings, equipment and personnel to the fullest extent. Section 5502.271 required that all the political subdivisions devise and establish plans for a unified emergency response and adopt NIMS.

In May 2005, a NIMS implementation guidance document named 245 Ohio cities and 155 townships with 5,000 or more residents, as well as 19 of Ohio's state agencies and each of Ohio's 88 counties. These governmental jurisdictions and agencies were required

to create strategies for fully implementing NIMS within the following compliance timeline:

Table 1.

NIMS Implementation Timeline

Date	Task
September 30, 2005	Identified Personnel Complete IS 700 Training
September 30, 2005	Identified Agencies Complete NIMCAST Baseline
September 30, 2005	Strategy for Full NIMS Compliance
April 30, 2006	Mid-Term NIMCAST Assessment
August 25, 2006	Final Implementation NIMCAST Assessment
September 30, 2006	Full NIMS Compliance

Adapted from "National Incident Management System (NIMS): Implementation Guidance," by Ohio Department of Public Safety, 2005, p. 6

Public safety administrative leadership is a statutorily mandated position in Ohio. As prescribed by Ohio law (Ohio Revised Code 737.01, effective October 2, 1969), every city must have a Department of Public Safety, administered by a Director of Public Safety (Effective Date: 10-02-1969 (Lawriter ORC 737.01 Director of Public Safety).

Ohio Law, Ohio Revised Code 705.83 effective July 6, 1982, defines the duties of the City Director of Public Safety as:

> 705.83 Director of public safety – duties. The department of public safety shall be under the supervision of a director who shall be appointed by the mayor. The director shall have charge of the police, fire, health, charities, corrections, and building inspection of the municipal corporation. All powers and authority over such police, fire, health, charities, corrections, and building inspection are vested

> in the director. The director shall have charge of the administration of all infirmaries, and all charitable, correctional, and penal institutions. He shall make such rules as are necessary and proper, consistent with the minimum standards for jails in Ohio promulgated by the department of rehabilitation and correction, for the employment, discipline, instructions, education, reformation, and for the conditional release and return of all prisoners confined in any penal institution under his control. (Lawriter –ORC – 705.83 "Director of public safety – duties" 1969).

However, there is no indication that Ohio's city public safety directors have been involved in state-wide leadership of NIMS implementation or local NIMS compliance. The Ohio Department of Public Safety's NIMS Implementation Guidance documents for federal fiscal years 2005, 2006, and 2007 do not indicate the participation of these Directors. Over these 3 years, the number of municipalities required to participate in NIMS implementation increased and the number of agencies decreased.

In fiscal year 2006, the municipalities required to formally adopt NIMS and complete compliance assessments increased from the 245 cities and 155 townships to every city, township, and village with 5,000 or more residents. Additionally, the jurisdictions with less than 5,000 residents were required to implement NIMS Training, but did not have to formally assess compliance (Ohio Department of Public Safety, 2006, January, p. 29). However, the total number of agencies required to meet NIMS implementation guidelines was progressively reduced by four agencies between fiscal year 2005 and 2007. The four agencies eliminated were the Ohio Department of Public Safety, the Ohio Department of Alcohol, the Ohio Department of Jobs and Family Services, and the Ohio Department of

Education. In fiscal year 2006, two agencies, the Ohio Department of Rehabilitation and Correction and the Ohio Department of Education were added to the list of required entities. Furthermore, the state of Ohio limited the NIMS Implementation Senior Advisory Committee to the following entities:

> The NIMS Implementation Senior Advisory Committee
>
> Ohio Homeland Security
>
> Ohio Emergency Management Agency
>
> Emergency Management Association of Ohio
>
> Ohio Emergency Medical Services
>
> Ohio Department of Health
>
> Ohio State Highway Patrol
>
> Ohio National Guard
>
> Ohio State Fire Marshal / Ohio Fire Academy
>
> Ohio Peace Officers Training Academy
>
> Ohio Association of Chiefs of Police
>
> Ohio Fire Chiefs' Association
>
> Buckeye State Sheriffs' Association
>
> (Ohio Department of Public Safety,
>
> Implementation Guidance, 2005, p. 8).

Of interest to this study was the elimination of the Ohio Department of Public Safety from the requirement to meet NIMS implementation guidelines. Furthermore, there is no reference to The Ohio Association of City Safety Directors nor to the position of Ohio City Public Safety Director as being essential for the institutionalization and modeling of

the cooperation necessary for NIMS implementation (K. L. Morckel, personal communication, February 15, 2006). Because none of these documents refer to the position of Ohio City Public Safety Director, it is impossible to know whether this position is fulfilling its statutory responsibilities of providing leadership relative to NIMS implementation in Ohio.

Statement of the Problem

The lives of Ohio's citizens might be at risk because it is not known if the statutorily mandated position of city public safety director is being used to lead the implementation of NIMS. It is essential that people in this position, responsible for the safety of nearly 60% of the citizens residing in Ohio's cities, assume leadership of this critical public safety policy.

An explanation of the quantitative research method, design, variables, and hypothesis is presented in the next section of this chapter.

The Nature of the Study

To research the problem, the responses from 25 practicing Ohio city public safety directors to a 30 – item, self-reported survey questionnaire were analyzed using non parametric chi-square, quantitative statistical methodology. Reliability and validity of the survey data collected were achieved through consensus of a panel of experts using the Delphi technique for the development of the survey questionnaire. These data relative to the variables of formal education, prior emergency field experience, NIMS certification and training, years of experience as an Ohio public safety director, NIMS leadership role, age, and gender pertaining to Ohio city public safety directors' knowledge of their

position and competence level to lead NIMS implementation in Ohio were analyzed using a cross-sectional, non-experimental, descriptive research design.

The hypothesis of this study relative to the variables tested using the chi-square (X^2) test of independence were:

- (X^2) null hypothesis ($H_0 1$): The variables are independent of each other
- (X^2) alternative hypothesis ($H_1 1$): The variables are dependent of each other

The hypothesis of this study relative to the variables tested using the chi-square (X^2) test for goodness of fit were:

- (X^2) null hypothesis ($H_0 1$): The variables have a normal distribution
- (X^2) alternative hypothesis ($H_1 1$): The variables are not normally distributed

A detailed explanation of the research design and methodology is presented in chapter 3 of this study.

Purpose of the Study

The purpose of this study was to examine the efficacy of the role of the Ohio city public safety director relative to successful NIMS implementation.

Research Questions

There were six main research objectives of this study. Each objective had sub-objectives that identified related issues to be analyzed.

Objective 1. To ascertain the impact of the level of formal education achieved by practicing Ohio City public safety directors on their leadership of NIMS implementation.

A. To determine the impact of formal education on leadership as perceived by Ohio City public safety directors.

B. To find out the impact of education on Ohio city public safety directors' knowledge of their statutory authority and duties.

C. To ascertain how Ohio city public safety directors perceive changes in subordinates' and superiors' expectations of their NIMS role based on academic achievement.

D. To determine perceived changes of attitude towards NIMS implementation leadership in the study population.

Objective 2. To determine the impact of prior emergency field experience on practicing Ohio city public safety directors' leadership of NIMS implementation.

A. To determine the impact of prior emergency field experience on NIMS leadership as perceived by Ohio city public safety directors.

B. To find out the impact of prior emergency field experience on Ohio city public safety directors' knowledge of their statutory authority and duties.

C. To ascertain how Ohio city public safety directors perceive changes in subordinates' and superiors' expectations of their NIMS role based on prior emergency experience.

D. To determine perceived changes of attitude towards NIMS implementation leadership in the study population.

Objective 3. To ascertain the relationship between the level of NIMS knowledge and training achieved by practicing Ohio city public safety directors and their leadership of NIMS implementation.

A. To explore the relationship between the level of NIMS knowledge and training among Ohio city public safety directors and their attitudes toward their leadership role in NIMS implementation.
B. To find out the connection between the level of NIMS knowledge and training among Ohio city public safety directors and their peer group with NIMS implementation leadership.
C. To examine the links between the level of NIMS knowledge and training achieved by Ohio city public safety directors and their perceived NIMS leadership expectations of subordinates and superiors.
D. To determine the relationship among Ohio city public safety directors between the level of NIMS knowledge and training and their competence to lead NIMS implementation.

Objective 4. To explore the relationship between the years of experience of practicing Ohio city public safety directors and their knowledge of the statutory authority and duties relative to leadership of NIMS implementation.

A. To ascertain the association between the years of experience among practicing Ohio city public safety directors and their knowledge of the statutory authority and duties of their position and their leadership of NIMS implementation.
B. To explore the relationship between Ohio city public safety directors' perceived NIMS leadership expectations among subordinates and superiors and their years of experience as a practicing Ohio city public safety director.

C. To find out the relationship between the years of experience among practicing Ohio city public safety directors and their perceived confidence toward leading NIMS implementation.

D. To determine links between the years of experience among practicing Ohio city public safety directors and their involvement in leading NIMS implementation.

Objective 5. To examine the relationship between the age and gender of practicing Ohio city public safety directors and their involvement in leading NIMS implementation.

A. To explore the relationship between the age and gender among practicing Ohio city public safety directors and their perceived confidence level that subordinates and superiors expect them to lead NIMS implementation.

B. To determine links between the age and gender of practicing Ohio city public safety directors and their leadership of NIMS implementation.

Objective 6. To ascertain the level of competency among practicing Ohio city public safety directors to lead NIMS implementation.

A. To identify the variables that contribute to the utilization of Ohio city public safety directors in the leadership of NIMS implementation.

B. To identify the variables that Ohio city public safety directors perceive as barriers to their leadership of NIMS implementation

Theoretical Foundation

The theoretical foundation of this study was informed by the literature of the field of public administration and the NIMS public policy. This literature recognizes theorists within each of the four classifications of leadership theory identified by Lussier and

Achua (2004): “Trait, behavior, contingency, and integrative” (p.14). However, it is important to understand that the historical divisions of these classifications assigned by Jacobowitz and Pratch (1997) as beginning in 1900 to the early 1940s for trait theory, behavior theory from the early 1940s to the 1960s, and the contingency period beginning in the late 1960s are not as finite as presented. This same understanding should be applied to the period for integrative leadership theory assigned by Lussier and Achua (2004) as beginning during the middle to late 1970s through to the present (Lussier & Achua, 2004, p. 16).

Although these divisions are not definitive, such theoretical approaches allow identification of what might be considered classic theories and theorists. Establishing a tradition of theories is important for providing the sense that there is a broad spectrum of theories and theorists contributing to the foundation of this study, rather than the absence of a unifying theory that can be found in some other professional fields (Shafritz, 2000, p. 13).

For this reason, and as a method for identifying the evolution of theories and theorists founding this study, Bennis and Thomas’s (2002) concept of the influence of historical eras is instructive. These eras span 18-year periods, allowing a correlation between theorist, theory, and their time of influence benchmarked by historical events. As explained by Bennis and Thomas , these representations of a common history and culture during a historical period are very different from generalizations because society experiences different eras across generations and throughout the decades. This broad theoretical perspective provides a basis for identifying transformational theory as the

main theoretical foundation of this study. Transformational leadership theory is an integrative leadership theory building upon trait, behavioral, and contingency theories and is associated with public administration in leadership literature. It is also recognized as the leadership paradigm espoused by the Federal Emergency Management Agency (FEMA) in support of NIMS implementation (FEMA, 2005).

The transformational leadership theory authors of particular influence on this study are: Burns, Bass, Kouzes, and Posner. Heilbrunn (1994) has called Burns, a Pulitzer Prize and National Book Award winner and the author of the publication *Leadership*, "The Rosetta Stone of recent leadership studies" (p. 3). Burns (1978) noted that the leadership role is a critical variable in any situation and that leadership provides a sense of movement that motivates both the leader and the followers to attain goals and fulfill needs. He believed that transforming leadership occurs when people engage one another in such a manner that motivation levels are raised in mutual support toward a mutual purpose (Burns, 1978, p. 20). Burns' description of the executive leader as a decision maker describes the position of Ohio City Public Safety Director. Burns (1978) stated, "The essence of the executive's function is the specialization of the process of making organizational decisions" (p. 379). Burns (1978) noted that executive leaders may not find themselves in circumstances favorable for implementation of a strategy toward a goal. He suggested that the leader's purpose may best be achieved through the leader's knowledge, training, use of administrative structures, and a transforming leadership strategy (pp. 383-385).

Bass (1998) expanded and developed his version of transformational leadership based on the work done by Burns (1996). According to Northouse (2004), Bass focused more

on emotional elements and on how transformational leadership might apply to negative outcomes in some situations (p. 173). As Bass (1998) noted, the components of transformational leadership are:

1. Charismatic leadership. This kind of leader leads by example and, as a result, becomes a role model for followers.
2. Inspirational motivation. These leaders empower their employees to become creative and innovative through the use of critical thinking. As a result, employees become empowered problem solvers.
3. Intellectual stimulation. These leaders create an environment which encourages employee innovation and empowerment through the fostering of critical thinking throughout all levels of the organization. The use of critical thinking allows employees and employers to address problems, create new solutions and develop innovative approaches within the organization.
4. Individualized consideration. Such leaders serve as mentors and facilitators to ensure that employees grow and learn. Within this context, there is equal exchange of information, which is encouraged by management. The management team also conducts a *walking around* within the organization (pp. 5-6).

Bass's discussion of emergency and disaster situations helps to describe the position of Ohio City Public Safety Director and NIMS implementation. Bass identified that the critical human resources in emergency and disaster situations are public service departments, health services, fire, and police departments. He believed the effectiveness

of the leadership of these human resources determines the success of the coordinated response to the disaster (Bass, 1998, p. 40).

Additionally, he stated, "At the national, state, and community level, effective leadership promotes the development of credible warning systems and preparations long before disasters actually strike" (Bass, 1998, p. 40). In the absence of this type of leadership, public defensiveness prevails, creating panic reactions. Administrative level management should be technically and behaviorally prepared for crises with warning systems as well as command centers "*managing-by-exception"* (Bass, 1998, p. 40).

Bass contended that it requires a transformational leader to effectively communicate the need for an early warning system and to prepare employees through training in safety, security, and detection tactics that defuse or avoid emergency situations (Bass, 1998, p. 40 & 43). Bass (1998) stated:

> In the acute stress of emergencies and disasters, panic will be prevented by leaders who encourage advanced preparation and well-trained, well-organized, credible systems. Chronic stress will be better handled when leaders are able to transform personal concerns into efforts to achieve group goals. (p. 28)

Thomas supported Bass's assertions when he described Kouzes and Posner's transformational leadership model, "as having the ability to fundamentally transform an organization through a powerful perspective and a distinctive set of capabilities" (Thomas, 2005, p. 90). Kouzes and Posner can be seen as applying the transformational leadership paradigm to the accomplishment of extraordinary results within organizations through five exemplary leadership practices (Thomas, 2005, p. 91).

Kouzes and Posner (2002) introduced these five exemplary leadership practices as:

1. Model the way. This practice requires the leader to display the behaviors expected from others. The leader gains the respect of followers and earns the ability to lead the organization through this practice.
2. Inspire a shared vision. This practice sparks enthusiasm and inspires people to share a common belief in an extraordinary future for their organization.
3. Challenge the process. This is the practice of searching for opportunities to improve the organization. It requires changing the status quo through innovations that often are generated by the employees.
4. Enable others to act. This is the practice of stimulating all of an organization's stakeholders to deliver exceptional results. Thus, leaders inspire constituents to become leaders.
5. Encourage the heart. This is the practice of expressing genuine appreciation for people's commitment to their organization's success. Individual rewards and group celebrations help recognize effort, especially in difficult times, and keep organizational values aligned (pp. 13-19).

Kouzes and Posner (2002) described a process that is relevant to the Ohio city public safety director and NIMS implementation when they wrote, "While the *content* of leadership has not changed, the *context* has" (p. xviii). Their research identified eight

contextual conditions that leaders in the current era must deal with and which this study examined (Kouzes & Posner, 2002, pp. xviii-xxii). They are as follows:

1. Heightened uncertainty. The September 11, 2001 acts of terrorism instantly created a greater feeling of insecurity among U.S. citizens.
2. People first. The September 11, 2001 tragedies led people to "put families first" (Kouzes & Posner, 2002, p. xviii). These terrorist acts demonstrated how tragedy can change people's priorities.
3. We're even more connected. The advance of electronic technology has put instant information in everyone's hands, globally connecting all the world's citizens – not just the wealthy ones. This connectedness diminishes the effects of traditional hierarchies by decentralizing how people interact.
4. Social capital. Kouzes and Posner (2002) described social capital as "the collective value of people who know each other and what they'll do for each other" (p. xx). Human networking can accomplish extraordinary things organizationally. On a global scale, the events of September 11, 2001 reinforced this concept. Social capital measures, among other elements, an ability to effectively use financial capital.
5. Global economy. The September 11, 2001 attacks had a drastic effect on markets globally because the world is so interconnected. Any organization, whether public or private, has constituents from other countries. This presents challenges to organizational unity.

6. Speed. The pace at which human beings are able to communicate, conduct business and travel has created the expectation that people's needs will be met instantly. While this speed has improved overall quality of life, it has created stress on an organization's ability to balance instant responsiveness with employees' family time.
7. A changing workforce. The homogeneous workforce is gone. The workforce is now as diverse as the global economy. Organizations must understand individual and cultural uniqueness – while finding common ground on which to build future success.
8. Even more intense search for meaning. Building cynicism in the last half of the decade is giving way to increased spirituality, values, virtue and the desire to leave a positive legacy. Many people seem to share a general desire to achieve a higher purpose (Kouze & Posner, 2002, pp. xviii-xxii).

Theories propounded by Burns (1978), Bass (1998), and Kouzes and Posner (2002) informed this study's transformational theoretical foundation.

Operational Definitions

The National Incident Management System (NIMS) is designed as a standardized approach for nationwide emergency incident management and response. NIMS require uniformity across all levels of government and jurisdictions regarding the procedures that emergency responders use in response operations. These procedures and responses are required to be documented in an emergency operations plan (EOP). However, it was recognized by the U.S. Office of Domestic Preparedness and the NIMS National

Integration Center (NIC) that jurisdictions throughout the country had existing emergency operation plans that contained terms and acronyms that were the same but had different meanings. For this reason, a standardized list of definitions and acronyms from the Department of Homeland Security was mandated:

Chain of command: A variety of management positions within a given organization arranged in a hierarchical order of authority.

Command: To direct, order and/or control a group of individuals within a given setting/organization based upon statutory, regulatory and/or delegated authority.

Coordinate: To disseminate information amongst a group of individuals/teams in order to equip them with the knowledge of what is required and what their assigned responsibilities/duties are.

Emergency: "Absent a Presidentially declared emergency, any incident(s), human-caused or natural, that requires responsive action to protect life or property" (State of Ohio NIMS, 2006, p. 53).

Emergency Operations Plan: "The 'steady-state' plan maintained by various jurisdictional levels for responding to a wide variety of potential hazards" (State of Ohio NIMS, 2006, p. 53).

Hazard: "Something that is potentially dangerous or harmful, often the root cause of an unwanted outcome" (State of Ohio NIMS, 2006, p. 54).

Incident: A natural or man-made disaster which requires an emergency response.

Incident Command System (ICS): "A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple

incidents, without being hindered by jurisdictional boundaries" (State of Ohio NIMS, 2006, p. 54).

Incident Objectives: "Statements of guidance and direction necessary for selecting appropriate strategy(s) and the tactical direction of resources" (State of Ohio NIMS, 2006, p. 54).

Jurisdiction: "A range or sphere of authority" (State of Ohio NIMS, 2006, p. 55).

Local government: "A county, municipality, city, town, township, local public authority, school district, special district, intrastate district, council of governments, (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; an Indian tribe or authorized tribal organization, or in Alaska a Native village or Alaska Regional Native Corporation; a rural community, unincorporated town or village, or other public entity" (State of Ohio NIMS, 2006, p. 55).

Mutual-aid agreement: "Written agreement between agencies and/or jurisdictions that they will assist one another on request, by furnishing personnel, equipment, and/or expertise in a specified manner" (State of Ohio NIMS, 2006, p. 56).

Public safety director: An administrative position appointed by the Mayor of the respective city who is tasked with having authority over the police, fire, health, charities, corrections and building inspections departments.

Response: "Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs" (State of Ohio NIMS, 2006, p. 58).

Unity of command: "The outlook that each individual is required to report to one assigned individual within the respective organization" (State of Ohio, NIMS, 2006, p. 60).

Assumptions, Limitations, Scope, Delimitations

Three assumptions were the basis for this study: First, cities in Ohio provide a critical indicator for how the public administrative position of Ohio City Public Safety Director is instrumental in implementing a state and national public policy NIMS. Second, an Ohio city public safety director's knowledge regarding his/her statutory duties and NIMS responsibilities is essential for effective, efficient NIMS implementation in Ohio cities. Third, the utilization of the position of Ohio city public safety director for NIMS implementation indicates that an Ohio city government has taken full advantage of an existing, middle-level public policy administrative position, demonstrating strategic, intergovernmental cooperation and functionality.

The scope of this study explores the public administrative position of Ohio public city safety director and its usage among Ohio cities relative to the national, state, and local implementation of (NIMS). Within this range of view, the relationship of variables, level of formal education, prior emergency field experience, NIMS certification and training, years of experience as a city public safety director, age, and gender are researched relative to differences among practicing Ohio city public safety directors and their utilization in Ohio cities for NIMS implementation.

The focus of this study was on the city public safety director's leadership role as it pertains to police and fire personnel. The NIMS courses identified and discussed in this study are limited only to ones that apply to these two public agencies. The second

limitation is the lack of previous research. There is little research regarding the position of Ohio city public safety director. No official Ohio directory of current Ohio city public safety directors exists, and there is little NIMS implementation compliance data for Ohio cities. These limitations require researching the position of Ohio City Public Safety Director in the literature, from its historical roots to the present. This research allows the study to extrapolate the position's evolution within the context of public administration in Ohio cities. To overcome this limitation, the study relied on a self-reported survey questionnaire instrument to gather each city's NIMS implementation data. The survey instrument was mailed to each city with a generic address of (Name of City), and public safety director.

The delimitation of this study falls within the bounds of the research data collected relative to the variables as they relate to the position of Ohio city public safety director and this position's relationship to NIMS implementation. Neither the state of Ohio nor its cities' compliance with federally required NIMS implementation is within the delimitations of this study.

Significance of the Study

This study indicated that NIMS knowledge is inconsistent among practicing Ohio city public safety directors. This inconsistency seems most likely to be caused by a lack of NIMS emergency response requirements. By identifying this significant flaw in NIMS implementation in Ohio, this study has the potential to promote positive social change. Addressing this flaw could encourage decision makers at the federal, state, and local levels to allocate resources more appropriately to protect Ohio's citizens from natural and man-made catastrophic events. If they are used as part of the city's NIMS team, this

allocation of resources could allow the Ohio city public safety director position to be accountable, to use their respective staff efficiently, and, to allocate resources efficiently toward greater safety and security for people. Furthermore, Ohio as a whole could benefit from the use of an established public safety administrative position that could provide leadership for NIMS in strategically important locations throughout the state. Additionally, this study could provide the impetus for other states to examine their NIMS implementation leadership positions for similar flaws that may further benefit people.

Summary

The safety of the general public is one of the most important functions of government. A critical component of this function is the immediate response to natural or manmade emergencies, preventing loss of life and reducing or eliminating human injuries. Accomplishing this objective can lead to public confidence in government administration. Adherence to laws, rules, and regulations relative to safety planning and the preparedness of safety personnel can avert and/or mitigate the catastrophic effects of an emergency situation.

The Ohio Revised Code of Law requires every city to employ a person in the position of Ohio city public safety director and statutorily defines this position's minimum responsibilities. This law gives every city in Ohio the advantage of a public administrative position that can carry out the provisions NIMS as prescribed under the Ohio NIMS compliance guidelines. It is incumbent upon Ohio city public safety directors to be knowledgeable regarding the statutory duties of their position and NIMS so their position can become a useful part of the city's management team for NIMS

implementation. However, this was not the case with most directors; this study examined why.

The research described in this chapter will provide the basis for the review of related research and literature, which will be described in chapter 2. The literature based description of the research variables presented in chapter 2 provides that basis for reporting the design and methodology for data collection as well as the analysis of this research in chapter 3. The methodology described in chapter 3 provides the basis for reporting the analysis of the data collected in chapter 4. The results and statistical analysis from chapter 4, will form the interpretations, implications, recommendations and conclusion found in chapter 5.

Chapter 2: Review of Literature

Introduction

The problem examined by this study was that Ohio's citizens might be at risk because it is not known if the position of Ohio city public safety director is being used to lead NIMS implementation. The literature reviewed in this chapter discusses 9/11 in the context of transformational leadership that initiated NIMS in order to understand the relevance of the position of Ohio city public safety director to the NIMS leadership environment and how this study's research variables conform with the leadership development model as more or less indicative of why Ohio is not utilizing the position to lead NIMS implementation.

Presented in this chapter are synthesis of the pertinent literature concerning the variables identified within a leadership model as potentially influential for predicting an Ohio city public safety director's interest in attaining the knowledge, skills, and experience for leadership of NIMS implementation. Some of the topics are 9/11's relevance to the position of Ohio city public safety director, transformational leadership, NIMS, and the leadership crucible. The components of a leadership development model including the collective relationship of Ohio cities as the organization of meaning, transformational leadership competencies, era related variables, variables related to individual factors, and experience related variables with the position of Ohio city public safety director.

In the course of this research, materials and information were sourced from universities, public and private libraries, governmental websites, and the Questia website. A subject-based approach was utilized for the search. Search terms included: *Ohio*

history and government, transformational leadership, emergency management, 9/11, NIMS, NIMS certification and training, age, gender, employment experience, and *formal education.*

Relevance of the Position of Ohio City Public Safety Director to 9/11, Transformational Leadership, and NIMS

Bennis (2003) indicated that the September 11, 2001 (9/11), terrorist attacks on America were especially relevant to leadership. Bennis (2003) predicted these attacks would be a crucible for producing a new generation of leaders. He believed that transforming the 9/11 catastrophe into something more meaningful than a senseless act of terrorism would be a leadership crucible. Lester (2007) seemed to support Bennis's (2003) emphasis on leadership by contending that NIMS provides the operational components for successful implementation of a universal response system addressing the deficiencies identified in America's preparedness by 9/11. Bennis (2003) and Lester (2007) identified transformational leadership as an important element in the leadership crucible and NIMS respectively. Lester contended that without the involvement of the elected officials, appointed officials, and careerists in government who are essential for providing transformational leadership to NIMS implementation, the system only provides rhetoric. Lester (2007) emphasized these points, stating:

> The significance of leadership—expressly, transformational leadership –is an important addition to the conversation about improving disaster response. Transformational leadership offers a means for achieving an improved disaster response mechanism while respecting federalism. With NIMS already in place and with the language of collaboration and initiative already part of its rhetoric, it

> provides a particularly interesting system for accomplishing the goal of real improvement. If leadership supports NIMS, real change can occur. Absent a commitment from leadership, NIMS will likely just become a tool of the federal government to attempt federal domination (p. 4).

The Federal Emergency Management Agency (FEMA) seemed to agree with Lester regarding the importance of NIMS implementation through transformational leadership and government officials. In December 2005, FEMA's Emergency Management Institute (EMI) made available, at no charge, an independent study course titled, "Leadership and Influence—IS 240."

This course recognizes the NIMS framework as providing a consistent foundation for first responders and government officials at all jurisdiction levels to effectively manage emergencies (FEMA, 2005, pp. 1.7-1.8). Recognizing NIMS as the systemic approach, this course is intended to improve the transformational leadership skills deemed vital for every emergency administrator and responder (FEMA, 2005, p. 1). This objective is emphasized in the course's introduction.

> As an emergency management professional, you must be able to use leadership and influence effectively to lead your organization and the community in planning for, preventing, and responding to emergency situations and disasters. Leadership involves providing vision, direction, coordination, and motivation toward achieving emergency management goals. These skills are necessary whether dealing with subordinates, those with more authority than you, your peers in partner organizations, volunteers, or the public (FEMA, 2005, p. 1.1).

The 9/11 leadership crucible, transformational leadership, and emphasis on NIMS implementation by government officials are relevant to the existing position of Ohio city public safety director. Statutorily mandated 37 years prior to the 9/11 disaster, the city public safety director position provides Ohio with the advantage of an existing governmental administrative position with the authority and responsibility for the city departments that are critical to successfully implementing NIMS. However, there has been no research conducted to determine if the position of Ohio city public safety director is involved and leading NIMS implementation in Ohio's cities. Therefore, this study addresses the problem that Ohio's citizens might be at risk because it is not known if the position of Ohio city public safety director is being used to lead NIMS implementation. The position of Ohio city public safety director has existed since 1969 and has had authority over the departments of police, fire, health, and building inspection since 1982. All of these areas of authority are of critical importance for NIMS implementation.

This analysis of the problem included examination of the variables in the Ohio city public safety director's job qualifications, including, years of experience as a practicing city safety director, NIMS knowledge/training, age, and gender. Data generated in these categories were analyzed quantitatively to determine their relationship to the problem. For example, the level of formal education and the amount of emergency-related field experience prior to the appointment of city public safety director may be indicative of an understanding of administrative leadership theory and the practical applications necessary to perform the functions of the job. These variables may predict the city public safety director's interest in attaining the knowledge/training required to implement NIMS. Additionally, the relationship between a city public safety director's years of experience

as a city public safety director and his or her age and gender may provide data across all general categories with relevance to job qualification levels and NIMS knowledge gained through NIMS training resulting in a NIMS certification. Analysis of these variables may determine why Ohio is not utilizing the existing position of city public safety director to lead NIMS implementation.

The leadership crucible developed by Bennis and Thomas (2004) is pertinent to this study's variables. Their leadership development crucible (as shown in Figure 1), provides a model relevant to the implementation of NIMS as well as transformational leadership presented in the EMI leadership and influence course from which the research variables have been extrapolated. Figure 2 shows the study's variables as components of the Bennis and Thomas model. This process enables the study to review the literature pertaining to the research variables through the lenses of era, individual factors, and experiences within the organization of meaning and transformational leadership competencies. The implications drawn from this literature review establish the cumulative merit of the relationship of the variables toward answering the research questions applicable to this study's investigation of the problem with Ohio's city public safety director's role in NIMS implementation.

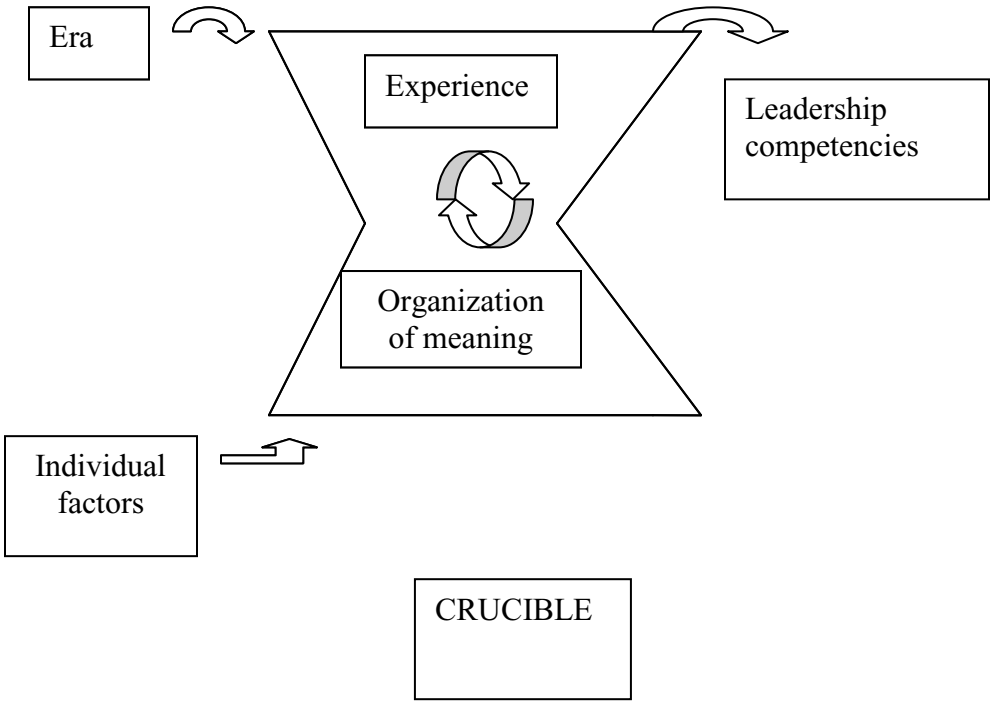

Figure 1. Leadership development model

Note. This model depicts the chain reaction and growth that occurs after a crucible occurs and variables that contribute to the organization of meaning and an individual's experience. Adapted from "Our Leadership Developmental Model,", by W. Bennis and R. Thomas, 2002, *Geeks & Geezers, p. 4*. Reprinted with permission.

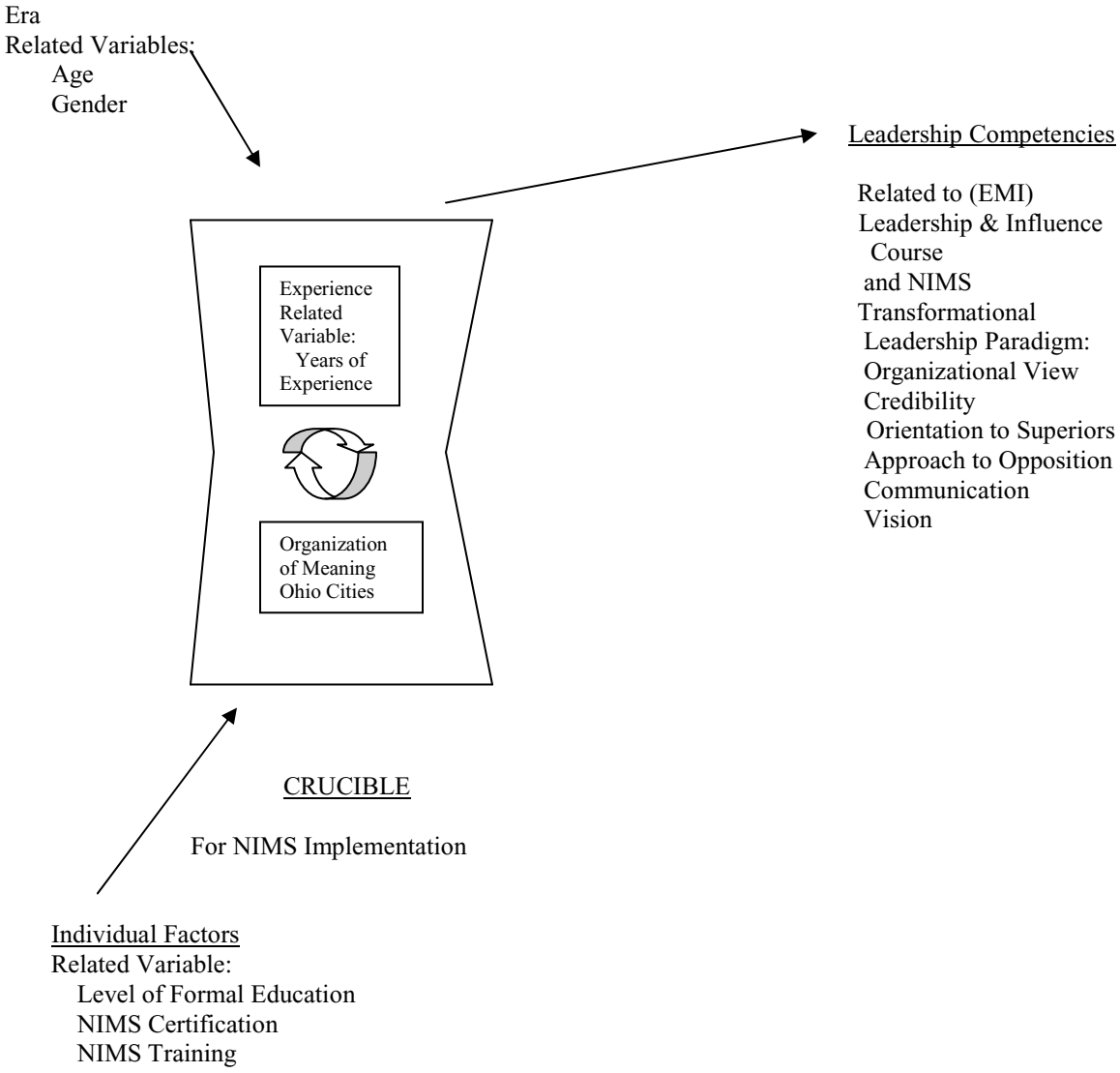

Figure 2. Research Variables.

Note. This figure identifies the variables used to research the Ohio's city public safety director's Role for the Implementation of NIMS in Ohio.

