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A QUANTITATIVE ASSESSMENT OF SPIRITUALITY IN POLICE OFFICERS

AND THE RELATIONSHIP TO POLICE STRESS

by

Antoinette M. Ursitti

Dissertation

Submitted to the Faculty of

Olivet Nazarene University

School of Graduate and Continuing Studies

in Partial Fulfillment of the Requirements for

the Degree of

Doctor of Education

in

Ethical Leadership
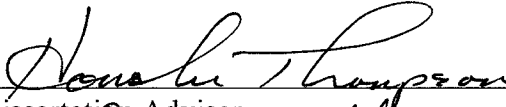
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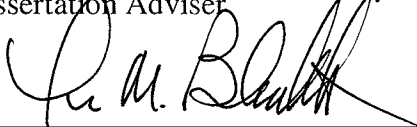
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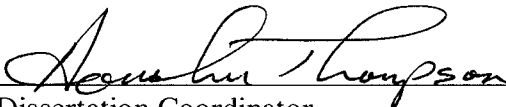
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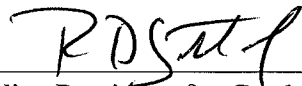
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ABSTRACT

by

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Law enforcement has been recognized as a stressful occupation related to deleterious physical and psychosocial outcomes in police officers' lives. Spirituality interrelates with every dimension of human functioning and has demonstrated a significant relationship to physical and mental health. This study was concerned with the implication of these conclusions, and addressed a gap in literature that has neglected to bridge these realizations due to limited assessment of spirituality in police officers. Measures of spirituality and police stress in a sample of police officers were collected utilizing two test instruments, and analyzed to determine the relationship. The results indicated a moderate, positive spirituality and average experience of stress in the sample, with several significant, positive relationships between measures.

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CHAPTER 1

INTRODUCTION

Law enforcement appears to change police officers in myriad ways. The

occupational stressors which accompany police work are one explanation for the

transformation. Police work consistently has been regarded in the literature as a stressful

occupation, though some critics have asserted that no or inadequate evidence exists to

support the claim (Dantzer, 1987; Terry, 1981). Dialogue on either side of the police

stress debate, however, has occurred within the context of inherent and organizational

stress factors with internal and external variables. (Symonds, 1970; Terry; Violanti &

Aron, 1993).

Inherent, or task-related, stressors of policing stem from the intrinsically

dangerous nature of police work. Law enforcement responsibilities expose police officers

to dangerous, high-pressure events which demand behavioral and attitudinal responses

necessary for success and survival on the street (Gilmartin, 2002; Skolnick, 1993;

Spielberger, Westberry, Grier, & Greenfield, 1981). Hypervigilance, a steady state of

elevated awareness, and constantly viewing people and situations as suspicious, often

enervates police officers (Gilmartin; Skolnick; Symonds, 1970). Police training often

inculcates a sense of invincibility and invulnerability in officers. Police often manifest

what Reiser (1974b) called the "John Wayne syndrome," summarized in literature as

"emotional withdrawal, cynicism and authoritarianism" (Spielberger et al., p. 2).

Organizational stressors of police work relate to administrative or other non-

emergency responsibilities of law enforcement. Overtime, court dates, shift work, and duty obligations on holidays and special occasions demand unusual schedules, which link to poor eating, sleeping and socializing habits. (Hillgren & Bond, 1975; Kowalski & Collins, 1992; *On the Front Lines,* 1991). Negative media coverage, a lenient judicial system, and public disdain, apathy and resentment for authority figures further afflict police officers, who are expected to respond professionally to such affronts (Skolnick, 1993; Spielberger et al., 1981; Symonds, 1970; Waters & Ussery, 2007). The paramilitary nature of the police agency often affords minimal emotional support for officers and limited opportunities for employee feedback (Kaufmann & Beehr, 1989). Unfair discipline, policies and promotions often diminish values and self esteem in officers who wholly invest themselves in the police role (Gilmartin, 2002).

These occupational stressors are believed to catalyze individual stressors which can manifest in outcomes such as suicide, illness, domestic strife, and alcohol abuse (Terry, 1981). Studies have sought to examine police stress and various stress-related symptoms thought to be influenced by the unique pressures of a police career (Gershon, 1999; Gilmartin, 2002; Li-Ping Tang & Hammontree, 1992; Neidig, Russell, & Seng, 1992; Neidig, Seng, & Russell, 1992; Violanti, Marshall, & Howe, 1985). Critics have asserted that research linking police stress with negative lifestyles and coping strategies has failed to establish support to substantiate the investigations (Dantzer, 1987).

In a hearing before the House of Representatives in Washington D.C., a select committee concerned with children, youth, and families listened as clinicians, directors, educators, and law enforcement officers considered physical and mental pressures afflicting police officers and families (*On the Front Lines,* 1991). Speakers highlighted

what several studies concluded about police officers' experiences of stress: Police families commonly encounter domestic discord, alcohol abuse, and physical and psychological complications in their homes. A call was issued for programs and services to reduce stress and stress-related symptoms in law enforcement communities, and for these concerns to receive national priority to ensure the ultimate security of society.

Two decades prior to the panel on police stress, a different conference also met in the Capitol to discern the needs of a separate group, one similarly faced with unique circumstances affecting health and well-being: the elderly. The 1971 White House Conference on Aging was a forum for leaders to hear the special interests and concerns of this population in preparation for the development of national policies for the elderly. A segment of the conference focused exclusively on spiritual needs. At a public and national level, it was acknowledged that all persons are spiritual beings, and that spiritual well-being facilitated aspects of human functioning (Moberg, 1971).

The 1991 symposium addressing police stress and family well-being called for interventions to ease the physical and emotional strains placed on officers and families (*On the Front Lines,* 1991). Spirituality has been recognized in multiple contexts as a resource for individuals facing stress and stress-related symptoms. This researcher's review of the literature, however, revealed minimal examination about spirituality in the police population, or the nature of association between spirituality and stress in the law enforcement community.

Statement of the problem

The specific issue to be addressed in this study was the gap in research about spirituality in the police population and the relationship to police stress. Seaward (2007)

stated "Every aspect of stress is undeniably intertwined with the essence of spirituality" (p. 15). Spirituality is interrelated with physical, mental, emotional, and social dimensions of functioning. Police stress literature has given considerable attention to the impact of policing on the physical and psychosocial functioning of police officers, but comparably has neglected the spiritual domain in analyses. Three qualitative works endeavored to understand the spirituality of police officers (Charles, 2005; Kowalski & Collins; 1992; Patton, 1998), and one quantitative study sought to illuminate the correlation between police stress and religiosity, a distinct construct of spirituality (Sigler & Thweatt, 1997).

Sigler and Thweatt (1997) focused on the relationship of religious beliefs, activities, satisfaction, and perceived influence of religion to experiences of life and work stress in police officers and firefighters. While findings were insignificant for the link between stress to religious beliefs and activities, the research demonstrated a greater amount of stress existed among police officers where measures of religious satisfaction and the perceived influence of religion were higher. The researchers posited that though religious beliefs and activities were not significantly related to stress in the study, stress may result for officers when religious tenets are incongruent with the behaviors and circumstances they encounter and tolerate in the course of their duties. The inability to match personal religious beliefs to professional responses may afflict police officers who hold religion as an instrumental guide for daily living.

In one of the earliest qualitative works about police and spirituality, Kowalski and Collins (1992) presented interviews with law enforcement officers who shared about Christian faith and police work. Though the work was outside of a structured

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methodology, the authors' text was seminal in focusing on the relationship between spirituality and police work. The authors' final conclusion suggested that indicators of spiritual wellness were evident in police officers. Later qualitative research based on a formal methodology supported this finding, and determined that police officers who maintained regular prayer and meditation practices believed these interventions enabled them to perform better in their professional capacities (Charles, 2005). Patton (1998) also discovered patterns of spiritual wellness in veteran law enforcement officers, but concluded that the constant exposure to crime, danger, suffering, and violence incited spiritual pain and distress (Patton, 1998).

The literature available about police officers and spirituality has indicated that the spiritual dimension is integral to police work. Charles (2005) and Patton (1998) noted limitations with the samples used in their studies, however, and urged additional inquiry. Patton suggested a quantitative research design as one possibility for investigating spirituality in the law enforcement profession; hence, the need for quantitative assessment of the spirituality of police officers was established.

<div align="center">Background</div>

Spirituality and religion have been presented in literature as distinct concepts (Canda & Furman, 1999; Graham, Furr, Flowers, & Burke, 2001; Houston & Cartwright, 2007; Lantz, 2007; Moberg, 1971; Tirri, Nokelainen, & Ubani, 2006). Religion has been portrayed as institutionally established beliefs, rituals and traditions that are shared by a group of people seeking to integrate the sacred teachings of a particular faith into their lives. As such, religion may be considered a concentrated area of spirituality, with the latter extending itself to pandemic ideas relevant and applicable to all human beings

<div align="center">5</div>

(Canda & Furman, 1999; Espeland, 1999; Howden, 1992). In contemporary expositions, spirituality has emerged as an essential human quality, not separate or reducible in a person but definite and sacred, making all persons unarguably whole and worthy (Canda & Furman; Caroll, 1998; Moberg, 1971). This integrative feature of spirituality is what scholars have believed influences an individual's thoughts, emotions and actions to contribute to positive health outcomes (Krok, 2008).