Literature Based Description of the Research Variables

Ohio cities are the organization in which an Ohio city public safety director has the opportunity to lead NIMS implementation. Therefore, Ohio cities are the organization of meaning relative to the leadership development model established for researching Ohio city public safety directors' role in NIMS implementation (see Figure 2). Obviously there is an important relationship between safety directors and their employing entities. But, there is a broader perspective on the cities themselves which can be gained from reviewing the literature. Knepper (1989) noted Ohio's unique position in the U.S.: "Ohio has been called the westernmost of the eastern states and the easternmost of the western states" (p. x). This is one of the reasons Knepper (1989) stated, "Ohio cities have often been selected to represent 'typical' American settings" (p. x).

Organization of Meaning

The roots of Ohio's unique designation may be founded in the continuous expansion across the North American Continent. Topography and international politics were the biggest influences on westward movement in the U.S. During the colonial period, the Appalachian Mountains ensured that the original thirteen colonies would grow along the east coast instead of extending further inland. After the American Revolution, the newly formed country gained control of territory to the Mississippi River. This territory contained a network of east-to-west navigable water ways; by 1800, the Ohio and Mississippi valleys were part of the new American frontier (Douglas, 1989, pp 49-50). The newly formed government intended to sell this land to reduce the federal debt. However, even prior to the Revolutionary War, settlers had been taking possession of land in this region. These settlers disputed the federal government's right to force them

to buy land that they had already cleared and started to farm. Fueled by economic incentives, these disputes over land ownership became a conflict between centrists who wanted an authoritative central government and localists who preferred a sympathetic local government to a distant central authority (Mee, 1987, pp 206-207). Further complicating this conflict of governance were other claims to land in this territory. The states of Virginia, Massachusetts, and Connecticut all laid claim to this region based on their original colonial charters. Furthermore, the Native American tribes believed an earlier treaty with England superseded all other claims and gave them sole ownership of all the land north of the Ohio River (Roberts, Moore, & Leidich, 1981, p 70).

Three of these four land disputes were dealt with diplomatically. First, on March 2,1781, as a condition of establishing central governance under the Articles of Confederation, all of the states claiming land in the Northwest Territory had to relinquish their claims. Next, the federal government enacted the Northwest Ordinance in 1787. This ordinance required that a governor, a secretary, and three judges be appointed by the United States Congress to govern the territory. When 5,000 white males of voting age resided in a territory, a local law making body was to be elected. When 60,000 people lived in any section of the territory, it could petition the federal government to grant a statehood status which would be equal in every aspect to the original thirteen states (Roberts, Moore, & Leidich, 1981, pp. 70-72). Unfortunately, the Native Americans' claims could not be settled peaceably, resulting in continuous hostility until they were defeated at the Battle of Tippecanoe in 1811 (Roberts et al., 1981, p. 112).

In 1788, Ohio's first territorial Governor, Arthur St. Clair, arrived at Fort Harmar on the west bank of the Muskingum River at the confluence of the Ohio and Muskingum

Rivers. St. Clair's vision was to transform the Ohio Valley into a world class commercial and agricultural center. He assumed that the existing inhabitants would identify themselves as prospective citizens of the United States and that their loyalty to the national government superseded any other allegiances. However, he discovered that his challenge was to demonstrate the value of the territorial and national government and encourage the inhabitants to achieve a vision they did not initially share. The inhabitants were more loyal to each other and their families than any nation. For this reason, they were more interested in keeping a local autonomy that recognized their traditions, customs, and concern for the protection of their families. These residents viewed the vision of the governor and the judges as a radical threat to their local autonomy. This difference in perspectives caused frequent controversies among the governor, judges, and local officials, supporting Knepper's assertion about Ohio's general representative status relative to the nation. The conditions in Ohio during this time were a microcosm of broader episodes that occurred across the nation as residents negotiated relationships among governing bodies in the context of the emerging democratic society (Benedict & Winkler, 2004b, pp. 13-27).

On April 7, 1788, 4 months before the arrival of the new territorial governor, the first Ohio city of Marietta was founded across the Muskingum River near Fort Harmar. This location was chosen for two main reasons. First, it was deemed too risky to locate any further from the fort and secondly, it was near an eastward route considered important for future commerce into the interior. Even with Fort Harmar nearby, the security and protection of the residents of Marietta was central to the establishment of the city as evidenced by the large fortification that dominated the center of town (Knepper, 1989,

pp. 64-65). Of interest to the development of cities in Ohio is that these settlers were not uneducated woodsmen of the type who had pioneered the westward movement into this new frontier. Rather, their leaders had been officers in the Revolutionary Army, and some had attended Harvard or Yale. Their educational ideals, their respect for law and order, and the fertility of the region brought more settlers. By 1791 the additional cities of Cincinnati, Gallipolis, and Manchester had been established. While southern and central Ohio cities were settled first, northern Ohio attracted later settlers and the cities of Cleveland, Youngstown, Warren and Ravenna were founded between 1796 and 1799 (Roseboom & Weisenburger, 1953, pp. 54-59).

The establishment of these cities, with their increasing populations was a threat to Governor St. Clair's desire to keep the region a territory. As early as 1790, St. Clair had devised a strategy to divide the territory to keep the population density below the 60,000 residents required for a statehood application. In 1800, Congress acted upon St. Clair's request to divide the territory into two unequal parts. The larger region became the Indiana Territory while the smaller region was still called the Northwest Territory, before becoming the future state of Ohio (Duckworth, 1988, p. 54 & 76). However, the smaller region's population grew faster than St. Clair expected. By 1800, it ranked eighteenth among existing states and territories with a population of 45,365 (Smith, 1975, p. 50). Contrary to Governor St. Clair's wishes, the residents of the Ohio region wanted to govern themselves. They mounted a public campaign using letters, handbills, town meetings, and newspapers to criticize St. Clair's obstructionist attitude and his pompous, arrogant disregard for the residents of the Ohio Territory. The campaign asked residents to participate in petitioning Congress for statehood. The success of this campaign

coupled with a population of over 60,000 resulted in Congress authorizing the submission of a state constitution in 1802. As a result, early in 1803, President Thomas Jefferson dismissed St. Clair as Territorial Governor and Congress approved the state constitution and the admission of Ohio as the seventeenth state on February 19, 1803 (Cayton, 2002, pp. 4-5).

Ohio's constitution reflected the residents' local ideology. Local officials were popularly elected; the legislature appointed the state's other executive officers and its judges. This left the governor with neither veto power nor any power to appoint officers (Benedict, 2004a, p. 679). Due in large part to these provisions, the first Ohio state constitution is not highly regarded by historians. On its surface it appears to be the result of the struggle between Governor St. Clair and the early settlers of Ohio. However, the constitution also reflected the citizens' insistence on a democratic government controlled by the popular vote rather than an aristocratic government paternally administered by a governor. The constitution remained in effect until 1851, demonstrating the citizens' determination to keep the power of government local and in the hands of the people (Randall, 1903, pp.238-249).

Ohio grew from a frontier state with a population of 45,365 in 1800 to 230,760 in 1810 and 581,434 in 1820. It became the third most populous state with 1,980,329 residents by 1850 (Cayton, 2002, p. 15). The rapid growth accentuated the need for constitutional reform, which was recommended by Ohio's governors as early as 1810. The second constitution, adopted in 1851, contained new provisions for state officials and judicial reform; it also required the legislature to hold a constitutional convention in 1871 and every twenty years thereafter (Benedict & Winkler, 2004a, pp. 51-60). This began a

process that has steadily increased the governor's powers to the degree that Ohio's chief executive is now regarded as one of the strongest gubernatorial positions in the nation. This gubernatorial power includes the authority to appoint 23 cabinet department directors, including a State Department of Public Safety (Lamis, 1994, pp.261-264).

While Ohio was growing, so was the political influence of Ohio's cities. In the 1840s and 1850s, the population started shifting from the rural areas to the cities (Cayton, 2002, p. 83). Cincinnati had become the country's third largest city (Benedict & Winkler, 2004b, p. 506). By 1910, Cleveland was the sixth largest city in the nation (Cayton, 2002, p. 164). Between 1880 and 1900, Ohio's population increased by 30 percent while the population of cities doubled. This increase in the urban population was the result of cities becoming centers for Ohio's emergence as a major industrial state, but it strained municipal services and created hazardous conditions (Benedict & Winkler, 2004, vol. I, p. 111). However, the Ohio constitution stifled the city governments' efforts to address these conditions. Under the constitution, cities were completely subordinate to the state's legislature, which continually undercut the initiatives that city leaders' proposed to address their local problems (Knepper, 1989, p. 327).

This obstructionism caused widespread dissatisfaction with the state government and a statewide resurgence of the tenets of individualism and localism that was reminiscent of Ohio's early settlers (Benedict & Winkler, 2004, vol. I, p. 111). Popular fervor to remove the state's interference from city governance grew and became an issue at the State Constitutional Convention in 1912 (Lamis, 1994, p. 7). Therefore, the convention amended Ohio's constitution to provide cities with a population of 5,000 or more the option of municipal home rule (Cayton, 2002, p. 231). Article XVIII, Section 3 of Ohio's

amended constitution of 1912 states "Municipalities shall have authority to exercise all powers of local self-government and to adopt and enforce within their limits such local police, sanitary and other similar regulations, as are not in conflict with general laws [Adopted Sept. 3, 1912]" (Roberts & Cummins, 1966, p. 420). This section represents a clear advantage for city's independence, but it also creates the potential for conflicting interpretation of laws between a city and the state. A central benefit of home rule is that it enables a city to meet the unique needs of its jurisdiction without prejudicial interference from the state legislature. However, its main deficit is the lack of a clear line of authority between state and city powers (Shoup, 1946, pp. 690-691).

This deficiency manifests itself in one way that is particularly pertinent to the position of Ohio city public safety director: policing powers. Since the enactment of city home rule charters, the Ohio courts have been dealing with issues of state powers versus city authority on a case-by-case basis by applying the general parameters of due process of law. The court usually focuses on whether the contested regulation reasonably promotes public welfare, health, or safety without causing any unwarranted burden on individuals. So, state courts must determine each case individually based on the specific circumstances and facts involved. Finally, the Supreme Court of Ohio ruled that Article XVIII, Section 3 of the state constitution gives city government independent sovereignty and local authority over the power to police – as long as these police powers do not conflict with the state's laws (Benedict & Winkler, 2004, vol. II, pp. 574-575).

This decision may have been predicated on the court's understanding that the potential conflict between a city's policing powers and state law would be mitigated by state statutes 737.01 and 705.83. These statutes mandate that every city in Ohio must have a

department of public safety administered by a director in charge of: police, fire, health, charities, corrections, and building inspection (which was sited previously in Ohio Revised Code). However, the position of Ohio city public safety director is neither employed by the state nor responsible to the state for fulfillment of its duties. Rather, the city public safety director position is appointed by each city's mayor, who also evaluates the Director's performance (Roberts & Cummins, 1966, p. 349). Therefore Ohio city public safety directors administer their responsibilities as required by the state's statutes, but they must do so within the city's regulations – which may be independent of the state's authority under a home rule charter. Because of this governmental structure, the city is the organization of meaning as part of the leadership development model's crucible.

Leadership Competencies

The practice and methodology of emergency management was changed by FEMA when it developed the NIMS system after September 11, 2001. FEMA integrated the existing best emergency management practices into the NIMS approach, but emphasized that an important element of emergency management is leadership. FEMA's Independent Study Course IS-240 states, "In the final analysis, leadership is a way of thinking that guides your behavior, decisions, and actions" (FEMA, 2005 p. 2.10). In this way, FEMA associates thinking like a leader with a transformational leadership paradigm (FEMA, , 2005, p. 2.3).

Defining a paradigm as a mental model that structures thoughts and guides thought patterns, FEMA's course compares two other paradigms with the transformational leadership paradigm in order to describe the paradigm shifts necessary to achieve a

leadership role. The course contrasts the technical paradigm (associated with the role of an individual contributor) and the transactional paradigm (associated with the role of a manager) with the transformational paradigm in FEMA's Independent Study Course – IS 240, that describes the transformational paradigm associated with the role of a leader under the categories of: organizational view, credibility, orientation to superiors, approach to opposition, communication, and vision (see figure 2 – Leadership Competencies).

Era Related Variables

Age and gender are the research variables identified as related to the concept of era in the leadership development model (see Figure 2) that this study is constructing for the purpose of researching Ohio's city public safety directors' role in NIMS implementation.

The relevant eras for this study are established by the workforce eligibility requirements (18 years and older) for Ohio city public safety directors. The literature divides this workforce age range into four generational eras as follows: (a) 1920-1945, labeled The Greatest Generation by Brokaw (1998), (b) 1946-1964, called The Baby Boom Generation by Russell (1993), (c) 1965-1976, labeled as The Baby Bust Generation by Diamond, Lindeman, and Young (1996) and, (d) 1977-2009, which Topscott (1998) has called The Net Generation. Figure 3 shows the current age and gender population of the United States and Figure 4 relates this population to the generational eras.

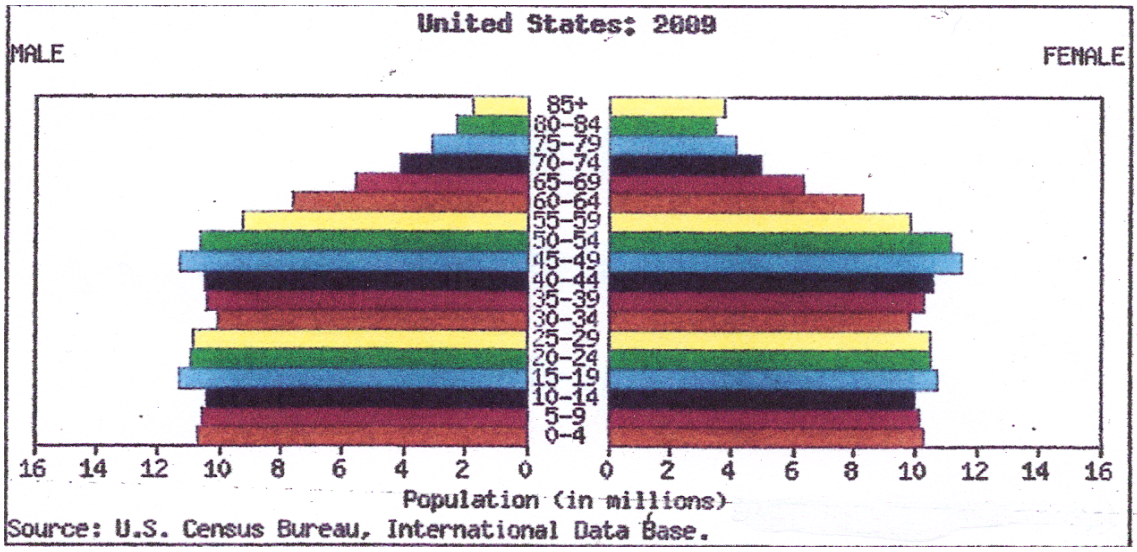

Figure 3. United States (2009) age and gender population

Chart which depicts the age and gender population (in millions) for the United States in 2009. Adapted from the U.S. Census Bureau. Reprinted with permission.

Figure 4. U. S. Percentage of Population Related to Generational Eras

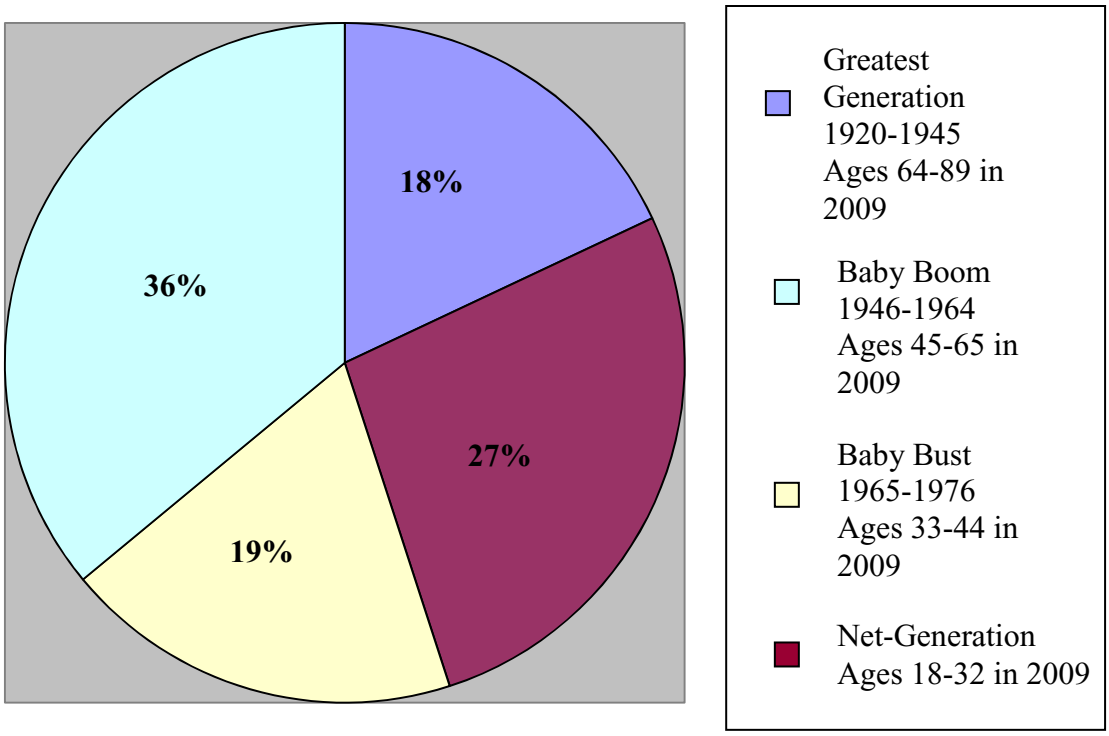

Figure 4. Leadership development model

Note. This figure depicts the U.S. population in 2009 respective to the generational eras.

These figures provide a basis for describing the characteristics common to the four generational eras. Within these eras the gender ratio, male to female, is almost equal; therefore, issues relevant to age and gender are not relevant because one gender outnumbers the other. Descriptions of the conditions within the four generational eras provide a perspective on the formative environment pertinent to the relationship of the

variables of age and gender in concert with the other variables. This perspective should not be confused with the influence of historical eras presented in Chapter 1 as a method for correlating leadership theorists to their theories and their time of influence. Within each of the four generational eras, the literature addresses key conditions and events that serve as era descriptors. These descriptors enable a general understanding of the attitudes, values, and social circumstances prevalent during the birth era of practicing Ohio city public safety directors.

The Greatest Generation Era—1920-1945

Tom Brokaw is credited with naming this generational era. He believed, "This is the greatest generation any society has produced" (Brokaw, 1998, p. xxx), and states, "At every stage of their lives they were part of historic challenges and achievements of a magnitude the world had never before witnessed" (Brokaw, 1998, p. xxi). Some of the major challenges and achievements common to the experience of this generation include; the 18th, 19th, and 21st Amendments to the United States Constitution, the Great Depression, the integration of mechanized transportation into daily life, World War II, the advance of science and technology that allowed the development of mass communication, a shift from the majority of the population residing on farms to cities where they worked in factories, and the use of atomic energy.

On January 20, 1920, the 18th Amendment to the U. S. Constitution went into effect stating; "the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited" (Eggleston, 1916, p. xvi). This Amendment is generally considered the impetus for the origins of

organized crime in the United States. Even though the federal government appropriated funds in excess of $10 million annually and achieved more than 300,000 convictions for violations of the law between 1920 and 1930, the 18th Amendment's enforcement was hopeless. While enforcement was most effective in rural America, where small town values were prevalent, cities were centers of resistance (Mencken, 1968, p. 363). The legislation became a contentious national issue opposed in large measure by upper class, politically influential city residents who totally disregarded prohibition. The national perception of a growing crime problem coupled with the poor image of public law enforcement led to the creation of a national commission on law observance and enforcement in 1929 (Morris & Vila, 1999, pp. 138-140). In 1931, this commission "recognized that Prohibition was unenforceable and reported that it carried a great potential for police corruption" (Schmalleger, 2003, p. 189). The downfall of the 18th Amendment was that, "It damaged American Society by breeding a profound disrespect for the law. In city after city, police openly tolerated the traffic in liquor, and judges and prosecutors agreed to let the bootleggers pay token fines" (Divine, Breen, Frederickson, Williams, & Roberts 2000, Vol. II, p. 565). Ultimately, the urban resistance to the 18th Amendment led to its repeal in 1933 by the passage of the 21st Amendment.

In tandem with the controversy over the 18th Amendment, the country was debating whether women should have a Constitutional right to vote. As 1920 dawned, many political leaders opposed voting rights for women out of fear over a power shift within their parties. Additionally, businesses associated with the sale of alcohol believed that women would vote for laws against selling liquor. Peck, Jantzen and Rosen point out another reason: "And a great many people—women as well as men—were against it

simply because it meant change" (Peck, Jantzen, & Rosen 1987, p. 442). This sentiment prevailed even though eight million women were employed outside the home (French, 1985, p. 219), and 86 percent of public school teachers were women (Hoffman, 1981, p. xv). 21,749 women were employed in public service occupations in 1920, including 899 guards and watchmen, 1,246 marshals, sheriffs, and detectives, 1587 city officials and inspectors, and 230 policemen (Department of Commerce, 1921, p. 182). Women were granted the right to vote with the passage of the 19th Amendment to the U. S. Constitution on August 26, 1920. The Amendment allowed women the right to vote nationally for the first time in the Presidential Election held in November 1920. The results of this election indicated that most women favored the winning candidate from Ohio, Warren G. Harding.

> Fears of great changes at the polls soon proved groundless. In the next few years, it became clear that women tended to vote the same way as men. Still, the 19th Amendment had made women the equals of men at the polls. And it had prompted many women to take a more active role in the world at large. (Peck et al., 1987, p. 444)

After Harding assumed the presidency in 1921, his four Supreme Court Justice appointees were instrumental in striking down a law requiring a minimum wage for women (Peck et al., 1987, p. 457) at a time when many employed women worked in factories earning one-half of the wages paid to men for performing comparable work (Department of Commerce, 1921, p. 94). This gender bias prevailed during a time when factories had become the country's major employer. Draves and Coates refer to 1920 as,

"the last year in which the Agrarian Age existed, and the first full year in which all of society was firmly and entirely in the Industrial Age" (Draves & Coates, 2004, p. 55).

As America moved from an agrarian to an industrial society throughout the prosperous 1920s, people's lives were transformed. For the first time in American history, the majority of the country's population was living in cities, the standard work week was becoming 40 hours, public education was becoming compulsory until age 16, the automobile was becoming a common mode of travel, the aviation industry was developing, and commercial radio and motion pictures were emerging as sources of entertainment as well as news (Draves & Coates, 2004, p. 55).

Among these transforming changes, many historians credit the automobile as having the greatest effect upon the American way of life. By directly employing millions of people and indirectly creating new jobs in supporting businesses, the automotive industry spurred a tremendous growth in national prosperity during the 1920s. As an agent of social change, it went from a luxury status symbol to a necessity, available to most Americans after the development of an installment buying system. The affordability of cars stimulated leisure travel and gave women more independence to travel without men. Automotive travel is considered to be a major contributor toward shifting America's population to suburbia and consolidating small rural public school districts into larger central districts. While these changes in American lives were considered positive and progressive, there were also negative effects. Automotive accidents increased, injuring, crippling, and killing more people each year. Older Americans believed that recreational driving among young people disrupted traditional family life and corrupted morals. The increase in crime during the 1920s and 1930s was attributed to criminals using

automobiles for quick getaways. However, the pleasure, excitement, freedom of travel, and increased standard of living created by car travel far outweighed most people's interest in returning to the horse and buggy (Bailey, 1961, pp. 813-815). Twenty-six and one half million automobiles were registered in the United States by 1929 – almost twice the number as registered in 1920 (Hicks, 1946, p. 619 & 620).

The beginning of 1929 marked a high point for the growth of the automotive industry and the nation's economic growth during the 1920s. However, it also marked the greatest economic disaster in U.S. history. The Great Depression began on October 24, 1929, when the American Stock Market collapsed, plunging the country into a devastating economic depression. Banks failed, businesses closed, millions of people became unemployed, families lost all their savings, and government leadership was required (McCall, Rapparlie & Spatafora, 1974, p. 221). Unfortunately, the federal government, led by President Herbert Hoover, believed the country was at the beginning of a short recession and did not react to the escalating crisis. This caused a lack of confidence in the federal government's ability to manage the situation effectively (Coffman, 1968, p. 98).

Coffman, President of the University of Minnesota, expressed the atmosphere and mood of the country on February 25, 1931, in his speech to the Department of Superintendence of the National Education Association.

> Here we are in the midst of the direst economic debacle the world has ever witnessed. It reaches around the world; it touches all people and affects life on every level. In the United States we are faced with an unparalleled record of

> business and bank failures. Millions are unemployed. Governmental and charitable agencies are called upon to relieve economic and social conditions. Our leaders stand before us helpless, advocating for the most part of a laissez faire policy. They maintain that if things are left alone they will right themselves soon and that when they have once adjusted themselves we shall enter upon a period of permanent prosperity. They would have us believe that panics will cure themselves. Intelligence, courage, and common sense are to be displaced by optimistic blindness. All this, I think, means that we are suffering from a helpless and misguided leadership. (Coffman, 1968, pp. 98-99)

Coffman believed that adult education could alleviate unemployment by giving people technological skills, but by 1932 unemployment reached its highest plateau at 13 million people (Peck, Jantzen and Rosen, 1965, p. 732).

This deteriorating economic environment was the primary issue during the 1932 presidential campaign that elected Franklin Delano Roosevelt. Promising a New Deal Program that would correct the causes of the Depression while relieving unemployment, Roosevelt brought the American people new hope (Bailey, 1961, p. 834). Under his administration, new laws gave the federal government control of the country's monetary system, regulated the stock market, established a Social Security System, required a minimum wage, guaranteed collective bargaining for labor unions, and gave the government the ultimate responsibility for assuring the well-being of the country's people (Goodwin, 1994, pp.42-43). In spite of this massive government effort, the Depression continued into Roosevelt's second term, only ending fully once the World War II

propelled the economy with orders for American manufactured equipment and supplies (Wish, 1961, p. 408). Even as the Depression was ending, economic conditions were still grim for many Americans in 1940. The sixteenth census in 1940 indicates that approximately seven million people were still unemployed. More than two and one half million people were relying on governmental public emergency work as their only source of income. Furthermore, among the 34,027,905 employed males and the 11,138, 178 employed females, almost half the men and two-thirds of the women earned less than $1,000.00 per year (Department of Commerce, 1942, pp. 10-12). Furthermore, among the thirty-five million dwelling units in the country, one-third did not have running water, indoor toilets, bathtubs or showers – and more than half did not have central heating (Goodwin, 1994, pp. 42-43).

By 1940, in stark contrast with Germany's 6.8 million trained and combat-ready forces, the U.S. military consisted of 504,000 active duty and trained reserve personnel – and no inventory of munitions. In terms of size, the U.S. Army ranked eighteenth, behind Holland. This lack of military preparedness was attributable to a prevailing isolationist attitude and lack of military funding during the Depression. These domestic, economic, and military conditions in 1940 are a stark contrast with the dramatic transformation Americans would experience following the Second World War. The economic strife and isolationism made many Americans reluctant to join the War dissolved after the December 7, 1941 attack on Pearl Harbor (Time, Inc. 1960, pp. 668-669).

Over the next four years, American industry responded by operating 365 days a year, 24 hours a day. This resulted in the production of $1 trillion worth of military supplies each week (Time, Inc., 1960, p. 668). At the same time, men flooded the military

recruiting offices, ultimately swelling the ranks of the United States Military to fourteen million men by 1945 (Wish, 1961, p. 570). Industry's increased need for workers and the reduction of civilian male workers reversed the previous of employment practice that denied jobs to married women and relegating women to the low paying jobs that men did not want. By 1941, women were encouraged to work and married women with children were provided the incentive of free day-care so they could work in factories. Additionally, women were provided training to perform jobs requiring skills that they were previously considered incapable of mastering. The result was an integration of women at every level of authority and responsibility in the workforce at greatly improved levels of earning (French, 1985, p. 222). However, as the war was ending in 1945, the pre-war employment status for women re-emerged. The day-care centers were closed and the training programs ended. Women were expected to return to domesticity (French, 1985, p. 222). Perhaps a soldier's response to a government pamphlet entitled;

> "Do you want your wife to work after the war?" expresses the prevalent opinion of the time; "There are two things I want to be sure of after the war. I want my wife waiting for me and I want my job waiting for me. I don't want to find my wife busy with a job that some returning soldier needs and I don't want to find that some other man's wife has my job" (Goodwin, 1994, pp. 555-556).

Even as women were losing their jobs at a rate 75 percent higher than men, Congress established provisions for military veterans. Public Law 346, The Serviceman's Readjustment Act, also known as the G.I. Bill, made veterans eligible for 52 weeks of unemployment compensation upon their return to civilian life along with guaranteed

loans for housing and paid educational benefits (Agel, 1997, pp. 243-255). The Act's educational provisions allowed millions of veterans to obtain college degrees which would have been beyond their financial capacity prior to the war. This influx of students into the higher education system stimulated unprecedented growth in all American colleges and universities – and increased the value placed on education in general (Bailey, 1961, pp. 907-908).

The year 1945 marked the final year of the Greatest Generation Era and World War II. As Bailey (1961) stated, "…the most terrible war in history ended in a mushrooming atomic cloud" (p. 901). The dramatic scientific and technological advances of "the Manhattan Project" had produced an incredible source of energy and destructive power.

> "Despite the shortening of the war and the hope that atomic power might usher in an age of plenty, the Allied peoples were shocked and saddened by the horrible potentialities of the bomb" (Wish, 1961, p. 585). Thus, The Greatest Generation Era ended and The Atomic Age was born, leaving the next generation facing a test of mankind's collective intelligence: "…the struggle to escape annihilation" (Wish, 1961, p. 585).

Those individuals born during The Greatest Generation Era have been positively described as frugal, modest, personally responsible, optimistic, patriotic, and religious. They value education, hard work, personal independence, modesty, unselfishness, community, and family. They have been negatively characterized as blindly supporting government, practicing gender-based discrimination, holding their children to strict standards of discipline, and being old-fashioned (Brokaw, 1999, pp. xix-xxii).

The Baby Boom Era 1946-1964

Russell has devoted her career to understanding the baby boom generation's impact on America. She believed:

> The explanation for the upheaval in American society lies in the baby boom generation itself. The attitudes and values of baby boomers are profoundly different from those of older Americans. These different attitudes and values have permanently changed our culture. (Russell, 1993, p. vii)

Russell identified the consequences of these different attitudes and values as: materialism, divorce, drug abuse, crime, lack of a sense of duty and an unwillingness to sacrifice (Russell, 1993, p. vii). However, baby boomers seem to have conflicting views regarding their membership in this generation. They are both proud of their status as a most powerful generation and painfully aware that their generation is infamously labeled as countercultural (Russell, 1993, p. 15). Russell (1993) stated:

> Whether boomers identify with the commonly held images of their generation does not matter. The power of the baby boom does not stem from a conscious generational identity, but from numbers alone. Baby boomers dominate the demographic landscape. This makes them a prime target for businesses and a mass audience for the entertainment industry. Consequently, American culture bends to their will, reflecting their prejudices and passions. (p. 15)

Born between 1946 and 1964, the baby boom generation is 36% of the United States population today. Representing more than seventy-five million people, it is the largest generation in the history of the U.S. The difference in demographic size is the difference

most often cited throughout historical literature as separating the baby boom from other generations. For each of the 18 years spanning this generational era more than four million babies were born (Merser, 1987, p. 72). This continuous birthrate surprised demographers who had predicted it would end within a year or two. Researchers began seeking answers for this unprecedented baby boom. The impact could be felt in full maternity wards, the need for more classrooms, and the shape of the American economy as they entered adulthood (Light, 1988, p. 9). The positive mood in the era is one reason for the baby boom. The Depression's hard economic times were over; the conclusion of World War II brought the men home while returning women to their traditional roles of housewife and mother. The entire country was enjoying stability as well as good fortune. People believed they could have a good quality of life by conforming to the institution of marriage, raising children, working, and owning a home (Russell, 1993, p. 11-13). This created a standardized childhood environment for baby boomers. Merser (1987) described it as:

> cookie-cutter lives...suburban house with bikes in the driveway, TV in the family room, barbecue grill on the patio...cupboards full of breakfast cereals in many flavors, a station wagon...a state of 'normalcy' that was so rigid it was downright weird. (Merser, 1987, pp.64-65)

Light (1988) seemed to concur with Russell's (1993) and Merser's (1987) assertions about conformity and standardization. He cited the era's standardized residential housing construction as an example, "of the trend toward homogenized homes, families, and baby-boom childhoods" (Light, 1988, p. 110).

Light referenced the description of a standardized kitchen in Goulder's book, *The Best Years,* to emphasize how construction codes contributed to this standardization (Light, 1988, p. 111). Light (1988) stated:

> Along with the norm of two children, two natural, married parents, a brand name appliance, and an American-made car, the standard baby-boom family and home gave the generation a sense of sameness that may have provoked the drive for individualism and tolerance of diversity that distinguishes the baby boom from its parents and grandparents today. (p. 111)

Thus, the baby boom era was the first standardized generation, united by its housing, television, school curricula, economic stability, and fears of nuclear war.

Russell provided a perspective of the baby boomer's world view that seems to generally coincide with most literature on this topic. She characterizes the baby boomers by describing their morality, approach to life, idea of work, and societal effect. Baby boomers rejected the traditional morality of their parents. They engaged in premarital sex at a higher rate than previous generations and have had multiple sex partners prior to marriage. They were slow to marry, preferring to live together instead. When confronted with marital difficulty, they divorced or left their live-in spouses at unprecedented rates. This lack of commitment to marriage also manifests itself in their reluctance to become parents. They were unwilling to accept the responsibility for children and their intrusion into their lives (Russell, 1993, p. 16).

In their youth, baby boomers rebelled against some of their parents' values. This was reflected in their clothes, music, hair length, drug use, and public protests. This battle

against authority resulted in a feeling of political alienation and disinterest in civic duty or public life. Businesses catered to the individualistic baby boomers by giving this large population what it wanted. This, in turn, helped foster baby boomers' dependence on credit – which they used to get what they wanted immediately rather than saving, as their parents had. This made credit card debt among boomers a more acceptable way to manage their financial transactions (Russell, 1993). Both male and female baby boomers rejected their parents' Depression-era work ethic, consistently rating leisure as more important. Women rebelled against their mothers' traditional role of housewife/ by a ratio of five to one. However, while more women pursued economic success as seriously as men, they were paid on the average about half as much during this time (U. S. Department of Labor, 1993, December, p. 1-8).

The baby boomers changed American society because of their large numbers. Their demographic size gave them economic leverage to obtain what they wanted, such as more schools, houses, and jobs. Because more schools were built, baby boomers became the best educated generation in the nation's history compared to the other generations. Residential house construction increased to record levels, mostly in suburban housing developments which required better roads since baby boomers relied on the automobile to get to work. To support the baby boomers' life style, employment opportunities were developed by the millions. These jobs provided equal opportunities for women and other neglected groups, in keeping with baby boomer values. Growing awareness of job discrimination and other forms of bias made civil rights a greater social concern (Russell, 1993, p. 18). The baby boomers customized the culture around them. "They ignored the rules that guided their parents and placed their families, jobs, and country at the mercy of

their personal desires" (Russell, 1993, p. 22).

The Baby Bust Era 1965-1976

The baby bust era represented a sudden drop in the U.S. population. The national birth rate dropped significantly during this 11-year span, reaching the lowest level in recorded American history (14.7 births per thousand people) in 1976 (Easterlin, 1980, p.37). The effects of this sharp decrease on the country were as dramatic as the baby boom era's (Diamond, 1996, p. 22). Bruce J. Schulman believes this era transformed American society, culture, and politics as much or more than the greatest generation or the baby boom era (Schulman, 2001, p. xii). Ben J. Wattenberg, in his 1987 book *The Birth Dearth: What Happens When People in Free Countries Don't Have Enough Babies?,* concurs with Schulman's assessment of the baby bust era.

These factors provide insight into the conditions that impact this generation's zeitgeist. These factors were not isolated; they interacted in many different ways to influence baby bust behavior. This study's review of literature will integrate the socioeconomic, legal/technological/medical, and values factors in examining the baby bust generation.