Spirituality also has been considered the personal aspect concerned with developmental processes of meaning-making and building relationships (Covey, 2004; Frankl, 1984; Howden, 1992; Lips-Wiersma, 2002; Peck, 1978), and the driving force compelling a person to achieve wholeness innate to one's being (Canda & Furman, 1999; Caroll, 1998). Spirituality encompasses experiences, both ordinary and unusual in nature, that transcend a person beyond one's usual physical and psychological capacities (Howden, 1992; Seaward, 2006, 2007). Spirituality may be manifested in active affiliation with secular or religious groups and practices, and in private and public realms (Canda & Furman).

Moberg (1979) asserted that spiritual assessment is critical for evaluating relationships between spirituality and holistic well-being. Difficulties in defining a singular and intangible concept such as spirituality, however, limited formal assessment of the spiritual dimension for many years (Brennan & Heiser, 2004). Scholars within varied disciplines have sought to recognize, comprehend, and articulate shared spiritual themes manifested in all of humankind, and to conceptualize defining characteristics of spirituality. Out of these developments have emerged tools for measuring spirituality which have facilitated analysis and assessment of the spiritual domain. Subsequent

studies using various assessment techniques have revealed that higher levels of religious and spiritual well-being and wellness are related to positive physical and mental health outcomes (Brizer, 1993; Graham et al., 2001; Kennedy, Abbott, & Rosenberg, 2002; Koenig, 2009; Larson & Greenwold Milano, 1995; Marsh, Beard, & Adams, 1999; Morris, 2001).

Despite the increasing availability of spirituality assessment tools used to investigate health and spirituality, information about spirituality has been limited in the police population. Although conducted in a broader context than law enforcement, one study concluded public servants were more spiritual than workers employed in nonpublic service roles (Houston & Cartwright, 2007). Police officers often explain that their decision to enter law enforcement was based on a calling, alluding to an intangible realm with roots in the spiritual. In this way, spiritual attributes such as meaning and purpose appear to be as strong as the physical and psychological characteristics police officers exhibit when passing rigorous pre-employment screening tests to enter law enforcement.

The spiritual dimension has been regarded as a dynamic condition. In much the same way the physical dimension of an individual undergoes transformation throughout a lifetime, spiritual growth is a developmental process (Covey, 2004; Espeland, 1999; Peck, 1978; Seaward, 2006, 2007). Peck noted that spiritual growth is a laborious endeavor that is possible only through conscious effort needed to overcome resistance innate to any process of evolution. A strong spirituality requires time, energy, and attention (Covey; Peck); the demands of a law enforcement career often claim all three (Gilmartin, 2002). Violanti (1999) suggested police officers often sever ties to all which is extraneous to police work, including spirituality. Seaward (2007) described the refusal

to acknowledge one's spiritual dimension as *spiritual dormancy*, a condition which commonly precedes dysfunction in an individual.

Trials and tribulations provide opportunities for spiritual growth and interventions (Frankl, 1984; Krok, 2008; Lancia, 2000; Peck, 1978). In difficult times, individuals demonstrate a yearning for spiritual answers and practices as a means for handling stressful situations (Brennan & Heiser, 2004; Krok). One question frequently posed after exposure to trauma or high stress situations is "Where is God in all of this," reflecting the desire for transcendence in the midst of distress (Lancia). Individuals who work through and process such existential questions develop a sense of meaning and purpose which promotes personal functioning and spiritual growth (Carlier, 1999). Seaward (2007) called this quest to understand existential questions *spiritual hunger*. Patton (1998) observed that continual exposure to crime, danger, suffering, and violence incited such a process of yearning and searching in police officers.

Individuals have a choice to recognize, explore and utilize their spirituality when facing personal crises and stress (Seaward, 2006, 2007). Seaward suggested that individuals seeking spiritual direction journey through four processes – centering, emptying, grounding, and connecting – which cultivate experiences of meaning, transcendence, inner resources, and relationships. Activities such as journaling, praying, meditating, and deep breathing have been related to spirituality and managing stress and stress-related symptoms. A study conducted by Charles (2005) focused on veteran law enforcement officers who consistently maintained spiritual practices. Participants perceived that spiritual activities such as prayer and meditation enhanced their performance professionally.

Individuals who choose spiritual avoidance rather than spiritual cultivation often opt to handle life stressors through such means as anger, addiction, and withdrawal (Frankl, 1984; Peck, 1978; Seaward, 2006). The research has indicated police officers often turn to such coping strategies, as demonstrated in patterns of stress symptoms, sedentary lifestyles, corpulence, and alcohol and tobacco use (Richmond, Wodak, Kehoe, & Heather, 1998) and increased rates of suicide (Violanti, 1996; Violanti, Vena, & Marshall, 1996) and domestic violence (National Center for Women and Policing [NCWP], n.d.; Neidig, Russell, et al., 1992; Neidig, Seng, et al., 1992) compared to other working populations and the general population. The findings from these studies have revealed dysfunction indicative of spiritual distress among police officers. Yet other research has illuminated patterns of spiritual wellness in the police population that conflict with these conclusions (Charles, 2005; Patton, 1998). The contradiction further compelled inquiry into the spirituality of police officers.

Research Questions

The purpose of this research was to quantitatively assess spirituality in a sample of police officers and evaluate the relationship to police stress. The spirituality of police officers was assessed using a valid and reliable measurement of spirituality, the Spirituality Assessment Scale, which was designed to measure four interrelated spiritual attributes: Purpose and Meaning in Life, Transcendence, Unifying Interconnectedness, and Innerness or Inner Resources (Howden, 1992). This instrument enabled a measure of spiritual wellness ranging from strong and positive spirituality to weak and negative spirituality. The degree of police stress experienced by police officers was measured using the Police Stress Survey, which identified 60 events which were determined to be

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police stressors (Spielberger et al., 1981). The original scoring scale was modified for this study to yield a measure of police stress. The following questions were addressed in this research:

1. What measure of spirituality is reported among police officers?

2. What measure of police stress is reported among police officers?

3. What is the relationship, if any, between measures of spirituality and police stress reported among police officers?

<div align="center">Description of Terms</div>

Hypervigilance. Hypervigilance is an elevated state of awareness in which one steadily is attuned to potential threats and unusual activity in an environment (Gilmartin, 2002).

Innerness/Inner Resources. Innerness and inner resources is the aspect of spirituality concerned with the discovery, development, and use of one's innate qualities (Howden, 1992). One's innerness and inner resources manifest as serenity and certainty in times of difficulty and doubt (Howden). Seaward (2006) noted inner resources include but are not limited to qualities such as humor, creativity, optimism, courage, willpower, patience, acceptance, forgiveness, intuition, compassion, curiosity, humility, faith, and love. The Spirituality Assessment Scale operationalized this attribute of spirituality as the Innerness and Inner Resources subscale (Howden).

Interconnectedness. Interconnectedness is an intrinsic understanding of all life forms as one. Interconnectedness focuses on the relationship aspect of spirituality and the connection between everyone and everything. Interconnectedness embraces self, others,

environment and, if one chooses, one's own concept of divinity (Ingersoll, 1994). The instinctual drive for interconnectedness manifests as service and responsibility to people, ecology, and in some instances, a universal power, ultimately yielding positive, nurturing relationships (Howden, 1992). The Spirituality Assessment Scale operationalized this attribute of spirituality as the Unifying Interconnectedness subscale (Howden).

Meaning. Meaning is a personal aspect (Canda & Furman, 1999) and process (Howden, 1992) concerned with seeking and finding one's worthiness and reason for living. The essence of meaning is purpose, an intentional construct of values which allows one to filter and integrate circumstances into personal beliefs and actions (Lips-Wiersma, 2002). Meaning requires individuals to determine to whom or what they are responsible and fulfill their obligations to this source (Frankl, 1984). The Spirituality Assessment Scale operationalized this attribute of spirituality as the Purpose and Meaning in Life subscale (Howden).

Police stress. Police stress is the impact of demanding work events specific to police vocation. Police stressors include inherent factors, such as exposure to violent and crisis situations, and organizational factors, such as unfair discipline and lack of support from the public and courts (Spielberger et al., 1981; Symonds, 1970; Violanti & Aron, 1993).

Religion. Religion is distinct but intimately related with spirituality (Canda & Furman, 1999; Graham et al., 2001, Houston & Cartwright, 2007; Lantz, 2007; Moberg, 1971; Tirri et al., 2006). Canda and Furman defined religion as "an institutionalized pattern of beliefs, behaviors, and experiences, oriented toward spiritual concerns, and

shared by a community and transmitted over time in traditions" (p. 37). Religion is one means by which spirituality is expressed.

Religiosity. Religiosity is a construct used to describe spiritual health (Ingersoll, 2003). Religiosity was defined as beliefs and actions consistent with one's religion, as evidenced by one's religious values, participation in religious events or affiliations, satisfaction with religious involvement, and perception of religion infusing daily life (Sigler & Thweatt, 1997).

Spirituality. Spirituality is a life aspect, force, process, experience, and essential human quality (Canda & Furman, 1999). Spirituality may be expressed in the religious or secular and understood through constructs of spiritual health such as religiosity, spiritual well-being, and spiritual wellness.

Spiritual well-being. Spiritual well-being is a construct which embodies what the National Interfaith Coalition on Aging defined as "the affirmation of life in a relationship with God, self, community and environment that nurtures and celebrates wholeness" (as cited in Moberg, 1979, p. 5). Spiritual well-being reflects religious and existential variables representative of one's spiritual health (Ingersoll, 2003). Spiritual health has been believed to be interrelated with other dimensions of wellness and manifests in feelings of being "generally alive, purposeful, and fulfilled" (Ellison, 1983, p. 332).

Spiritual wellness. Spiritual wellness is a construct of spiritual health which gauges the extent that singular spiritual dimensions integrate and comprise total spirituality (Ingersoll, 2003). Spiritual attributes are drawn from diverse, multicultural traditions rather than specific religious practices and beliefs when assessing spiritual wellness (Howden, 1992; Ingersoll). Howden operationalized spiritual wellness in four

subscales related to themes of purpose and meaning in life, transcendence, innerness and inner resources, and unifying interconnectedness.

Stress. Stress is three interrelated factors: events believed to be threatening to one's well-being; the processes for handling the threat; and the resulting responses to the threat (Hillgren & Bond, 1975). Stress manifests when the demands of an event exceed a person's ability, or perception of ability, to adapt to the pressure. Physical and psychological symptoms often accompany tensions associated with stress.

Transcendence. Transcendence is the capacity or occurrence of going to or beyond the bounds of human limitations, either physically or psychologically (Howden, 1992). Frankl (1984) believed transcendence is achieved by contributing a creative work or thoughtful deed, experiencing a person or event which inspires love, or assuming an attitude which allows one to survive unavoidable suffering. The experience and process of transcendence involves a shift from self-centered to other-centered interests, and allows for the inclusion or exclusion of a deity or higher power source (Chandler, Holden, & Kolander, 1992; Hinterkopf, 1994). The Spirituality Assessment Scale operationalized this attribute of spirituality as the Transcendence subscale (Howden).

Significance of the Study

A significant body of literature has detailed suicide, domestic strife, alcohol abuse, and physical illness as problems in the law enforcement population (Gershon, 1999; Li-Ping Tang & Hammontree, 1992; Neidig Russell, et al., 1992; Neidig, Seng, et al., 1992; Richmond et al., 1998; Violanti et al., 1985; Violanti, 1996). Medical, nursing, and mental health professionals often encounter these types of issues in their fields. In a growing body of literature from these disciplines, spiritual assessment and intervention

has been considered germane to patient care (Brizer, 1993; Delaney, 2003; Howden, 1992; Kennedy et al., 2002; Morris, 2001.) This researcher's efforts were designed to increase understanding of spirituality in police in order to enhance insight for helping professionals working with law enforcement officers.

The efforts of a reserved number of writers, researchers, and law enforcement professionals in the late 20th century and early millennium suggest spirituality is a critical factor in the law enforcement profession (Charles, 2005; Feemster, 2007, 2009a, 2009b; Kowalski & Collins, 1992; Marsili, 2007; Patton, 1998; Tuck, 2009). Feemster (2007) issued a call for law enforcement agencies to evolve toward holistic education and training in its police academies:

> The law enforcement profession … must develop a curriculum of best practices to be implemented by officers, educators, and communities working together to stem the tide of self-inflicted officer causalities. In addition, law enforcement training academies must circumspectly collaborate by joining this evolution toward a more holistic curriculum. In conjunction with stress, conflict, crisis management, tactical, and investigative training, as well as physical exercise, an intentional emphasis on spiritual wellness will produce a more effective vocation. (p. 16)

The infusion of spirituality into police curriculum may be considered spiritual intervention, defined by Brennan and Heiser (2004) as "any programs, policy, procedure, or protocol that address the spiritual well-being and needs of individuals" (p. 1). According to Brennan and Heiser, spiritual assessment ought to precede any spiritual intervention to ensure the intended person's or group's needs and concerns are met. Spiritual assessment therefore is a precursor for developing a holistic police curriculum

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called for in contemporary literature (Feemster, 2007). This research was significant in that it was designed to provide spiritual assessment results which have been limited in the corpus of literature about police.

Patton (1998) concluded that various spiritual attributes were affected by police work. This study assessed spirituality overall and by attributes in order to extend understanding about the relationship between spirituality and police stress. It may be noted that research has suggested spiritual wellness can be improved by spiritual interventions which engage spiritual attributes (McGee, Nagel, & Moore, 2003), and in this way, the results of this study also were significant for the development and implementation of a more holistic police curriculum.

<center>Process to Accomplish</center>

This researcher discovered several qualitative works focused exclusively on spirituality and police officers (Charles, 2005; Kowalski & Collins, 1992; Patton, 1998). In these works, it was determined that the samples lacked diversity and limited the applicability of findings in the broader law enforcement community. Patton noted that quantitative inquiry into spirituality in law enforcement was a subsequent step for advancing research. Descriptive research, a type of quantitative research methodology, seeks to understand a phenomenon exactly as it is (Leedy & Ormrod, 2005), much like the purpose of qualitative research. Descriptive research often is collected through self-report measures such as surveys and questionnaires (Gay, Mills, & Airasian, 2006). Valid and reliable test instruments which enabled descriptive research therefore were necessary to accomplish this study.

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Howden's (1992) Spirituality Assessment Scale is a 28-item Likert scale test instrument which measures spiritual attributes in four areas representative of one's spirituality. This researcher's review of literature supported Howden's assessment and description of four global spiritual qualities, which Howden labeled as Purpose and Meaning in Life, Transcendence, Innerness or Inner Resources, and Unifying Interconnectedness. Four questions in the Spirituality Assessment Scale addressed Purpose and Meaning in Life, six concerned Transcendence, nine regarded Innerness or Inner Resources, and the remaining nine examined Unifying Interconnectedness (Howden). The questions were designed to be neutral to any particular faith traditions and focused on the aspects of spirituality inherent to all persons. The Spirituality Assessment Scale yielded high internal consistency overall and in each scale and was utilized in other studies (Delaney, 2003; Howden; McGee et al., 2003).

The measure of police stress was gauged utilizing the Police Stress Survey (Spielberger et al., 1981), a 60-item survey designed to assess police work factors commonly perceived as problematic to police officers. The researchers identified stressors for the instrument based primarily on qualitative studies conducted by Kroes and associates (Kroes & Gould, 1979; Kroes, Hurrell, & Margolis, 1974; Kroes, Margolis, & Hurrell, 1974). These qualitative pieces determined the courts, police administration, community relations, and various line of duty crises were prevalent strains, among others, experienced by police officers in their vocation (Spielberger et al.). A review of the literature substantiated the variables of police stress identified by Spielberger and colleagues, and the instrument was considered a reliable tool which was used in other studies (Li-Ping Tang & Hammontree, 1992; Violanti & Aron, 1993).

Howden (1992) identified several variables believed to influence spirituality, and designed a demographic survey to elicit demographic characteristics and situational factors from participants responding to the Spirituality Assessment Scale. Demographic and situational variables included age, gender, marital status, income, conditions of health and experiences of crises. Similarly, Spielberger et al. (1981) utilized a demographic questionnaire with the Police Stress Survey to glean information from participants about rank, age, education, marital status, and years of police experience. This study created a modified demographic survey comprised with questions from these two demographic instruments.

The probability of representing the entire police population was diminished in this study given the global nature of law enforcement and the limited resources of this researcher. Gay et al. (2006) maintained that purposive sampling, a nonrandom sample design, is appropriate when researchers can justify that a particular group is representative of the larger population.

This researcher's review of the literature suggested that continuing education is a relevant sphere which affects modern policing (Breci, 1997; Hepler, 1994; Lane, 2005; Varricchio, 1998). Many police agencies raised the educational requirements necessary to enter law enforcement following the civil unrest and social protests of the 1960s. Law enforcement communities have since encouraged higher education among police officers in order to meet the skill and knowledge demands required in the community policing model emphasized in the late 20th century and subsequent millennium (Breci; Varricchio). This emphasis on higher education for advancement through the police ranks

has indicated that colleges and universities are appropriate sites to locate officers who are representative of the contemporary law enforcement population.

As such, this researcher approached three institutions of higher education in the Midwest that were known to actively recruit and enroll police officers, and coordinated with administrators to discern police officers enrolled in classroom instruction. These student/police officers were provided informed consent letters and test instrument packets comprised of a demographic survey and items from the Spirituality Assessment Scale and Police Stress Survey. Voluntary participants returned the packets, and the adequately completed surveys were analyzed in order to address the research questions.

Participant responses were entered into a statistical software program in order to analyze the data for each research question. Descriptive statistics were obtained to provide the data necessary to satisfy each query, and were presented overall and by participant site and variable subscales. Additional statistical processes were utilized where appropriate to enhance understanding of the findings. The numerical findings realized in these steps subsequently were explicated to conclude the purpose of this research.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

In addressing two comprehensive topics such as police stress and spirituality, diligence must be paid to the myriad details, movements, and perspectives comprising each area. The scope of theory, experience, and research findings may never be exhausted given the complexity of both subjects, but careful consideration of consistent themes, observations, and arguments ought to provide a significant account representative of each realm. This literature review was a summary of key ideas established in seminal works about police stress and spirituality, and later contributions which expounded upon these findings. This chapter first explored police stress utilizing a paradigm which has been used in organizational stress studies, and then transitioned to research and literature about stress-related outcomes in the police population and influential factors which may affect stress responses in police officers. Spirituality was examined utilizing various models and constructs, and the role of spiritual coping in health outcomes additionally was delineated. The chapter concluded with an examination of spirituality in the context of law enforcement.