The effect of urbanization on the baby bust generation might be associated with this era's housing crisis, which was experience particularly acutely in large cities such as New York, Detroit, Milwaukee, Cleveland, and Chicago. State and local governments were struggling to address these problems (Daley, 1974, p. 104). The significance of urban issues was addressed at the federal level through the creation of a new cabinet office, the Department of Housing and Urban Development, in 1965 (Long, 1966, p. 96). The reason for this new cabinet department were given by Chicago's Mayor Richard

Daley in his testimony before Congress regarding housing problems in his city. Daley said, "The city and Federal Government have stepped into this area because private industry failed to meet the needs, particularly for those in the lower economic brackets" (Daley, 1974, p. 105). The country's population shift from rural, spacious farms to crowded, urban cities parallels the drop in birthrate since children can be a problem in a cramped urban apartment instead of being valued workers on the family farm (Wattenberg, 1987, p. 119). This urbanization trend may be placed within context by noting that during this era, the U.S. became the first country in the world with more students in college than there were farmers. By 1969, there were three students in college for every farmer (Gitlin, 1987, p. 21). Additionally, for the first time, there were as many female students as male (Wattenberg, 1987, p. 119). Students in college tend to delay marriage and pursue careers after graduation, reducing the national birthrate because there are fewer years of fertility (Wattenberg, 1987, p. 124). However, while gender parity was achieved regarding college enrollment, "Newspaper ads separated jobs by sex; employers paid women less than men for the same work. Bars often refused to serve women; banks routinely denied women credit or loans. Some states even excluded women from jury duty" (Brokaw, 2007, p. 191). Throughout the nation these conditions for women were being protested. Indicative of this unrest was the female protesters outside the 1968 Miss America Pageant that introduced the general public to the phrase "Woman's Liberation" (Kurlansky, 2004, p. 307). This phrase became a descriptor for one of the most significant movements addressing women's rights during this era and credited with influencing the United States Congress' passage of The Equal Rights Amendment in 1972 (Chafe and Sitkoff, 1983, p. 223). During this time, lesbians were

more involved and identified with women's liberation than with the gay rights movement. All of these movements contributed to redefining masculinity, less restrictive divorce laws, and the weakening of stigmas against unmarried couples or never married individuals (Schulman, 2001, p. 176-181). During the baby bust generation, people began living together openly and the national divorce rate doubled (Brokaw, 2007, p. 18). The result was reduced birthrates due to fewer mothers and fathers, as well as removal of potential mothers through divorce (Wattenberg, 1987, p. 125-126).

Although it might seem logical to assume that wealth would have a positive effect on birthrate, just the opposite is the case (Wattenberg, 1987, p. 120). As the United States entered into the 1970s, "America was not only the richest country in the world; it was producing more goods and services than the *combined* output of Britain, France, West Germany, and Japan" (Chancellor, 1990, p. 60). This prosperity coupled with more women entering the workforce contributed to the baby bust. People did not want to reduce their purchasing power by incurring the expense of raising children (Wattenberg, 1987, p. 120). Additionally, working women did not want to risk derailing their careers by taking time off for child raising (Brokaw, 2007, p. 223).

Further influencing the baby bust era was the legalization of abortion. In 1973, the United States Supreme Court established a woman's absolute right to control her reproductive cycle through its Roe vs. Wade decision (Chafe & Sitkoff, 1983, p. 278). This decision, in concert with the biotechnological and medical advances in contraceptives, made avoiding pregnancy legally acceptable as well as medically achievable.

Thus, the baby bust era is characterized as initiating a new personal liberal ethic – respective to this born in this era. Individuals born into this era generally demonstrate a looser life style – from how they dress to their sexual behavior. Their notions of restraint, decency, and civility are much looser than older more traditional views (Schulman, 2001, p. xv). Additionally, this generation is described as one of activism, suspicious of government, and displaying an approach to leadership that is intuitive—"where a figure is known by style rather than substance…" (Kurlansky, 2004, p. 378).

The Net Generation Era 1977-2009

Tapscott (1998) disputed the traditional description of the net generation as impulsive, materialistic, self-centered, and focused on instant gratification. He contended that these characteristics are misinterpreted, attributing the misunderstanding to an unprecedented change in the hierarchy of knowledge. (Tapscott, 1998, p. 282). For the first time in history a new generation was more knowledgeable and more adept at the use of an emerging technology than their parents (Tapscott, 1998, p. 36). This, in concert with the transition from an industrial, labor-intensive, national economic model to an information and knowledge-driven global economy, helps historians understand this generational era (Naisbitt, 1982, p. 249-252). Tapscott (1998) defined this era as "a generation lap—kids outpacing and overtaking adults on the technology track, lapping them in many areas of daily life" (p. 36), and Naisbitt (1982) describes it as "living in the *time of the parenthesis,* the time between eras" (p. 249).

Tapscott's (1998) and Naisbitt's (1982) observations are borne out by a newspaper article written by Jeffrey Sheban in *The Plain Dealer* (2009, July 5, p. B-2) entitled "Technology Cited for Widened Generation Gap." The article cites a June 29, 2009

report from the Pew Research Center that confirms that the generation gap fueled by information technologies has never been so wide. While technology is increasing the generation gap, it is shrinking the world by electronically linking countries, businesses, and individuals. Technology has become a catalyst for changing the traditional hierarchically structured business model and replacing it with a collaborative structure that empowers individuals (The Plain Dealer, 2009, p. B-2).

Johnson described how the phenomenon of the net generation emerged during President Bill Clinton's administration in the 1990s. Johnson (2001) stated:

> The Internet ushered in a new world, one in which people could sit in their homes and transact business and pay bills, buy and shop, trade stocks and make investments, book travel reservations and rent vacation homes, exchange messages and documents, and move from serious to playtime activities by linking everything from the latest offerings in museum exhibits in Paris and Rome to the most explicit pornography, all in vibrant color. It affected attitudes about society, about work, about government, about private and public interests, about the future. It's the perfect tool for the best of times, the linchpin for the "new economy" of the computer-driven, get-rich-quick, out-for-yourself information age. (p. 18)

This new Internet-driven economy was credited with growing the American economy by more than 33% through 1999 (Johnson, 2001, p. 19). This growth was reflected by the Congressional Budget Office's 2000 forecast of a $6.8 trillion surplus in the federal budget over a ten year period, just as the country prepared to elect a new president (Kotlikoff, 2004, p. 43).

However, within 8 months of the President George W. Bush taking office, the net generation experienced 9/11, the worst terrorist acts ever perpetrated against U.S. These acts profoundly affected the net generation, causing the country to establish The Federal Office of Homeland Security, the war on terrorism, and military campaigns in Afghanistan as well as in Iraq (World Book Focus on Terrorism, 2003, p. 6-8). The terrorist acts significantly weakened the U.S. economy; Congress authorized a $15 billion loan and cash guarantee program to save the airline industry from bankruptcy and estimated spending for national defense was increased from $293,995 billion to $330,533 billion (World Book, Focus on Terrorism, 2003, p. 9). By 2004, as President Bush's first term ended, the Congressional Budget Office's projected $6.8 trillion surplus had been replaced with a nearly $1 trillion deficit (Kotlikoff, 2004, p. 43-44). This economic picture continued to worsen throughout President Bush's second term and into the current first term of President Barack Obama.

Figure 5 shows economic conditions in the U.S. based on the primary indicators economists use to forecast growth or recession. Significantly, every indicator indicates recession and some are at their worst levels in recorded history. Perhaps, influenced by these economic conditions and the collaborative nature of technology, the Obama Administration's approach to prevention of terrorist attacks is different than that of the Bush Administration. Instead of unilateral, anti-terrorism action at the Federal Government level, the Obama Administration is emphasizing collaboration and shared responsibility among individuals as well as at all levels of government ("Napolitano Outlines Terrorism Strategy", 2009, July 30, *The Plain Dealer,* p. A8).

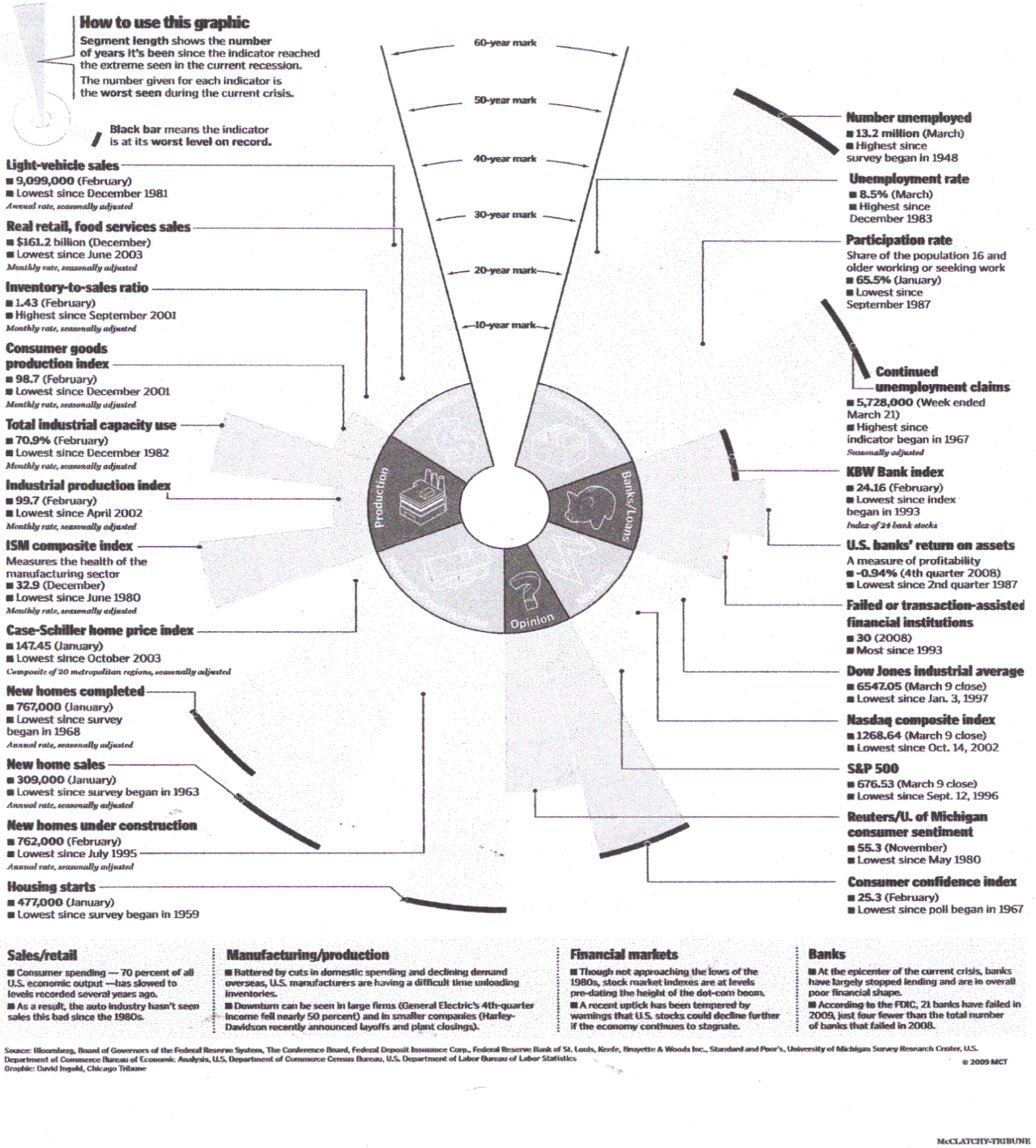

Figure 5. Effects of Economic Conditions in United States

Note. This chart which depicts the effects of economic conditions in the United States. Adapted from "Economy Swirls to Record Lows,", by D. Ingold, 2009, The *Plain Dealer*, 2009. April 8, Section C-1. Reprinted with permission.

Of interest to the gender issues associated with the net generation is President Obama's appointment of the first woman, Janet Napolitano, as the Secretary of Homeland Security. This appointment seems to align with other gender-related actions taken by President Obama. On January 30, 2009, President Obama's tenth day in office, he signed legislation allowing employees the ability to sue more easily for discriminatory acts related to work or pay discrimination (The Plain Dealer, 2009, April 19, p. A7). In March 2009 Obama signed an Executive Order establishing a council to ensure that women are provided the same opportunities as men throughout government agencies (Elliott, 2009, March 12, p. A7). During his announcement of this order, President Obama cited statistics consistent with evidence found in the 2000 Census that men earn on an average of 20% more than women (U. S. Department of Commerce, 2004, p. 7), and that women only hold 3% of the Fortune 500 Companies executive positions (Elliot, 2009, March 12, p. A 7). This executive level disparity exists even though women hold half of the professional degrees and achieve 58% of the Bachelor of Arts degrees in the United States (Caldwell, 2009, p. 21). The issues brought to public attention by President Obama demonstrate his understanding of the gender trends plaguing the net generation and substantiated by a recent national survey conducted by the Pew Research Center's Social and Demographic Trends Project. On September 3, 2009, the Pew Research Center reported that "After marching steadily upward for five decades, the labor force participation rate of women has essentially flattened out" (Pew Research Center, 2009, p. 2). The report also stated:

> Most working moms would rather have a part-time job. Among mothers of young children who have a full-time job outside the home, six-in-ten (61%) say they

> would prefer to work part time. By contrast, just 19% of fathers who have a full-time job and a young child say they would prefer to work part time. (Pew Research Center, 2009, p. 2)

These findings, according to the Pew Research Center, make the stagnation regarding gender issues the most interesting story on this front (Pew Research Center, 2009, p.1). Considering this perspective, Tapscott's (1998) characterization of the net generation as investigative, equipped to create wealth, self-reliant, and conditioned by computer technology to expect immediate responses seems to have merit.

Figure 6 charts the relationship between the traditional characterization of the net generation and Tapscott's (1998) characterization.

Table 2. The Net Generation Characterized

Traditional Characteristics				Tapscott's Characteristics
Impulsive	→	→	→	Investigative: *Critical Thinkers *Authenticate what they hear or see *Focused on how something works *Innovative
Materialistic	→	→	→	Equipped to Create Wealth: *Value a comfortable life and those material things associated with it *Desire product options *Want customization of consumer goods
Self-Centered	→	→	→	Self-Reliant: *Assertive *Preoccupied with maturity *Changeable mindset
Instant Gratification	→	→	→	Expect Immediacy: *Computer technology moves information instantly

Note. This table compares the Net Generation traditional characteristics to the characteristics discussed by Tapscott. Adapted from the Plain Dealer, 2009. April 8, Section C-1. Reprinted with permission.

Individual Factors as Variables

Level of formal education, NIMS knowledge, and NIMS training are the research variables identified as individual factors in the leadership development model (see Figure 2) that this study established for researching Ohio's City Public Safety Directors' role in the implementation of NIMS. These factors are the variables that public administration theory identifies as allowing a given individual to achieve competence in leadership. These factors indicate what an individual has learned, regardless of their era orientation, and help identify the individual's formal education, NIMS knowledge, and NIMS training. However, a review of the literature about these variables requires that each one be clearly defined regarding its meaning. The level of formal education refers to "Education …2. Instruction and training in an institution of learning" (Landau, 1997, p. 225). NIMS Knowledge refers to "Knowledge…4. The accumulated body of facts concerning a specified field of study" (Landau, 1997, p. 398). NIMS Training refers to "Training…1. Systematic instruction and drill" (Landau, 1997, p. 781).

Level of Formal Education

What formal education is supposed to accomplish is a complicated question. However, Fullan (1982) believed education's major purpose was to educate students so they develop individual and social skills. At the same time they are gaining academic and cognitive abilities along with the knowledge necessary to function occupationally as well as socio-politically (Fullan, 1982, p. 10). From this perspective, it would seem there is no disadvantage to an individual's pursuit of the highest level of formal education attainable. However, Thurow provides insight into education's financial disincentive. He estimates that the acquisition of a kindergarten through twelfth grade education costs $65,000. A

Bachelor of Arts costs between $80,000 to $120,000 to obtain. He also contends that sixteen years of schooling equates to $68,000 of foregone earnings (Thurow, 1996, p. 282). Thurow (1996) argued that this financial cost may be offset in a competitive job market because there is a significant financial return potential from an individual's investment in the first sixteen years of formal education. This is the time in life when basic literacy is obtained. An individual further separates him- or herself from the majority of Americans by completing a graduate degree (p. 283).

However, while the private sector may provide financial reward as a motivation for education, an individual's motivation may not stem from the promise of increased earnings. Most public administrators understand that their return on a formal educational investment often will not be in the form of money. Instead, many public administrators get a psychic reward from protecting society and exercising the power to lead governmental programs in the service of society (Shafritz & Russell, 2005, pp. 24-25). Therefore, it would seem that career public administrators are more committed to ideals than to self interest. Senge (1990) referred to this phenomenon as "Genuine Commitment" (p. 171). He contended that individuals committed to personal growth out of a sincere interest to serve others have more energy than they would find in the pursuit of narrower objectives (Senge, 1990, p. 171). Senge (1990) also emphasized that personal growth is a continual process driven by an individual's intrinsic desire and cannot be mandated from outside (pp. 172-173).

Choppin (1991) seemed to confirm Senge's (1990) assertions within the context of total quality management through personal improvement. Choppin (1991) believed that many individuals' approach to commitment is through individually driven academic

education (p. 346). While Choppin (1991) acknowledged the difficulty an individual faces in devoting time and energy to self education, he asserted that without such a commitment, other activities may supersede the educational purpose (p. 348). He suggested that a sense of purpose is necessary for an effective educational experience. Choppin makes the case that if an individual's commitment is in conflict with his or her idealism, that situation can cause a poor career performance (Choppin, 1991, p. 349).

Perhaps this is why Bennis and Thomas (2002) noted that the formal education process and graduate degree attainment can lead an individual to career success despite the sometimes tedious nature of education (p. 102). They also believed that formal education teaches individuals how to learn, an important component for adult learning and development (Bennis & Thomas, 2002, p. 175). Bennis and Thomas's endorsement of learning aligns them with educators at every level (MacKeracher, 2004, p. 15). However, while learning to learn is presented throughout the literature under various terms, it clearly indicates that everyone does not develop the conscious ability to learn (MacKeracher, 2004, p. 17). To be an effective learner in the formal sense, an individual must demonstrate the capability to learn from a chosen curriculum that is presented by others (MacKeracher, 2004, p. 217). Necessary learning skills include: basic learning skills, learning from the curriculum taught, learning from task assignments, and learning techniques to generalize from instructional activities (MacKeracher, 2004, p. 217).

Bok (2006), President Emeritus and Research Professor at Harvard University, confirmed that studies of college students showed improvement in competencies such as generalized knowledge, critical thinking, quantitative ability, and moral reasoning (Bok, p. 8). Furthermore, Bok (2006) stated, "Researchers find that students become

progressively clearer and more realistic about their career plans as they move through college" (p. 287). Kanter (1983) argued that changes in the level of formal education from the 1960s through the 1980s brought about a rare transformational paradigm shift brought on by more complex, intellectually oriented work requirements (p. 42). During this period, the number of individuals in the workforce with sixteen years of formal education increased from five to twenty-five percent (Kanter, 1983, p. 56). Furthermore, Kanter's prediction that this trend will continue is validated by the 2000 Census, which showed that the number of or individuals with 16 years of formal education in the workforce has risen by 3.9 percent since 1980 (U.S. Department of Commerce, 1980, p. 1- 23).

Kanter (1983) believed that these emerging formally educated employees have shifted how authority is exercised in organizations (p. 56). Instead of administrators exercising direct control over employees, Kanter (1983) contended that formally educated individuals have created pressure on organizations to allow them to work more autonomously where indirect authority allows these individuals flexibility and freedom to meet their career expectations (p. 56-57).

Kanter's (1983) perspective has implications for the implementation of NIMS and the level of formal education attained by Ohio city public safety directors. Some individuals in a career as an Ohio City Public Safety Director may have prepared themselves through the study of public administration, but it is not necessary.

This presents a conundrum regarding public administration's status as a legitimate independent academic field. The history of the development of public administration study is fraught, and a variety of its curricular elements are contained in other fields. This

suggests that individuals who prepare within other disciplines may attain the basic tenets of public administration without completion of a degree or a specific public administration orientation. Shafritz and Russell (2005) acknowledged: "As an independent academic field, public administration has always been controversial" (p. 27). Public administration was first considered to be within the curriculum of political science. Then it became a specialty area within business or management schools (Shafritz & Russell, 2005, p. 27).

Fry (1989) explained public administration's origins by focusing on pioneering theorists who influenced its development toward an independent field (p. 1). Fry first used Weber's theories to place public administration in a broader historical context. Fry establishes Weber's notion that bureaucracy is, "the most rational and efficient form of organization yet devised by man" (Fry, 1989, p. 15). Weber's contention that bureaucracy embodies the concept that the rule of law is impersonal and equally applied sets the stage for Fry's concluding chapter about Waldo's assessment of the administration-as-politics approach (Fry, 1989, pp. 4-15). This approach asserts that it is neither possible nor desirable to separate administration from politics (Fry, 1989, p. 11). For this reason, it is essential to identify the political environment within which a public administrator must perform and note the characteristics that distinguish public administration from private administration.

However, Fry's book was not intended to be a public administration textbook. Fry (1989) wanted students to have exposure to the specific ideas of the theorists and their direct words (Fry, 1989, p. 13). Of importance to this study is Fry's emphasis on the influence of theorists found in public administration textbooks that correlate with the

theoretical foundations of researching NIMS implementation presented in Chapter 1. This is substantiated by Denhardt, Denhardt, and Aristigueta (2002). They cited Weber (p. 225), McGregor (p. 12), Maslow (p. 22), Fiedler (pp. 192-193), Bass (pp. 201-202), Burns (pp. 199-202), Kouzes (p. 198), and Kotter (p. 377) as a method for identifying core curricula deemed necessary by The National Association of Schools of Public Affairs and Administration. (Denhardt et al., 2002 p. xiii). Additionally, this core textbook identified basic concepts that should be included in developing an individual's management ability (Denhardt, et al., 2002, p. xiii). These concepts include: communications, motivation, teamwork, group dynamics, decision making, power, influence, and leadership (Denhardt, et al., 2002, p. xiii). These concepts are recognized as helping students understand the implications of their actions in real situations, while stimulating an individual's need for continuing to learn (Denhardt, et al., 2002, p. xiii).

All these concepts are addressed within the Emergency Management Institute's (EMI's) Leadership and Influence Course in support of NIMS implementation (FEMA, 2005).

Furthermore, Denhardt, et al. (2002) indicated the importance of transformational leadership, thus their theoretical foundation supports the leadership approach taken by the NIMS implementation system. Denhardt, et al. (2002) wrote: "it is interesting that perhaps the most powerful formulation of leadership in the modern era—the idea of 'transformational leadership'—has its roots in studies of political and governmental leadership" (p. 199). This notion of transformational leadership origins aligns with Fry's argument that public administration establishes its cohesiveness more as an object of analysis rather than an intellectual discipline. Fry attributed this to the field of public

administration's history of borrowing from other fields of study and cumulatively adding new ideas to old ideas rather than replacing them (Fry, 1989, p. 12). Fry (1989) contended that this borrowing accounts for the tension within public administration regarding its independent identity. Thus he concludes his book with Dwight Waldo's perspective that the field's overlooked history provides insight despite the lack of agreement regarding its philosophy or intellectual core (p. 235). Ultimately, Waldo prefers to consider public administration a multi-disciplinary approach for an individual preparing for a public service career and rejects the notion that it is a sub-discipline within other fields of study (Fry, 1989, p. 241). Accordingly, Waldo subscribed to thinking of public administration within the context of professionalism and identifies it as the primary mechanism for government to make the decisions central to policy implementation and transformational change (Fry, 1989, pp. 242-243).

With this understood, McKenzie (1993) provided a description of professionalism that allows for variability within a level of formal education. Formal education helps individuals share common knowledge within an occupation and establishes professionalism. This specialized knowledge, along with self-regulation and rigorous preparation, helps establish public confidence in public administrators (Chapter 1, pp. 20-21).

McKinney and Howard's (1998) emphasis on middle and lower level public administrative positions is applicable to the position of Ohio Public Safety Director. In their book titles Public Administration: Balancing Power and Accountability, these authors point out that most individuals studying public administration will spend their careers at these levels of responsibility serving state or local government. Furthermore,

they identify middle and lower level public administrators as, "key translators of policy objectives into program outputs in the delivery of services" (McKinney & Howard, 1998, p. xi). McKinney and Howard also note that policy implementation is the key component of public administration. While most people focus attention to known federal, state, or city policy makers, it is the unknown middle and lower level public administrators that actually perform – over extended periods of time – the complex tasks necessary for policy implementation (McKinney & Howard, 1998, p. 77). For this reason, they encourage schools of public administration to teach the traditional elements that distinguish the field from political science or business administration so that students understand how to routinely implement policy at the middle and lower levels (McKinney & Howard, 1998, pp. 60-62). Considering the literature reviewed thus far, Shafritz and Russell (2005) seem to present a compelling explanation that public administration is an independent academic field that incorporates so much curriculum from other disciplines of study that it fuels the argument against it as a legitimate academic field. Figure 6 illustrates Shafritz and Russell's explanation that other disciplines coalesce around a core; however, public administration is informed by the interdisciplinary elements that contribute to its formation and does not have its own core (Shafritz & Russell, 2005, p. 26).

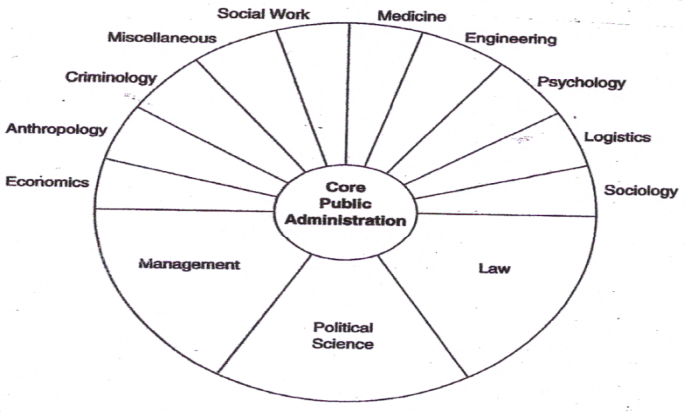

Figure 6. The interdisciplinary nature of public administration.

Note. This figure depicts the field of public administration as the core component and the applications and professions that contribute to this core field (public administration). Adapted from "Defining Public Administration", by J. Shafritz and E. W. Russell, 2005, Introducing Public Administration. Reprinted with permission.

NIMS Knowledge

Hesselbein (2002) saw the events of September 11, 2001 as the cause of worldwide turbulence that has created a crucible for leaders to understand they are leading in a changed world (Hesselbein, 2002, p. 95). Hesselbein (2002) stated, "the time is now to describe the organization of the future for leaders of the future as mission-focused, values-based, and demographics-driven" (p. 96). Additionally, Hesselbein (2002) listed "Not taking charge of one's own personal learning and development" (Hesselbein, 2002, p. 39) as a self-imposed barrier to leadership that is future focused, raises employee performance, and provides the greatest potential for organizational success (Hesselbein,

2002, p. 40). Hesselbein's perspective gives credence to the idea that NIMS knowledge should be considered in the broader informational context of an individual's total learning. This observation would go beyond the knowledge acquired through the NIMS compliance curriculum which is required to certify NIMS compliance in accordance with the Federal Department of Homeland Security's requirements. Smith (1990) provided an understanding of the potential influence compliance-driven, specialized NIMS knowledge would have upon NIMS implementation. Smith believed that specialization of this type loses any sense of connection to the unifying information that develops into wisdom or that serves greater effects (Smith, 1990, pp.294-295).

The research regarding the background and development of NIMS presented in this study provides the broader, informational parameters of NIMS knowledge that is accessible to Ohio city public safety directors . The following list of courses within the Emergency Management Institute – offered through the independent study program – represents the specialized NIMS knowledge that is required for NIMS implementation and to meet compliance objectives at the state, territorial, tribal, and local levels – as defined by FEMA under The Department of Homeland Security (as updated on October 2, 2009).

- IS-100.a (ICS 100) Introduction to Incident Command System
- IS-100.HC Introduction to the Incident Command System for Healthcare/Hospitals
- IS-100.HE Introduction to the Incident Command System for Higher Education
- IS-100.Lea Introduction to the Incident Command System for Law Enforcement

- IS-100.PWa Introduction to the Incident Command System for Public Works Personnel
- IS-100.SCa Introduction to the Incident Command System for Schools
- IS-200.a (ICS 200) ICS for Single Resources and Initial Action Incidents
- IS-700.a National Incident Management System (NIMS), An Introduction
- IS-800.b National Response Framework, An Introduction

(Emergency Management Institute, 2009, October 2, p. 1)

Of particular interest to understanding the variable of NIMS knowledge is course IS-240, Leadership and Influence. This course is not required by The Department of Homeland Security to meet NIMS implementation and compliance objectives. For this reason, IS-240 serves as a key example of Hesselbein's (2002) perspective regarding the value of an individual's personal learning initiative as well as Page's beliefs relative to specialization versus achieving greater end results through broader generalized knowledge. This course identifies NIMS as the federal initiative developed in response to Presidential Directives HSPD-5 and HSPD-8 (U.S. Department of Homeland Security, 2005 December, p. 1.7), the six major components of the NIMS approach (U. S. Department of Homeland Security, 2005, December, pp. 1.9- 1.10), nine leadership theories worthy of further study (U.S. Department of Homeland Security, 2005, December, p. 1.13), and a reference library for accessing more information as part of each instructional unit (U. S. Department of Homeland Security, 2005, December, p. 1.19, p. 2.32, p. 3.14, p. 4.23, p. 5.39, p. 6.15). Furthermore, IS-240 informs this study and acts as the crucible for NIMS implementation's leadership competencies as presented

in the introduction to Chapter 2.

NIMS Training

Throughout the literature, researchers value training as an essential investment necessary for achieving employee performance objectives and developing their skills (Moorhead & Griffin, 1995, pp. 141-142). Organizations that direct greater resources toward training develop competencies and foster confidence among all levels of their organizational hierarchy. This, in turn, achieves higher employee commitment, involvement, understanding, and alignment with the organizational goals (Kouzes & Posner, 2002, p. 292). However, Bennis (2003) argued that the way people are usually taught is inadequate, stating, "Training is good for dogs, because we require obedience from them. In people, all it does is orient them toward the bottom line" (Bennis, 2003, p. 41). Bennis supports this statement by comparing a list of terms under the headings of education (what a leader receives) versus training (what a manager receives).

Table 3.

Differences between Training and Education

	Education	Training
	inductive	deductive
	tentative	firm
	dynamic	static
	understanding	memorizing
	ideas	facts
	broad	narrow
	deep	surface
	experiential	rote
	active	passive
	questions	answers
	process	content
	strategy	tactics
	alternatives	goal
	exploration	prediction
	discovery	dogma
	active	reactive
	initiative	direction
	whole brain	left brain
	life	job
	long-term	short-term
	change	stability
	content	form
	flexible	rigid
	risk	rules
	synthesis	thesis
	open	closed
	imagination	common sense
The Sum:	Leader	Manager

Adapted from “On Becoming a Leader,”, W. Bennis, 2003, . Copyright 2003 by Basic Books.

Furthermore, Bennis (2003) also compiled a list of terms describing what a leader needs to master the context of the organization versus the terms a manager needs to learn to conform to the context of the organization. These lists provide insight into Bennis's thinking about education verses training.

Table 4.

Differences Between Leaders and Managers

Leader	Manager
innovates	administers
original	copy
develops	maintains
people focus	system & structure focus
inspires trust	relies on control
long-range perspective	short-range view
asks what and why	asks how and when
future oriented	bottom line oriented
originates	imitates
challenges the status quo	accepts the status quo
self-assured	responsive

Adapted from "On Becoming a Leader,", W. Bennis, 2003, . Copyright 2003 by Basic Books.

In the same vein, Schwahn and Spady (1998) also aligned a leader with education. However, they believe that leaders' education should allow them to shift away from the limits of current assumptions to ideas that enable everyone in the organization to achieve the highest possible levels of performance (Schwahn & Spady, 1998, pp. 63-65). This shift organizes education around a new set of expectations oriented toward learning mastery, rather than current expectations, which are guided by isolated criteria.

Table 5.

New versus Current View of Leaders

New View	versus	Current View
Ends		Means
Purposes		Procedures
Results		Resources
Outcomes		Processes
Goals		Roles
Learning		Teaching
Achievement		Programs
Performance		Curriculum
Standards		Time
Competence		Content
Life		School

Adapted from "Total Leaders: Applying the Best Future Focused Strategies to Education,", C. J. Schwan and W. G. Spady, 1998, p. 64. Copyright 1998 by American Association of School Administrators.

Schwahn and Spady (1998) believed that the "New View" terms portray clearly defined expectations and performance criteria that provide the learner with multiple opportunities for achieving the desired level of performance based on expectations at each level. The "Current View" terms, however, represent more ambiguous expectations (p. 64).

FEMA also has identified training as one of the most critical activities that must be completed by federal, state, territorial, tribal, and local jurisdictional entities. Furthermore, FEMA advocates training that is participatory and that integrates all jurisdictional entities as well as community-based non-governmental organizations (FEMA: NIMS Training, p. 1). The NIMS Integration Center strongly supports this view in a document containing frequently asked questions about who must take NIMS

Training (FEMA:NIMS Training, p. 1). The NIMS Integration Center advocates training for all personnel having a direct role in emergency response and management. The document then names applicable emergency services disciplines: emergency management services (EMS), hospitals, public health, fire, law enforcement, and public work/utilities. The Center also includes skilled support personnel as well as other emergency management response, support, and volunteer personnel. (Ohio Homeland Security, 2008, p. 1). The Center also advocates NIMS training for entry level personnel, first line supervisors, and middle management – as well as command and general staff (Ohio Homeland Security, 2008, p. 1).

FEMA's approach to NIMS training across all of these entities and personnel categories appears throughout EMI's curriculum for the "Leadership and Influence Independent Study" course. This course parallels the educational qualities Bennis associates with a leader as well as Schwahn and Spady's new view of educational expectations. In Unit 1: Course Introduction, the materials state: "By its very nature, emergency management connotes leadership—safeguarding life and property by marshalling both the will and the required resources to respond to and recover from an emergency quickly" (FEMA, 2005b, p. 1.2). Unit 7: Course Summary espouses the attributes of transformational leadership when it lists the qualities demonstrated by an effective leader (FEMA: Leadership and Influence, 2005, p. 7.1). The "Leadership and Influence Course" lists 15 leadership behaviors that correlate to Bennis, Schwahn, and Spady's assertions. Therefore NIMS training, while acknowledging the usefulness of past training methodology in some situations, is oriented more toward a transformational paradigm that guides entry level supervisory managers, staff, and command personnel to

perform their duties more effectively (FEMA, Leadership and Influence, 2005, p. 7.1).

Experience Related Variables

Years of prior emergency field experience is the research variable that relates most closely to the concept of "experience" in the leadership development model (see Figure 2) that this study will use to research the Ohio city public safety directors' role in NIMS implementation. This variable reflects the knowledge and skills a practitioner acquires in previous emergency-related occupations prior to becoming an Ohio city public safety director. Therefore, the variable of prior emergency field experience should be understood to extend beyond the simple duration of an Ohio City Safety Directors' involvement in one or more emergency fields. Kotter (1998) described this variable as the personal abilities which contribute to effective leadership and which are developed through prior work experience (p. 28). Kotter (1988) listed several leadership abilities that are developed in prior career experiences: organizational knowledge, industry relationships, proven reputation for success in prior job assignments, abilities as well as skills, and a high motivational energy level to lead (pp. 29-34). Figure 9 compares and contrasts Kotter's requirements for effective leadership, such as inborn innate mental capacity, childhood experiences, and formal education/training, with those attributed solely to career experiences. Kotter's analysis about why an individual provides effective leadership has led him to conclude that organizational knowledge, reputation, ability as well as skills, and high motivational energy level are ultimately the result of inborn capacity, childhood experiences, formal education/training, and, very importantly, a number of career experiences (Kotter, 1988, p. 38).

NIMS Leadership Behavior	Bennis Education=Leader	Schwahn/Spady New Educational View
1. Plan for the future	Long-range perspective	Ends
2. Remain up to date with emerging issues and trends	Inspires trust	Achievement
3. Communicates a sense of where the organization will be over the long term	Future oriented	Outcomes
4. Faster commitment	Inspires trust	Achievement
5. Emphasize organizational values	Develops	Purposes
6. Challenges people with new goals and aspirations	People focus	Goals
7. Creates a sense of excitement or urgency	Challenges the status quo	Purpose
8. Inspire people to take action	Original	Competence
9. Manage the efficiency of operations	Self-assured	Standards
10. Evaluate proposed projects	Asks what and why	Achievement
11. Integrates conflicting perspectives and needs	Develops	Learning
12. Manage performance	People focus	Performance
13. Focus on results	Develops	Results
14. Solve problems	Innovates	Life
15. Influence operational decisions	Originates	Standards

Figure 7: Correlation of the 15 Leadership Behaviors

Note. This figure depicts the correlation of the 15 Leadership Behaviors Identified in the FEMA Leadership and Influence Course with Bennis's (2003), Schwahn's, and Spady's (1998) Assertions.