Overview of Police Stress

Many people, even those who know little about the exact duties of a law enforcement officer, believe police work is a stressful occupation. Hans Selye, a pioneer in the study of stress, provided credence to this assumption by asserting police work was

one of the most stressful professions (Selye, 1978). Critics of the notion of police stress, however, have contended that this supposition is unfounded and that police work is not necessarily more stressful than any other occupation (Dantzer, 1987). Police families and helping professionals have testified to the contrary (*On the Front Lines,* 1991), and research and literature has related the police vocation to various deleterious physical and psychosocial outcomes in the lives of police officers (Gershon, 1999; Gilmartin, 2002; Li-Ping Tang & Hammontree, 1992; *On the Front Lines,* 1991; "Researchers Investigate Impact," 2008; Silbert, 1982; Violanti et al., 2006; Violanti et al., 1985). The corpus of literature has suggested that police stress is a serious concern for the law enforcement community, though it has been argued that research has demonstrated limitations, including biased samples and methodologies (Dantzer). Contemporary studies have focused on gender, race, and other demographic variables to broaden findings in the police population, and have reflected similar conclusions that stress is rife in the law enforcement community (He, Zhao, & Ren, 2005; McCarty, Zhao, & Garland, 2007; Morash, Kwak, & Haarr, 2006; Zachar, 2004).

Defining the two words that comprise police stress may ground and enhance understanding of the subject. The term *police* has been defined as the body of individuals "charged with the regulation and control of the affairs of a community" and "established to maintain order, enforce the law, and prevent and detect crime" ("Police," 2000). This definition reveals the manifest authority that is an inherent quality of law enforcement, and which may elicit an unfavorable opinion of police officers charged with the responsibilities of policing. Literature has recognized hostile responses to authority as a

stress-related factor in the police population (Gershon, 1999; Kroes, Margolis, et al., 1974; Niederhoffer, 1967; Pate & Spielberger, 1980).

The etymology of *stress* has evolved since its initial application in the field of physics, where it was used to describe the pressure that caused an object to curve or crack (Seaward, 2006). Physiologist and author Hans Selye introduced *stress* to other disciplines by paralleling it to the wear and tear seen in the human body in response to various strains. Researchers in the field of psychology incorporated perception and coping in the understanding of stress (Seaward, 2006). Anderson, Litzenberger, and Plecas (2002) put forth a psychosocial definition of *stress* as "the response of an individual to the self-perceived imbalance between the demands of the situation presented, and the resources one has at their disposal to respond successfully" (p. 402). With occupational stress, the work setting presents long hours, work-family conflicts, and role ambiguities and conflicts which threaten and challenge individuals and overwhelm what they believe are their available resources to deal with the circumstances (Zellars & Perrewe, 2003).

Police work, comprised of demands and other unique factors, such as public prominence and routine exposure to crises and suffering, has elicited what is believed to be its own type of stress. Symonds (1970) proposed two general areas of job strain in police vocation: pressure resulting from the unique responsibilities of law enforcement, and tension arising from the organizational aspects of policing. Stressors which have been considered inherent to police work include physically or psychologically threatening events, such as in-progress felony calls, physical attacks, high speed chases, and the death or injury of another police officer (Spielberger et al., 1981; Violanti & Aron, 1993).

Organizational stressors in police work have been related to policies, procedures, shift work, poor or no equipment, and inadequate support mechanisms from superiors (Kroes, Hurrell, et al., 1974; Kroes, Margolis, et al., 1974; Violanti & Aron, 1994; Spielberger et al.). Spielberger et al. suggested negative encounters with the public, courts, and media were tantamount as organizational pressures and psychological threats.

The term *stress* has multifaceted descriptions, including the stimuli that prompt distress or eustress; the response of an individual to stress stimuli; and the interplay between stress stimulus and response that comprises the overall stress process (Anderson et al., 2002). The distinctions have manifested in the literature in various ways. In occupational stress studies, researchers have concentrated on stress in terms of two antecedent variables, personality characteristics and organizational characteristics, in order to explore stress stimuli (Hillgren & Bond, 1975; Zellars & Perrewe, 2003). An individual's reaction to threatening stimuli has been recognized in two responses: fight or flight. In these phases, a person responds by either confronting or withdrawing from the threat (Seaward, 2006). The entire stimulus-and-response stress process has been illuminated in the literature by focusing on influential factors such as perception, cognitive appraisal, coping styles and coping processes in the transaction (Aldwin & Yancura, 2004; Anderson et al.).

The police stress literature reviewed by this researcher provided material that informed understanding about stress in the aforementioned categories. As such, the next three sections of this chapter were organized to examine antecedent factors in police stress, stress-related outcomes in the police population, and factors influencing stress responses in police officers.

Antecedent Factors in Police Stress

Personality

Personality is the entire spectrum of characteristics representative of an individual. Encompassed in personality are values, motives, and behaviors that forge a unique composite of a person (Sigelman & Rider, 2003). One assumption that has been explored in the literature is that police officers have a distinct personality (Lefkowitz, 1975). Empirical research overall has been inconclusive about the origin or dominance of particular traits in the police population, although several characteristics consistently have illustrated the police personality, including hypervigilance, suspiciousness, alienation, cynicism, and authoritarianism (Lefkowitz; Skolnick, 1993; Symonds, 1970).

Limited empirical data has emerged to elucidate qualities and characteristics of police officers prior to entry into law enforcement. Police officers generally have been portrayed from working class backgrounds, attracted to the career because of the salary, benefits, and pension, which satisfy a value of security (Symonds, 1970; Neiderhoffer, 1967). Many police officers also have expressed an ardent desire to serve, protect, and help others, indicating altruism as a shared motive among the group (Reiser, 1974a; Symonds). Others have intimated a sense of adventurousness as the compelling reason they sought out police work (Storch & Panzarella, 1996).

Police agencies must sort through an array of candidates to select those individuals believed to possess the strongest physical, intellectual, and moral qualities. Symonds (1970) noted that many individuals who excel in these specific domains, regardless of occupation, tend to have developed rapidly and display certain qualities:

In my studies of young people of all economic classes, men who exhibit the above

traits seem to have sidestepped the adolescent process and have gone from

childhood directly to adulthood. They tend to be conservative and security bound.

They are uncomfortable with rebellion and all forms of dramatic adolescent

protest. These young men are idealistic, and have preserved an attitude towards

authority that is one of respect, awe and, sometimes, reverence. They cannot

understand, accept or tolerate any direct challenge of authority. They experience

challenge as abuse and defiance. (p. 157)

While Symonds' work limited itself to males, it suggested several dominant

characteristics of law enforcement personnel.

Violanti (2003) submitted that police socialization is a significant factor in police

personality, and that once officers are ingrained into the police role, a range of cognitive

and behavioral shifts result. Hypervigilance has been recognized as one response

inculcated into police recruits, and practiced and maintained throughout the careers of

most officers (Gilmartin, 2002; Hillgren & Bond, 1975; Skolnick, 1993). Hypervigilance

is an elevated state of awareness in which one steadily is attuned to potential threats and

unusual activity in an environment. Police officers whose lives depend on the ability to

detect danger essentially must adopt a worldview in which people and situations are

perceived as suspicious. This perspective is believed to influence police officers on and

off duty, and to catalyze other frequently identified characteristics of the police

personality, such as suspiciousness, isolation, and cynicism (Gilmartin; Violanti).

Empirical conclusions about the onset of suspiciousness in police officers have remained

inconclusive (Lefkowitz, 1975), though the link of hypervigilance to other perceived police traits was discussed in the literature (Gilmartin; Violanti).

Gilmartin (2002) and Violanti (2003) intimated that the physiological repercussions of hypervigilance prompt police officers to detachment or withdrawal outside of their police role. These arguments have maintained that the high energy phase of the hypervigilance cycle biologically requires a subsequent, lower phase of intensity for officers to recharge and revitalize. Police officers who physiologically are addicted to the high energy associated with hypervigilance respond to the low feelings at the bottom of the cycle by avoiding time at home so as to avert the renewal experience, or by staying physically present but mentally detached from activities with family and friends (Gilmartin). Withdrawal and detachment intersect with another police characteristic identified in the literature: isolation.

Isolation as a characteristic of police officers has been attributed to factors other than the lower phase of hypervigilance. Skolnick (1993) observed that police officers, wary of people and situations as part of their occupational mindset, are themselves perceived by society as suspicious individuals because of the dangerous work they perform and the authoritative role they assume. In this way, public hostility because of authoritarianism and rejection because of differences spurs solidarity among police officers. Lefkowitz (1975) asserted that in spite of this professional unity, police are as suspicious of one another as of civilians. Others have maintained that support and identification with colleagues enables officers to withstand the outside pressures of law enforcement and instills a sense of certainty and morale that counters public opposition (Kroes, Margolis, et al., 1974; Reiser, 1974a).

Another quality conceptualized in the police personality is cynicism, which Hillgren and Bond (1975) asserted officers may acquire for purposes of "self-preservation" (p. 29). Cynicism, much like suspiciousness, has appeared to manifest in police officers as a result of the police socialization process and has maintained itself in police culture via cohesive relationships with peers (Hillgren & Bond; Niederhoffer, 1967). Niederhoffer proposed two categories of police cynicism: one directed toward the public, and the other, at the police organization.

Cynicism, according to Niederhoffer (1967), requires a person to draw certain conclusions about circumstances. For police officers, these inferences often are taken from continual negative encounters with individuals and situations on the streets and in police administration. Yet Niederhoffer recognized that in spite of these circumstances, some police professionals acknowledge flaws and still believe it is possible to change and improve the system. Lefkowitz (1975) noted that while cynicism appears to be a prevailing characteristic in the police population, this conclusion has lacked supporting evidence. Research that has determined a relationship between cynicism and the police force has been disputed because of methodological limitations (Lefkowitz).

Literature has suggested an interrelationship among many of the traits perceived in police officers (Lefkowitz, 1975; Niederhoffer, 1967; Skolnick, 1993). Closely related to cynicism, suspiciousness, solidarity and social isolation is the trait of authoritarianism. Authoritarianism has been understood as an amalgamation of several qualities, including cynicism, conventionalism, black-or-white thinking, and suspicion (Neiderhoffer). Symonds (1970) posited conservatism as a preexisting tendency in police officers, while all-or-nothing cognitive distortions, cynicism, and suspiciousness have been correlated to

police socialization (Niederhoffer; Violanti, 2003). Studies that have focused on police authoritarianism have yielded contradictory findings (Lefkowitz). Lefkowitz's review of the literature yielded as many resources indicating police scored low in dogmatic and authoritarian personality styles as studies demonstrating qualities of aggression, rigidity, and punishment, all auxiliary traits of authoritarianism. In multiple studies, police were shown as even less authoritarian than civilian counterparts, though variables such as seniority, education, and work assignment appeared to influence the extent of dogmatism in police officers in these evaluations.

Regardless of research conclusions, literature has maintained the traditional societal view of police officers as authoritarian figures (Reiser, 1974b; Skolnick, 1993). The power and control that police wield, symbolically via uniform and equipment, and literally with the extent of legal jurisdiction, can prompt conflicted responses from individuals (Reiser, 1974b). Niederhoffer (1967) captured the range of latent and overt emotion that can be triggered by the perception of police as authority figures:

> The policeman is a 'Rorschach' in uniform as he patrols his beat. His occupational accouterments – shield, nightstick, gun, and summons book – clothe him in a mantle of symbolism that stimulates fantasy and projection. Children identify with him in the perennial game of 'cops and robbers.' Teen-agers in autos stiffen with compulsive rage or anxiety at the sight of the patrol car. To people in trouble the police officer is a savior. In another metamorphosis the patrolman becomes a fierce ogre that mothers conjure up to frighten their disobedient youngsters. At one moment the policeman is hero, the next, monster (p. 1).

The characterization of police as "John Wayne" (Reiser, 1974a, 1974b) and superhuman

(Violanti, 2003) additionally has reflected the gamut of perceptions about the police

personality.

This summary of police personality traits by no means accounts for all police

officers, and it must be noted that much of the police literature has focused almost

exclusively on male officers. The analyses, however, have provided context for police

stress following the stream of occupational stress literature which has emphasized

personality as one of two antecedent factors of stress. The second factor, characteristics

of the organization, also must be explored.

Organizational Characteristics

A second antecedent to consider in occupational stress is the work environment

itself. Police departments have been established as paramilitary organizations, meaning

that the rules, structure, and regulations employed in police agencies are based on a

military model of operation. Within paramilitary organizations is a chain of command,

which has been likened to a patriarchy with the Chief at the helm as father figure, and the

officers beneath as children and sibling figures (Reiser, 1974b). It has been considered

that the paramilitary nature of the police agency creates a tension wherein officers often

vie for the approval of the figurehead at the same time they need each other for support

(Symonds, 1970).

The paramilitary structure promotes routine and tradition in order to accomplish

goals, and thus inspires a culture of conformity which can prompt stress in police officers

in various ways (Skolnick, 1993; Violanti, 2003). Violanti contended that a traditional

police culture often prescribes roles and expectations that restrict officers from

expressing their true selves. Deviation from the assigned norm often results in feelings of guilt and shame for the police officer (Reiser, 1974b; Symonds, 1970). Paramilitary organizations also encourage rigidity in thoughts and actions, which similarly can limit the role of officers and decrease the perception of opportunities for change (Violanti). Gilmartin (2002) recognized that one of the effects of a singular identity includes the sense of victimization, which carries several attributes, among them the "ever present feeling of threat from the organization" (p.97). Violanti discussed a concept by Kirschman called "deflection of blame," where bureaucracy controls the organization by protecting its reputation at all costs. In this way, the paramilitary and bureaucratic features of police agencies stimulate defensive feelings in police officers and activate a stress response (Violanti).

In the literature, various factors have been considered stress catalysts for police officers. In the first of a seminal series of qualitative studies, Kroes, Margolis, et al. (1974) interviewed 100 Cincinnati police officers to learn more about police perceptions of work stress. Questions were presented in a semi-structured interview to glean responses to the following: what the interviewee perceived most bothersome about his vocation; what the interviewee believed other police officers found most bothersome about police work; whether the interviewee found specific work events stressful; and the most recent occasion in which the interviewee "felt particularly uncomfortable in his job" (p. 146).

The most troubling situations for police officers in the Kroes, Margolis, et al. (1974) study surrounded the court system, administration, equipment, and community relations. No distinction appeared between what participants believed was most

bothersome for themselves or vexing for other officers. The majority of participants indicated their frustration with court encompassed clement verdicts, system processes, and impact on officers' schedules. Officers in the study believed verdicts disseminated in the courtroom were "too light," or that cases often were dismissed without appropriate punishment (p.147). The greater tension officers experienced with the court system was appearing when off duty or after working the midnight shift. In a separate study, Storch and Panzarella (1996) found that officers perceived their work schedule to be the most disagreeable part of their duties, which illuminated stress resulting from mandated court appearances. Problems with shift work also have been related to ramifications in eating and sleep habits and family life (Hillgren & Bond, 1975; Kowalski & Collins, 1992; *On the Front Lines,* 1991). Isolation and boredom similarly have been linked to shift work (Kroes, Margolis, et al., 1974; Patton, 1998).

More than half of the respondents in Kroes, Margolis, et al. (1974) study related that the police administration was a source of stress in policing. Policies, procedures, and lack of appropriate support mechanisms all were identified as strains experienced in the course of police duties. In regards to police policy, participants discussed tedious paperwork requirements, and most notably were perturbed by inappropriate duty assignments which failed to maximize their abilities or provide adequate manpower for tasks. Subsequent research showed the absence of support as the prevalent issue among police officers in regards to police management, particularly in use of force situations (Kroes & Gould, 1979). More than the backing of colleagues, supervisor support was shown as the integral factor in the psychological well-being of officers and improvement after critical incidents (Violanti, 1996). Kirkcaldy, Cooper, and Ruffalo (1995) concluded

that administrative antagonism dominated as a stressor compared to other organizational situations.

In Kroes, Margolis, et al. (1974), equipment ranked third most bothersome among police officers. The inability for officers to perform assignments sufficiently due to inadequate equipment can perpetuate negative public opinion about police, another stressor identified in the police stress literature. In one study, four of the top 10 most experienced stressors in police work were related to hostile reactions demonstrated in the public's attitudes, insults, and criticisms toward officers and negative and misleading media portrayals of police (Pate & Spielberger, 1980). Another study manifested public blame as the second greatest dislike of police work encountered by officers (Storch & Panzarella, 1996). In other work, researchers similarly learned that disdain directed toward police officers in media accounts and public interactions were significant sources of stress for police (Gershon, 1999; Kroes, Hurrell, et al., 1974, Spielberger et al., 1981).

A significant finding of the Kroes, Margolis, et al. (1974) study was that organizational issues outranked crisis situations as more bothersome to police officers. These researchers asserted the difference was indicative of two conclusions: police in the sample either observed the inherent risks of policing as dangerous more than troublesome, or psychologically safeguarded themselves by disregarding the threatening elements of police work. Terry (1981) noted "what may appear shocking, horrifying, or revolting to a lay person may be only technical problems to the police officer," citing Hughes to reason "janitors do not turn away in disgust at the sight of garbage, nor does the undertaker become nauseous when confronted with a dead body" (p. 64).

One of the critiques of police stress studies has been methodology, and particularly the use of restricted samples that have utilized police officers at the exclusion of other ranks and roles in police agencies (Dantzer, 1987). Kroes, Hurrell, et al. (1974) provided one glimpse into differences in the police environment as perceived by police administrators. In a research investigation structured similarly to the researchers' previous work with Cincinnati patrol officers (Kroes, Margolis, et al., 1974), the top four ranking police stressors bothersome to the rank-and-file also was shown as problematic to police administrators. The sample of police supervisors, consisting of 18 lieutenants and 12 captains, revealed the most distressing elements of the police environment as administration, equipment and manpower, community relations and court. Participants illumined accountability and lack of support and input in decision-making as factors that affected them in addition to excessive paperwork. Kaufmann and Beehr (1989) demonstrated police supervisors were not immune to inadequate support, but that ranking officials experienced less stress and more backing than the rank-and-file. Police administrators as well as police officers identified personnel shortages and availability or quality of police supplies as bothersome (Kroes, Hurrell, et al., 1974).