Origins	Personal Requirements Needed\ for Providing Effective Leadership
1. Inborn Capacity Innate Mental Ability A and C	A. Motivation High Energy Level Strong Desire to Lead
2. Childhood Experience Building on and Supplementing inborn Capacity A, B, and C	B. Personal Values High Integrity Values all People and Groups of People
3. Formal Education/Training Capacity to Think Strategically Multi-dimensionally C	C. Abilities and Skills Analytical Ability Strong Interpersonal Skills
4. Career Experience Building on and Supplementing Requirements A, B, and C A, C, D, E, and F	D. Proven Reputation for Success in Prior Job Assignments Excellent Reputation Strong Track Record in a Broad Set of Activities
	E. Industry Relationships Broad Set of Solid Relationships Relationships in the Field or Organizations
	F. Organizational Knowledge Broad Knowledge of the Field Broad Knowledge of the Organization

Figure 8. Origins of Personal Requirements Required to Provide Effective Leadership

Note. This figure depicts the Origins of Personal Requirements Required to Provide Effective Leadership. Adapted from "Origins of Personal Requirements Required to Provide Effective Leadership", by J. P. Kotter, 1988, The Leadership Factor. Reprinted with permission.

Burns (1978), Bass (1998) and Kouzes and Posner (2002), who were described in Chapter One as providing theoretical foundations for this study, seem to support Kotter's analysis. Burns (1978) expressed the need to examine inborn capabilities because they represent the foundation for what may ultimately become effective leadership (pp. 61-62). Burns (1978) believed that childhood experiences build on biological capabilities – and together they are influential in an individual's assumption of a leadership role (p. 105). Additionally, he saw formal education and training as raising an individual's self-esteem, which may result in self-actualization (Burns, 1978, p. 449). However, Burns (1978) pointed out that transformational leadership may be nurtured more in the home and in the workplace than in schools (pp. 449-450). Burns (1978) stated, "*Real* leaders—leaders who teach and are taught by their followers—acquire many of their skills in everyday experience, in on-the-job training, in dealing with other leaders and with followers" (p. 169).

Bass seems to agree with Burns when he addressed using life history data as a predictor of transformational leadership (Bass, 1998, p. 92). Bass researches personnel interviews, work applications, and personnel history forms. He then correlates leadership potential to a variety of experiences:

- Homes that held high expectations for children
- Parents who support their children's best efforts regardless of success or failure
- Age at beginning of initial paid employment
- Volunteer work
- Learning to swim and ride a bicycle

- Early supervisory experience
- Hiking and camping
- High school athletics
- Previous work or organizational experience as a leader (Bass, 1998, p. 93).

However, the biggest predictor of leadership potential was previous work assignments and responsibilities (Bass, 1998, p. 93).

Kouzes and Posner (2002) also described the value of experience. Kouzes and Posner's research indicated that exemplary transformational leaders seek opportunities to change, grow, innovate, and improve bureaucratic systems (Kouzes & Posner, 2002, p. 176). They wrote, "Experience is about active participation in situational, functional, and industry events and activities and the accumulation of knowledge derived from participation" (Kouzes & Posner, 2002, p. 30). Rather than experiencing a series of routine activities and ordinary tasks in the workplace, these leaders are internally motivated to take initiative with energy and enthusiasm – and to achieve extraordinary results (Kouzes & Posner, 2002, pp. 176-181). Furthermore, there is evidence that motivation that comes from external rewards (i.e., pay increases or promotion) or punishments (i.e., pay stagnation or demotion), actually lowers performance (Kouzes & Posner, 2002, pp. 185-186). Conversely, intrinsic motivation drives an individual to excel by seeking more challenging job assignments that offer opportunities for leadership (Kouzes & Posner, 2002, pp. 196-197).

Kotter, Burns, Bass, Kouzes and Posner help identified the importance of field related career experiences as well as recognizing the personal requirements necessary for

effective leadership. This suggests that prior emergency field experience is the most important variable for Ohio city public safety directors' leadership in implementing NIMS. However, other important contributions include: inborn capacity, childhood experiences, formal education, and training – as well as other workforce experience. With this understood, historically experience has been invaluable in the field of emergency preparedness (Alexander, 2002, p. 302). This is due in part to the lack of institutions of higher learning offering degrees or postgraduate courses in emergency preparedness or disaster management. As recently as 2000, only one percent of U.S. colleges and universities offered diplomas, certificates, or degrees in emergency management and fewer than four percent offered disaster training as part of the qualifications for other credentials (Alexander, 2002, p. 301).

Previous emergency preparedness experience is vital, too, because of the fragmentation and lack of cohesion in the field of emergency training. David Alexander states, "Although emergency-training needs, and the means of satisfying them, are not especially difficult to identify, there is no firm consensus on what needs to be done" (Alexander, 2002, p. 289). The lack of educational opportunities, coupled with a lack of consensus on training needs, confirms why NIMS was necessary following September 11, 2001. Even though NIMS has established a common national platform for training and qualifying emergency management and response personnel, previous and on-going emergency field experiences are part of the criteria for professional and career progression (National Integration Center (NIC), 2008, February, "National Incident Management System (NIMS): Five-Year (NIMS) Training Plan", pp. 1, 5-6).

Summary

Whether a given Ohio city public safety director is leading NIMS implementation is influenced by the variables presented in this chapter. The research literature helps to identify how each variable contributes to a given Director's situation. Seeing the variables as components in a larger leadership development model avoids viewing them only in isolation and allows them to be seen as conjoint elements in determining an Ohio city public safety director's leadership of NIMS implementation.

The literature cited delineates the characteristics that would enable an Ohio city public safety director to ascribe to the transformational leadership paradigm which is recommended for effective NIMS implementation. Thus, transformational leadership abilities, already present in the NIMS program, essentially transcend the director's legitimate power to lead NIMS implementation and the Ohio statutes.

This chapter's literature-based description of the research variables will provide the basis for the data collection, design and methodology, and data analysis in chapter 3.

Chapter 3: Research Design and Methodology

Introduction

The preceding chapters describe historical and current federal and state constitutional provisions, statutes, and regulations that affect the implementation of NIMS within the complicated system that shapes the position of Ohio's city public safety director. This complexity is a consequence of political and public policy conditions that have changed as Ohio cities grew. Determining whether Ohio city public safety directors are leading NIMS implementation pivots on answering this study's two research questions through quantitative analysis of the variables.

This chapter presents descriptions of the study's research design and methodology. The descriptions fall under the following headings: research design and approach, setting and sample, instrumentation and materials, data collection and analysis, and protection of participants. This arrangement of the components will provide the foundation for reporting and discussing the results in chapter 4.

Research Design and Approach

The study used a cross-sectional, nonexperimental, descriptive research design. A 30 statement survey questionnaire was developed by a panel of experts using the Delphi technique. The data collected from the responses of 25 Ohio city public safety directors to this questionnaire instrument investigated the problem that Ohio citizens might be at risk because it is not known if Ohio city public safety directors are being used to lead NIMS implementation. The data collected also helped answer the following two research questions:

Research Question 1

Is there a significant difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency field experience, NIMS certification and training, years of experience as an Ohio city public safety director, NIMS leadership role, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the state of Ohio?

- Null hypothesis—(H_O) There is no significant statistical difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency field experience, NIMS certification and training, years of experience as an Ohio City Public Safety Director, NIMS leadership role, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the state of Ohio.
- Alternative hypothesis—(H_A) There is a significant statistical difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency field experience, NIMS knowledge and training, years of experience as an Ohio city Public Safety Director, NIMS leadership, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the State of Ohio.

Research Question 2

Are there significant differences among practicing Ohio city public safety directors and their competency levels to lead NIMS implantation in Ohio cities?

- Null hypothesis—(H_O) There is no significant statistical difference among practicing Ohio city public safety directors and their competency levels to lead the NIMS implementation in Ohio cities.
- Alternative hypothesis—(H_A) There is a significant statistical difference among practicing Ohio city public safety directors and their competency levels to lead the NIMS implementation in Ohio cities.

Nonparametric, chi-square, quantitative statistical analysis methods were used to test the independence between the variables identified in the first research question and the normalcy of distribution regarding the competency level among practicing Ohio city public safety directors relative to the second research question. This approach met the criteria established for using non parametric methods and statistics when the assumption of normalcy cannot be me (Bluman, 2002, p. 584) and when dealing with data that are frequency counts (Aczel & Sounderpandian, 2006).

Setting and Sample

Due to the statistical conclusions to be derived about a study's population, the process of selecting a representative segment of the entire population is important (Aczel & Sounderpandian, 2006, p. 25). While the process may be done through sampling a smaller subset of individuals within the total population, there exists the possibility that a sample of this kind may not exhibit similar characteristics to those in entire population (Sincich, 1990, p. 264). Obtaining data from all of the individuals that exist in the entire

population of interest optimizes accuracy in a research study's findings (Kumar, 1996, pp. 148-149). Kumar (1996) emphasized the effect of sample size by listing two factors influencing the inferences that may be made from a sample. They are:

1. The size of the sample—findings based upon larger samples have more certainty than those based on smaller ones. As a rule, the larger the sample size, the more accurate will be the findings.
2. The extent of variation in the sampling population—the greater the variation in the study population with respect to the characteristics under study, for a given sample size, the greater will be the uncertainty. [In technical terms, the greater the standard deviation, the higher will be the standard error, for a given sample size, in your estimates] (Kumar, 1996, p. 152).

To ensure the inclusion of every characteristic exhibited by this study's population of interest, the population records serving as the sampling frame consists of all the individuals currently employed in the position of Ohio city public safety director. As Cozby (1989) stated, "Subjects are an integral part of the research process….The method used to select subjects has implications for generalizing the research results" (p. 107). Cozby's assertion was further supported by Maxfield and Babbie's (2001) statement that, "The correspondence between a target population and sampling frames affects the generalizability of samples (p. 229). For this reason, it is important to have an accurate source that provides a complete list of the researched individuals. Often, a membership roster from an organization or professional associations can serve as an acceptable sampling frame (Maxfield & Babbie, 2001, p. 229). The Ohio Association of Public Safety Directors was contacted to obtain a directory of public safety directors. This

association did not have such a directory, but suggested contacting the Ohio Attorney General's office. The Attorney General's office referred the request to the Ohio Department of Public Safety. However, the Ohio Department of Public Safety had no listing and no suggestions about where such a directory or list could be found.

However, it was important to assemble a complete and verifiable sampling frame that includes all the individuals currently serving in the position of Ohio city public safety director. So a seven-step process was implemented. First, based on the year 2000 Federal Census Data and the Ohio Almanac, a list of incorporated Ohio cities was generated (Baskin & Bryant, 2004, pp.601-620). Second, a list of all Ohio cities was generated from "The Year 2007: Community Profiles Directory of Cities, Counties, Townships, Villages & Public Officials" (pp. 17-386). Third, these two lists were compared and contrasted so that all cities from each of the three sources could be compiled into a comprehensive master list. Fourth, the master list of 256 Ohio cities was researched on the internet to verify each city's status as an Ohio city and its home rule status. The websites also provided the names of the people employed as each city's safety director. Fifth, a spread sheet was generated that listed the city name, address, safety director's name, position title, and home rule status. Sixth, the cities whose websites did not name the position or a person as safety director were contacted by telephone to determine if the position or person existed. Appendix A displays the master list spreadsheet with the resulting list of 205 Ohio city public safety directors. This constitutes the sampling frame for this study.

The literature cited earlier notes the importance of using an appropriately sized population sample to determine accurate results. In order to ensure accurate findings, the

study surveyed 204 out of the 205 Ohio city public safety directors in the sampling frame. In other words, the study's sample size consisted of every Ohio city public safety director within the sampling frame with only one exception. The exception was an individual who served in the dual role of Mayor and Safety Director. This exempted individual was excluded because he was a member of the panel of experts involved in developing this study's survey questionnaire instrument. His responses to the survey might have skewed the overall results.

Instrumentation and Materials

The data for this research study were collected from participants by administering a self-reported survey questionnaire. This instrument measured the six main research objectives along with their corresponding subobjectives. Collectively studying the objectives and subobjectives provided answers to Research Questions 1 and 2. The questionnaire instrument consisted of two sections: Demographic Data Sheet and Safety Director Questionnaire (Appendix D and Appendix E).

The demographic data section described the participating individuals within the sample population relative to age, gender, level of formal education, prior emergency field experience, NIMS certification, NIMS training, years of experience as an Ohio city public safety director, and NIMS leadership role. This demographic information enabled for a classification of the sample population into sub-groups for comparing and contrasting the respondents' responses with the data collected from the Safety Director Questionnaire section.

The Safety Director Questionnaire contained 30 statements testing the following research objectives: the impact of formal education, the impact of prior emergency field

experience, the relationship between NIMS certification and training achieved and leadership of NIMS implementation, and the relationship between years of experience as a safety director and knowledge of the statutory authority and duties relative to leadership of NIMS implementation among Ohio city public safety directors. True or false answers to each of these 30 statements meant that there was either a positive or negative correlation with a particular research variable, helping to contribute to the study's findings.

The assessment of the survey questionnaire instrument's reliability and validity was accomplished by using the Delphi technique to develop this research tool. A definition of the Delphi technique is provided by Worthen and Sanders (1987):

> A variant of survey procedures for collecting group consensus and judgmental data is the *Delphi technique*, in which a panel of experts responds independently to a mailed set of questions. A follow-up report to the panel summarizes responses, using the median and interquartile range as descriptive statistics for the responses to each original question (p. 312).

The panel of experts assembled for development of the survey questionnaire instrument consisted of: one city public safety director/mayor, one emergency management director/professor, one city police chief, one city fire chief, one officer of the Ohio Association of City Directors/City Public Safety Director, one Ohio NIMS implementation advisory board member, and one Ohio University Professor, credentialed to provide NIMS instruction.

Utilizing the Delphi Technique, this panel of experts helped the survey meet the definition of reliability supplied by Kumar, "if a research tool is consistent and stable,

and hence, predictable and accurate, it is said to be reliable" (Kumar, 1996, p. 140). The Delphi Technique process also met Cozby's standards for validity of a survey questionnaire instrument. Cozby (1989) wrote: "validity is a question of whether the measure that is employed actually measures what it is intended to measure" (p. 31).

The panel of experts was asked to compare their first round responses to proposed questionnaire statements and revise their responses if desired. Panel members were also asked to justify any deviation from the panel's majority judgment if their second round responses were outside the interquartile range. The second round responses were summarized, and panel members were asked to reconsider their second round responses after the results and reasons were compiled. A panelist respondent who desired to remain outside the interquartile range on the third round was asked to present reasons for consideration by other panelists toward changing the accepted response. On the fourth and final round, panel members were asked to make final revisions of their responses.

A letter was sent inviting experts who achieved the professional status required for development of the research instrument along with the dissertation consent form (Appendix J & K), a demographic information request (Appendix F), a Delphi Technique methodology document and the first round questionnaire (Appendix G & H) . The experts were then subsequently sent second and third round questionnaires with summaries from the results obtained on the first and second round questionnaires. The fourth and final round documentation displayed the final questions that would be used on the survey instrument (Appendix I). This documentation provides the consensus of correct answers to the 30 questions correlated with this study's research objectives. The raw data pertaining to the Delphi Technique process is available upon request from the researcher.

The seven content experts' repeated responses to the questions affirmed that the questions reflect the meaning of the concepts under consideration and ultimately achieved consensus on the questionnaire. The research data collection instrument achieved reliability and validity.

The study's participants completed the self-reported research instrument in a three-step procedure. Step 1: A letter requesting participation, a consent form, a demographic data sheet, and the safety director questionnaire (Appendix C) as well as a self-addressed, stamped envelope were mailed to the 204 Ohio city public safety directors identified as the sample population of this study. Step 2: Three weeks after the Step 1 materials were mailed, the number and city of origin of returned research instruments were tabulated and this was considered the data base of this study.

Data Collection and Analysis

Any data collected for quantitative analysis through a study's nonexperimental descriptive research design is best generated using a questionnaire instrument, which is considered particularly appropriate for determining what or how respondents know, think, or behave, or plan to behave (McNabb, 2002, pp. 125 & 126). The data collected from the surveys will be presented in two sections. The first section presents an aggregated description of the study's participants. In this section, the questionnaire responses are summarized using frequency distribution and measures of central tendency along with dispersion. This analysis meets the expectation that descriptive statistics show what the collected data looks like relative to the study's population (Lurigio, Seng, Dantzker, Sinacore, and Johnson, 1997, p. 5).

The second section uses inferential analysis to test the null hypothesis and answer the two research questions.

The data analysis to test the null hypothesis and answer Research Question 1 measured the distributional characteristics of the sample populations' correct and incorrect responses to the questionnaire statements. The analysis compared and contrasted the responses that were accepted as correct in the Delphi Technique development process. These measures then provided the mean, mode and median values for correct scores as well as the variability of this data set. The relative standing of the survey questionnaire data set measurements was established by expressing the position of the data as a percentile and dividing this data into quartiles, each containing one fourth or 25% of the observations. The questionnaire statements identified in the lower quartile, 25^{th} percentile, represent incorrect responses that were most frequently given by the safety directors. This allowed the variables to be tested for independence in correspondence to the most frequent incorrect responses of the sample population. The Chi-square X^2 test of independence was used to compare the variables to each of the questionnaire statements identified in the lower quartile data set to test:

- X^2 Null hypothesis (H_0): The variables are independent of each other
- X^2 Alternative hypothesis (H_1): The variables are dependent of each other

If the probability value or P-value was less than .05 level of significance set as the confidence level for rejecting the X^2 (H_0), the incorrectness of the statement was statistically dependent on the variable. This analysis subsequently resulted in accepting or rejecting the null hypothesis associated with Research Question 1.

The data analysis to test the null hypothesis and answer Research Question 2 measured how well the data collected from the sample populations' correct responses to the questionnaire statements as compared to the responses accepted as correct. The questionnaire, developed through the Delphi Technique, supported a normal distribution with regard to the variables of age, gender, level of formal education, prior emergency field experience and NIMS certification and training and NIMS leadership role. The Chi-square X^2 test for how they fit was used to test:

- X^2 null hypothesis (H_0): the variables have a normal distribution
- X^2 alternative hypothesis (H_1): the variables are not normally distributed

If the probability value or P-value is less than the .05 level of significance set as the confidence level for rejecting the X^2 (H_0), the correct answers are not statistically normally distributed. This analysis resulted in accepting or rejecting the null hypothesis associated with Research Question 2.

Chapter 4 presents the results of the research along with a summary of the methods of analysis.

Protection of Participants

All participants' rights were protected by adhering to the policies prescribed by Walden University. No data were collected until this study was approved by the university's Institutional Review Board (IRB approval # 12-07-10-0300469). This included maintaining all raw data in a confidential file – accessible and viewed by solely by the researcher. The data were collected from each of the 204 Ohio city public safety directors. These individuals were identified primarily by their position and were mailed

the data collection instrument directly. The paper work was returned via a self addressed stamped envelope directly to the researcher.

The collected data were locked in a file. The research followed built-in procedures, including: (a) a consent form that explained and guaranteed confidentiality for participants and documents the measures that the researcher had taken to maintain confidentiality; (b) no individual data from respondents was identified in any public format; (c) all individual data from respondents was aggregated so that no specific city or Ohio Public Safety Director could be identified.

Summary

This chapter includes the research design and approach, setting and sample, instrumentation and materials, as well as data collection and analysis methods that were used to answer the study's two research questions. This methodology derives logically from the detailed description of the variables associated with the crucible for the NIMS implementation model presented in Chapter 2.

The data collection for this study was generated from the responses of 204 practicing Ohio city public safety directors, identified as the sample population to the survey questionnaire. However, the entire population of 205 Ohio city public safety directors were not involved in the study. The one Ohio city public safety director excluded from the sample population was a member of the panel of experts that developed the survey questionnaire instrumentation. This methodology supports the validity and reliability of the measurements analyzed using the SPSS software toward answering each research question.

The methodology described in this chapter provided the basis for reporting the analysis of the data collected and the findings in chapter 4.

Chapter 4: Results of Data Analysis

Introduction

The results and data analysis used to describe the sample population of Ohio city public safety directors as well as address the two research questions defined for this sample are presented in this chapter. This data analysis presentation, explanation, and interpretation are presented in three sections. The first section presents an aggregated description of the study's participants in terms of demographic variables. The second section presents the statistical analysis, testing the null hypothesis and answers the two research questions posed for this study. The third section presents the conclusion of chapter 4, summarizing and interpreting the findings relative to their importance to the research questions and hypothesis.

The 256 municipalities identified as Ohio cities represent the organization of meaning for this research study due to the statutory, mandated requirement to employ a person in the position of safety director. However, through the methodology described in Chapter 3 of this study, it was determined that 51 of these cities did not employ a safety director. With the subtraction of one Ohio city safety director represented on the Delphi technique panel of experts, 204 Ohio city public safety directors were mailed this study's survey questionnaire instrument. The 30 responses represent a 14.70% return rate.

One survey questionnaire instrument was returned without being completed in the return envelope. The attached, signed note by the city manager indicated this city did not have a safety director. Another city's mayor return mailed a response on city letterhead indicating this city did not have a safety director. Both of these responses were in contradiction with the master list spreadsheet (see Appendix A) which confirmed the

position and named a person as the safety director. Additionally, three other survey instruments were returned incomplete and unusable for this study. Therefore, 25 survey instruments or 12.25% of the population sampled were usable and were included in the data analysis for this study.

Section 1: Description of the Sample Population

The demographic data sheet component of this safety director questionnaire instrument, found in Appendix J, provides the information gathered from each of the 25 safety directors that comprise the usable survey's' return rate of 12.25%. This demographic data describes these respondents relative to the variables of age, gender, level of formal education, prior emergency field experience, NIMS certification, NIMS training, years of experience as an Ohio city public safety director, and NIMS leadership role. These variables provide the headings under which the respondents are described.

Age.

The age dissipation, frequency, and percentage by participant as well as generational era for respondents are displayed in Table 6.

Table 6.

Age Dissipation, Frequency, and Percentage/Generational Era

Age	Age Frequency	Age Percent	Era Frequency	Era Percent	Era
27	1	4.0			
32	1	4.0	2	8.0	Net-generation
36	1	4.0			
38	1	4.0			
39	3	12.0			
40	1	4.0			
41	1	4.0	7	28.0	Baby Bust
46	1	4.0			
47	1	4.0			
48	1	4.0			
49	1	4.0			
50	1	4.0			
51	1	4.0			
53	1	4.0			
56	2	8.0			
57	1	4.0			
59	2	8.0			
61	2	8.0			
63	1	4.0	15	60.0	Baby Boom
70	1	4.0	1	4.0	Greatest Generation
Total	25	100.0	25	100.0	

The majority of the respondents (n) = 15 or (60.0%) were represented within the baby boom generation, while the minority of the respondents (n) = 1 or (4.0%) were represented within the Greatest Generation, as represented in Table 6. This generally conforms with the overall percentages of the United States population, respective to the generational eras displayed in Figure 4.

The measures of central tendency and dispersion for respondent's ages are displayed in Table 7.

Table 7.

Age, Mean, Median, Mode, Standard Deviation, Variance, and Range for Respondents

Descriptive Measure	Descriptive Statistics
Mean ($\bar{x}$)	48.68
Median (M)	49.00
Mode (M_0)	39.00
Standard Deviation (SD)	10.85
Variance (V)	117.81
Range (R)	43.00

As presented in Table 7, the standard deviation (SD) = 10.85, calculated as the square root of the variance (V) = 117.81 for the age of the sample respondent data points indicates the average deviation of the data points from the mean ($\bar{x}$) = 48.68. The mean ($\bar{x}$) = 48.68 is approximately the same as the median (M) = 49, indicating the sample age data set is not influenced by outlying data observations that are extremely large or small

relative to the other observations. Additionally, the mode (M_0) = 39, representing the most frequently occurring age for respondents as well as the range (R) = 43 are within five data points of the median (M) = 49. These measures indicate an unbiased age sample for respondents relative to the location or centrality of the observations.

The SPSS18 Computer Generated Nonparametric One-Sample Kolmogorov-Smirnov Test was used to determine if the relative frequency distribution for the variable of age is normal for the sample population as well as each of the generational eras represented within the sample at a .05 confidence level of significance. The (S_1) and alternative (S_2) supposition for the One-Sample Kolmogorov-Smirnov Test are:

(S_1): The distribution for age is normal.

(S_2): The distribution for age is not normal.

If the significance level is greater than the .05 confidence level, the (S_1) is retained. The One-Sample Kolmogorov-Smirnov Test results for the entire sample population for respondents, as well as for each of generational eras for the variable of age, are displayed in Table 8. As presented in Table 8, with the exception of the Greatest Generation, the significance level is greater than .05 confidence level for the three remaining eras as well as the entire sample population. For this reason, the (S_1) supposition is retained. The relative frequency distribution for the variable of age in the entire sample population as well as each of the generational eras (with the exception of the Greatest Generation) is normal. The One-Sample Test is not applicable (n/a) for the Greatest Generation due to only returned survey from this era.

The mean ($\bar{x}$) = 48.68 and the median (M) = 49 age of respondents is contained within the data set comprising the Baby Boom Generational Era. It also comprises the

largest number of respondents as displayed in Table 6. The mean and median ages for the entire sample population of respondents (as depicted in Figure 3) are similar to the national age group of 45-49 (the Baby Boom Generational Era), which is also the largest population in the U.S.

Table 8.

One-Sample Kolmogorov-Smirnov Test Results for Age for Respondents

Population	($\bar{x}$) and (*SD*)	Significance Level	Decision
Entire Sample	($\bar{x}$) = 46.68	.62	Retain
	(*S*D) = 10.84		S_1
Net	($\bar{x}$) = 29.5	.999	Retain
Generation	(*SD*) = 3.54		S_1
Baby Bust	($\bar{x}$)= 38.86	.772	Retain
Generation	(*SD*) = 1.59		S_1
Baby Boom	($\bar{x}$) = 54.4	.910	Retain
Generation	(*SD*) = 5.63		S_1
Greatest	($\bar{x}$)= 70	N/A	N/A
Generation	(*SD*) = N/A		

Gender

There are two females and 23 males represented in the sample population for respondents. The low number of female respondents represented in the population sample indicates a potential gender bias for the sample population. To determine if a gender bias exists, a comparison of the gender representation for the sample population of respondents to the entire population of Ohio city public safety directors was conducted.

The gender bias comparison was done utilizing the master Ohio city public safety director spreadsheet, which can be found in Appendix A. After eliminating the two safety directors due to the correspondence explained previously, the gender representation for the entire population (n) = 203 was established for males (n) = 182 and females (n) = 21. Table 9 presents the gender frequency and percentage for the sample population of respondents as well as the entire population.

Table 9.

Gender Frequency and Percentage for the Sample Respondents as well as the Entire Population

Gender	Frequency	Percentage
Sample Male Population	23	92.0
Entire Male Population	182	90.0
Sample Female Population	2	8.0
Entire Female Population	21	10.0

An evaluation of Table 9 establishes that the sampled population portion (P) = 92.0% for male respondents has a numerical proximity to the entire population portion (P) = 90.0% and the sampled population portion (P) = 8.0% for female respondents has a numerical proximity to the entire population portion (P) = 10.0%. Furthermore, the mean for gender presented in Table 10 indicates that the sampled population mean ($\bar{x}$) = .92 for male respondents has a numerical proximity to the entire population mean ($\bar{x}$) = .90 and the sampled population mean ($\bar{x}$) = .08 for female respondents has a numerical proximity to the entire population mean ($\bar{x}$) = .10.

Table 10.

Mean Measures by Gender for the Sample Population of Respondents and the Entire Population

Gender	Sample ($\bar{x}$)	Population ($\bar{x}$)
Male	.92	.90
Female	.08	.10

The SPSS 18 Computer Generated Paired-Observation τ Test was used to determine if the gender population parameter is bias for the sampled male as well as female respondents when compared to the entire population at a .05 confidence interval for the difference in mean measures. The (S_3) and alternate (S_4) supposition for the paired observation τ test are:

(S_3): The gender parameter represented for the sample population (n) = 25) is unbiased compared to the entire population (n) = 203).

(S_4): The gender parameter represented for the sample population (n) = 25) is biased compared to the entire population (n) = 203).

If the confidence interval is greater than .05 for the difference in mean measure, the (S_3) is retained. The paired-observation τ test statistic result for gender is presented in

Table 11.

Paired-Observation τ Test Results for Gender Bias

Gender	(S_3) Supposition	Test Statistics	Decision
Male	Unbiased sample Compared to entire population	1.2105	Retain (S_3)
Female	Unbiased sample Compared to entire population	1.2893	Retain (S_3)

As presented in Table 11, the test statistic is greater than the .05 confidence interval established to retain the (S_3) supposition describing the gender representation for the sample population of respondents as unbiased.

Level of Formal Education

The highest level of formal education achieved for the sample respondents was the doctorate degree (*n*) = 2 followed by the master degree (*n*) = 11, the baccalaureate degree (*n*) = 6, the associate degree (*n*) = 3, and the high school diploma (*n*) = 3. The dissipation, frequency, and percent for the respondents' levels of formal education equated to years of education are presented in Table 12.

Table 12.

Level of Formal Education (years) Dissipation, Frequency, and Percentage for Respondents

Education Level (years)	Frequency	Percentage
High School (12)	3	12.0
Associate (14)	3	12.0
Baccalaureate (16)	6	24.0
Master (18)	11	44.0
Doctorate (20)	2	8.0
Total	25	100.0

Using the number of years equated with each level of formal education achieved for the sample respondents (as displayed in Table 12) the mean, median, mode, and standard deviation indicate an unbiased sample for level of formal education. Table 13 presents these measures of central tendency for sample respondents.

Table 13

Mean, Median, Mode, and Standard Deviation for Level of Education Equated to Years for the Sample Respondents

Descriptive Measures	Descriptive Statistics
Mean ($\bar{x}$)	16.48
Median (*M*)	18.00
Mode (M_0)	18.00
Standard Deviation (*SD*)	2. 33

As displayed in Table 13, the median (M) = 18 as well as the mode (M_0) = 18 are the same and the mean ($\bar{x}$) = 16.48 is in close numerical proximity.

The SPSS 18 Computer Generated Non-Parametric One-Sample Kolmogorov-Smirnov Test was used to determine if the relative frequency distribution for the variable of level of formal education is normal for the sample population as well as each of the generational eras represented within the sample at a .05 confidence level of significance. The (S_5) and alternative (S_6) supposition for the One-Sample Kolmogorov-Smirnov Test is:

(S_5): The distribution for level of formal education is normal.

(S_6): The distribution for level of formal education is not normal.

If the significance level is greater than the .05 confidence level, the (S_5) is retained. The One-Sample Kolmogorov-Smirnov Test results for the entire sample population for respondents as well as for each of the generational eras are displayed in Table 14. As

presented in Table 14, with the exception of the Greatest Generation, the significance level is greater for the three remaining eras (as well as the entire sample population) than the .05 confidence level established to retain the (S_5) supposition. Therefore, the relative frequency distribution for the variable of levels of formal education in the entire sample population as well as each of the generational eras (with the exception of the Greatest Generation) is normal. The One-Sample Test is not applicable (n/a) for the Greatest Generation due to only one observation.

Table 14.

One-Sample Kolmogorov-Smirnov Test results for Level of Education for Respondents

Population	($\bar{x}$)and (*SD*)	Significant Level	Decision
Entire Sample	($\bar{x}$) = 16.48 (*SD*) = 2.33	.063	Retain S_5
Net Generation	($\bar{x}$) = 17 (*SD*) – 1.41	.999	Retain S_5
Baby Bust Generation	($\bar{x}$) = 16.86 (*SD*) = 1.95	.810	Retain S_5
Baby Boom Generation	($\bar{x}$) = $\bar{x}$16.27 (*SD*) = 2.60	.185	Retain S_5
Greatest Generation	($\bar{x}$) = 18 (*SD*) = N/A	N/A	N/A

Not only did the masters degree level represent the largest grouping (*n*) = 11 for respondents, as displayed in Table 14, this group also represents the largest grouping (*n*) = 10 for public administration as the major area of study. The next grouping, represented by criminal justice as the major area of study, was smaller (*n*) = 3 with respondents spread equally among associate, baccalaureate and masters degrees. Table 15 displays

the dissipation, frequency, and percentage for levels of education achieved by degree in correspondence with the major area of study.

Table 15.

Dissipation, Frequency, and Percentage for Respondent Level of Education by Degree and Corresponding Major Area of Study

Degree	Major	Frequency	Percentage
None (High School)	None	3	12.0
Associate	Business	2	8.0
Associate	Criminal Justice	1	4.0
Baccalaureate	French	1	4.0
Baccalaureate	Science	1	4.0
Baccalaureate	Journalism	1	4.0
Baccalaureate	Criminal Justice	1	4.0
Baccalaureate	Government	1	4.0
Baccalaureate	Engineering	1	4.0
Master	Public Administration	10	40.0
Master	Criminal Justice	1	4.0
Doctorate	Jurisprudence	2	8.0
Total		25	100.0

As presented in Table 15, there are four major areas of study: public administration (*n*) = 10, criminal justice (*n*) = 2, jurisprudence (*n*) = 2, and government (*n*) = 1, totaling (*n*) = 15 or 60% of the sample population that had majors whose content related to implementation of public policy. The remaining major areas of study totaling (*n*) = 10, or 40% of the sample population, (displayed in Table 15) are not indicative of formal education related to implementation of public policy.

Prior Emergency Field Experience

The largest number of respondents (*n*) = 8 had no prior emergency field experience. Among the remaining respondents (*n*) = 17, law enforcement (*n*) = 7 was the category most frequently identified for prior emergency field experience, followed by fire (*n*) = 5, emergency management (*n*) = 4, and emergency medical technician (EMT) (*n*) = 1. The dissipation, frequency, and percent for respondents' prior emergency field experience is presented in Table 16.

Table 16.

Prior Emergency Field Experience, Dissipation, Frequency, and Percentage for Respondents

Field	Frequency	Percentage
None	8	32.0
Law Enforcement	7	28.0
Fire	5	20.0
Emergency Management	4	16.0
EMT	1	4.0
Total	25	100.0

As presented in Table 16, respondents without any prior emergency experience represent 32%of the sample population. The respondents with prior experience total 68%.

The five categories for prior emergency field experience displayed in Table 16 are presented showing the years of experience accrued for each category for respondents in Table 17. With the exception of the categories indicating no prior experience and EMT, Table 17 shows that the years of experience for law enforcement vary from five years to 35 years (Range = 30), fire varies from three years to 33 years (Range = 30), emergency

management varies from two years to 13 years (Range = 11). The years of experience for all five categories of prior experience vary from zero years to 35 years (Range = 225). The measures of central tendency and dispersion for respondents' years of prior emergency field experience are displayed in Table 17.

Table 17.

Mean, Median, Mode, Standard Deviation, and Range for Respondent Years of Prior Emergency Field Experience

Descriptive Measures	Descriptive Statistics
Mean ($\bar{x}$)	9.4
Median *(M)*	5.0
Mode (M_0)	0
Standard Deviation (*SD*)	11.17
Range (*R*)	225

Table 18.

Years of Prior Emergency Field Experience Accrued for Each Category of Experience, Dissipation, Frequency, and Percentage for Respondents

Field	Years of Experience	Frequency	Percentage
None	0	8	32.0
Emergency Management	2	2	8.0
Emergency Management	3	1	4.0
Fire	3	1	4.0
Law Enforcement	5	1	4.0
Law Enforcement	8	2	8.0
Fire	8	1	4.0
Law Enforcement	11	1	4.0
Law Enforcement	12	1	4.0
Emergency Management	13	1	4.0
EMT	17	1	4.0
Fire	20	1	4.0
Law Enforcement	25	1	4.0
Fire	30	1	4.0
Fire	33	1	4.0
Law Enforcement	35	1	4.0
Total	225	25	100.0

The descriptive measures for Mean ($\bar{x}$) = 9.4 and standard deviation (*SD*) = 11.17 were entered into the SPSS 18 Computer Generated Non-Parametric One-Sample Kolmogorov-Smirnov Test to determine if the relative frequency distribution for the variable of years of prior emergency field experience is normal for the sample population. The same process was used for each of the generational eras within the sample of all respondents. A .05 confidence level of significance was established for these tests. The (S_7) and alternate (S_8) supposition for the One-Sample Test are:

(S_7): The distribution for years of prior emergency field experience is normal.

(S_8): The distribution for years of prior emergency field experience is not normal.