Police administrators in the Kroes, Hurrell, et al. (1974) study considered different variables than patrol officers when assessing the organizational aspects of policing most taxing to personnel. The researchers presented work overload, work ambiguity, work conflict, and relationships with superiors, subordinates, and the community as the organizational factors for participants to evaluate. A majority of respondents were bothered with the amount of work which needed to be completed within a certain time, and distressed by making decisions without adequate information

available to them. The next greatest strain for participants was negative public relations, particularly civilians' complaints, demands, and inability or unwillingness to recognize and support the total mission of the police force.

Seminal qualitative works by Kroes, Margolis, et al. (1974), Kroes, Hurrell, et al. (1974), and Kroes and Gould (1979) were foundational for operationalizing police stress. Spielberger et al. (1981) developed a test instrument known as the Police Stress Survey primarily utilizing the data obtained in this series of interviews, as well as other police stress evaluations in the literature. Quantitative research utilizing this instrument extended understanding about police stress (Li-Ping Tang & Hammontree, 1992; Spielberger et al.; Violanti & Aron, 1993, 1995).

In contrast to early qualitative work which suggested organizational and administrative factors were most bothersome to police officers, quantitative research demonstrated that the danger and distress intrinsic in police work was the most outstanding work-related condition prompting stress (Spielberger et al., 1981). The top five responses given among participants in the Spielberger et al. study were related to the physical and psychologically threatening elements of police work. The top three stressors identified in Spielberger et al. included a fellow officer killed in the line of duty; killing someone in the line of duty; and exposure to battered or dead children. Spielberger et al.'s findings were not isolated to their research. Violanti and Aron (1995), also utilizing the Police Stress Survey, discerned the same results with a slightly altered rank order. In unrelated research, Gershon (1999) found that officers emotionally were affected most by attending funeral services for a colleague killed in the line of duty.

Quantitative research also contrasted with qualitative conclusions drawn about organizational stressors in policing. The first organizational pressure to appear in the Spielberger et al. (1981) study was inadequate salary, which ranked nominally above the next organizational stressor, inadequate department support. Silbert (1982) found that pay significantly outweighed all other stressors perceived by police officers, including crisis situations. It may be noted that literature has emphasized police officers as working class individuals inclined toward police work for its security and benefits (Niederhoffer, 1967; Symonds, 1970). Qualitative studies, however, have found pay ranks lowest out of various categories of police stress (Kroes, Margolis, et al., 1974).

Critics of police stress studies have argued there is insufficient evidence to conclude police work is more stressful than other occupations (Dantzer, 1987). Zellars and Perrewe (2003) summarized assorted work and organizational pressures which have been identified in various occupational stress studies, including "long hours, high workloads, conflicting or ambiguous demands, work and family conflict, and even organizational politics" (p. 300). Kroes and Gould (1979) recognized 10 stressors common in both policing and other vocations, including administration, job conflict, working secondary employment, idleness, shift work, manpower shortages, organizational comfort, assignment overload, overresponsibility, and pay and work statuses. In research comparing police stress with the stress of other professions, police officers experienced more pressure from work-related conditions than individuals in other occupations (Sigler & Wilson, 1988; Silbert, 1982).

Sigler and Wilson (1988) investigated stress in a sample of teachers and police officers in New York State and learned the perception of stress encountered in the police

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population was greater than what was encountered by teachers. Silbert (1982) compared stress data obtained from San Francisco police officers to human services professionals and general professionals across the United States. The results indicated police were more stressed than other professionals and received less validation overall in rewards and recognition. In one comparison of police officers and firefighters, however, findings demonstrated that police experienced less work stressors than their municipal counterparts (Sigler & Thweatt, 1997). The researchers emphasized that the results were inconsistent with other stress investigations involving police and fire personnel, and extrapolated the results were influenced by current events affecting firefighters in the sample at the time the study was conducted. The prevalent conclusion that has emerged about police stress is that police officers experience greater levels of job-related strain, both in unique law enforcement situations and administrative capacities.

<div align="center">Stress-Related Outcomes in the Police Population</div>

Police stress has been studied in relationship to a myriad of personal and professional outcomes (Dantzer, 1987; Terry, 1981; Waters & Ussery, 2007). Common themes which have emerged in police stress literature include physical health, suicide, alcohol use, and domestic discord (*On the Front Lines,* 1991; Terry; Waters & Ussery). This literature review was concerned with the research that considered these stress-related outcomes in the police population. It may be noted that much of the research which has established a relationship between police stress and stress-related outcomes has been disputed and criticized for its assumptions and methodologies (Anderson et al., 2002; Dantzer; Lindsay et al., 2008; Terry; Spielberger et al., 1981). Both perspectives were presented in this section.

Data about mortality and morbidity rates among police officers has been gleaned from reports such as census findings, death certificates, and other municipal and federal records. Different interpretations of this data, however, have precluded consensus about whether police have higher incident rates than other employees and citizens (Anderson et al., 2002; Terry, 1981). In Kroes (as cited in Terry), census data revealed police officers experienced increased occurrences of cardiovascular problems, diabetes, and suicide. Terry challenged arguments which maintained the standard mortality rate for police officers in this study exceeded the rate among other professionals. Violanti et al. (1986) compared mortality and disease risk among police officers between 1950 and 1979 with municipal workers and the general population and found deaths from cancer and circulatory system diseases were higher among police officers. In terms of the total mortality rate of all causes of death, the rate among police officers was comparable to the general public.

Unhealthy lifestyle choices often precede morbidity and mortality (Richmond et al., 1998; Violanti et al., 1986). Literature about police stress has identified situational factors in policing which are believed to be related to unhealthy patterns, such as shift work (Hillgren & Bond, 1975). In a study of police officers from a metropolitan Australian police department, researchers learned that more than 48% of males and 40% of females who were sampled consumed alcohol excessively (Richmond et al., 1998). Twenty-seven percent of men and 32% of women reported smoking. Other factors related to physical health that were studied included exercise, which was neglected by 21% of men and 24% of women in the sample, and body weight, which was perceived to be in excess by 46% of male and 47% of female police officers.

Silbert's (1981) work realized a cluster of symptoms reported in a sample of San Francisco police officers who identified headaches, backaches, stomachaches, loss of appetite, problems sleeping, and being fidgety, tense, nervous, and shaky inside as commonly experienced stress-related responses. Other research concluded that police stress resulted in a significant effect on illness and absenteeism in a sample of police officers from multiple suburban police agencies in Middle Tennessee (Li-Ping Tang & Hammontree, 1992).

Self-report research methodologies have been corroborated by more recent studies focused on collecting physical evidence of police stress (Anderson et al., 2002; Violanti et al., 2006). A sample of police officers from 12 municipal police agencies in British Columbia demonstrated abrupt increases in heart rates and the release of chemicals related to acute stress and increased occurrences of cardiovascular disease (Anderson et al.). Violanti et al. (2006) shifted focus from acute stress symptoms to posttraumatic stress symptoms, and discovered an almost two-fold occurrence of an indicator of subclinical cardiovascular disease when studying completed data sets submitted by a group of Buffalo police officers. One pilot study conducted with police officers indicated that those older than age 40 demonstrated a higher 10-year risk of a coronary event, with the group overall showing above average pulse rates and blood pressure and cholesterol levels higher than the recommended range ("Researchers Investigate Impact," 2008).

Amidst the studies of mortality, morbidity, and illness in the police population was data which indicated police suicides occur at a greater rate than what has been demonstrated in other populations (Violanti, 1986). Suicide, which has been called the ultimate stress reaction, illuminates what may be considered the most self-destructive

response to stress (Loo, 1999). Violanti (1996) conducted an evaluation of various police suicide studies focused on suicide risk and deaths in the police population; the research revealed multiple studies demonstrating a higher rate of suicide among police officers when compared to the general population and other occupations, along with an increased risk of suicide among police officers. Other research compared a sample of police officers with a sample of municipal workers and found police officers yielded an increased risk of suicide over homicide and accidental deaths (Violanti et al., 1996).

Literature also revealed research which demonstrated a police suicide rate lower than what was found in the general population (Aadmodt & Stalnaker, 2001; Marzuk, Nock, Leon, Portera, & Tardiff, 2002; Violanti, 1996). Aadmodt and Stalnaker collected data from interviews, electronic databases, and published law enforcement suicide studies and determined an 18.1 per 100,000 annual law enforcement suicide rate compared to 11.4 per 100,000 in the general population. However, this data was adjusted to account for demographic differences, and the final results indicated law enforcement personnel committed suicide at a lesser rate than that of the general population. In a separate study, researchers examined death certificates of active New York police officers who died between 1977 and 1996, and adjusted for age, race, and gender demographics (Marzuk et al.). In conclusion, the researchers asserted that the 14.9 per 100,000-person police suicide rate was lower than the 18.3 per 100,000-person suicide rate of New York City residents.