If the significance level is greater than the .05 confidence level, the (S_7) is retained. The One-Sample Kolmogorov-Smirnov Test results for the entire sample population for respondents as well as each of the generational eras for the variable of prior emergency field experience are displayed in Table 19. As presented in Table 19, with the exception of the Greatest Generation, the significance level is greater for each of the remaining three eras as well as the entire sample than the .05 confidence level established to retain the (S_7) supposition. Therefore, the relative frequency distribution for the variable of prior emergency field experience for the entire sample population as well as each of the generational eras, with the exception of the Greatest Generation, is normal. The One-Sample Test is not applicable (n/a) for the Greatest Generation due to only one observation.

Table 19.

One-Sample Kolmogorov-Smirnov Test Results for Years of Prior Emergency Field Experience

Population	($\bar{x}$) and (*SD*)	Significant Level	Decision
Entire Sample	($\bar{x}$) = 9.4 (*SD*) =11.17	.270	Retain S_7
Net Generation	($\bar{x}$) = 1.5 (*SD*) = 2.12	.999	Retain S_7
Baby Bust Generation	($\bar{x}$) = 6.57 (*SD*) = 8.36	.603	Retain S_7
Baby Boom Generation	($\bar{x}$) = 12.40 (*SD*) = 12.44	.497	Retain S_7
Greatest Generation	($\bar{x}$) = 0 (*SD*) = N/A	N/A	N/A

NIMS Certification

As presented in Table 20, more than two-thirds (72%) of respondents have NIMS certification and less than one-third (28%) of respondents do not have NIMS certification.

Table 20.

NIMS Certification Dissipation, Frequency, and Percentage for Respondents

NIMS Certification	Frequency	Percentage
Yes	18	72.0
No	7	28.0
Total	25	100.0

The measures of central tendency and dispersion for NIMS certification are presented in Table 21.

NIMS Certification Mean, Median, Mode, Standard Deviation, and Range for Respondents

Descriptive Measures	Descriptive Statistics NIMS Certification
Mean ($\bar{x}$)	12.5
Median (*M*)	12.5
Mode (M_0)	7.0
Standard Deviation (*SD*)	7.78
Range (*R*)	11.0

The descriptive measures for NIMS certification mean ($\bar{x}$) = 12.5 and standard deviation (*SD*) = 7.78 were entered into the SPSS 18 Computer Generated Non-Parametric One-Sample Kolmogorov-Smirnov Test to determine if the relative frequency distribution for the variable of NIMS certification is normal for the sample population. The same process was used for each of the generational eras within the sample of all respondents for NIMS certification. A .05 confidence level of significance was established for these tests. The (S_9) and alternate (S_{10}) supposition for the One-Sample Tests for NIMS Certification are:

(S_9): The distribution for NIMS certification is normal.

(S_{10}): The distribution for NIMS certification is not normal.

If the significance level is greater than the .05 confidence level, the (S_9) is retained. The One-Sample Kolmogorov-Smirnov Test results for the entire sample population for respondents as well as each of the generational eras for the variable of NIMS certification are displayed in Table 22. As presented in Table 22, with the exception of the Greatest Generation, the significance level is greater for each of the remaining eras as well as the entire sample of the .05 confidence level established to retain the (S_9) supposition. Therefore, the relative frequency distribution for the variable of NIMS certification for the entire sample population as well as each of the generational eras, with the exception of the Greatest Generation, is normal. The one-Sample Test is not applicable (N/A) for the Greatest Generation due to only one observation.

Table 22.

One-Sample Kolmogorov-Smirnov Test Results for NIMS Certification

Population	NIMS Certification ($\bar{x}$) (*SD*)	NIMS Certification Significant Level	Decision
Entire Sample	($\bar{x}$) = 12.5 (*SD*) = .458	.999	Retain S_9
Net Generation	($\bar{x}$) = .5 (*SD*) =.707	.999	Retain S_9
Baby Bust Generation	($\bar{x}$) = .571 (*SD*) =.535	.327	Retain S_9
Baby Boom Generation	($\bar{x}$) = 7.5 (*SD*) = 6.364	.999	Retain S_9
Greatest Generation	($\bar{x}$) = 1 (SD) = N/A	N/A	N/A

NIMS Training

The Ohio City Public Safety Director Questionnaire Demographic Data Sheet asked the sample population to indicate each NIMS training course completed under Statement 7, Sections A through L. Additionally, a category for other NIMS courses that may have been completed was included. Among respondents, the NIMS Courses IS-300 and IS-400 were listed by four respondents. The total number of NIMS courses completed by each respondent was tallied to achieve a numeric data point for analyzing the variable of NIMS training. The dissipation frequency and percentage by number of NIMS courses completed for respondents is displayed in Table 23.

The basic NIMS training courses required to achieve NIMS certification are IS-100, IS-700, and IS-800. One respondent displayed in Table 23 completed IS-100 and did not achieve NIMS certification. Among the seven respondents completing three NIMS training courses, one completed IS-100, IS-200, and IS-700 and did not achieve NIMS certification. The remaining respondents (n) = 18 completed three or more NIMS training courses, which included IS-100, IS-700, and IS-800 and achieved NIMS certification. Table 23 displays the dissipation for the number of NIMS training courses, the frequency for non-certification of NIMS, and the percentage of respondents.

Table 23.

Number of NIMS Training Courses Completed. Dissipation, Frequency for Respondents of NIMS Course Completion, and Percentage for Respondents

No. NIMS Courses	Frequency	Percentage
0	5	20.0
1	1	4.0
3	7	28.0
4	6	24.0
5	2	8.0
6	1	4.0
8	1	4.0
9	1	4.0
10	1	4.0
Total	25	100.0

Table 24.

The Dissipation for Respondents by Number of NIMS Courses Completed, Frequency for NIMS by Respondents, and Percentage for Respondents

No. Courses	Non-Certification	Percentage
0	5	20.0
1	1	4.0
3	1	4.0
Total	7	28.0

Table 24 displays the dissipation for respondents by the number of NIMS training courses, frequency for NIMS Certification, and the percentage for respondents.

Table 25.

The Dissipation for Respondents by Number of NIMS Courses Completed, Frequency for NIMS Certification, and Percentage for Respondents

No. Courses	NIMS Certification	Percentage
3	6	24.0
4	6	24.0
5	2	8.0
6	1	4.0
8	1	4.0
9	1	4.0
10	1	4.0
Total	18	72.0

The descriptive measures of central tendency and dispersion for the variable of NIMS training courses are presented in Table 26.

Table 26.

Number of NIMS Courses Mean, Median, Mode, Standard Deviation, and Range for Respondents

Descriptive Measures	Descriptive Statistics
Mean ($\bar{x}$)	3.56
Median (*M*)	3.0
Mode (M_0)	3.0
Standard Deviation (*SD*)	2.69
Range (*R*)	10

The descriptive measures for number of NIMS training course mean ($\bar{x}$) = 3.56 and standard deviation (*SD*) = 2.69 were entered into the SPSS18 Computer Generated Non-Parametric One-Sample Kolmogorov-Smirnov Test to determine if the relative frequency distribution for the variable of NIMS training is normal for the sample population. The same process was used for each of the generational eras contained within this sample of all respondents for NIMS training. A .05 confidence level of significance was established for these tests. The (S_{11}) and alternative (S_{12}) supposition for the One-Sample Test for NIMS training are:

(S_{11}): The distribution for NIMS training is normal.

(S_{12}): The distribution for NIMS training is not normal.

If the significance level is greater than the .05 confidence level, the (S_{11}) is retained.

The One-Sample Kolmogorov-Smirnov Test results for the entire sample population for respondents as well as each of the generational eras for the variable of NIMS training are displayed in Table 27. As presented in Table 27, with the exception of the Greatest Generation, the significance level is greater for each of the remaining three eras as well as the entire sample than the .05 confidence level established to retain the (S_{11}) supposition. Therefore, the relative frequency distribution for the variable of NIMS training in the entire sample population as well as each of the generational eras (with the exception of the Greatest Generation) is normal. The One-Sample Test is not applicable (n/a) for the Greatest Generation due to only one observation.

Table 27.

One-Sample Kolmogorov-Smirnov Test Results for NIMS Training

Population	($\bar{x}$) and (*SD*)	Significance Level	Decision
Entire Sample	($\bar{x}$) = 3.56 (*SD*) = 2.69	.297	Retain S_{11}
Net Generation	($\bar{x}$) = 3.50 (*SD*) = .71	.999	Retain S_{11}
Baby Bust Generation	($\bar{x}$) = 3.86 (*SD*) = 3.13	.844	Retain S_{11}
Baby Boom Generation	($\bar{x}$) = 3.67 (*SD*) = 2.69	.302	Retain S_{11}
Greatest Generation	($\bar{x}$) = 0 (*SD*) = N/A	N/A	N/A

Years of experience as an Ohio City Public Safety Director.

The number of years of experience as an Ohio city public safety director dissipation, frequency, and percentage for respondents is displayed in Table 28.

Table 28.

Years of Experience as a Safety Director Dissipation, Frequency, and Percentage for Respondents

Years Ohio Safety Director	Frequency	Percentage
1	3	12.0
2	3	12.0
3	3	12.0
4	4	16.0
5	3	12.0
6	2	8.0
7	3	12.0
13	1	4.0
15	1	4.0
17	1	4.0
20	1	4.0
Total	25	100.0

The descriptive measures of central tendency and dispersion for the variable of years of experience as an Ohio City Public Safety Director are presented in Table 29.

Table 29.

Number of Years Experience Mean, Median, Mode, Standard Deviation, and Range for Respondents

Descriptive Measures	Descriptive Statistics
Mean ($\bar{x}$)	5.88
Median (*M*)	4.0
Mode (M_0)	4.0
Standard Deviation (*SD*)	5.08
Range (*R*)	19.0

The descriptive measures for number of years of experience as an Ohio city public safety director mean ($\bar{x}$) = 5.88 and standard deviation (*SD*) = 5.08 were entered into the SPSS18 Computer Generated Non-Parametric One-Sample Kolmogorov-Smirnov Test. This determined if the relative frequency distribution for the variable of years of experience as an Ohio city public safety director is normal for the sample population. The same process was used for each of the generational eras contained within this sample of all Ohio city public safety directors. A .05 confidence level of significance was established for these tests. The (S_{13}) and alternative (S_{14}) supposition for the One-Sample

Tests are:

(S_{13}): The distribution for years of experience as a safety director is normal.

(S_{14}): The distribution for years of experience as a safety director is not normal.

If the significance level is greater than the .05 confidence level, the (S_{13}) is retained. The One-Sample Kolmogorov-Smirnov Test results for the entire sample population for respondents as well as each of the generational eras for the variable of years of experience as an Ohio city public safety director are displayed in Table 30. As presented in Table 30, with the exception of the Greatest Generation, the significance level is greater than the .05 confidence level for each of the remaining three eras as well as the entire sample. Therefore, the relative frequency distribution for the variable of years of experience as an Ohio city public safety director is normal in the entire sample as well as each of the generational eras (with the exception of the Greatest Generation). The One-Sample Test is not applicable (n/a) for the Greatest Generation due to only one observation.

Table 30.

One-Sample Kolmogorov-Smirnov Test results for Years of Experience as an Ohio City Public Safety Director

Population	($\bar{x}$) and (*SD*)	Significance Level	Decision
Entire Sample	($\bar{x}$) = 5.88 (*SD*) = 5.08	.082	Retain S_{13}
Net Generation	($\bar{x}$) = 2.0 (*SD*) = 1.41	.999	Retain S_{13}
Baby Bust Generation	($\bar{x}$) = 3.29 (*SD*) = 1.89	.789	Retain S_{13}
Baby Boom Generation	($\bar{x}$) = 7.80 (*SD*) = 5.70	.163	Retain S_{13}
Greatest Generation	($\bar{x}$) = 3 (*SD*) = N/A	N/A	N/A

NIMS Leadership Role

The Ohio City Public Safety Director Questionnaire Demographic Data Sheet asked the sample population if respondents were responsible for NIMS implementation to determine the NIMS leadership role for each respondent.

As presented in Table 31, more than three-fifths (64%) of respondents (*n*) = 16 have responsibility for leading NIMS implementation, while less than two-fifths (36%) of respondents (*n*) = 9 do not have NIMS leadership responsibility.

Table 31 displays the NIMS responsibility dissipation, frequency and percent for respondents.

Table 31.

NIMS Responsibility Dissipation, Frequency, and Percentage for Respondents

NIMS Responsibility	Frequency	Percentage
Yes	16	64.0
No	9	36.0
Total	25	100.0

The measures of central tendency and dispersion for NIMS responsibility are presented in Table 32.

NIMS Responsibility Mean, Median, Mode, Standard Deviation, and Range for Respondents

Descriptive Measures	Descriptive Statistics NIMS Responsibility
Mean ($\bar{x}$)	12.5
Median (*M*)	12.5
Mode (M_0)	9
Standard Deviation (*SD*)	4.95
Range (*R*)	7.0

The descriptive measures for Mean ($\bar{x}$) = 12.5 and Standard Deviation (*SD*) = 4.95 were entered into the SPSS 18 Computer Generated Non-Parametric One-Sample

Kolmogorov-Smirnov Test to determine if the relative frequency distribution for the variable of NIMS leadership role is normal for the sample population. The same process was used for each of the generational eras within the sample of all respondents for NIMS responsibility. A .05 confidence level of significance was established for these tests. The (S_{15}) and alternative (S_{16}) supposition for the One-Sample Tests for NIMS responsibility are:

(S_{15}): The distribution for NIMS responsibility is normal.

(S_{16}): The distribution for NIMS responsibility is not normal.

If the significance level is greater than the .05 confidence level, the (S_{15}) is retained. The One-Sample Kolmogorov-Smirnov Test results for the entire sample population for respondents as well as each of the generational eras, for the variable of NIMS leadership role is displayed in Table 33. As displayed in Table 33, with the exception of the Greatest Generation, the significance level is greater for each of the remaining eras as well as the entire sample than the .05 confidence level established to retain the (S_{15}) supposition. Therefore, the relative frequency distribution for the variable of NIMS leadership for the entire sample population as well as each of the Generational Eras (with the exception of the Greatest Generation) is normal. The One-Sample Test is not applicable (N/A) for the Greatest Generation due to only one observation.

Table 33.

One-Sample Kolmogorov-Smirnov Test Results for NIMS Responsibility

Population	NIMS Responsibility ($\bar{x}$) (*SD*)	NIMS Responsibility Significance Level	Decision
Entire Sample	($\bar{x}$) = 12.5 (*SD*) = 4.95	.999	Retain S_{15}
Net Generation	($\bar{x}$) = .50 (*SD*) = .71	.999	Retain S_{15}
Baby Bust Generation	($\bar{x}$) = .57 (*SD*) =.54	.324	Retain S_{15}
Baby Boom Generation	($\bar{x}$) = 7.5 (*SD*) = 3.54	.999	Retain S_{15}
Greatest Generation	($\bar{x}$) = 1 (*SD*) = N/A		

Summary

The analysis of the responses to the Questionnaire Demographic Data Sheet by the sample population of Ohio city public safety directors (n) = 25 relative to this study's variables provides the statistical basis for inferences regarding the total population of Ohio city public safety directors (n) = 205. Since the data analyzed was found to have normal relative frequencies of distribution, the sample median for the data collected is an efficient and consistent summarizing descriptor for the relative standing of the sample population. Table 33 displays the Median for each of the variables and the associated sample population percentage associated with a particular variable.

The common characteristics for the sample population of respondents (n) = 25 related to the variables of age, gender, formal education, prior years of emergency experience, and years of experience as an Ohio city public safety director emerge from the Median data displayed in Table 34. This data estimates a typical Ohio city public safety director as 49 years of age, male with 18 years of formal education and 5 years of prior emergency field experience – as well as 4 years of experience as an Ohio city public safety director. Furthermore, the Median data displayed in Table 30 estimates the typical Ohio city public safety director's common characteristics for variables related to NIMS. This data identifies 50% of Ohio city public safety directors as NIMS certified and responsible for NIMS implementation in their city of employment, having completed 3 NIMS Training Courses.

Table 34.

Sample Population Median for each Variable and Associated Percentage for Respondents

Variable/Associated Information	Median (*M*)	Sample %
Age	49years	4%
Gender	Male	92%
Level of Formal Education	18 years	44%
Prior Emergency Field Experience	5 years	4%
NIMS Certification	12.5	50%
NIMS Training	3 Courses	28%
Experience as Ohio City Public Safety Director	4 years	16%
NIMS Leadership Role	12.5	50%

Table 34 allows the estimated summary description for the typical Ohio city public safety director.

Section II: Data Analysis Testing the Null hypothesis and Answering the Research Questions: Analysis of the Questionnaire Responses

This study had thirty statements developed and validated through the Delphi Technique. These statements provide the data for testing the null hypothesis and answering the research questions by assessing the knowledge, attitude, or feeling of each Ohio city public safety director respondent relative to NIMS. The response (n) = 25 for each questionnaire statement (n) = 30 required either a true or false response. These responses are displayed in Table 31, categorized by statement number, the sum of true and false responses and the percent of the sample population (n = 25) the responses represents.

Table 36 displays the summary of the panel of experts' responses to the thirty statements surveyed. This summary represents the responses accepted as correct, as validated through the Delphi Technique. This summary of correct responses is compared and contrasted to the Ohio city public safety director responses, as displayed in Table 36.

Table 38 presents an analysis of the Ohio city public safety director responses categorized and grouped as incorrect responses compared and contrasted to the responses accepted as correct.

There were ten classes of correct scores among the respondents (n) = 25. The relative frequency distribution for these scores is displayed in Table 39. Table 40 provides the descriptive measures of central tendency for the correct scores displayed in Table 39.

Table 35.

Analysis of Safety Director Questionnaire Responses

Statement	TRUE	%Sample	FALSE	%Sample	Total Sample	%Sample
1	1	4	24	96	25	100
2	17	68	8	32	25	100
3	18	72	7	28	25	100
4	15	60	10	40	25	100
5	16	64	9	36	25	100
6	0	0	25	100	25	100
7	21	84	4	16	25	100
8	19	76	6	24	25	100
9	18	72	7	28	25	100
10	19	76	6	24	25	100
11	12	48	13	52	25	100
12	0	0	25	100	25	100
13	5	20	20	80	25	100
14	6	24	19	76	25	100
15	16	64	9	36	25	100
16	11	44	14	56	25	100
17	22	88	3	12	25	100
18	18	72	7	28	25	100
19	21	84	4	16	25	100
20	13	52	12	48	25	100
21	0	0	25	100	25	100
22	1	4	24	96	25	100
23	8	32	17	68	25	100
24	17	68	8	32	25	100
25	19	76	6	24	25	100
26	14	56	11	44	25	100
27	25	100	0	0	25	100
28	2	8	23	92	25	100
29	0	0	25	100	25	100
30	18	72	7	28	25	100

Table 36.

Panel of Experts Correct Responses Validated through the Delphi Technique

TRUE or FALSE	
Statement	Experts' Consensus Response
1	FALSE
2	TRUE
3	TRUE
4	FALSE
5	TRUE
6	TRUE
7	TRUE
8	TRUE
9	TRUE
10	FALSE
11	TRUE
12	FALSE
13	FALSE
14	FALSE
15	TRUE
16	TRUE
17	TRUE
18	TRUE
19	FALSE
20	TRUE
21	TRUE
22	TRUE
23	TRUE
24	TRUE
25	TRUE
26	TRUE
27	TRUE
28	FALSE
29	FALSE
30	TRUE

Table 37.

Correct Responses Compared and Contrasted to Safety Director Responses

Statement	Correct Response	TRUE	Percent	FALSE	Percent	Total Sample	Percent
1	FALSE	1	4	24	96	25	100
2	TRUE	17	68	8	32	25	100
3	TRUE	18	72	7	28	25	100
4	FALSE	15	60	10	40	25	100
5	TRUE	16	64	9	36	25	100
6	TRUE	0	0	25	100	25	100
7	TRUE	21	84	4	16	25	100
8	TRUE	19	76	6	24	25	100
9	TRUE	18	72	7	28	25	100
10	FALSE	19	76	6	24	25	100
11	TRUE	12	48	13	52	25	100
12	FALSE	0	0	25	100	25	100
13	FALSE	5	20	20	80	25	100
14	FALSE	6	24	19	76	25	100
15	TRUE	16	64	9	36	25	100
16	TRUE	11	44	14	56	25	100
17	TRUE	22	88	3	12	25	100
18	TRUE	18	72	7	28	25	100
19	FALSE	21	84	4	16	25	100
20	TRUE	13	52	12	48	25	100
21	TRUE	0	0	25	100	25	100
22	TRUE	1	4	24	96	25	100
23	TRUE	8	32	17	68	25	100
24	TRUE	17	68	8	32	25	100
25	TRUE	19	76	6	24	25	100
26	TRUE	14	56	11	44	25	100
27	TRUE	25	100	0	0	25	100
28	FALSE	2	8	23	92	25	100
29	FALSE	0	0	25	100	25	100
30	TRUE	18	72	7	28	25	100

Table 38.

Correct/Incorrect Response Analysis

Statement	Correct Response	Percent	Incorrect Response	Percent	Total	Percent
1	24	96	1	4	25	100
2	17	68	8	32	25	100
3	18	72	7	28	25	100
4	10	40	15	60	25	100
5	16	64	9	36	25	100
6	0	0	25	100	25	100
7	21	84	4	16	25	100
8	19	76	6	24	25	100
9	18	72	7	28	25	100
10	6	24	19	76	25	100
11	12	48	13	52	25	100
12	25	100	0	0	25	100
13	20	80	5	20	25	100
14	19	76	6	24	25	100
15	16	64	9	36	25	100
16	11	44	14	56	25	100
17	22	88	3	12	25	100
18	18	72	7	28	25	100
19	4	16	21	84	25	100
20	13	52	12	48	25	100
21	0	0	25	100	25	100
22	1	4	24	96	25	100
23	8	32	17	68	25	100
24	17	68	8	32	25	100
25	19	76	6	24	25	100
26	14	56	11	44	25	100
27	25	100	0	0	25	100
28	23	92	2	8	25	100
29	25	100	0	0	25	100
30	18	72	7	28	25	100
Total	459		291			
Percent		61		39		

Table 39.

Relative Frequency Distribution for Correct Scores Among Respondents

Class	Correct Scores	Frequency	Relative Frequency
1	14	1	.04
2	15	4	.16
3	16	1	.04
4	17	6	.24
5	18	1	.04
6	19	3	.12
7	20	3	.12
8	21	2	.08
9	22	2	.08
10	23	2	.08
	Total	25	1.00

Table 40.

Mean, Median, Mode, Standard Deviation, and Range for the Ten Classes of Correct Scores for Respondents

Descriptive Measures	Descriptive Statistics
Mean ($\bar{x}$)	18.5
Median (M)	18.5
Mode (M_0)	17.0
Standard Deviation (SD)	2.9
Range (R)	9.0

Figure 9 illustrates the cumulative relative frequency distribution, central tendency, and variance data from Tables 44 and 45 applied to the correct score data set.

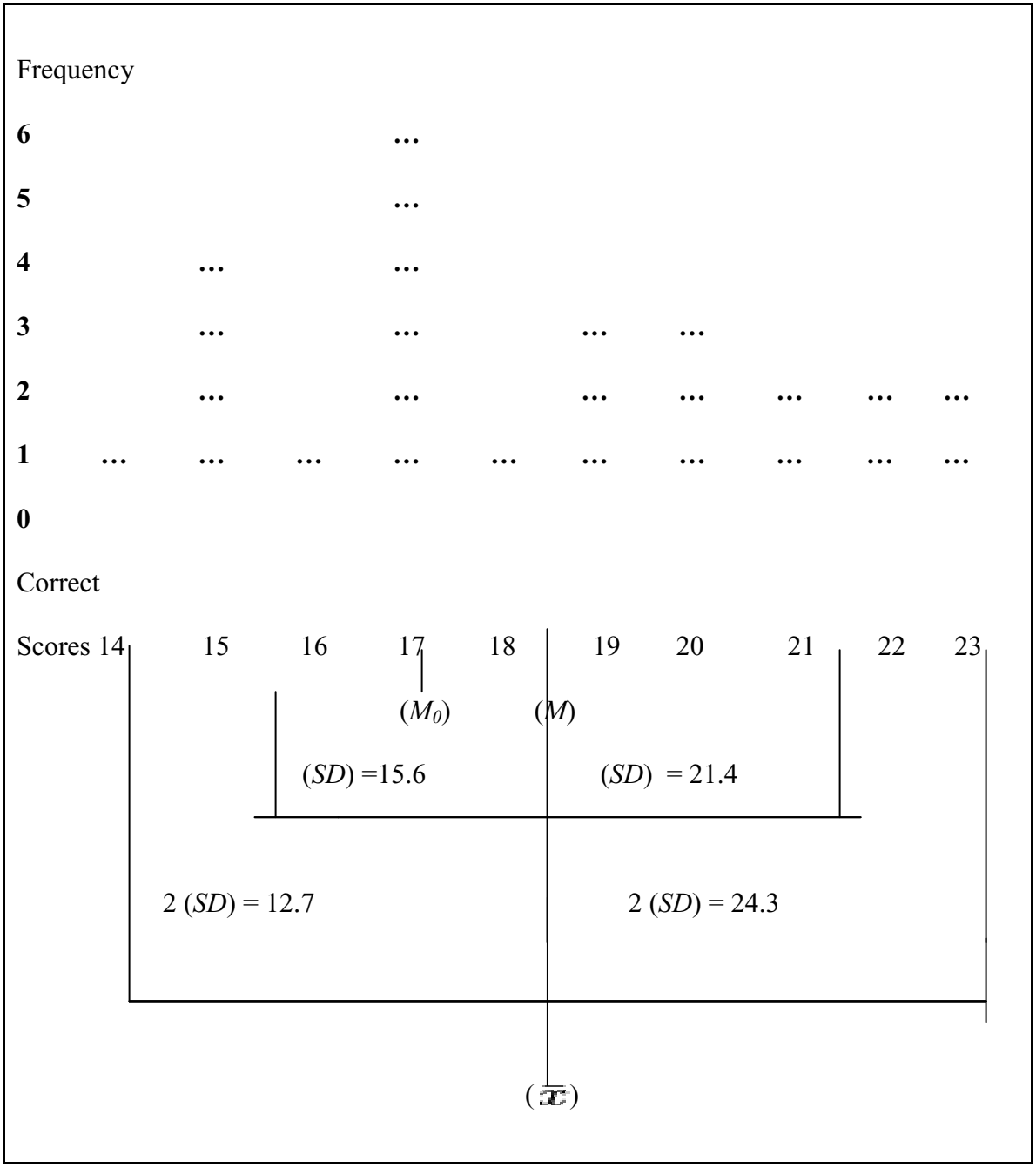

Figure 9. Analysis of Relative Frequency Distribution, Standard Deviation (*SD*), Mean ($\bar{x}$), Median (*M*), Mode (M_0), and Variance for Correct Scores for Respondents

In order to arrange the survey data to correspond with the 30 statements identified in the survey questionnaire, the correct scores were grouped according to each of the statements. Table 37 displays the relative frequency distribution for these grouped correct scores. This grouping of data increased the score frequency from 25 or the total number of respondents to 30 for the total number of statements. A stem and leaf display is utilized in Table 37 to preserve the original data and illustrate the numerical characteristics of this data.

Table 41.

Relative Frequency Distribution for Correct Scores Grouped According to Each of the 30 Survey Statements

Stem	Leaf	Score Frequency	Relative Frequency
0		1	.03
0		1	.03
1		1	.03
4		1	.03
6		1	.03
8		1	.03
1	0123466778888999	16	.53
2	01234555	8	.29
	Total	30	1.00

Table 42 presents the descriptive measures of central tendency for correct scores grouped according to the 30 survey statements.

Table 42.

Mean, Median, Mode, Standard Deviation, and Range for Correct Scores Grouped according to the 30 Survey Statements

Descriptive Measures	Descriptive Statistics
Mean ($\bar{x}$)	15.3
Median (M)	17.5
Mode (M_0)	18.0
Standard Deviation (SD)	7.3
Range (R)	25

The cumulative relative frequency, central tendency, and variance data applied to the grouped correct scores according to each of the 30 survey statements are illustrated in Figure 10.

While the classes of correct scores for respondents versus correct scores for the survey statements are only related by their content of all the respondents' correct score data, they provide a transitional description of the correct score data useful for conveying a mental image of the relative frequency distribution for this data. A comparison of Figure 9 and Figure 10 reveals that both data sets are mound-shaped as defined by the empirical rule.

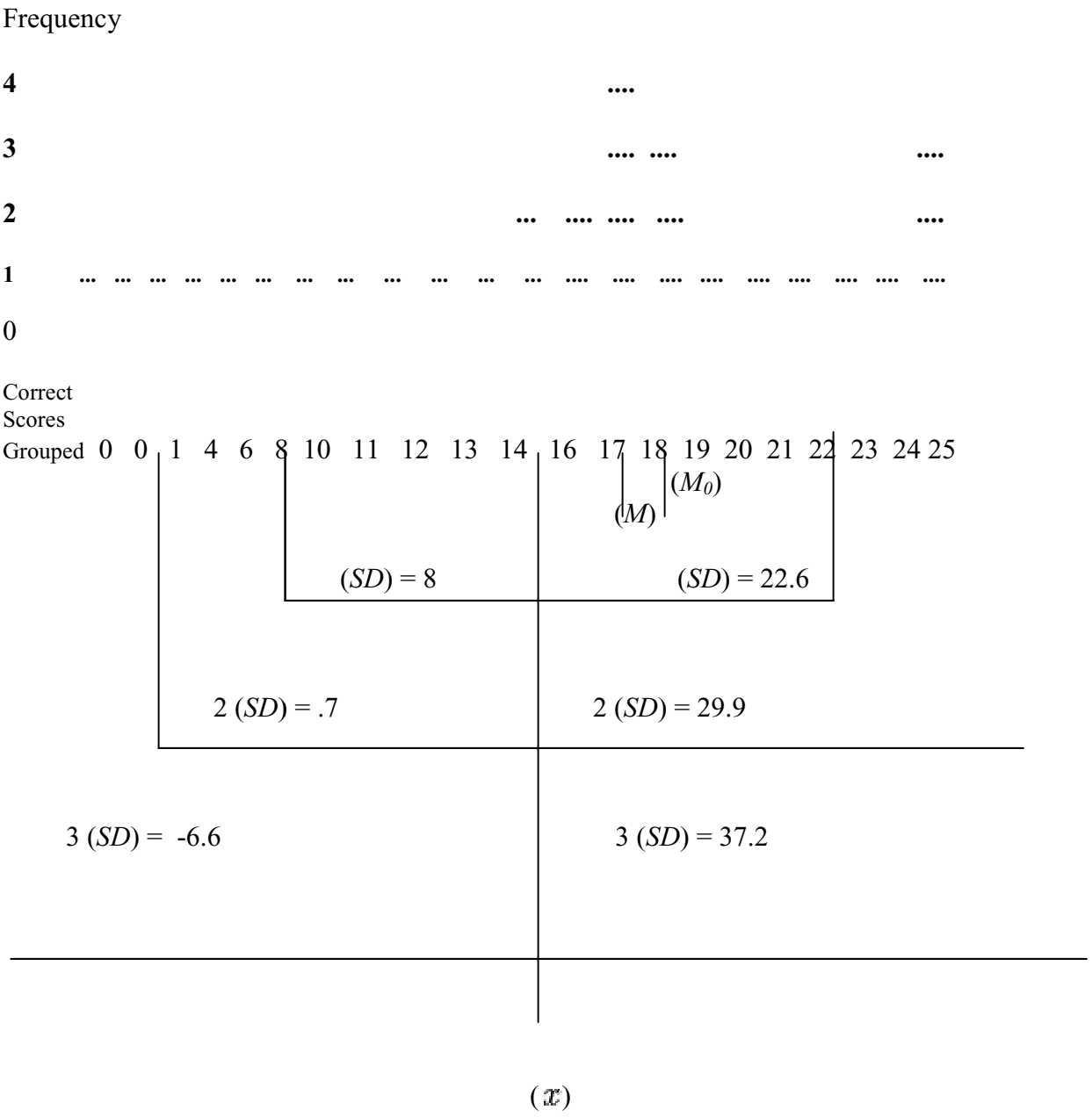

Figure 10. Analysis of Relative Frequency Distribution, Standard Deviation (*SD*), Mean ($\bar{x}$), Median (*M*), Mode (M_0), and Variance for Correct Scores Grouped According to each of the 30 Survey Statements

This rule establishes that the relative frequency distribution of the sample data is more or less symmetric with a single mode. It is approximately 68% of the observations within one standard deviation (*SD*) of the mean and approximately 95% of the observations within two standard deviations (2 *SD*) of the mean. All or almost all of the observations are within 3 standard Deviations of the mean (Aczel & Sounderpandian, 2006, p. 45). However, the mound-shaped distribution for each of the data sets has a negative kurtosis implying a flatter distribution than the normal distribution. This platykurtic distribution indicated the sample data is skewed and may include extremely large and small errant outlying observations outside the range of the data values to be described. This possibility for outliers is eliminated by the use of SPSS 18 Computer Generated Descriptive Statistics from the data sets displayed in Tables 49 and 50 to construct the box plots illustrated in Figures 11 and 12 respectively. As shown in these figures, there are no observations outside the outer fences for the classes of either correct scores for respondents or the correct scores for survey statement data sets.

Additionally, both sets of data depict correct scores on the low side of the bar charts illustrated in Figure 13. This establishes that there is a group of Ohio city public safety director respondents who scored relatively low on the survey questionnaire, and that there is a set of statements that correspond to this negative relative frequency distributed data.

Table 43.

Descriptive Measures and Statistics for the Classes of Correct Scores for Respondents

Descriptive Measures	Descriptive Statistics
Lower Observation (LO)	14
1st Quartile (1st Q)	16.25
Median (M)	18.5
3rd Quartile (3rd Q)	20.75
Interquartile Range (IQR)	4.5
Upper Observation (U_O)	23
1.5 (I QR)	6.75
Inner Fence (IF)	9.50/27.50
Outer Fence (OF)	2.75/34.25

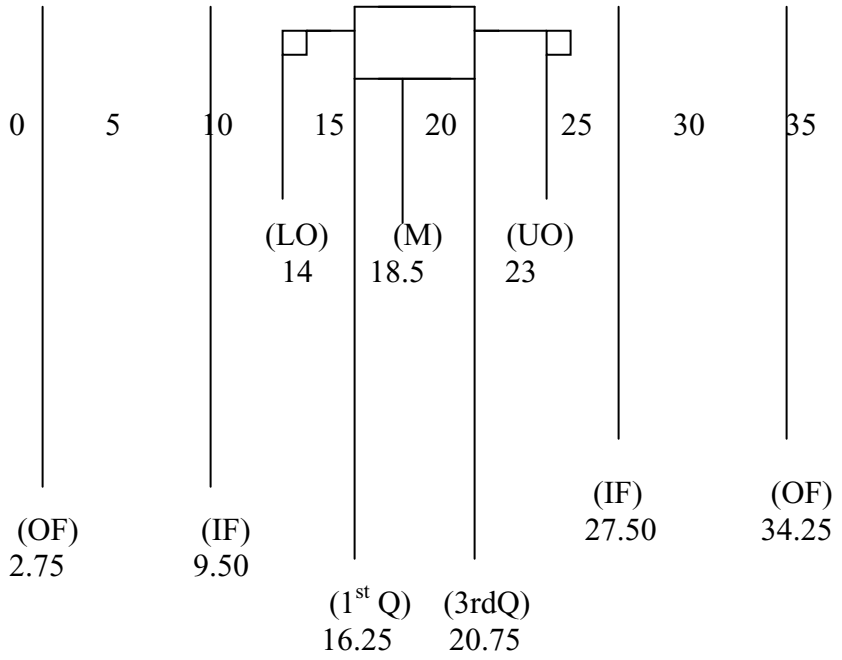

Figure 11. Box Plot of Classes of Correct Scores for Respondents

Table 44.

Descriptive Measures and Statistics for the Correct Scores Grouped According to the 30 Survey Statements

Descriptive Measures	Descriptive Statistics
Lower Observation (LO)	0
1st Quartile (1st Q)	11.25
Median (M)	17.5
3rd Quartile (3rd Q)	19.75
Interquartile Range (IQR)	8.5
Upper Observation (UO)	25
1.5 (I QR)	18
Inner Fence (IF)	-2.75/32.5
Outer Fence (OF)	-15.5/45.25

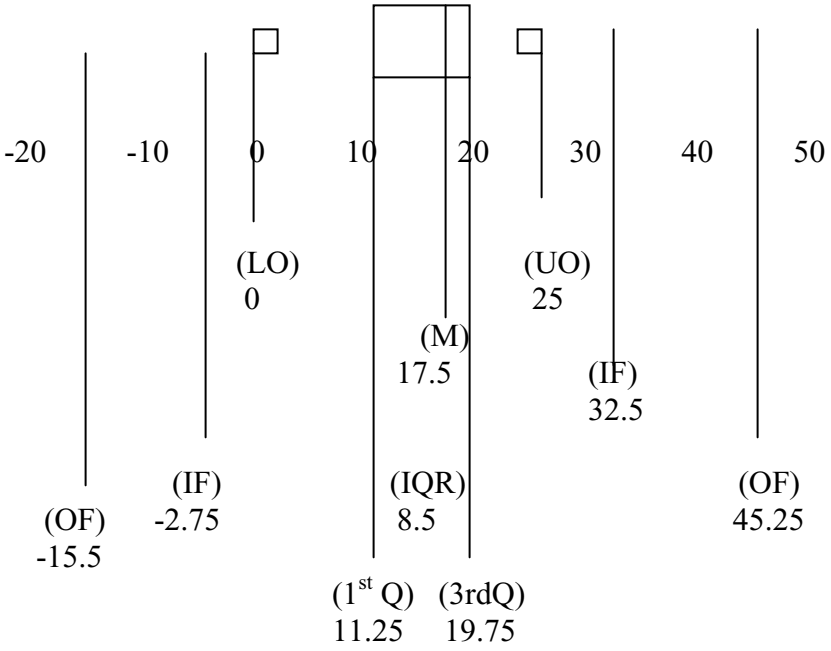

Figure 12. Box Plot for the Correct Scores Grouped According to the 30 Survey Statements

Frequency Percentage for Respondents

Frequency							
24%				24%			
22%							
20%							
18%							
16%		16%					
14%							
12%						12%	
10%							
8%							8%
6%							
4%	4%		4%		4%		
2%							
0							
Correct Scores	14	15	16	17	18	19-20	21-23

Frequency Percentage for Survey Statements

55%		53%	
50%			
40%			
30%			29%
20%			
10%			
5%	3%		
0			
Grouped Correct Scores	0-8	10-19	20-25

Figure 13. Relative Frequency Distribution Compared and Contrasted Between the Correct Scores of the Respondents (n) = 25) and these Correct Scores Grouped According to the 30 Survey Statements

The relative standing of the survey questionnaire data set measurements was established by ranking the grouped correct scores as represented in the stem and leaf display in Table 41, expressing the position of this data as a percentile and dividing this data into quartiles using SPSS 18 Computer Generated Statistics. Figure 14 illustrates the 25^{th} percentile, lower quartile, 50^{th} percentile or median, 75^{th} percentile, upper quartile, and the area of each quartile. Additionally, Figure 14 identifies the data set represented in the previous discussion of negative kurtosis for the correct scores grouped according to the 30 survey statements. The 25^{th} percentile is the grouped correct scores of 11 corresponding to survey statement number 16 and lower quartile is a data set of grouped correct scores 0, 0, 1, 4,6, 8, 10, and 11 corresponding to survey statements 6, 21, 22, 19, 10, 23, 4, and 16 respectively. Therefore, the most frequently incorrect response to the questionnaire statements by the respondents has been identified as:

Number 4. In fiscal year 2006, all cities were required to implement NIMS Training but did not have to formally assess compliance.

Number 6. Formal education and academic achievement resulting in a college degree is critical for leading NIMS implementation.

Number 10. The NIMS was developed by the Federal Department of Homeland Security to ensure training, equipment, and planning is adequate for the Federal Government to initially manage emergency incidents.

Number 16. The safety director should have prior emergency field experience for leading NIMS implementation.

Number 19. The safety director may delegate the statutory duties of the position to another city employee.

Number 21. The public safety director should be considered academically (college degree based) prepared to lead NIMS.

Number 22. The public safety director should have formal college education to be considered prepared to lead NIMS by subordinates.

Number 23. The safety director should be the NIMS CAST SUGL with approval of the county EMA Director.

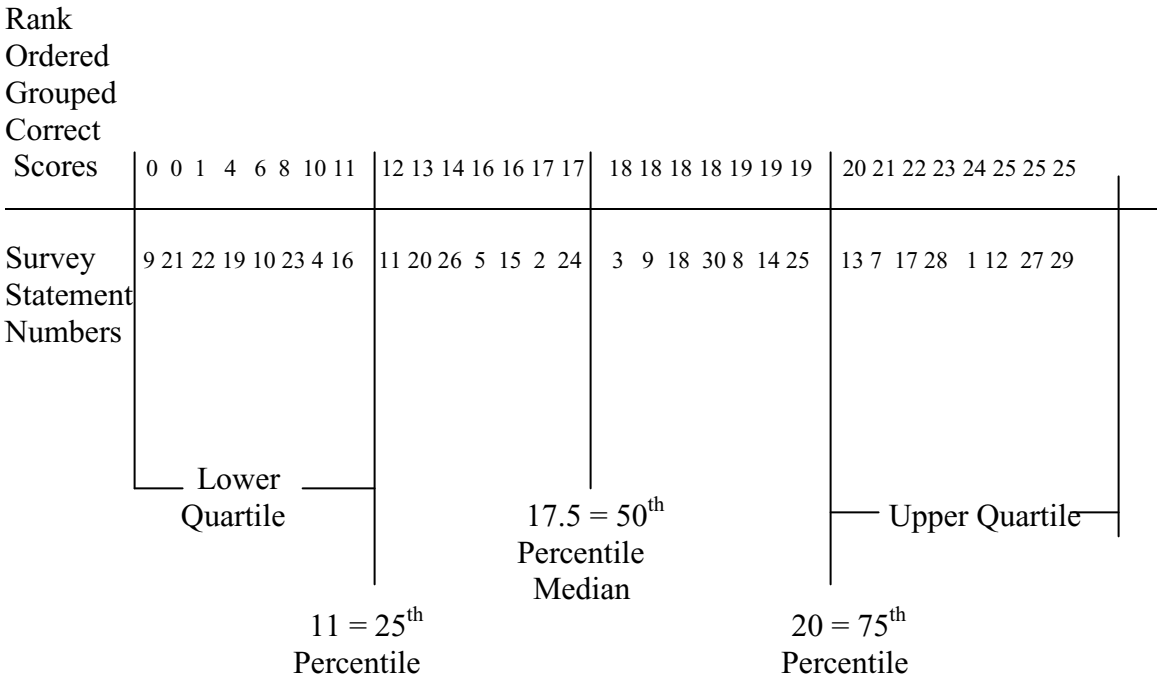

Figure 14. Analysis of Grouped Correct Scores, Corresponding Survey Statement Numbers and Quartiles.

These eight statements were tested with the Ohio city public safety director respondent variables of age, gender, level of formal education, prior emergency field experience, NIMS certification, NIMS training, years of experience as an Ohio city public safety director, and NIMS leadership role.

Chi-Square (x^2) Tests Conversions

The Chi-Square (x^2) tests for independence and goodness of fit were used to compare the variables to the eight survey statements numbers 4, 6, 10, 16, 19, 21, 22, and 23 in the

lower quartile of the grouped correct scores 0, 0, 1, 4, 6, 8, 10, and 11 as shown in Figure 15.

The null hypothesis (H_0) and alternative hypothesis (H_A) for the (x^2) test for independence is:

- (x^2) H_0: The variables are independent of each other.
- (x^2) H_A: The variables are dependent on each other.

The null hypothesis (H_0) and the alternative hypothesis (H_A) for (x^2) test for goodness of fit are:

- (x_2) $H_{0:}$ The variables have a normal distribution.
- (x^2) H_A: The variables do not have a normal distribution.

For the chi-square (x^2) tests, SPSS 18 Computer Generated Statistical Tables computed a probability value of *P*-Value for the (x^2) test for independence as well as the (x^2) test for goodness of fit. If the *P*-Value for the (x^2) test for independence is less than .05 level of significance, set as the confidence level for rejecting the null hypothesis (*P*-Value<.05), the incorrectness of the statement is statistically dependent on the variable. If the P-Value for the (x^2) test for goodness of fit is less than the .05 level of significance set as the confidence level for rejecting the null hypothesis (*P*-Value<.05), the correctness of the answers do not have a normal distribution. This means the variables are determining factors for the incorrectness of the statement.

Summary tables are presented for both (x^2) tests pertaining to each of the eight survey statements. These tables identify the statement, the number of correct and incorrect responses for the statement, the variables, the chi-square statistic, the *P*-Value for (x^2) test

for independence or the critical value for (x^2) test for goodness of fit, and the (x^2) H_0 acceptance or rejection.

The size of the Ohio city public safety director population sample is twenty-five (n) = 25). The response to each statement was separated according to the variable and sequestered into groups of rows and columns for the (x^2) test for independence and cells for the (x^2) test for goodness of fit to determine the degrees of freedom (df). The degrees of freedom (df) was computed as (df) = (rows-1) (columns-1) for the (x^2) test for independence, and as (df) = (cells-1) for the (x^2) test for goodness of fit.

The Chi-Square Test Results

Tables 44 through 53 present the results for the (x^2) test for independence and the (x^2) test for goodness of fit in each table. Each table displays an analysis of the variables in correspondence with the eight survey statements in the lower quartile of the grouped correct scores shown in Figure 15.

Table 44 displays the (x^2) test for independence and the (x^2) test for goodness of fit analysis for Survey Statement 4 with respect to each variable. As shown, the null hypothesis (H_0) for the (x^2) test for independence, the variables are independent of each other and are accepted for every variable. Therefore, the incorrectness for Statement 4 is not statistically dependent on any of the variables. Additionally, Table 44 shows that the null hypothesis (H_0) for the (x^2) test for goodness of fit; the variables have a normal distribution and are accepted for the variables of: prior emergency field experience, NIMS training, and years of experience as an Ohio city public safety director. Therefore, the correct answers for these variables for Statement 4 are statistically normally distributed and fit the expected count data. However, the null hypothesis is (H_0) is

rejected for the variables of age, gender, formal education, NIMS certification, and NIMS leadership role. Therefore, for the alternative hypothesis (H_A), the variables are not normally distributed and are accepted for these variables. This indicates that the distribution of correct answers for these variables disagrees with the theorized probabilities and that the correct answers do not fit the expected count data for Statement 4.

Table 46 displays the (x^2) test's analysis for Survey Statement 6 with respect to each variable. Due to incorrect answers for each of the variables by all of the respondents, both (x^2) tests reject the (H_0) and the (H_A) is accepted for every variable for Statement 6. Therefore, the incorrectness for Statement 6 is statistically dependent on every variable for the (x^2) test for independence and the correct answers do not fit the expected count data for every variable for the (x^2) test for goodness of fit for every variable for Statement 6.

Table 47 displays the (x^2) test's analysis for Survey Statement 10 with respect to each variable. As shown, the (H_0) for the (x^2) test of independence is accepted for every variable for Statement 10. Therefore, the incorrectness for Statement 10 is not statistically dependent on any of the variables for Statement 10. However, the (H_0) is rejected and the (H_A) accepted for every variable for the (x^2) test for goodness of fit. Therefore, the correct answers do not fit the expected count data for these variables for Statement 10.

Table 48 displays the (x^2) test's analysis for Survey Statement 16 with respect to each variable. As shown, the (H_0) for the (x^2) test for independence is accepted for every variable for Statement 16. Therefore, the incorrectness for Statement 16 is not

statistically dependent on any of the variables for Statement 16. Additionally, Table 48 shows that the (H_0) for the (x^2) test for goodness of fit is accepted for the variables of formal education, NIMS training, and years of experience as an Ohio city public safety director. Therefore, the correct answers for these variables for Statement 16 are statistically normally distributed and fit the expected count data. However, the (H_0) is rejected and the (H_A) is accepted for the variables of age, gender, prior emergency field experience, NIMS certification, and NIMS leadership role. Therefore, the correct answers do not fit the expected count data for these variables for Statement 16.

Table 49 displays the (x^2) test's analysis for Survey Statement 19 with respect to each variable. As shown, the (H_0) for the (x^2) test for independence is accepted for every variable for Statement 19. Therefore, the incorrectness for Statement 19 is not statistically dependent on any of the variables for Statement 19. However, the (H_0) is rejected and the (H_A) accepted for every variable for the (x^2) test for goodness of fit. Therefore, the correct answers do not fit the expected count data for these variables for Statement 19.

Table 50 displays the (x^2) test's analysis for Survey Statement 21 with respect to each variable. Due to the incorrect answers for each of the variables by all respondents, both (x^2) tests reject the (H_0), but the (H_A) is accepted for every variable for Statement 21. Therefore, the incorrectness for Statement 21 is statistically dependent on every variable for the (x^2) test for independence and the correct answers do not fit the expected count data for every variable for the (x^2) test for goodness of fit for every variable for Statement 21.

Table 51 displays the (x^2) test's analysis for Survey Statement 22 with respect to each variable. As shown, with the exception of the variable of prior emergency field experience, the (H_0) for the (x^2) test for independence is accepted for all the other variables. Therefore, the incorrectness for Statement 22 is not statistically dependent on any of the variables except prior emergency field experience. Additionally, Table 51 shows that the (H_0) is rejected and the (H_A) is accepted for every variable for the (x^2) test for goodness of fit. Therefore, the correct answers do not fit the expected count data for these variables for Statement 22.

Table 52 displays the (x^2) test's analysis for Survey Statement 23 with respect to each variable. As shown, the (H_0) for the (x^2) test for independence is accepted for every variable for Statement 23. Therefore, the incorrectness for Statement 23 is not statistically dependent on any of the variables for Statement 23. Additionally, Table 52 shows that the (H_0) for the (x^2) test for goodness of fit is accepted for the variables of NIMS training and years of experience as an Ohio city public safety director. Therefore, the correct answers for these variables for Statement 23 are statistically normally distributed and fit the expected count data. However, the (H_0) is rejected and the (H_A) is accepted for the variables of age, gender, formal education, prior emergency field experience, NIMS certification, and NIMS leadership role. Therefore, the correct answers do no fit the expected count for these variables for Statement 23.

Research Questions

Two research questions were posed for this study. Each of these questions is answered using inferential statistical analysis based on the results of the chi-square (x^2) tests performed with a .05 level of significance.

Research Question Number 1

Is there a significant difference among practicing Ohio city public safety directors relative to their level of formal education, emergency field experience, NIMS certification and training, years of experience as an Ohio city public safety director, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the State of Ohio?

Null hypothesis (H_0)—There is no significant statistical difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency field experience, NIMS certification and training, years of experience as an Ohio city public safety director, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in Ohio.

Alternative hypothesis (H_A)—There is a significant statistical difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency experience, NIMS certification and training, years of experience as an Ohio city public safety director, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in Ohio.

Table 45.

Statement 4: In Fiscal Year 2006 All Cities Were Required To Implement NIMS Training but Did Not Have To Formally Assess Compliance.

(False) Total Sample Responses: 10 Correct/ 15 Incorrect

(x^2) Test for Independence: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	1.88492	3	0.5966	Accept
Gender	0.2038	1	0.6517	Accept
Education	6.75505	4	0.1494	Accept
Emergency Ex	1.91964	4	0.7505	Accept
NIMS Cert	0.0744	1	0.7850	Accept
NIMS Training	8.49206	8	0.3869	Accept
Safety Director Ex	8.36227	9	0.4981	Accept
NIMS Leadership	0.58594	1	0.4440	Accept

(x^2) Test for Goodness of Fit: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	9.4524	3	0.0238	Reject
Gender	9.0217	1	0.0027	Reject
Education	10.621	4	0.0312	Reject
Emergency Ex	9.4607	4	0.0506	Accept
NIMS Cert	9.0079	1	0.0027	Reject
NIMS Training	11.038	8	0.1996	Accept
Safety Director Ex	11.167	9	0.2645	Accept
NIMS Leadership	9.3403	1	0.0022	Reject

Table 46.

Statement 6: Formal Education and Academic Achievement Resulting in a College Degree is Critical for Leading NIMS Implementation.

(True) Total Sample Responses: 0 Correct/ 25 Incorrect

(x^2) Test for Independence: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	25	3	0.000	Reject
Gender	25	1	0.000	Reject
Education	25	4	0.000	Reject
Emergency Ex	25	4	0.000	Reject
NIMS Cert	25	1	0.000	Reject
NIMS Training	25	8	0.000	Reject
Safety Director Ex	25	9	0.000	Reject
NIMS Leadership	25	1	0.000	Reject

(x^2) Test for Goodness of Fit: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	25	3	0.000	Reject
Gender	25	1	0.000	Reject
Education	25	4	0.000	Reject
Emergency Ex	25	4	0.000	Reject
NIMS Cert	25	1	0.000	Reject
NIMS Training	25	8	0.000	Reject
Safety Director Ex	25	9	0.000	Reject
NIMS Leadership	25	1	0.000	Reject

Table 47.

Statement 10: The NIMS was Developed by The Federal Department of Homeland Security to Ensure Training, Equipment, and Planning is adequate for the Federal Government to Initially Manage Emergency Incidents.

(False) Total Sample Responses: 6 Correct/ 19 Incorrect

(x^2) Test for Independence: Reject (x^2) H_0 if P-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	6.72515	3	0.0812	Accept
Gender	0.00119	1	0.9725	Accept
Education	4.15005	4	0.3861	Accept
Emergency Ex	1.52334	4	0.8225	Accept
NIMS Cert	0.73143	1	0.3924	Accept
NIMS Training	13.7218	8	0.0893	Accept
Safety Director Ex	14.0351	9	0.1211	Accept
NIMS Leadership	0.11003	1	0.7401	Accept

(x^2) Test for Goodness of Fit: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	15.667	3	0.0013	Reject
Gender	14.565	1	0.0001	Reject
Education	15.197	4	0.0043	Reject
Emergency Ex	14.718	4	0.0053	Reject
NIMS Cert	14.786	1	0.0001	Reject
NIMS Training	16.943	8	0.0307	Reject
Safety Director Ex	17.000	9	0.0487	Reject
NIMS Leadership	14.444	1	0.0001	Reject

Table 48.

Statement 16: The Safety Director Should Have Prior Emergency Field Experience for Leading NIMS Implementation.

(True) Total Sample Responses: 11 Correct/ 14 Incorrect

(x^2) Test for Independence: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	1.40306	3	0.7048	Accept
Gender	0.31850	1	0.5725	Accept
Education	3.78542	4	0.4358	Accept
Emergency Ex	7.18634	4	0.1264	Accept
NIMS Cert	2.01022	1	0.1562	Accept
NIMS Training	8.0754	8	0.4261	Accept
Safety Director Ex	5.7224	9	0.7673	Accept
NIMS Leadership	0.14909	1	0.6994	Accept

(x^2) Test for Goodness of Fit: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	8.1857	3	0.0423	Reject
Gender	8.2609	1	0.0041	Reject
Education	8.7727	4	0.0670	Accept
Emergency Ex	9.6107	4	0.0475	Reject
NIMS Cert	8.6984	1	0.0032	Reject
NIMS Training	10.938	8	0.2052	Accept
Safety Director Ex	9.25	9	0.4145	Accept
NIMS Leadership	7.6403	1	0.0051	Reject

Table 49.

Statement 19: The Safety Director may Delegate the Statutory Duties of the Position to Another City Employee.

(False) Total Sample Responses: 4 Correct/ 21 Incorrect

(x^2) Test for Independence: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	3.42262	3	0.3309	Accept
Gender	0.13102	1	0.7174	Accept
Education	5.15873	4	0.2714	Accept
Emergency Ex	0.57929	4	0.9653	Accept
NIMS Cert	0.21318	1	0.6443	Accept
NIMS Training	14.3707	8	0.0726	Accept
Safety Director Ex	10.119	9	0.3409	Accept
NIMS Leadership	0.00465	1	0.9456	Accept

(x^2) Test for Goodness of Fit: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	18.1	3	0.0004	Reject
Gender	17.696	1	0.0000	Reject
Education	18.333	4	0.0011	Reject
Emergency Ex	17.718	4	0.0014	Reject
NIMS Cert	17.794	1	0.0000	Reject
NIMS Training	19.571	8	0.0252	Reject
Safety Director Ex	19.000	9	0.0252	Reject
NIMS Leadership	17.694	1	0.0000	Reject

Table 50.

Statement 21: The Public Safety Director Should be Considered Academically (College Degree Based) Prepared to Lead NIMS.

(True) Total Sample Responses: 0 Correct/ 25 Incorrect

(x^2) Test for Independence: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	25	3	0.0000	Reject
Gender	25	1	0.0000	Reject
Education	25	4	0.0000	Reject
Emergency Ex	25	4	0.0000	Reject
NIMS Cert	25	1	0.0000	Reject
NIMS Training	25	8	0.0000	Reject
Safety Director Ex	25	9	0.0000	Reject
NIMS Leadership	25	1	0.0000	Reject

(x^2) Test for Goodness of Fit: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	25	3	0.0000	Reject
Gender	25	1	0.0000	Reject
Education	25	4	0.0000	Reject
Emergency Ex	25	4	0.0000	Reject
NIMS Cert	25	1	0.0000	Reject
NIMS Training	25	8	0.0000	Reject
Safety Director Ex	25	9	0.0000	Reject
NIMS Leadership	25	1	0.0000	Reject

Table 51.

Statement 22: The Safety Director Should Have Formal College Education to be Considered Prepared to Lead NIMS by Subordinates.

(True) Total Sample Responses: 1 Correct/ 24 Incorrect

(x^2) Test for Independence: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	2.67857	3	0.4439	Accept
Gender	2.4966	1	0.1141	Accept
Education	1.32576	4	0.8570	Accept
Emergency Ex	25.0000	4	0.0001	Reject
NIMS Cert	0.25008	1	0.6170	Accept
NIMS Training	3.2981	8	0.9142	Accept
Safety Director Ex	3.29861	9	0.9513	Accept
NIMS Leadership	0.08861	1	0.7659	Accept

(x^2) Test for Goodness of Fit: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	P-Value	(x^2) H_0
Age	23.143	3	0.0000	Reject
Gender	23.043	1	0.0000	Reject
Education	23.091	4	0.0001	Reject
Emergency Ex	24.000	4	0.0001	Reject
NIMS Cert	23.056	1	0.0000	Reject
NIMS Training	23.167	8	0.0032	Reject
Safety Director Ex	23.167	9	0.0058	Reject
NIMS Leadership	23.063	1	0.0000	Reject

Table 52.

Statement 23: The Safety Director Should be the NIMS CAST SUGL with Approval of the County EMA Director.

(True) Total Sample Responses: 8 Correct/ 17 Incorrect

(x^2) Test for Independence: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	5.7423	3	0.1248	Accept
Gender	0.04895	1	0.8249	Accept
Education	2.71836	4	0.6060	Accept
Emergency Ex	4.30344	4	0.3665	Accept
NIMS Cert	0.06164	1	0.8039	Accept
NIMS Training	7.33182	8	0.5013	Accept
Safety Director Ex	11.5962	9	0.2370	Accept
NIMS Leadership	0.11521	1	0.7343	Accept

(x^2) Test for Goodness of Fit: Reject (x^2) H_0 if *P*-Value <.05

Variables	(x^2) Statistic	(*df*)	*P*-Value	(x^2) H_0
Age	12.81	3	0.0051	Reject
Gender	11.783	1	0.0006	Reject
Education	12.152	4	0.0163	Reject
Emergency Ex	12.496	4	0.0140	Reject
NIMS Cert	11.571	1	0.0007	Reject
NIMS Training	14.438	8	0.0710	Accept
Safety Director Ex	14.083	9	0.1194	Accept
NIMS Leadership	11.694	1	0.0006	Reject

Of the eight Survey Statements, 4, 6, 10, 16, 19, 21, 22, and 23 identified for the chi-square (x^2) test for independence item analysis with the Ohio city public safety director variables of age, gender, level of formal education, prior emergency field experience,

NIMS certification and training, years of experience as an Ohio city public safety Director, and NIMS leadership role (variables = 8) (statement = 8) = 64. Seven statements, 4, 6, 10, 16, 19, 21, and 23 were found to contain consistent results for each variable tested. The (x^2) H_0 was accepted for every variable tested for the five statements, 4, 10, 16, 19, and 23; while the (x^2) H_0 was rejected for every variable for the two statements, 6 and 21. However, one variable, prior emergency field experience, (x^2) tested for one statement 22. It was the only variable found rejecting the (x^2) H_0 for this statement. This one variable represents an inconsistency of 1out of the 64 (x^2) tests conducted for the eight variables for each of the eight statements or an inconsistency rate of 0.015625 (1.6%). Additionally, this one variable represents an inconsistency of 1 out of the 8 (x^2) tests conducted on prior emergency field experience for the eight statements of an inconsistency rate of 0.125 (12.5%). Comparing the inconsistency ratings of this variable with the consistency rate of 0.984375 (98.4%) for all (x^2) tests (n = 64) conducted and a consistency rate of 0.875 (87.5%) for all (x^2) tests (n = 8) conducted for the variable of prior emergency field experience indicated a need for further analysis to explain this inconsistency.

Since each of the other seven variables (x^2) tested at 100% consistency; five statements accepted the (x^2) H_0 for all variables and two statements rejected the (x^2) H_0 for all variables and the inconsistency for the variable of prior emergency field experience was a rejection of the (x^2) H_0 for Statement 22, the two statements 6 and 21 were examined for a possible relationship with the inconsistency for Statement 22. The two statements 6 and 21, rejecting the (x^2) H_0 for every variable due to incorrect answers by every respondent, were ordered numerically prior to Statement 22. Statement 6 stated:

"Formal education and academic achievement resulting in a college degree is critical for leading NIMS implementation." Statement 21 stated: "The public safety director should be considered academically (college degree based) prepared to lead NIMS." Statement 22 stated: "The safety director should have formal college education to be considered prepared to lead NIMS by subordinates." While these three statements correlate with the different variables of formal education, NIMS training, and NIMS leadership respectively, it seems all respondents held no value, first for formal education (Statement 6) nor secondly for academic achievement as a component of their NIMS training (Statement 21). Therefore, it seems reasonable that respondents would place more value on practical experience gained through prior emergency field experience than formal education (Statement 6), academic preparedness (Statement 21), or subordinate's confidence in their leadership based on a college education (Statement 22). For this reason, the one relatively small inconsistency for the variable of prior emergency field experience represented in the (x^2) test of independence for Statement 22, is not significant enough to indicate there is a big statistical difference among Ohio city public safety directors, relative to the variables regarding the authority and duties of their position and leadership of NIMS implementation in Ohio.

Considering the high consistency of the (x^2) test for independence results and the conclusions drawn from an analysis of the one inconsistency, there is no statistically significant basis for rejecting the null hypothesis (H_0) for Research Question 1.

Research Question 2

Is there a significant difference among practicing Ohio city public safety directors and their competence levels to lead NIMS implementation in Ohio cities?

Null hypothesis (H_0)—there is no significant statistical difference among practicing Ohio city public safety directors and their competence levels to lead the NIMS implementation in Ohio cities.

Alternative hypothesis (H_A)—there is a significant statistical difference among practicing Ohio city public safety directors and their competence levels to lead the NIMS implementation in Ohio cities.

Of the eight Survey Statements; 4, 6, 10, 16, 19, 21, 22, and 23 identified for chi-square (x^2) test for goodness of fit item analysis with the Ohio city public safety director variables of age, gender, formal education, prior emergency field experience, NIMS certification, NIMS training, years of experience as an Ohio city public safety director, and NIMS leadership. Statements; 6, 10, 19, 21, and 22 contained consistent results for each variable.

The (x^2) tests for the eight variables for these five statements, representing 62.50% of all the statements (n) = 8, resulted in a rejection of the (x^2) H_0 for each time a variable was tested (n) = 40 and represented 62.50% of all tests (n = 64 conducted. Additionally, the (x^2) tests for the eight variables for Statements 4, 16, and 23 resulted in the rejection of the (x^2) H_0 for five variables for Statement 4 as well as 6, and six variables for Statement 23, representing 25% of all (x^2) tests (n = 64 conducted. Table 48 displays the (x^2) H_0 rejection frequency and percentage for each variable for each survey statement. As shown, the (x^2) Test for Goodness of Fit rejected the (x^2) null hypothesis (H_0), that the variables are normally distributed indicating the correct answers for the statements agree with the theorized probabilities for correct answers 56 or 87.50% of the 64 times a test was conducted. Therefore, the (x^2) alternative hypothesis, that the variables are not

normally distributed indicating the correct answers disagree with the theorized probabilities for the correct answers, was accepted at a 87.50% rate for the 64 times an (x^2) test was conducted. Furthermore, the high (x^2) H_0 rejection frequency correlating with the high (x^2) H_A acceptance frequency, cumulatively indicating a low competency level for the leadership of NIMS implementation for Ohio city public safety directors among the eight survey statements.

Table 53.

(x^2) H_0 Rejection Frequency and Percentage for each Variable for each Survey Statement

	Statements								(x^2) H_0 Reject	
Variables	4	6	10	16	19	21	22	23	Frequency	%
Age	R	R	R	R	R	R	R	R	8	12.5
Gender	R	R	R	R	R	R	R	R	8	12.5
Education	R	R	R	A	R	R	R	R	7	10.94
Emergency Ex	A	R	R	R	R	R	R	R	7	10.94
NIMS Cert	R	R	R	R	R	R	R	R	8	12.5
NIMS Training	A	R	R	A	R	R	R	A	5	7.81
Safety Dir Ex	A	R	R	A	R	R	R	A	5	7.81
NIMS Leadership	R	R	R	R	R	R	R	R	8	12.5
Total	5	8	8	5	8	8	8	7	56	87.5

However, to determine if the four variables of formal education, prior emergency field experience, NIMS training, and years of experience as an Ohio city public safety director (identified in Table 53 with an (A) for acceptance of the (x^2) H_0) indicate a significant statistical difference among Ohio city public safety directors and their competence to lead NIMS that would result in rejecting the null hypothesis (H_0) for research Question 2, further analysis was conducted. As shown in Table 53, the (x^2) H_0 was accepted once each for the variables of prior emergency field experience and formal education for

Statements 4 and 16 respectively. Each of these variables represent 1.563% of all the (x^2) tests conducted for all variables (n) = 64). Additionally, the (x^2) H_0 was accepted once each for the variables of NIMS training and years of experience as an Ohio city public safety director in Statements 4, 16, and 23. Each of these variables represent 1.563% of all the (x^2) tests conducted for all variables (n) = 64. Therefore, the individual (x^2) H_0 acceptance rate (1.563%) for each of the four variables is relatively low and isolated to three statements (4, 16, and 23). Furthermore, a comparison of the cumulative total rate of (x^2) H_0 acceptance of 12.50% for the four variables with the cumulative total rate of (x^2) H_0 rejection of 87.50% for all variables concluded that the four variables collectively represent only one-eighth (1/8) of the (x^2) test data. This comparison further substantiates that the grouped data for the (x^2) test for the four variables is not statistically significant enough to conclude it indicates a difference among Ohio city public safety directors and their competency to lead NIMS.

Considering the high (x^2) H_0 rejection frequency and the conclusions drawn from an analysis of the (x^2) H_0 acceptance frequency, there is no statistical basis for rejecting the Null hypothesis (H_0) for Research Question 2.

Summary

The analysis of the responses to the Survey Questionnaire Statements (n) = 30 by the sample population of Ohio city public safety directors (n) = 25 provides the statistical basis for the chi-square tests (x^2). This analysis described the response data and established that there is a group of respondents who scored relatively low on the Survey Questionnaire. The relative standing of this data was established by ranking the grouped correct scores for respondents and expressing the position of the data as a percentile.

Dividing this data into quartiles identified Survey Statements 4, 6, 10, 16, 19, 21, 22, and 23 as representative of the incorrect responses most frequently given by respondents. This allowed the variables to by (x^2) tested for independence and goodness of fit in correspondence to the most frequently incorrect responses from the sample population.

The (x^2) test for independence analysis resulted in acceptance of the null hypothesis (H_0) for Research Question 1; there is no significant difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency field experience, NIMS certification and training, years of experience as an Ohio city public safety director, NIMS leadership role, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the State of Ohio.

The (x^2) test of goodness of fit analysis resulted in acceptance of the null hypothesis (H_0) for Research Question 2; there is no significant statistical difference among practicing Ohio city public safety directors and their competence levels to lead the NIMS implementation in Ohio cities. Additionally, this (x^2) test analysis grouped Ohio city public safety directors as having a low competency level for the leadership of NIMS implementation in Ohio cities.

Section 3: Conclusion

Section 1 of this chapter described this study's participants (n) = 25 relative to the eight variables of age, gender, level of formal education, prior emergency field experience, NIMS certification and training, years of experience as an Ohio city public safety director, and NIMS leadership role. The SPSS 18 Computer Generated Non-Parametric One-Sample Kolmogorov-Smirnov Test was conducted for seven of these variables. This test determined that the relative frequency distribution for these seven variables was normal. Additional one-sample testing for these seven variables by generational era confirmed the normal relative frequency distribution for these variables, with one exception. The Greatest Generation era could not be tested due to only one observation. Furthermore, the variable of gender could not be one-sample tested due to the nature of the data. For this reason, the SPSS 18 Computer Generated Pair t-Test was conducted for the variable of gender. This test determined the gender parameter represented for the sample population (n) = 25 was unbiased compared to the entire population (n) = 205. Analysis of these test results for all eight variables for the sample population supported a description of the typical Ohio city public safety director as 49 years of age, master degreed, with five years of prior emergency field experience, NIMS certified, having completed three NIMS training courses, with four years experience as an Ohio city public safety director, and responsible for the leadership of NIMS implementation in the city of their employment.

Section II of this chapter analyzed the eight variables in correspondence with the eight variables in correspondence with the eight Survey Statements 4, 6, 10, 16, 19, 21, 22, and 23 identified within the lower quartile of the grouped correct scores for the entire

data set of Survey Statements (n) = 30. This analysis was conducted using SPSS 18 Computer Generated Chi-Square (x^2) Test results to answer the two Research Questions for this study. The(x^2) test for independence for the eight variables, in correspondence with the eight survey statements resulted in retaining the null hypothesis (H_0) for Research Question 1. Therefore, there is no significant statistical difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency field experience, NIMS certification and training, years of experience as an Ohio city public safety director, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the State of Ohio.

The (x^2) test for goodness of fit for the eight variables in correspondence with the eight survey statements resulted in retaining the null hypothesis (H_0) for Research Question 2. Therefore, there is no statistical difference among practicing Ohio city public safety directors and their competency levels to lead the NIMS implementation in Ohio cities. Furthermore, the analysis of the (x^2) test for goodness of fit indicated that the uniformity among Ohio city public safety directors regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the State of Ohio, confirmed by the retention of the (H_0) for Research Question 1 and the lack of a statistical difference among practicing Ohio city public safety directors and their competence levels to lead the NIMS implementation in Ohio cities, confirmed by the retention of the (H_0) for Research Question 2, correlates to low levels of competency to lead NIMS among Ohio city public safety directors.

The results of the statistical analysis have been presented in this chapter. The interpretation, implications, recommendations and conclusions associated with these findings are presented in chapter 5.

Chapter 5: Discussions, Conclusions, and Recommendations

Introduction

Chapter 5 presents an overview of this study, the interpretation, and implications of the study's findings, recommendations for action, as well as further study, and a conclusion.

Overview of the Study

The introduction to this study establishes the uniqueness of the governmental structure of the United States of America regarding the administration of public policy. In matters of public safety, the individual states have more authority the central federal government. The deficiencies of this governance structure were apparent as a result of the terrorist attacks against the United States on September 11, 2001. These attacks identified the need to correct these deficiencies with particular emphasis on improving coordination between the federal, state, and local governments. One of the major areas of emphasis identified was emergency preparedness and response. To address this area of deficiency, the federal government established the Department of Homeland Security and included emergency preparedness and response as one of its responsibilities. The National Incident Management System (NIMS) was implemented by this agency to provide a comprehensive system for emergency preparedness and response among federal, state, and local governments as well as their agencies. However, the structure of governance in the United States made the implementation of the NIMS optional among the states.

Even though the governor of the State of Ohio mandated the adoption of NIMS, a review of the membership on the NIMS Implementation Senior Advisory Committee found no reference to the Ohio Department of Public Safety or the Ohio Association of

City Safety Directors. To determine if these omissions stemmed from the lack of any statutory requirement pertinent to NIMS implementation, a review of the statutes contained in the Ohio Revised Code of Law was conducted. It was found that Ohio Revised Code mandated that every Ohio city have a Department of Public Safety administered by a Director of Public Safety. Additionally, the duties of the Ohio city public safety director specified by statute correlated with the tenets of NIMS. The majority of Ohio's citizens reside in Ohio's cities; the department and the position of Ohio city public safety director were statutorily established in 1969. Yet, the governor's mandate for NIMS adoption made no reference of any involvement of the position in NIMS implementation. Thus, it was not known whether the individuals employed in the public safety director position were fulfilling their responsibilities relative to leadership of NIMS. This lack of knowledge identified the significant problem worthy of study; the lives of Ohio's citizens might be at risk because it is not known if the statutorily mandated position of city public safety director is being used to lead the implementation of NIMS. Due to the lack of any informational basis relative to the position of Ohio city public safety director outside of the Ohio Revised Code references, an analysis of the problem focused on identifying the variables that may determine why Ohio is not using this position to lead NIMS implementation.