The methodology of studies which have controlled for various demographic variables have been critiqued for the oversight of other pertinent factors, such as employment and mental health differences between the police and public. The

implications of failing to control for these auxiliary variables in the Marzuk et al. (2002) study was challenged by Violanti (2004):

> This study compared police officers with the general population of New York City. While age, gender, race, and region were statistically adjusted for, an inaccurate comparison of suicide rates may have resulted. The comparison involved a healthy and psychologically tested working group (the police) with the New York general population, which included the unemployed, institutionalized, incarcerated, and mentally ill. These population groups generally experience higher suicide rates. Thus, the study compared a New York population containing segments that have high suicide rates with the police, who *should have relatively low suicide rates.* Even if this study were accurate, the fact that police officers have suicide rates equal to those of the New York population demonstrates that suicide is a problem. (p. 766)

Along with an increased risk and rate of suicide, alcohol abuse also has been suggested as a stress-related outcome in the police population (Territo & Vetter, 1981; Violanti, Marshall, & Howe, 1985; Waters & Ussery, 2007). A review of the literature revealed multiple investigations that concluded excessive alcohol use among law enforcement officers (Davey, Obst, & Sheehan, 2000; Pendergrass & Ostrove, 1986; Rallings, Martin, & Davey, 2004; Richmond et al., 1998). Additionally, research revealed a relationship between stress and alcohol use greater than any found with other coping responses, including cynicism and emotional dissonance (Violanti et al., 1985).

Three studies conducted with samples of Australian police officers underscored increased quantities of alcohol consumption among law enforcement officers (Davey et

al., 2000; Rallings et al., 2004; Richmond et al., 1998). The first study was comprised of police personnel from an Australian police service, and results demonstrated that while officers consumed alcohol at approximately the same frequency as the general population, nearly 35% of law enforcement officers reported binge drinking compared to 20% in the general population (Davey et al.). In this study, 30% of police officers manifested as at risk of harmful consumption. A second study was undertaken with Australian state police recruits, who were tested during training and after one year of performing field duties (Rallings et al.). The findings revealed an increase in both amount and frequency of alcohol consumption in the sample, with 9% of participants drinking alcohol at high levels during training compared to 17% of participants consuming high levels of alcohol after one year of operational service. In a third study, police officers selected from a metropolitan Australian police department reported excessive alcohol consumption, including 48% of male officers and 40% of female officers (Richmond et al., 1998).

Lindsay et al. (2008) queried drinking habits in the American law enforcement population. In a study that involved Mississippi police officers from all but three law enforcement agencies statewide, researchers concluded the drinking levels of sampled police officers approximated the consumption rate reported in the general population: 18.2% of police participants ranked in a category considered at risk of harmful or hazardous alcohol consumptions, a marginal difference compared to the general Mississippi population. A distinction was realized in abstinence rates, however, with 23.7% of officers abstaining from alcohol compared to 31% in the general population. A separate study conducted with sworn police officers in a major American suburban police

department contradicted these findings and suggested that police did consume alcohol at a heavier rate than the general population (Pendergrass & Ostrove, 1986). Thirty-seven percent of male officers and 23% of female officers reported heavy alcohol use compared to 14% of men and 4% of women in a national survey of the general population. Fewer sworn officers were abstainers or light drinkers compared to the national rate, with 40% of male police and 62% of female police reporting nil to low alcohol consumption compared to 54% and 78% respectively of the general population.

Domestic strife in police families has been recognized in relationship to police stress (*On the Front Lines,* 1991; Terry, 1981; Waters & Ussery, 2007). At the 1991 congressional hearing about police stress and family well-being, expert testimony highlighted the link between police stress and family violence and marital problems (Anderson, 1991; Johnson, 1991). Although research about occupational stress and domestic life in the police population has been limited, Kroes, Margolis, et al. (1974) queried a group of police officers about the effects of police work on home life and learned that retardation of nonpolice friendships, infrequent time spent with children, and work pressures infiltrating the home were the most common responses given. Silbert (1981) sampled a group of police officers and found nearly half of respondents reported that being a police officer brought stress into their homes, with 75% reporting conflict between work and family.

One indicator of domestic discord which has been researched in the law enforcement community is domestic violence. Findings from a sample of police officers and spouses drawn from two East coast police agencies demonstrated that 40% of police officers reported having behaved violently toward their spouse or children (Johnson,

1991). Ten percent of spouses responded that they had been physically abused by their mate. A meaningful comparison of findings with national statistics was difficult due to lack of distinction about the type and severity of abuse.

Neidig, Russell, et al. (1992) expounded upon the pervasiveness and variables of marital aggression in the police population, finding a greater incidence of marital aggression among police compared to civilians, and determining relationships between work-related variables and aggression rates. The researchers' study revealed minor and severe domestic violence occurred at a rate of 41% in a law enforcement sample compared to 16% in a civilian sample. Shift work showed a statistically significant relationship with aggression, with 49% of officers on overnight and rotating shifts reporting violence compared to 36% of those assigned to days. The nature of duty assignment also manifested as a significant factor in domestic violence, with officers in narcotics or uniform assignments demonstrating the highest levels of any type of domestic violence, at 42% and 32% respectively.

Subsequent research conducted by Neidig, Seng, et al. (1992) failed to demonstrate a statistically meaningful relationship between domestic violence and work-related variables, but did garner additional evidence of domestic violence in police relationships. Johnson, Todd, and Subramanian (2005) further extended understanding about police stress and domestic discord by revealing a strong link between domestic violence and indirect effects of burnout and authoritarianism resulting from violence exposure.

Factors Influencing Stress Response in Police Officers

Seaward (2006) noted that while the fight-or-flight response originally was conceptualized to describe a person's response to physical peril, the body physiologically responds in the same manner to psychological threats. In either circumstance, the fight-or-flight response involves an individual assessment of the stress catalyst as either dangerous or harmless, and is influenced by several variables, including a person's personality, cognitive appraisal, and coping strategies (Anderson et al., 2002). Findings from research and literature have illumined these aspects of the stress process and were reviewed in this section (Alexander, 1999; Anderson et al.; Paton, Violanti, & Schumuckler, 1999; Patterson, 1999; Silbert, 1982).

Researchers have observed a dearth of physiological proof to validate conclusions about police stress (Anderson et al., 2002). Most of the evidence that has corroborated theories of police stress has stemmed from self-report data from police officers about their perceptions of various law enforcement pressures (Dantzer 1987; Terry, 1981). Anderson et al. addressed the lack of physical evidence in police stress research with a study that quantified the physiological response of police officers to various work-related events by measuring officers' heart rates throughout tours of duty. The findings indicated that officers experienced a significant amount of stress from physical exertion related to their duties, including "tussling, wrestling, and fighting," as demonstrated by high above resting heart rates during these activities (p. 412).

Psychological stress for police officers also may result from the anticipation, performance, and outcome of certain events. In the Anderson et al. (2002) study of police stress, anticipatory stress was manifested in above resting heart rates during the first hour

of police officers' shifts, where heartbeats were elevated on average by 25 over the resting rate. Comparably, officers' heart rates at the beginning of the shift were markedly higher than the 19 beats above resting average shown at the end of the tour, and 22 beats above resting average demonstrated throughout the entire shift. Officers' heart rates also remained above resting during miscellaneous driving activities, most notably while engaged in a motor vehicle pursuit or responding as backup to a high risk assignment. Above resting heart rate averages of 41 beats during these situations were considered indicative of psychological stress that results in anticipation of the critical incidents presented to police officers as a matter of their work routine.

The conclusion that anticipation about work events precedes physiological responses in police officers has suggested that variables other than the physical presence of a threat may influence a biological response to stress. Seaward (2006) noted that the brain must determine a stimulus is a nonthreat before the fight-or-flight stress response can cease. Officers who have been trained to be hypervigilant, however, routinely expect that people and situations are dangerous and suspicious (Gilmartin, 2002; Skolnick, 1993; Violanti, 1996). This constant state of vigilance, regardless of the presence of a bona fide threat, prompts an elevated physiological response in police officers (Anderson et al., 2002). At the beginning of a law enforcement career, officers favorably perceive this enhanced experience as eustress rather than distress (Gilmartin). As the body returns to a physical state of equanimity, typically off-duty, officers often confront and are affected by the negative effects of homeostasis:

> The alert, alive, engaged, quick-thinking individual changes into a detached, withdrawn, tired, and apathetic, individual in his or her personal life. Every action

has an equal and opposite reaction. Biological homeostasis, which is the biological balancing phenomena, turns the person who has been experiencing the hypervigilance reaction on duty into the person experiencing the direct opposite reaction off duty. (Gilmartin, p. 44)

Dunning (1999) realized a critical distinction between stress and posttraumatic stress and the physical and psychological responses corresponding to each type. The exposure to one or more events that threaten great harm affects the brain's intake, analysis, storage, and retrieval of details differently than situations that prompt general anxiety (p.270). Chronic exposure to routine and traumatic police stressors therefore has implications for the coping process in police officers whose experience of dangerous circumstances is commonplace (Alexander, 1999; MacLeod & Paton, 1999; Paton et al., 1999). Acclimation to distress is affected more by the coping style of officers than the event that prompted the stress (Aaron, 2000). Aldwin and Yancura (2004) identified five general coping strategies employed by individuals managing stressors: problem-focused, emotion-focused, social support, religious coping, and cognitive reframing.

Problem-focused coping seeks to diminish or remove the psychological tension caused by a stressor by changing the stressful event (Patterson, 1999). A problem-focused strategy features thoughts and actions centered on analysis and solution. Gathering facts, identifying options, and taking action all are indicative of a problem-focused strategy (Aldwin & Yancura, 2004). Police literature has underscored that officers are individuals prone to action (Kirkaldy et al., 1995; Paton et al., 1999; Silbert, 1982). Silbert compared a sample of police officers demonstrating low burnout scores in one study to civilian participants with consonant results in another investigation and determined that "active,

outer-directed coping strategies" (p.48) appeared to be the significant factor mitigating the negative burnout outcomes. Paton et al. similarly concluded police officers "tend to be action-oriented, wanting to get things done, and seeking immediate results," (p. 80) but attached adverse implications of this style to officer conduct and coping. The euphoria experienced from taking control of situations was suggested to trigger a craving for more excitement, often leading to risky behavior with negative consequences; ostensibly, this pattern impacted the ability to process traumatic situations and practice healthy coping behaviors (p. 81). Literature has portrayed both adverse and favorable results in police officers utilizing problem-focused coping approaches, with no definitive conclusion about a prevailing outcome.