These variables were identified as age, gender, level of formal education, prior emergency field experience, NIMS certification, NIMS training, years of experience as an Ohio city public safety director, and NIMS leadership role. The first research questions asked: "Is there a significant difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency field

experience, NIMS certification and training, years of experience as an Ohio city public safety director, NIMS leadership role, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the state of Ohio?" Answering this question required the variables to be analyzed as potential factors contributing to the lack of involvement in the NIMS process by the position of Ohio city public safety director.

The second research question asked: "Is there significant differences among practicing Ohio city public safety directors and their competency levels to lead the NIMS implementation in Ohio cities?" Answering this question required the variables to be analyzed as potential factors contributing to an Ohio city public safety director's competence levels to lead NIMS implementation in Ohio cities.

The data pertaining to the analysis of this study's variables, in the context of the two research questions, was collected using a self-reported survey questionnaire instrument mailed to the entire population (N) = 204 of Ohio city public safety directors. The Demographic Section of this instrument described the respondents (n) =25 relative to the variables. The analysis of this data found a normal frequency of distribution for each variable resulting in an estimated description of the typical Ohio city public safety director as follows:

Table 54.

Description of the Typical Ohio City Public Safety Director

Variables	Findings
Age	49
Gender	Male
Level of Formal Education	Master Degree
Prior Emergency Field Experience	5 years
NIMS Certification	May or may not be (A 50%change either way)
NIMS Training	3 NIMS Courses Completed
Experience as an Ohio City Public Safety Director	4 years
NIMS Leadership Role	May or May Not Be Responsible for Leading NIMS Implementation (A 50% Chance Either Way)

The Safety Director Questionnaire Section of the survey instrument contained 30 statements developed and validated through the Delphi Technique. The analysis of the responses to these statements was compared and contrasted with the responses accepted as correct through the Delphi Technique development process. The relative standing for this data set was established by expressing the data as a percentile and dividing the data into quartiles. This analysis identified Statements 4, 6, 10, 16, 19, 21, 22, and 23 in the lower quartile and representative of the incorrect responses most frequently given by safety directors. This allowed the variables to be chi-square ($\bar{x}$) tested for independence and goodness of fit for Research Question 1 and Research Question 2 respectively. This resulted in finding no statistical difference among Ohio city public safety directors

relative to the variables with regard to their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in the state of Ohio for Research Question 1. And, the study found no statistical difference among Ohio city public safety directors and their competency levels to lead the NIMS implementation in Ohio cities for Research Question 2.

Interpretation and Implications of the Study's Findings

The conceptual basis for this study was drawn from the cumulative merit of analyzing variables associated with Ohio city public safety directors' knowledge of their position as well as their competency levels relative to leadership of NIMS implementation in the state of Ohio and its cities. Conceptually, the variables of age, gender, level of formal education, prior emergency field experience, NIMS certification, NIMS training, years of experience as an Ohio city public safety director, and leadership role represent potentially influential factors relevant to this study's theoretical frame of transformational leadership theory and the large body of public administration literature regarding NIMS public policy. The interpretations of this study's findings have implications for improvement to NIMS policy, education, and governmental agencies that positively impact individuals responsible for the safety of Ohio's citizens and the American public.

The statistical analysis for each of the eight variables describing the sample population of Ohio city public safety directors established that this sample had a normal distribution and was not biased regarding gender. The seven variables of age, level of formal education, prior emergency field experience, NIMS certification, NIMS training, years of experience as an Ohio city public safety director, and NIMS leadership role had a normal frequency of distribution. The normalcy of distribution for these variables was confirmed by additionally testing their frequency of distribution within each of the four generational eras associated with the age of respondents. However, due to the small representation of females (n) = 2) among respondents, (n) = 25, the sample population was statistically compared with the entire population (N) = 205. This statistical comparison resulted in establishing the variable of gender as unbiased. The results of these findings, presented

in chapter 4, enable the interpretation of the description for a typical Ohio city public safety director in association with the eight variables for this study.

A typical Ohio city public safety director's generational era (Baby Boom), age (41 years), and gender (male), corresponds with generally descriptive attitudes, values, and social conditions presented in chapter 1 and chapter 2 that influence the typical Ohio city public safety director. Therefore, the typical Ohio city public safety director may be characterized by describing their morality, approach to life, work ethic, and societal effect in concert with the Baby Boom Generational Era. The research literature supports characterizing the typical Ohio city public safety director as rejecting the traditional morality of his or her parents, materialism, individualistic, oriented toward pursuing leisure rather than work, lacking a sense of duty. They are typically unwilling to make sacrifices for others, and subjecting family, work, and civic duty to their personal interests. To support the demand for consumer goods and due to the rejection of gender-based discrimination, equal educational and employment opportunities emerged for this generation. However, wages for women remained at half those of males for the same jobs.

A typical Ohio city public safety director's level of formal education (Master's degree) is relatively high. Additionally, the majority of the sample respondents (40%) with a Master of Arts degree indicated public administration as their major area of study. Orienting this level of formal education with a typical Ohio city public safety director's prior emergency field experience (5 years), and years of experience as an Ohio city public safety director (4 years), seems to support the interpretation that a typical Ohio city public safety director was entering college at approximately the same time

transformational leadership theory was evolving as an accepted integrative leadership theory. Their graduate studies may have included this theory. Furthermore, the typical Ohio city safety director's NIMS training (3 NIMS courses), encompassing the basic courses required for NIMS certification, espouse transformational leadership theory as the preferred model for effective NIMS implementation. Additionally, as shown in Table 24 of chapter 4, among the sample respondents (n) = 25, seven (28%) did not hold NIMS certification. Five (20%) of this group did not complete any NIMS courses. One (4%) of this group completed one NIMS course and one (4%) completed three NIMS courses. Comparing and contrasting the non-NIMS certified respondents course completion frequency with the NIMS certified respondents completion frequency, shown in Table 25 of chapter 4, reveals that all 18 respondents (72%) had completed the three basic NIMS courses and 12 (48%) among this group had completed four or more NIMS courses – with 10 (4%) representing the highest number of NIMS courses completed by one respondent. These findings with regard to transformational leadership theory suggest that the typical Ohio city public safety director has at least an awareness of transformational leadership theory through academic study and or NIMS courses.

The analysis of research findings for the variables of NIMS certification and NIMS leadership role resulted in describing a typical Ohio city public safety director as having equal possibilities for holding NIMS certification or not holding NIMS certification, and the same equal possibilities for their NIMS leadership role. This description seems to imply that it is equally possible that a typical Ohio city public safety director is knowledgeable regarding the statutory authority and duties of their position relative to leadership of NIMS implementation.

The results of the statistical analysis, reported in chapter 4, found that the eight variables were independent of each other and answered Research Question 2 by accepting the null hypothesis.

> Null hypothesis (H_0): There is no significant statistical difference among practicing Ohio city public safety directors relative to their level of formal education, prior emergency field experience, NIMS certification and training, years of experience as an Ohio city public safety director, age, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of NIMS implementation in Ohio.

Additionally, the analysis of the measurement data relative to Research Question 1 identified the sample population's (n) = 25 position regarding formal education relevant to NIMS leadership as well as transformational leadership theory. All of the sample population's responses (100%) to Survey Statements 6 and 21 (analyzed in chapter 4, and shown in Table 46 and 50 respectively), were incorrect for each of the eight variables. These two statements positively associate formal college education and academic preparedness with leading NIMS implementation and preparing for NIMS leadership. All of the responses (100%) support an interpretation that the typical Ohio city public safety director does not positively associate formal education with NIMS preparedness or NIMS leadership. The implication seems to be that even though the typical Ohio city public safety director has attained a high level of formal education (Master of Arts degree), majoring in public administration, they do not associate their formal education with NIMS leadership. Furthermore, this orientation implies that the typical Ohio city public safety director makes no correlation between academic exposure to

transformational leadership theory and NIMS leadership. Additionally, while the results of the analysis for Statement 22 (conducted in Chapter 4 and displayed in Table 51) were not significant enough to reject the null hypothesis for Research Question 1, they do inform the interpretations and implications about formal education and transformational leadership theory regarding the variable of prior emergency field experience. Statement 22 positively associated a safety director's formal college education with confidence in his or her preparation of subordinates to lead NIMS . Twenty four respondents (96%) answered Statement 22 incorrectly for the variable of prior emergency field experience. This seems to support the interpretation that the typical Ohio city public safety director's prior emergency field experience (5 years) provides more confidence among subordinates regarding their preparation to lead NIMS than does formal college education. The implication seems to be that the typical Ohio city public safety director values prior emergency field experience more highly than formal college education as a predictor for subordinate's confidence in their NIMS leadership. Furthermore, this seems to imply that subordinates value the prior emergency field experience of a typical Ohio city public safety director more than their level of formal education.

The results of the statistical analysis reported in chapter 4 found that the eight variables were normally distributed and answered Research Question 2 by accepting the null hypothesis.

> Null hypothesis (H_0): There is no significant statistical difference among practicing Ohio city public safety directors and their competence levels to lead NIMS in Ohio cities.

Additionally, the analysis of the measurement data relative to Research Question 2 found low competence levels among respondents for the leadership of NIMS implementation in Ohio cities. This finding allows for an elaboration of the interpretations and implications presented thus far for this study's variables in relation to the research questions and the literature on the topic of NIMS implementation. Since Research Question 1 found no difference among Ohio city public safety directors and their knowledge of their position relative to leadership of NIMS implementation, Research Question 2 confirms no difference among this group and translates their uniformity of knowledge as low competence levels to lead NIMS. All of the sample population's correct responses (100%) for the eight survey statements analyzed for Research Question 2 disagreed with the theoretical possibilities for correct answers for the variables of age, gender, NIMS certification, and NIMS leadership role. This may be interpreted as coinciding with the general description of age and gender presented in chapters 1 and 2. These factors may influence the typical Ohio city public safety director's attitudes and values. The implication seems to be that the lack of NIMS competency, relative to these variables may be attributable to the poor work ethic, lack of sense of duty, and unwillingness to subjugate personal interests to public duty. The disagreement with the theoretical possibilities for correct answers for all respondents (100%) for the variables of NIMS certification and NIMS leadership role expands the interpretation for these variables with regard to the typical Ohio city public safety director's awareness of transformational leadership theory and their knowledge of their position relative to the leadership of NIMS implementation. The lack of competency for NIMS leadership for these variables seems to support a conclusion that the typical Ohio city public safety director is not

knowledgeable regarding transformational leadership theory and does not apply this theory to his or her NIMS leadership role. Furthermore, the low levels of competency for NIMS leadership among the remaining variables of formal education, prior emergency field experience, years of experience as an Ohio city public safety director, and NIMS training seem to expand the interpretation for findings to include formal academic education, work experience, NIMS training, and transformational leadership theory relevant knowledge of the position of Ohio city public safety director, and NIMS implementation. The broadened implementation seems to support a conclusion that academic education, experiential knowledge gained, and NIMS specific training do not adequately inform Ohio city public safety directors concerning their authority, their duties, or applying transformational leadership theory to NIMS – and it doesn't affect NIMS implementation in the state of Ohio or its cities.

The relationship of the implications, stemming from the interpretations of the findings analyzed for the two research questions suggest the following conclusions germane to the literature underpinning this research study's subject:

- The typical Ohio city public safety director uniformly exhibits a lack of knowledge of the statutory authority and duties applicable to his or her lack of leadership for NIMS implementation.
- The typical Ohio city public safety director uniformly exhibits a lack of competency for leading the NIMS implementation in Ohio cities.

These conclusions are pertinent to the major governmental function of protecting public safety and convey a necessity for improvements. As presented in public safety literature, the need for improvements emanate from the public's expectation that

governmental agencies, policy administrators, and public servants be efficient, effective, accountable, and responsive. Strengthening NIMS policy education at the federal level could directly improve the safety of Ohio's citizens and indirectly may improve the safety for citizens of the United States . This improved education could influence Ohio's state government to effectively utilize the existing state mandated position of Ohio city public safety director to lead NIMS implementation in its cities.

Additionally, the literature identified the Ohio governmental agency responsible for public safety as having no requirement to meet NIMS implementation requirements, nor did this agency keep a list of the persons holding the position of city safety director. This lack suggests the need to improve the agency's relationship with the individuals employed in the position of Ohio city public safety director. Furthermore, individual Ohio city public safety directors demonstrated an inadequate knowledge of their statutory duties as well as an inability to relate these statutory responsibilities to an obligation for NIMS leadership. This signals the need for improvements to the position's job expectation and accountability as well as a necessity to strengthen the correlation of these elements with NIMS.

Recommendations for Action and Further Study

Improving NIMS policy education at the federal level may be accomplished through using a process for this purpose. First, the Federal Department of Homeland Security should elicit the support and involvement of colleges as well as universities for the NIMS initiative, bringing academic expertise to NIMS policy education. A particular benefit of engaging these institutions is the teaching of transformational leadership theory and public administration studies. Since the typical Ohio city public safety director indicated

seeing no merit regarding level of education or an understanding of transformational leadership theory, those institutions could positively address this situation. Second, the Federal Department of Homeland Security should identify governmental agencies at the state and local levels, as well as the positions within these agencies, that have the responsibility for public safety. Third, the Federal Department of Homeland Security should convene continuous national forums with incentives encouraging participation from every state and local agencies as well as academic administrators and professors. These forums could integrate NIMS specific training with its academic foundation in transformational leadership theory. They could accentuate the value of a college education and encourage state and local agencies to emulate this process on a regular schedule. This would reduce the occurrence of situations like Ohio's in which Ohio city public safety directors are excluded from statewide NIMS implementation planning and are not knowledgeable about their responsibilities or adequately prepared to lead NIMS.

Improving the relationship between the Ohio Department of Safety and the individuals employed in the position of Ohio city public safety director may be accomplished through a process developed for this purpose. First, the Ohio Department of Public Safety should be designated as having an overarching leadership role for NIMS in the state of Ohio. This would centralize the leadership for NIMS implementation in the existing Ohio governmental agency that already has the responsibility for Ohio's public safety. Additionally, this would eliminate the current spread of NIMS leadership among the entities identified in the literature which may have contributed to the inadequacy of the position of Ohio city public safety director. Second, the Department of Ohio Public Safety should recognize the position of Ohio city public safety director as statutorily

responsible for the leadership of NIMS implementation in Ohio cities. Third, the Ohio Department of Public Safety should maintain a ist of Ohio city public safety directors and should provide regular NIMS information through statewide meetings, training events, and e-mails. These steps would involve the Ohio city public safety directors in statewide planning for NIMS implementation and clearly define their role in leadership of NIMS implementation.

Improving individual Ohio city public safety directors' statutory knowledge and obligations as well as emphasizing the correlation of these elements with NIMS may be accomplished through a process for this purpose. First, the job description for the position of Ohio city public safety director should contain a verbatim copy of the state statute that establishes the position and specifies its duties. Second, the job description should correlate the position's statutory authority and duties with the responsibility to implement NIMS. Third, the job description should specify the position's sole responsibility for leading NIMS for the city.

Administrators for NIMS policy in the Federal Department of Homeland Security, deans of college and university public administration departments, state governors, administrators of state and local safety related agencies, mayors of Ohio cities, and Ohio city public safety directors should all take attentive interest in the results and recommendations of this study. For this reason, the results of this study should be disseminated in a manner that specifically targets this population while allowing for wider distribution. This might be accomplished in association with the Federal Department of Homeland Security. This agency has a state office in Ohio that is represented on the Ohio NIMS Implementation Advisory Committee. Therefore, federal

level interest and influence might produce a presentation of this study for the Ohio Advisory Committee toward effectively distributing the results. This process would allow the Ohio city public safety directors to receive the study first. The goal should be expanding the knowledge base about leadership of NIMS implementation in Ohio while creating opportunities for its dissemination nationally, but not causing any criticism of Ohio city public safety directors or their position. Next, with the support of the Federal Department of Homeland Security and input from the Ohio city public safety directors, as well as the Ohio NIMS Advisory Committee, the results of the study could be disseminated in a positive light to a targeted population. Ultimately, the resources of the Federal Department of Homeland Security would enable national dissemination through print communication as well as through their website. This might stimulate interest in further study.

The recommendations for a further study include examination of the effectiveness of the leadership for NIMS implementation nationally and within the state of Ohio. This study indicates the need for a closer examination of whether nationally and among the states' governmental agencies some safety directors do not fully understand their NIMS leadership role and are not effectively engaged with NIMS implementation. This inquiry holds the potential for revealing the same conditions nationally and among the states that have been found in Ohio. Within Ohio, this study raises the need for a further study regarding the Ohio Department of Public Safety's neglect of NIMS implementation planning and leadership. Additionally, among Ohio city public safety directors, closer analysis of their devaluation of formal education related to NIMS implementation leadership is warranted. This also raises a need to examine the lack of understanding of

transformational leadership theory among Ohio city public safety directors. These recommendations focus on the need for closer examination of topics salient to this study, but this should not be considered a comprehensive listing. Others having an interest in the topics of NIMS, NIMS implementation, and NIMS leadership as well as the effectiveness, efficiency, and accountability of government may find additional related subjects worthy of study.

Conclusion

The lives of Ohio citizens are at risk because Ohio city public safety directors are not knowledgeable about the statutory authority and duties of their position relative to NIMS leadership nor are they competent to lead NIMS implementation in Ohio cities.

This concluding statement is supported the analysis of the variables underpinning the answers to this study's two research questions. The result of this study's research clearly signals a warning worth heeding predicated on the premise stated in the literature of this study that "everything government does is supposed to protect public safety" (Burns & Peltson, 1966, p. 30). This premise, accentuated by the events of September 11, 2001, that identified deficiencies in U.S. emergency preparedness, provided the impetus for this study's interest in the implementation of the National Incident Management System (NIMS). However, the research found that the effective implementation of this federally initiated system is dependent on each state. In Ohio, the position of Ohio city public safety director had statutorily existed since 1969, with legally vested authority and duties noticeably in alignment with the focus of the NIMS. This position, predating NIMS by more than 30 years, potentially provided the state of Ohio, and particularly its cities, the advantage of an existing position that could immediately provide leadership for NIMS

implementation. Unfortunately, this study reveals that this position has not been involved with Ohio's NIMS planning and that the individuals employed in the position are not necessarily capable of effective leadership for NIMS implementation within Ohio cities.

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Appendices

Appendix A: Ohio Public Safety Directors

City	Address	Name	Position	Home Rule
1. Ada	115 West Buckeye Ave 45810		None	0
2. Akron	166 S. High St 44308		Public Safety Director	Yes
3. Alliance	504 E. Main St 44601		Public Safety Director	Yes
4. Amherst	206 South Main St 44001		Public Safety Director	No
5. Ashland	206 Claremont Ave 44805		Mayor, Public Safety Director	Yes
6. Ashtabula	4717 Main Ave 44004		None	Yes
7. Athens	8 East Washington St Athens, 45701		Public Safety Director	No
8. Aurora	130 South Chillicothe Rd 44202		Mayor, Public Safety Director	Yes
9. Avon	36080 Chester Rd 44011		Public Safety Director	Yes
10. Avon Lake	150 Avon Belden Rd 44012		Mayor, Public Safety Director	Yes
11. Barberton	576 W. Park Ave 44203		Public Safety Director	Yes
12. Bay Village	350 Dover Center Rd 44140		Mayor, Public Safety Director	Yes
13. Beachwood	25325 Fairmount Blvd 44122		Mayor, Public Safety Director	Yes
14. Beavercreek	1368 Research Pk Dr 45432		None	Yes
15. Bedford	165 Center Rd 44146		City Manager, Public Safety Director	Yes
16. Bedford Hts.	5661 Perkins Rd 44146		Mayor, Public Safety Director	Yes

17. Bellaire	3197 Belmont St 43906		None	No
18. Bellbrook	15 East Franklin St 45305		None	Yes
19. Bellefontaine	135 N. Detroit St 43311		Public Safety Director	No
20. Bellevue	3000 Seneca Industrial Parkway 44811		Public Safety Director	No
21. Belpre	P.O. Box 160, 715 Park Dr 45714		Public Safety Director	No
22. Berea	11 Berea Commons 44017		None	Yes
23. Bexley	2242 East Main St 43209		Mayor, Public Safety Director	Yes
24. Blue Ash	41343 Cooper Rd 45242-5699		None	Yes
25. Bowling Green	304 North Church St 43402		Municipal Administrator, Public Safety Director	Yes
26. Brecksville	9069 Brecksville Rd 44141		Mayor, Public Safety Director	Yes
27. Broadview Heights	9543 Broadview Rd 44147		Mayor, Public Safety Director	Yes
28. Brook Park	6161 Engle Road 44142		Public Safety Director	Yes
29. Brooklyn	7619 Memphis Avenue 44144		Public Safety Director	Yes
30. Brookville	301 Sycamore St P.O. Box 10 45309		City Manager, Public Safety Director	0
31. Brunswick	4095 Center Rd 44212		City Manager, Public Safety Director	Yes
32. Bryan	103 North Beech St 43506		Public Safety Director	Yes
33. Bucyrus	500 S. Sandusky Ave 44820		Service/Safety Director	No
34. Cambridge	1131 Steubenville Ave		Public Safety Director	No

	43725			
35. Campbell	351 Tenney Avenue 44405		None	Yes
36. Canal Fulton	155 Market Street East 44614		Mayor, Public Safety Director	No
37. Canfield	104 Lisbon Street 44406		None	Yes
38. Canton	P.O. Box 24218 44701		Public Safety Director	No
39. Carlisle	760 West Central Ave 45005		Fire Chief, Public Safety Director	0
40. Clina	426 W. market St 45822		Public Safety Director	No
41. Centerville	100 W. Spring Valley Rd 45458		None	Yes
42. Chardon	111 Water St 44024		City Manager, Public Safety Director	0
43. Cheviot	3814 Harrison Avenue 45211		Public Safety Director	No
44. Chillicothe	35 South Paint St 45601		Safety Service Director	No
45. Cincinnati	801 Plum St 45202-1979		None	Yes
46. Circleville	130 South Court Street 43113		Public Safety Director	No
47. Clayton	P.O. Box 280 45315		Public Safety Director	No
48. Cleveland	601 Lakeside Ave, Room 230 44114		Public Safety Director	Yes
49. Cleveland Heights	40 Severance Circle Cleveland Hts., 44118		City Manager, Public Safety Director	Yes
50. Clyde	222 North Main St 43410		City Manager, Public Safety Director	Yes
51. Columbiana	28 West Friend Street 44408		City Manager, Public Safety Director	Yes
52. Columbus	50 W. Gay Street 43215		Public Safety Director	Yes

53. Conneaut	294 Main St 44030		City Manager, Public Safety Director	Yes
54. Cortland	400 North High St 44410		Mayor, Public Safety Director	Yes
55. Coshocton	760 Chestnut Street 43812		Public Safety Director	No
56. Crestline	100 North Seltzer St 44827		Public Safety Director	No
57. Cuyahoga Falls	2310 Second St 44221		Mayor, Public Safety Director	Yes
58. Dayton	101 W. Third St 45402		Chief of Police, Public Safety Director	Yes
59. Deer Park	7777 Blue Ash Road 45236		Public Safety Director	No
60. Defiance	324 Perry Street 43512		None	Yes
61. Delaware	One South Sandusky St 43015		None	Yes
62. Delphos	608 N. Canal St 45833		Safety Service Director	No
63. Dover	110 E. Third St 44622		Public Safety Director	No
64. Dublin	5200 Emerald Parkway 43017-1006		None	Yes
65. East Cleveland	14340 Euclid Ave 44112		Mayor, Public Safety Director	Yes
66. East Liverpool	126 West 6th St 43920		Service/Safety Director	No
67. East Palestine	P.O. Box 231 44413		None	Yes
68. Eastlake	35150 Lakeshore Blvd 44095		Mayor, Public Safety Director	Yes
69. Eaton	328 North Maple St, P.O. Box 27 45320		City Manager, Public Safety Director	Yes
70. Elyria	131 Court St 44035		Public Safety Director	Yes

71. Englewood	333 W. National Rd 45322		None	Yes
72. Euclid	585 E. 222nd St 44123		Mayor, Public Safety Director	Yes
73. Fairborn	44 W. Hebbie Ave 45324		None	Yes
74. Fairfield	5350 Pleasant Ave 45014		None	No
75. Fairlawn	3487 S. Smith Rd 44333		Mayor, Public Safety Director	Yes
76. Fairview Park	20777 Lorain Rd 44126		Mayor, Public Safety Director	Yes
77. Findlay	318 Dorney Plaza 45840		Public Safety Director	No
78. Forest Park	1201 West Kemper Rd 45240-1697		None	Yes
79. Fostoria	213 S. Main St 44830		Public Safety Director	No
80. Franklin	1 Benjamin Franklin Way 45005-2478		City Manager, Public Safety Director	Yes
81. Fremont	323 S. Front St 43420		Public Safety Director	Yes
82. Gahanna	200 S. Hamilton Road 43230		Public Safety Director	Yes
83. Galion	115 Harding Way East 44833		None	Yes
84. Gallipolis	518 Second Ave 45631		Public Safety Director	Yes
85. Garfield Heights	5407 Turney Road 44125		Mayor, Public Safety Director	Yes
86. Geneva	44 North Forest Street 44041		City Manager, Public Safety Director	Yes
87. Girard	100 W. Main Street 44420		Public Safety Director	No
88. Grandview Heights	1016 Grandview Avenue 43212		Mayor, Public Safety Director	Yes

89. Green	P.O. Box 278 44232-0278		Mayor, Public Safety Director	0
90. Greenfield	300 Jefferson St, P.O. Box 300 45123		Public Safety Director	No
91. Greenville	4160 State Route 502 45331		Safety/Service Director	No
92. Grove City	4035 Broadway 43123		Public Safety Director	Yes
93. Hamilton	345 High St 45011		City Manager, Public Safety Director	Yes
94. Harrison	300Georgg Street 45030		None	Yes
95. Heath	1287 Hebron Road 43056		Mayor, Public Safety Director	Yes
96.Highland Heights	5827 Highland Road 44143		Mayor, Public Safety Director	Yes
97. Hilliard	3800 Municipal Way 43026		Public Safety Director	Yes
98. Hillsboro	130 North High St 45133		Safety & Service Director	No
99. Hubbard	220 West Liberty Street P.O. Box 307 4425-0307		Public Safety Director	No
100. Huber Heights	6131 Taylorsville Road 45424		City Manager, Public Safety Director	Yes
101. Hudson	27 E. Main Street 44236		City Manager/Public Safety Director	Yes
102. Huron	417 Main Street P.O. Box 468 44839		None	Yes
103. Independence	6800 Brecksville Road 44131		Mayor, Public Safety Director	Yes
104. Indian Hill	6525 Drake Road, Cincinnati 45243		City Manager, Public Safety Director	Yes
105. Ironton	301 South 3rd St 45638		None	Yes
106. Jackson	145 Broadway Street 45640		Service/Safety Director	No

107. Kent	319 South Water Street 44240		Public Safety Director	Yes
108. Kenton	111 W. Franklin Street P.O. Box 220 43326		Safety/Service Director	No
109. Kettering	3600 Shroyer Road 45429		City Manager/Public Safety Director	Yes
110. Kirtland	9301 Chillicothe Rd 44094		Mayor, Public Safety Director	Yes
111. Lakewood	12650 Detroit Avenue 44107		Mayor, Public Safety Director	Yes
112. Lancaster	104 E. Main St 43130		Service/Safety Director	Yes
113. Lebanon	50 South Broadway Street 45036		City Manager, Public Safety Director	Yes
114. Lima	50 Town Square 45801		None	0
115. Logan	10 S. Mulberry St 43138		Service/Public Safety Director	No
116. London	6 E. 2nd Street 43140		Safety/Service Director	No
117. Lorain	200 West Erie Avenue 44052-1647		Public Safety Director	No
118. Louisville	215 S. Mill Street 44641-1699		City Manager/Public Safety Director	Yes
119. Loveland	120 West Loveland Avenue 45140		City Manager/Public Safety Director	Yes
120. Lyndhurst	5301 Mayfield Rd 44124		Mayor/ Public Safety Director	Yes
121. Macedonia	9691 Valley View Road 44056		Mayor/ Public Safety Director	Yes
122. Madeira	7141 Miami Avenue 45243		City Manager, Public Safety Director	Yes
123.Mansfield	30 North Diamond Street 44902		Public Safety Director	Yes

124. Maple Heights	5353 Lee Road 44137		Mayor, Public Safety Director	Yes
125. Marietta	301 Putnam Street 45750		Public Safety Director	No
126. Marion	233 W Center St 43302		Public Safety Director	No
127. Martins Ferry	35 South 5th Street 43935		Public Safety Director	No
128. Marysville	125 E. Sixth Street 43040		None	Yes
129. Mason	6000 Mason-Montgomery Road 45040		Chief of Police/Public Safety Director	Yes
130. Massillon	151 Lincoln Way East 44646		Public Safety Director	No
131. Maumee	400 Conant Street 43537		City Administrator, Public Safety Director	Yes
132. Mayfield Heights	6154 Mayfield Rd 44124		Mayor/ Public Safety Director	Yes
133. Medina	132 North Elmwood 44256		Mayor, Public Safety Director	Yes
134. Mentor	8500 Civic Center Blvd 44060		City Manager, Public Safety Director	Yes
135. Mentor-on-the-Lake	5860 Andrews Rd 44060		Mayor, Public Safety Director	Yes
136. Miamisburg	10 North First Street 45342		None	Yes
137. Middleburg Heights	15700 Bagley Road 44130		Public Safety Director	Yes
138. Middletown	One Donham Plaza 45042		City Manager, Public Safety Director	Yes
139. Milford	745 Center Street, Suite 200 45150		None	Yes
140. Mingo Junction	501 Commercial St 43938		None	No

141. Monroe	P.P. Box 330 45050-0330 233 South Main Street		None	Yes
142. Montgomery	10101 Montgomery Road 45242		Public Safety Director	Yes
143. Moraine	4200 Dryden Rd 45439		None	Yes
144. Mount Healthy	7700 Perry St 45231		Public Safety Director	No
145. Mount Vernon	40 Public Square 43050-3241		Public Safety Director	No
146. Munroe Falls	43 Munroe Falls Ave 44262		Mayor, Public Safety Director	Yes
147. Napoleon	255 West Riverview 43545		City Manager, Public Safety Director	Yes
148. Nelsonville	30 Public Square 45764		City Manager, Public Safety Director	Yes
149. New Carlisle	331 S. Church Street P.O. Box 419 45344		Public Safety Director	Yes
150. New Franklin	5611 Manchester Rd 44319		None	0
151. New Lexington	125 South Main St 43764		Public Safety Director	Yes
152. New Philadelphia	150 East High Ave 44663		Public Safety Director	No
153. Newark	40 West State Street 44446		Public Safety Director	Yes
154. Newton Falls	19 N. Canal 44444		Public Safety Director	Yes
155. Niles	34 West State Street 44446		Public Safety Director	No
156. North Canton	145 N. Main St 44720		Public Safety Director	Yes
157. North College Hill	1704 W. Galbraith Road 45239		Safety-Service Director	No

158. North Olmsted	5200 Dover Center Road 44070		Public Safety Director	Yes
159. North Ridgeville	7307 Avon Belden Rd 44039		Public Safety Director	Yes
160. North Royalton	14000 Benngtt Rd 44133		Public Safety Director	Yes
161. Northwood	6000 Wales Rd 43619		City Administrator/Public Safety Director	Yes
162. Norton	4060 Columbia Woods Drive 44203		Public Safety Director	Yes
163. Norwalk	38 Whittlesey Ave 44857		Safety/Service Director	Yes
164. Norwood	4645 Montgomery Rd 45212		Safety/Service Director	Yes
165. Oakwood	30 Park Avenue Dayton 45419		Public Safety Director	Yes
166. Oberlin	85 South Main Street 44074		None	Yes
167. Olmsted Falls	26100 Bagley Road 44138-1897		Mayor, Public Safety Director	Yes
168. Ontario	555 Stumbo Road 44862		Public Safety Director	No
169. Oregon	5330 Seaman Rd 43616		Public Safety Director	Yes
170. Orrville	207 North Main St 44667		Public Safety Director	Yes
171. Oxford	101 East High Street 45056		City Manager, Public Safety Director	Yes
172. Painesville	7 Richmond Street 44077		Public Safety Director	Yes
173. Parma	6611 Ridge Road 44129		Public Safety Director	No
174. Parma Heights	6281 Pearl Road 44130		Public Safety Director	Yes
175. Pataskala	621 W Broad Street 43062		None	No

176. Pepper Pike	28000 Shaker Boulevard 44124-5001		Mayor, Public Safety Director	Yes
177. Perrysburg	201 W. Indiana Ave 43551		City Administrator, Public Safety Director	Yes
178. Pickerington	100 Lockville Road 43147		None	Yes
179. Piqua	201 W. Water Street 45356		None	Yes
180. Port Clinton	1868 East Perry St 43452		Public Safety Director	No
181. Portsmouth	728 Second Street 45662		None	Yes
182. Powell	47 Hall Street 43065		Director of Public Safety	Yes
183. Ravenna	210 Parkway Drive 44266		Mayor, Public Safety Director	Yes
184. Reading	1000 Market Street 45215		Public Safety Director	No
185. Reynoldsburg	7232 E. Main St 43068		Public Safety Director	Yes
186. Richmond Heights	26789 Highland Road 44143-1429		Mayor, Public Safety Director	Yes
187. Rittman	30 North Main Street 44270		City Manager, Public Safety Director	Yes
188. Riverside	1791 Harshman Road 45424		Public Safety Director	0
189. Rocky River	21012 Hilliard Boulevard 44116		Director Public Safety-Service	Yes
190. Rossford	133 Osborn Street 43460		City Administrator, Public Safety Director	Yes
191. Salem	231 S. Broadway 44460		Public Service Director	No
192. Sandusky	222 Meigs Street 44870		City Manager, Public Safety Director	Yes
193. Seven Hills	7325 Summitview Drive 44131		Public Safety Director	Yes

194. Shaker Heights	3400 Lee Road 44120		Mayor, Public Safety Director	Yes
195. Sharonville	10900 Reading Rd 45241		Public Safety Director	No
196. Sheffield Lake	609 Harris Road 44054		Mayor, Public Safety Director	Yes
197. Shelby	430 W. Main St 44875		Mayor, Public Safety Director	Yes
198. Sidney	201 W. Poplar Street 45365		None	Yes
199. Silverton	6860 Plainfield Road 45236-4095		None	Yes
200. Solon	34200 Bainbridge Road 44139		Mayor, Public Safety Director	Yes
201. South Euclid	1349 S. Green Rd 44121		Mayor, Public Safety Director	Yes
202. Springboro	320 West Central Avenue 45066		Chief of Police	Yes
203. Springdale	11700 Springfield Pike 45246		None	Yes
204. Springfield	76 East High Street 45502		City Manager, Public Safety Director	Yes
205. St. Bernard	110 Washington Ave 45217		None	No
206. St. Clairsville	100 North Market Street P.O. Box 537 43950		None	Yes
207. St. Marys	101 E. Spring St 45885		Director of Public Service/Safety	No
208. Steubenville	300 Market Street 43952		City Manager, Public Safety Director	Yes
209. Stow	3760 Darron Road 44224		Mayor, Public Safety Director	Yes
210. Streetsboro	2080 State Route 303 44241		Mayor, Public Safety Director	Yes

211. Strongsville	16099 Foltz Parkway 44149-5598		Mayor, Public Safety Director	Yes
212. Struthers	6 Elm Street 44471		Public Safety Director	No
213. Sylvania	4927 Holland Sylvania Road 43560-2121		None	Yes
214. Tallmadge	46 North Avenue 44278		Mayor, Public Safety Director	Yes
215. Tiffin	51 E. Market St 44883		City Administrator, Public Safety Director	Yes
216. Tipp City	260 South Garber Drive 45371		City Manager/Public Safety Director	Yes
217. Toledo	640 Jackson Blvd 43604		Chief of Staff, Public Safety Director	Yes
218. Toronto	308 North Sixth St 43964		Public Safety Director	No
219. Trenton	11 East State street 45067		Public Safety Director	Yes
220. Trotwood	3035 Olive Road 45426		None	Yes
221. Troy	100 South Market Street (2nd Floor) 45373		Public Safety Director	No
222. Twinsburg	10075 Ravenna Road 44087		Mayor, Public Safety Director	Yes
223. Uhrichsville	305 E. 2nd St 44683		Public Safety Director	No
224. Union	118 N. Main st 45322		Public Safety Director	Yes
225. University Heights	2300 Warrensville Center Rd 44118		Mayor, Public Safety Director	Yes
226. Upper Arlington	3600 Tremont Road 43221		None	Yes
227. Upper Sandusky	119 N. 7th Street 43351		None	Yes
228. Urbana	205 S. Main street 43078		None	Yes

229. Van wert	515 E. Main street 45891		Safety Service Director	No
230. Vandalia	333 J.E. Bohanan Drive 45377		City Manager/Public Safety Director	Yes
231. Vermilion	5511 Liberty Ave 44089		Public Safety Director	Yes
232. Wadsworth	120 Maple St 44281		Public Safety Director	No
233. Wapakoneta	P.O. Box 269 45895*0269		Public Safety Director	No
234. Warren	391 Mahoning Ave. 44483		Public Safety Director	No
235. Warrensville Heights	4301 Warrensville Center Rd		Mayor, Public Safety Director	Yes
236. Washington Court House	105 N. Main St 43160		None	No
237. Wauseon	230 Clinton Street 43567		None	Yes
238. Waverly	201 W. North St 45690		Fire/Safety Director	Yes
239. Wellston	203 E. Broadway St 45692-1521		Director of Public Service & Safety	Yes
240. Wellsville	1200 Main St 43968		None	No
241. West Carrollton	300 E. Central Avenue 45449		City Manager, Public Safety Director	Yes
242. Westerville	21 S. State Street 43081		City Manager, Public Safety Director	Yes
243. Westlake	27700 Hilliard Blvd 44145		Mayor, Public Safety Director	Yes
244. Whitehall	360 S. Yearling Road 43213		Public Safety Director	Yes
245. Wickliffe	28730 Ridge Rd 44092		Mayor/ Public Safety Director	Yes

246. Willard	P.O. Box 367 631 Myrtle Ave 44890		City Manager/Public Safety Director	Yes
247. Willoughby	1 Public Square 44094		Mayor, Public Safety Director	Yes
248. Willoughby Hills	35405 Chardon Rd 44094		Mayor, Public Safety Director	Yes
249. Willowick	30435 Lakeshore Blvd 44095		Mayor, Public Safety Director	Yes
250. Wilmington	69 North South St 45177		Public Safety Director	No
251. Wooster	538 N. Market St 44691		Public SID	No
252. Worthington	6550 N. High St 43085		City Manager, Public Safety Director	Yes
253. Wyoming	80 Oak Avenue Cincinnati 45215		None	Yes
254. Xenia	101 N. Detroit street 45385-2996		City Manager, Public Safety Director	Yes
255. Youngstown	26 South Phelps Street 44503		None	Yes
256. Zainesville	401 Market St 43701 City Hall, 2nd Floor, Room 227		Public Safety Director	No

Appendix B: Ohio Public Safety Directors Demographic Data Sheet

Instructions:
Please complete each of the following questions by writing the answer or by indicating the response with and "X."

1. Age:_____
2. Sex:_____
3. Education (indicate only the highest level achieved):
    A. Less than High School_____
    B. High School Diploma _____
    C. Two-Year Associate Degree_____
    D. Baccalaureate Degree_____
    E. Masters Degree_____
    F. Doctorate_____
    G. Other_____

If you have achieved a degree above the high school level, list your major area(s) of study.

_____

4. Indicate the total number of years you have served as a Safety Director in Ohio.

    _____

5. Have you been a City Safety Director in more than your current city of employment in Ohio? Yes_____ No_____
6. Indicate the number of years of field experience in each of the following emergency related professions.

A. Law Enforcement_____

B. Fire Fighter_____

C. EMT_____

D. Emergency Management_____

E. National Incident Management System (NIMS)_____

F. Other_____(If indicated, list Professional Experience below)

_____

7. NIMS Courses completed (Indicate each course completed)

A. IS-100_____ G. IS-241_____

B. IS-139_____ H. IS-242_____

C. IS-200_____ I. IS-244_____

D. IS-230_____ J. IS-700_____

E. IS-235_____ K. IS-701_____

F. IS-240_____ L. IS-800_____

Other_____(list below)

_____ _____ _____ _____

8. Are you NIMS certified?

Yes_____ No_____

9. Do you belong to any professional organizations that provide information or seminars to safety directors related to NIMS?

Yes_____ No_____

If yes, list the professional organization(s) below.

_____

_____

_____

10. Are you responsible for NIMS implementation in your city?

Yes_____ No_____

Appendix C: Ohio Public Safety Directors Questionnaire

Safety Director Questionnaire

Instructions:
Please read each of the following 30 statements carefully. Place an "X" in the blank which best represents your opinion of the validity of the statement.

1. The NIMS was created by the Federal Government as a response system solely for the purpose of responding to terrorist attacks.

   True_____ False_____

2. Governor Taft ordered statewide utilization of NIMS in 2004.

   True_____ False_____

3. Transformational leadership theory is the paradigm espoused by the Federal Emergency Management Agency (FEMA) in support of NIMS implementation.

   True_____ False_____

4. In fiscal year 2006, all cities were required to implement NIMS Training but did not have to formally assess compliance.

   True_____ False_____

5. The Safety Director was required to create a strategy toward fully implementing NIMS within the compliance timeline established by The Ohio Department of Public Safety in May 2005.

   True_____ False_____

6. Formal education and academic achievement resulting in a college degree is critical for leading NIMS implementation.

   True_____ False_____

7. The State of Ohio statutorily requires full implementation of NIMS under a process developed within The Ohio Department of Public Safety and governed by The Director of Public Safety.

   True_____ False_____

8. The President of the United States required all states, tribal, and local governments to adopt NIMS.

   True:_____ False_____

9. A key component of NIMS is enabling first responders to act in a leadership capacity regardless of rank or title.

   True_____ False_____

10. The NIMS was developed by The Federal Department of Homeland Security to ensure training, equipment, and planning is adequate for the Federal Government to initially manage emergency incidents.

    True_____ False_____

11. According to Ohio law, in each municipality, The Department of Public Safety shall be administered by a Director of Public Safety.

    True_____ False_____

12. The Safety Director should not be involved in NIMS implementation.

    True_____ False_____

13. By virtue of academic degree and formal education, the Safety Director should lead NIMS implementation.

    True_____ False_____

14. Various levels of Incident Command (ICS) classes cannot be taken via online courses.

    True_____ False_____

15. The course IS—700 is designed as an introduction course to the overviews of The National Incident Management System (NIMS).

    True_____ False_____

16. The Safety Director should have prior emergency field experience for leading NIMS implementation.

    True_____ False_____

17. The Safety Director should maintain a record of NIMS Training attained by all personnel in subordinate agencies.

    True_____ False_____

18. The Safety Director or his designee monitors NIMS implementation using NIMS Cast.

    True_____ False_____

19. The Safety Director may delegate the statutory duties of the position to another city employee.

    True_____ False_____

20. The Safety Director should be considered the NIMS implementation authority for the police, fire, and health departments.

    True_____ False_____

21. The Public Safety Director should be considered academically (college degree based) prepared to lead NIMS.

    True_____ False_____

22. The Public Safety Director should have formal college education to be considered prepared to lead NIMS by subordinates.

    True_____ False_____

23. The Safety Director should be the NIMS CAST SUGL with approval of the county EMA Director.

    True_____ False_____

24. The Safety Director should lead implementation of multi-jurisdictional mutual aid agreements.

    True_____ False_____

25. The Safety Director should lead NIMS by empowering first responders to become creative and innovative through the use of critical thinking.

    True_____ False_____

26. The Safety Director should be considered the NIMS implementation leader by superiors and subordinates alike.

    True_____ False_____

27. The NIMS Incident Command System is a standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries.

    True_____ False_____

28. The NIMS Incident Command System does not allow low ranking first responders to take charge.

    True_____ False_____

29. The ICS-100 Class (Introduction to Incident Command System) does not introduce the functions and principles of the Incident Command System.

    True_____ False_____

30. The hallmark of effectively leading NIMS is being able to facilitate change in an organization.

    True_____ False_____

Appendix D: Panel Expert Cover Letter

Mrs.

Dear Mrs.

My name is John C. McCauley and I am conducting a Dissertation Research Study entitled, *Ohio's City Public Safety Director's Leadership Role for the Implementation of The National Incident Management System (NIMS) in Ohio* at Walden University, Baltimore, Maryland. Since my dissertation topic deals with the City Safety Director as defined in The Ohio Revised Code relative to leadership of (NIMS) implementation within cities in the state of Ohio, I am inviting a panel of experts holding the following professional titles to participate in developing a research instrument through a Delphi Technique:

- One City Public Safety Director
- One City Mayor
- One City Manager
- One City Police Chief
- One City Fire Chief
- One Officer of the Ohio Association of City Safety Directors / Public Safety Director
- One Ohio (NIMS) Implementation Advisory Board Member
- One Ohio University Professor Knowledgeable on the Topic Panel of Experts

I request your participation as a member of panel of experts. Please consider the outlined procedure (enclosure) required by the Delphi Technique and the time commitment required to respond to a minimum of three rounds of potential questions to be used as the research instrument when making your decision to participate or not.

Please return the grey form and the questionnaire in the stamped envelope and note if you wish your name to be held as confidential.

Thank you in advance for considering my request.

Sincerely,

John McCauley

Enclosures

Appendix E: Panel Expert Consent Form

Dissertation Research Study – **Consent Form**

Ohio's City Public Safety Director's Leadership Role for the Implementation of (NIMS)

Walden University

Name: _____

Title: _____

Address: _____

_____

Please make one of the following with an "X":

_____ I agree to participate as an expert panelist.

_____ I do not wish to participate.

Please make one of the following with an "X":

_____ I wish to have my name kept confidential.

_____ I wish to be consulted prior to releasing my name as part of the presentation of this study.

_____ I place no restrictions on the use of my name as a part of my involvement in developing a research instrument using the Delphi Technique.

_____ Other Comments:

_____

_____

Please sign and return this form in the stamped, self-addressed envelope provided.

_____ Panelist Signature

Name

_____

Date

Appendix F: Panel Expert Demographic Sheet

Demographic Data Sheet

Ohio Safety Director Dissertation Study for

Selected Panel of Experts Developing the

Survey Questionnaire through the Delphi Technique

Instructions: Please complete each of the following questions by writing the answer or by indicating the responses with an "X".

1. Professional Experience (Indicate each area of experience)

   A. Safety Director _____
   B. Law Enforcement _____
   C. Fire _____
   D. Emergency Management _____
   E. National Incident Management System (NIMS) _____
   F. Other _____ (If indicated, list professional experiences below).

2. Number of professional experience years accumulated among all the categories indicated above _____ (total).

3. Education (indicate only the highest level achieved)
   A. Less than high school _____
   B. High School Diploma _____
   C. Two Year Associate Degree _____
   D. Four Year Baccalaureate Degree _____
   E. Masters Degree ____
   F. Doctorate _____
   G. Other _____

4. If you have achieved a degree above high school, what was your major area of study?

   _____

5. Have you been or worked directly with an Ohio Public Safety Director?

   Yes _____ No _____

6. Have you been or worked directly with an Ohio Public Safety Director in more than one city?

   Yes _____ No _____

7. Have you completed one or more (NIMS) Courses of Study?

   Yes _____ No _____

8. Are you (NIMS) certified?

   Yes _____ No _____

9. Do you belong to any professional organizations that provide information or seminars related to Safety Directors or (NIMS)?

   Yes _____ No _____

If yes, list the professional organizations below.

_____

_____

Appendix G: Panel Expert Delphi Technique Explanation Form

Delphi Technique Methodology

Ohio Safety Director Dissertation Study for

Selected Panel of Experts Developing the

Survey Questionnaire through the Delphi Technique

A panel of experts will be invited to respond to a questionnaire constructed to determine if:

1. There is a significant difference among practicing Ohio Public Safety Directors relative to their level of formal education, emergency field experience, (NIMS) knowledge and training, years of experience as a City Public Safety Director, and gender regarding their knowledge of the statutory authority and duties of their position relative to leadership of (NIMS) implementation in the state of Ohio.
2. There is a significant difference among practicing Ohio Public Safety Directors and their utilization to lead the (NIMS) implementation in Ohio cities.

Through the Delphi Technique, a group consensus is developed validating the relevance of the research instrument prior to asking the sample population of practicing Ohio Public Safety Directors to respond. Additionally, this technique provides a method for comparing the responses of experts in the field with the sample population.

Delphi Technique Procedure

A. The proposed panel of experts will consist of:
    1. One City Public Safety Director
    2. One City Mayor
    3. One City Manager
    4. One City Police Chief
    5. One City Fire Chief
    6. One Officer of the Ohio Association of City Safety Directors / Public Safety Director
    7. One Ohio (NIMS) Implementation Advisory Board Member
    8. One Ohio University Professor Knowledgeable on the Topic

B. A questionnaire will be developed following the guidelines from the selected references below:

    1. Helmer, O. (1967) *Analysis of the Future: The Delphi Method,* Santa Monica, CA: Rand Corporation.

2. Hencley, S. P., and Yates, J. R. (Eds) (1974) *Futurism in Education,* Berkeley, CA: McCutchan.
3. Worthen, Blaine R., and Sanders, James R., (1987) *Educational Evaluation: Alternative Approaches and Practical Guidelines,* New York: Longman.

C. Each member of the panel will be mailed the questionnaire independently and asked to respond.

D. After the researcher receives the first round responses from the panel, a follow up report to the panel is developed by the researcher summarizing responses using the median and interquartile range as descriptive statistics for the responses to each original question.

1. Each panel member receives a reminder of how he/she responded to each of the original questions.
2. Each panel member is asked to compare their first response to the panel summary and revise any response they desire.
3. If a panel member's response is outside the interquartile range, the panel member is asked to justify their deviation from the panel's majority judgment.

E. A third round questionnaire is sent to each panel member summarizing the second round responses and the reasons listed by deviants for their positions.

1. Each panel member is asked to reconsider their second round responses, given the results and reasons yielded from this round.
2. A respondent who desires to remain outside the interquartile range on the third round is asked to present reasons.

F. This procedure may continue until the researcher is satisfied. On the final round, panel members are asked to revise their responses one last time, given the results and arguments yielded by the previous round.

Sample Population

Once developed, this research instrument will be mailed to 204 Ohio city public safety directors. Furthermore, this instrument and/or the results generated will be used as part of a Doctoral Dissertation Study on the position of Ohio City Safety Director.

Appendix H: Panel Expert First Round Questionnaire

Ohio Safety Director Dissertation Study for

Selected Panel of Experts Developing the

Survey Questionnaire through the Delphi Technique

Instructions for completing this Questionnaire

The duties and responsibilities as listed in the following questions may be required by Ohio Revised Code or The (NIMS) of Ohio Public Safety Directors to provide leadership of (NIMS) implementation. Please read each duty of responsibility carefully and place an "X" in the **True** blank if you believe it to be a duty or responsibility of the Ohio Public Safety Director. Place an "X" in the **False** blank if you do not believe the statement is a duty or responsibility of the Ohio Public Safety Director.

Instructions for the Delphi Technique expert panelists.

As a member of the panel of experts, I request that after responding to each question, you circle the abbreviation to the right of the word (comments) that best defines your opinion as to whether this question should be retained on the questionnaire.

SA = Strongly Agree
A = Agree
No = No Opinion
D = Disagree
SD = Strongly Disagree

Additionally, a space is provided for you to reword the statement or suggest a different statement.

Appendix H: First Round Questionnaire for Panel of Experts

1. The (NIMS) was created by the Federal Government as a response system solely for the purpose of responding to terrorist attacks.

True_____ False_____

Comments: SA A No D SD

2. Governor Taft ordered statewide utilization of (NIMS) in 2004.

True_____ False_____

Comments: SA A No D SD

3. Transformational leadership theory is the paradigm espoused by the Federal Emergency Management Agency (FEMA) in support of (NIMS) implementation.

True_____ False_____

Comments: SA A No D SD

4. In fiscal year 2006, all cities were required to implement (NIMS) Training but did not have to formally assess compliance.

True_____ False_____

Comments: SA A No D SD

5. Kenneth L. Morckel named safety directors as essential for institutionalization and modeling of the cooperation necessary if (NIMS) principles are to be attained.

True_____ False_____

Comments: SA A No D SD

6. The Safety Director was required to create a strategy toward fully implementing (NIMS) within the compliance timeline established by The Ohio Department of Public Safety in May 2005.

True_____ False_____

Comments: SA A No D SD

7. The Safety Director attained the theoretical leadership foundation necessary for leading (NIMS) implementation through work experience.

True_____ False_____

Comments: SA A No D SD

8. In each Ohio City, there shall be a Department of Public Safety.

True_____ False_____

Comments: SA A No D SD

9. The Public Safety Director is expected to lead Public Policy Implementation of the Police Department.

True_____ False_____

Comments: SA A No D SD

10. Formal education and academic achievement resulting in a college degree is critical for leading (NIMS) implementation.

True_____ False_____

Comments: SA A No D SD

11. The State of Ohio statutorily requires full implementation of (NIMS) under a process developed within The Ohio Department of Public Safety and governed by The Director of Public Safety.

True_____ False_____

Comments: SA A No D SD

12. The President of the United States required all states, tribal and local governments to adopt (NIMS).

True_____ False_____

Comments: SA A No D SD

13. A key component of (NIMS) is enabling first responders to act in a leadership capacity regardless of rank or title.

True_____ False_____

Comments: SA A No D SD

14. All powers and authority over police, fire, health, charities, corrections, and building inspections are vested in the Safety Director.

True_____ False_____

Comments: SA A No D SD

15. The (NIMS) was developed by the Federal Department of Homeland Security to ensure training, equipment, and planning is adequate for the Federal Government to initially manage emergency incidents.

True_____ False_____

Comments: SA A No D SD

16. In each Ohio City, the Department of Public Safety shall be administered by a Director of Public Safety.

True_____ False_____

Comments: SA A No D SD

17. The Public Safety Director is not expected to lead Public Policy implementation of the Fire Department.

True_____ False_____

Comments: SA A No D SD

18. The Safety Director should not be involved in (NIMS) implementation.

True_____ False_____

Comments: SA A No D SD

19. The Department of Public Safety shall be under the supervision of a director who shall be appointed by the Mayor.

True_____ False_____

Comments: SA A No D SD

20. By virtue of academic degree and formal education, the Safety Director should lead (NIMS) implementation.

True_____ False_____

Comments: SA A No D SD

21. The (NIMS) Certification cannot be obtained by taking on-line courses.

True_____ False_____

Comments: SA A No D SD

22. The (NIMS) course IS—700 is the first step toward (NIMS) certification.

True_____ False_____

Comments: SA A No D SD

23. The Safety Director should have prior emergency field experience for leading (NIMS) implementation.

True_____ False_____

Comments: SA A No D SD

24. The Safety Director should maintain a record of (NIMS) Training attained by all personnel in subordinate agencies.

True_____ False_____

Comments: SA A No D SD

25. The Safety Director is required to be (NIMS) certified.

True_____ False_____

Comments: SA A No D SD

26. The Safety Director monitors (NIMS) implementation using (NIMS CAST).

True_____ False_____

Comments: SA A No D SD

27. The Safety Director may delegate the statutory duties of the position to another city employee.

True_____ False_____

Comments: SA A No D SD

28. The Safety Director need not be a resident of the city at the time of appointment.

True_____ False_____

Comments: SA A No D SD

29. The Safety Director should be considered the (NIMS) implementation authority for the police, fire, and health departments.

True_____ False_____

Comments: SA A No D SD

30. The Public Safety Director should be considered academically prepared to lead (NIMS) by superiors.

True_____ False_____

Comments: SA A No D SD

31. The Public Safety Director should have formal academic education to be considered prepared to lead (NIMS) by subordinates.

True_____ False_____

Comments: SA A No D SD

32. The Safety Director is not responsible for building inspections.

True_____ False_____

Comments: SA A No D SD

33. The Safety Director should be the NIMSCAST SUGL.

True_____ False_____

Comments: SA A No D SD

34. The Safety Director should lead implementation of multi-jurisdictional mutual aid agreements.

True_____ False_____

Comments: SA A No D SD

35. The Safety Director should lead (NIMS) by empowering first responders to become creative and innovative through the use of critical thinking.

True_____ False_____

Comments: SA A No D SD

36. The Safety Director is considered the (NIMS) implementation leader by subordinates as well as superiors.

True_____ False_____

Comments: SA A No D SD

37. The (NIMS) Incident Command System is a standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries.

True_____ False_____

Comments: SA A No D SD

38. The (NIMS) Incident Command System does not allow low ranking first responders to take charge.

True_____ False_____

Comments: SA A No D SD

39. The (NIMS) ICS-100 Class does not introduce the functions and principles of the Incident Command System.

True_____ False_____

Comments: SA A No D SD

40. The hallmark of effectively leading (NIMS) is being able to facilitate change in an organization.

True_____ False_____

Comments: SA A No D SD

Appendix I: Panel Expert Fourth Round-Delphi Technique

The panel summary of third round responses to the 30 statements developed as the survey questionnaire instrument for the Dissertation Research Study entitled, *Ohio's City Public Safety Director's Leadership Role for the Implementation of The National Incident Management System (NIMS) in Ohio* at Walden University, Baltimore, Maryland indicates a consensus among the panelists. The 30 statements with the correct answers, correlated with the research objective tested, as confirmed by the panel, are listed below. Additionally, a separate document is provided for referencing the exact text of the main research objectives and their sub-objectives. If you wish to comment or change your acceptance of these statements, please do so in writing on the comments section provided.

Safety Director Questionnaire

1. The NIMS was created by the Federal Government as a response system solely for the purpose of responding to terrorist attacks.

   True_____ False__X_____

   Tests: Level of NIMS Knowledge and Training (Main Research Objective} (Sub-Objective)—Number 4

2. Governor Taft ordered statewide utilization of NIMS in 2004.

   True__X_____ False_____

   Tests: Level of NIMS Knowledge and Training (Main Research Objective) (Sub-Objective)—Number 4

3. Transformational leadership theory is the paradigm espoused by the Federal Emergency Management Agency (FEMA) in support of NIMS implementation.

   True__X_____ False_____

   Tests: Level of NIMS Knowledge and Training (Main Research Objective)

(Sub-Objective)—Number 4

4. In fiscal year 2006, all cities were required to implement NIMS Training but did not have to formally assess compliance.

   True_____ False__X_____

   Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
   (Sub-Objective)—Number 1

5. The Safety Director was required to create a strategy toward fully implementing NIMS within the compliance timeline established by The Ohio Department of Public Safety in May 2005.

   True__X_____ False_____

   Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
   (Sub-Objective)—Number 4

6. Formal education and academic achievement resulting in a college degree is critical for leading NIMS implementation.

   True__X_____ False_____

   Tests: Impact of Level of Formal Education (Main Research Objective)
   (Sub-Objective)—Number 1

7. The State of Ohio statutorily requires full implementation of NIMS under a process developed within The Ohio Department of Public Safety and governed by The Director of Public Safety.

   True__X_____ False_____

   Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
   (Sub-Objective)—Number 3

8. The President of the United States required all states, tribal, and local governments to adopt NIMS.

   True:__X_____ False_____

   Tests: Level of NIMS Knowledge and Training (Main Research Objective)
   (Sub-Objective)—Number 3

9. A key component of NIMS is enabling first responders to act in a leadership capacity regardless of rank or title.

   True__X_____ False_____

   Tests: Level of NIMS Knowledge and Training (Main Research Objective) (Sub-Objective)—Number 3

10. The NIMS was developed by The Federal Department of Homeland Security to ensure training, equipment, and planning is adequate for the Federal Government to initially manage emergency incidents.

    True_____ False__X_____

    Tests: Level of NIMS Knowledge and Training (Main Research Objective) (Sub-Objective)—Number 4

11. According to Ohio law, in each municipality, The Department of Public Safety shall be administered by a Director of Public Safety.

    True__X_____ False_____

    Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
    (Sub-Objective)—Number 3

12. The Safety Director should not be involved in NIMS implementation.

    True_____ False__X_____

    Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
    (Sub-Objective)—Number 4

13. By virtue of academic degree and formal education, the Safety Director should lead NIMS implementation.

    True_____ False__X_____

    Tests: Level of Prior Emergency Experience (Main Research Objective) (Sub-Objective)—Number 1

14. Various levels of Incident Command (ICS) classes cannot be taken via online courses.

    True_____ False__X____
    Tests: Level of NIMS Knowledge and Training (Main Research Objective)
    (Sub-Objective)—Number 4

15. The course IS—700 is designed as an introduction course to the overviews of The National Incident Management System (NIMS).

    True__X____ False_____

    Tests: Level of NIMS Knowledge and Training (Main Research Objective)
    (Sub-Objective)—Number 4

16. The Safety Director should have prior emergency field experience for leading NIMS implementation.

    True__X____ False_____

    Tests: Level of Prior Emergency Experience (Main Research Objective)
    (Sub-Objective)—Number 2

17. The Safety Director should maintain a record of NIMS Training attained by all personnel in subordinate agencies.

    True__X____ False_____

    Tests: Level of NIMS Knowledge and Training (Main Research Objective)
    (Sub-Objective)—Number 2

18. The Safety Director or his designee monitors NIMS implementation using NIMS Cast.

    True__X____ False_____

    Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
    (Sub-Objective)—Number 1

19. The Safety Director may delegate the statutory duties of the position to another city employee.

    True_____ False__X____

Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
(Sub-Objective)—Number 2

20. The Safety Director should be considered the NIMS implementation authority for the police, fire, and health departments.

True__X_____ False_____

Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
(Sub-Objective)—Number 1

21. The Public Safety Director should be considered academically (college degree based) prepared to lead NIMS.

True__X_____ False_____

Tests: Level of Impact of Formal Education (Main Research Objective)
(Sub-Objective)—Number 3

22. The Public Safety Director should have formal college education to be considered prepared to lead NIMS by subordinates.

True__X_____ False_____

Tests: Level of Impact of Formal Education (Main Research Objective)
(Sub-Objective)—Number 1

23. The Safety Director should be the NIMS CAST SUGL with approval of the county EMA Director.

True__X_____ False_____

Tests: Level of Knowledge of Statutory Authority and Duties (Main Research Objective)
(Sub-Objective)—Number 4

24. The Safety Director should lead implementation of multi-jurisdictional mutual aid agreements.

True__X_____ False_____

Tests: Level of Impact of Formal Education (Main Research Objective) (Sub-Objective)—Number 1

25. The Safety Director should lead NIMS by empowering first responders to become creative and innovative through the use of critical thinking.

True__X_____ False_____

Tests: Level of Impact of Formal Education (Main Research Objective) (Sub-Objective)—Number 3

26. The Safety Director should be considered the NIMS implementation leader by superiors and subordinates alike.

True__X_____ False_____

Tests: Level of Prior Emergency Experience (Main Research Objective) (Sub-Objective)—Number 2

27. The NIMS Incident Command System is a standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries.

True__X_____ False_____

Tests: Level of NIMS Knowledge and Training (Main Research Objective) (Sub-Objective)—Number 4

28. The NIMS Incident Command System does not allow low ranking first responders to take charge.

True_____ False__X_____

Tests: Level of NIMS Knowledge and Training (Main Research Objective) (Sub-Objective)—Number 3

29. The ICS-100 Class (Introduction to Incident Command System) does not introduce the functions and principles of the Incident Command System.

True_____ False__X_____

Tests: Level of NIMS Knowledge and Training (Main Research Objective) (Sub-Objective)—Number 4

30. The hallmark of effectively leading NIMS is being able to facilitate change in an organization.

    True__X_____ False_____

    Tests: Level of Impact of Formal Education (Main Research Objective) (Sub-Objective)—Number 3

Fourth Round—Delphi Technique

Panel of Experts Reference Document

Purpose of this Document:

This document provides the Panel of Experts a reference to the Research Objectives corresponding to the Fourth Round Questionnaire confirming correct responses to the Safety Director Questionnaire.

Instructions:
The exact wording of the Main Research Objectives and their Sub-Objectives are listed below. These correspond to the abbreviated text found on the Fourth Round Questionnaire after the word "Tests". After each Main Research Objective Heading, the Questionnaire Statement numbers are listed.

Main Objective for Questionnaire #6, #21, #22, #24, #25, and #30

To ascertain the impact of the level of formal education achieved by practicing Ohio city public safety Directors on their leadership of NIMS implementation in the state of Ohio.

Sub-Objectives

1. To determine the impact of formal education on leadership as perceived by Ohio city public safety directors.
2. To find out the impact of education on Ohio city public safety director's knowledge of their statutory authority and duties.
3. To ascertain Ohio city public safety directors perceived changes in subordinates and superiors expectations of their NIMS role based on academic achievement.
4. To determine perceived changes of attitude towards NIMS implementation leadership in the study population.

Main Objective for Questionnaire #13, #16, and # 26

To determine the impact of prior emergency field experience on practicing Ohio city public safety director's leadership of NIMS implementation.

Sub-Objectives

1. To determine the impact of prior emergency field experience on NIMS leadership as perceived by Ohio city public safety directors.
2. To find out the impact of prior emergency field experience on Ohio city public safety director's knowledge of their statutory authority and duties.
3. To ascertain Ohio city public safety directors' perceived changes in subordinates and superiors expectations of their NIMS role based on prior emergency experience.
4. To determine perceived changes of attitude towards NIMS implementation leadership in the study population.

Main Objective for Questionnaire #1, #2, #3, #8, #9, #10, #14, #15, #17, #27, #28, and #29

To ascertain the relationship between the level of NIMS knowledge and training achieved by practicing Ohio city public safety directors and their leadership of NIMS implementation.

Sub-Objectives

1. To explore the relationship between the level of NIMS knowledge and training among Ohio city public safety directors and their attitudes toward their leadership role in NIMS implementation.

2. To find out the association between the level of NIMS knowledge and training among Ohio sity public safety directors and their peer group toward NIMS implementation leadership.
3. To examine the links between the level of NIMS knowledge and training achieved by Ohio city public safety directors and their perceived NIMS leadership expectations of subordinates and superiors.
4. To determine the relationship among Ohio city public safety directors between the level of NIMS knowledge and training and their competence to lead NIMS implementation.

Main Objective for Questionnaire # 4, #5, #7, #11, #12, #18, #19, #20, and #23

To explore the relationship between the years of experience of practicing Ohio city public safety directors and their knowledge of the statutory authority and duties relative to leadership of NIMS implementation.

Sub-Objectives

1. To ascertain the association between the years of experience among practicing Ohio city public safety directors, their knowledge of the statutory authority, and duties of their position and their leadership of NIMS implementation.
2. To explore the relationship between Ohio city public safety directors perceived NIMS leadership expectations among subordinates and superiors and their years of experience as a practicing Ohio city public safety director.
3. To find out the relationship between the years of experience among practicing Ohio city public safety directors and their perceived confidence toward leading NIMS implementation.

4. To determine links between the years of experience among practicing Ohio city public safety directors and their involvement in leading NIMS implementation.

Appendix J: Ohio Public Safety Directors Cover Letter

Mrs.

Dear Mrs.

My name is John C. McCauley and I am conducting a Dissertation Research Study entitled, *Ohio's City Public Safety Director's Leadership Role for the Implementation of The National Incident Management System (NIMS) in Ohio* at Walden University, Baltimore, Maryland. Since my Dissertation topic deals with the Safety Director of Ohio cities, as defined in The Ohio Revised Code, I request your cooperation in this study.

This study has been constructed to assure that your individual responses will be confidential and no value judgments about you or your city will be made. No individual or city will be identified in this study.

Enclosed, please find, a Dissertation Research Study Consent Form, a Demographic Data Sheet, a Safety Director Questionnaire, and a stamped, self-addressed envelope. I request that you allow five minutes to read the Consent Form and 35 minutes to complete the Demographic Information requested, as well as the Questionnaire. If you agree to participate in this study, please sign the Consent Form, complete the Demographic Information Sheet as well as the Questionnaire and return these to me within one week of receipt.

I appreciate your time and cooperation in this study and extend my thanks in advance for your participation.

If you have questions, please contact me.

Sincerely,

John C. McCauley

Enclosures

Appendix K: Ohio Public Safety Directors Consent Form

CONSENT FORM

You are invited to take part in a research study of NIMS implementation in Ohio cities. You were chosen for the study because you are a practicing Ohio City Public Safety Director. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named John C McCauley, who is a doctoral student at Walden University.

Background Information:
The National Incident Management System (NIMS) was implemented as a result of the events of September 11, 2001. The purpose of this study is to research the role of Ohio City Public Safety Director regarding NIMS implementation.

Procedures:
If you agree to be in this study, you will be asked to:

- Complete the consent form
- Complete the Public Safety Director demographic data sheet
- Complete the questionnaire

Voluntary Nature of the Study:
Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

I request that you allow five minutes to read the Consent Form and 35 minutes to complete the Demographic Information requested, as well as the Questionnaire.

Risks and Benefits of Being in the Study:
There are no risks in this study. The benefit is to understand the role of Ohio City Public Safety Director regarding NIMS implementation.

Compensation:
None

Confidentiality:
Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email or phone if you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this

with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study IRB approval # 12-07-10-0300469 and it expires on December 26, 2011.

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I am agreeing to the terms described above.

Printed Name of Participant _____

Date of consent _____

Participant's Written Signature _____

Researcher's Written Signature _____

Curriculum Vita

JOHN C MCCAULEY

EDUCATION

2005 – Present Walden University Baltimore, Md

- PH.D in Public Policy & Administration
- Specialization in Emergency Response Policy & Coordination (Counter terrorism).
- Inducted into the Pi Alpha Alpha National Honors Society for Public Affairs & Administration
- ABD – Currently working on dissertation

2003 – 2004 Tiffin University Tiffin, Oh

- Masters Degree in Criminal Justice Administration
- Graduated with Distinction (4.0 GPA)
- Degree Conferred on 12/17/04

2001 - 2003 Myers University Cleveland, Oh

- B.A., Criminal Justice Administration.
- Graduated Magna Cum Laude.
- Maintained Deans List for 2002 and 2003 Quarters
- Degree Conferred on 05/31/2003
- Inducted into Delta Honors Society

1992 – 1995 Lakeland Community College Kirtland, Oh

- Associates, Criminal Justice Administration
- Degree Conferred on 06/1995

PROFESSIONAL EXPERIENCE

2010- Present Kaplan University Ft Lauderdale, FL
Adjunct Instructor
- Teaching Criminal Justice, Counter-terrorism and Emergency Management classes at the 300 and 400 level.

2009- Present Taser International Scottsdale, AZ
Master Instructor
- Teaching & certifying police officers for an instructor level certification on the various devices and programs that the company offers.

2009 - Present Tiffin University Tiffin, Ohio
Adjunct Instructor
- Teaching Criminal Justice, Counter-terrorism and Emergency Management classes at the 300 and 400 level.

2008 - Present Corinthian Colleges, Inc Santa Ana, CA
Adjunct Professor
- Teaching classes in Criminal Justice Administration & Homeland Security at the 2000 level.

2008 – Present Excelsior University Albany, NY
Adjunct Professor
- Teaching bachelors degree program in Liberal Arts – Homeland Security at the 300 level

2006 – Present Mountain State University Beckley, WV
Adjunct Professor
- Teaching criminal justice, management and leadership courses at the 300 and 400 level

2005 – Present Lakeland Community College Kirtland, Oh
Instructor
- Certified Ohio Peace Officer Instructor in the Basic Police Academy

1995 - Current Eastlake Police Dept Eastlake, Oh
Police Officer
- Patrol of city, responds to calls for service and crimes in progress.
- Field Training Officer, Firearms Instructor, and an instructor in the Civilian

Police Academy.

- K9 Unit
- Assists in writing new and/or revising departmental policies and procedures.
- Taser Instructor
- Radar/LIDAR Instructor
- Defensive Tactics Instructor
- Formulating and submitting grants

1998 - 1999 CHESTER TWP POLICE DEPT
CHESTERLAND, OH

Police Officer

- Patrol of township, responded to calls for service and crimes in progress.
- Instructor for the civilian police academy

1998 CLEVELAND CLINIC POLICE DEPT
CLEVELAND, OH

Police Officer

- Interior / exterior patrol of the main Cleveland Campus, responded to calls for service and crimes in progress.

1995 - 1998 TIMBERLAKE POLICE DEPT
TIMBERLAKE, OH

Police Officer

- Patrol of village, responded to calls for service and crimes in progress
- Field Training Officer, Firearms Instructor, Vehicle and Equipment Maintenance.
- Developed Field Training Program and Manual and developed the Firearms / Use of force Policy and procedures.

PROFESSIONAL MEMBERSHIPS

International Association of Law Enforcement Planners

National Association of Field Training Officers
International Association of Law Enforcement Firearms Instructors
International Law Enforcement Educators and Trainer Association