Whereas problem-focused coping commonly is engaged when situations appear changeable, emotion-focused coping usually occurs when events are perceived as uncontrollable (Anderson et al., 2002). Aldwin and Yancura (2004) identified emotion-focused coping as more than the release of feelings. Avoidance, withdrawal, and disengagement are varieties of the emotion-focused strategy. One police stress study concluded that increased levels of police stress predicted increased manifestations of dissociation, which is a defense mechanism to avoid painful events or memories (Aaron, 2000). Literature has emphasized the lower end of the hypervigilance cycle as a phase where officers are "tired, detached, isolated, and apathetic" (Gilmartin, 2002, p. 50). Gilmartin suggested that police biologically are inclined toward emotion-focused coping responses as they recover off-duty from the constant state of vigilance during their shifts. Several signs of disengagement were identified, including reluctance to participate in non-work related events and discussions, limited interaction with people who are not the

police, delayed decision-making in their personal lives, and extramarital affairs. Another emotion-focused response is the excess use of substances, a means of avoidance that serves to control emotions (Aldwin & Yancura; Anderson et al.).

The existing corpus of research has led some to conclude that better health is related to problem-focused coping than emotion-focused methods (Aldwin & Yancura, 2004). In stressful situations, problem-focused coping and emotion-focused coping strategies may be alternated or used simultaneously. Coping strategies such as social support and religious coping often employ a combination of both approaches.

Various forms of social support consistently have been linked to salutary outcomes (Aldwin & Yancura, 2004). Social support includes a range of behaviors and feedback, and transmits a sense of valuing and caring for an individual (Alexander, 1999). Solicitation of advice, acceptance of help, and validation of actions and perspective all are measures of social support (Aldwin & Yancura). The corpus of literature which has detailed police culture has referenced a high degree of peer support, solidarity, and cohesive relationships among police officers (Kroes, Margolis, et al., 1974; Reiser, 1974a; Violanti, 1999). Participation in groups with strong bonds may mitigate psychological distress experienced by a person, especially after exposure to traumatic events (Paton et al., 1999).

Police officers in one study showed a greater inclination to talk with sympathetic associates and seek support and counsel from supervisors in response to work stress (Kirkaldy et al., 1995). In the Kaufman and Beehr (1989) study of job stress and social supports among police officers, researchers determined a strong relationship between job strain and increased levels of social support. The effect was explained by the suggestion

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that a critical factor in the efficacy of social support is whether the source of social support is related to the source of stress; without independence from one another, "further association with the person who is the source of stressor might make things worse (increased strain) rather than better" (p. 193). Violanti (1999) and Gilmartin (2002) asserted that a law enforcement career tends to diminish the extracurricular social roles of officers and limit the availability of social supports which are independent of police work and police organizations. Literature has considered that the coping style of police officers may be reinforced by the strategies which are practiced or condoned in the police culture (Waters & Ussery, 2007).

Religious coping involves practices and beliefs related to spiritual concerns. Religious coping has been affiliated with the emotion-focused style of coping, and considered most useful in stressful situations that are ongoing or unchanging (Aldwin & Yancura, 2004). Research about police and religious coping has been limited in police literature. One study investigated whether religiosity – the actions and convictions of a faith tradition, and the satisfaction and influence which religion wields – was a mediator of stress in a sample of police officers (Sigler & Thweatt, 1997). The findings suggested that the more that officers were satisfied and influenced by religion, the more they experienced stress. Researchers concluded that a firm grasp of religious convictions may conflict with the values and experiences encountered in police work, thereby provoking stress in police officers.

Cognitive reframing is another means by which individuals endeavor to manage stress. The process of cognitive reframing involves making meaning of a situation, and most often is utilized to cope with the effects of trauma exposure (Aldwin & Yancura,

2004). Carlier (1999) identified five meaning-making steps used with police officers undergoing treatment for posttraumatic stress disorder: developing a frame of reference for the symptoms; confronting and working through emotions which previously were evaded; realizing existential questions and awareness; personal growth; and acceptance and rituals of closure. McLeod and Paton (1999) noted that the stereotype of police officers as all-powerful may influence recovery from a traumatic event because self-blame may arise when officers believe they had control over the outcome. Trauma treatment focused on cognitive reframing can assist police officers in resolving the fact of their humanness and vulnerability, which was exposed by the traumatic event, and enable officers to question unchallenged assumptions about their professional expectations and perceptions of self (Carlier).

Overview of Spirituality

Stress is believed to be related to disease and various psychosocial outcomes (Seaward, 2006, 2007). Moreover, Seaward (2007) maintained stress is associated with human spirituality. The interrelationship between spirituality, stress, and stress-related outcomes underscores spirituality as a relevant resource for addressing a range of bio-psycho-social problems. Conflicting interpretations and assumptions about the meaning of spirituality may spur dispute and prohibit clear communication about this germane subject to health and wellness (Canda & Furman, 1999). Literature has recognized the indistinct and inconclusive nature of the definition of spirituality, with Garcia-Zamor (2003) identifying spirituality as a "definitional mess." One way to develop a coherent understanding of spirituality is to distinguish the term from the meaning of another closely related concept, religion (Carroll, 1998).

The contemporary use of the word spirituality has resulted from several trends, including individualization, deinstitutionalization, and dissatisfaction with religious organizations and leaders (Houston & Cartwright, 2007; Ingersoll, 1994; Pargament, 1999). The pervasiveness of these trends has been reflected in the common description of spirituality in literature as broad, private, subjective, and informal, compared with the characterization of religion as narrow, public, orthodox, and traditional (Hill & Smith, 2003; Houston & Cartwright; Tirri et al., 2006). Pargament noted that the schism has encouraged a polarized perception of spirituality as good and religion as bad.

Several disciplines have informed a comprehensive explanation of religion, including theological, philosophical, psychological, and anthropological and sociological perspectives (Canda & Furman, 1999). The theological stance has focused on moral codes and transcendental beliefs, the philosophical outlook has examined beliefs related to "cosmic order" and human existence, the psychological view has studied the mental states and processes of belief related to higher powers, and the anthropological and sociological angle has contemplated institutionalized patterns related to greater forces (p. 45). Each of these views unequivocally emphasized the role of transcendence in religion.

Pargament (1999) argued that while many substantive definitions of religion have hinged on a higher power, the meaning of religion historically has been about much more than God. Pargament asserted one of the primary functions of religion is to fulfill a unique purpose of facilitating the search for significance related to the sacred; what is held as sacred has been considered the most distinguishable difference between religion and spirituality (p. 11-12). Spirituality finds significance solely in the experience of the sacred, defined as that which has meaning beyond oneself or one's ordinary affairs,

whereas religion embraces any artifact which sustains the sacred (Hill & Smith, 2003; Pargament). Pargament argued that contrary to mainstream perceptions of the rigidity of religion, this distinction renders religion a broader, more inclusive definition than that of spirituality.

Whereas Pargament (1999) maintained the unique purpose of religion is to facilitate the search for meaning, others have contended the function of religion is to provide answers to the ultimate questions of life (Taylor & Outlaw, 2002). From this perspective, religion is defined by the expectation that it provides a set of organized, institutionalized beliefs and activities that encourage spiritual expression and experience (Carroll, 1998). This feature of institutionalization emphasizes the social dimension of religion and contrasts with the consistent description of spirituality as an innately personal experience. Scholars have challenged this difference, however, arguing that religion and spirituality each are realized in private and social contexts (Moberg, 1971; Pargament).

Canda and Furman (1999) noted that two particular objections have arisen in the endeavor to define spirituality. One conflict has been between descriptions of spirituality too limited to capture the full scope of spirituality and language so general that the concept of spirituality becomes oversimplified and standardized. The former has been disputed for alienating individuals with spiritual ideas outside of mainstream tradition, and the latter criticized for precluding vibrant explanations of the spiritual (Canda & Furman). The second disparity has emerged in differences of opinion about whether spirituality entirely is ineffable or, in at least some of its features, an observable dimension. Some perspectives have maintained that mystical experiences transcend

language, and that religious and spiritual features cannot be reduced to parts; another point of view has asserted it is a mistake to confuse descriptions of the spiritual with their referents and to deny spiritual explanations germane to studying and engaging spirituality because of this error (p. 40-41).

<div align="center">Models for Understanding Spirituality</div>

A review of the literature revealed various models and constructs to elucidate spirituality. Canda and Furman (1999), whose work was in the stream of social work literature, developed two conceptual models of spirituality based on a multidisciplinary understanding of religion and spirituality. Additionally, holistic and operational models have been found in literature drawn from nursing, psychology, and other health-related fields. Ingersoll (2003) recognized three emergent constructs of spiritual health in the literature – religiosity, spiritual well-being, and spiritual wellness – that have guided discussion about spirituality without specifically defining the term. Two models for understanding spirituality that were proposed by Canda and Furman were examined further in this section, and then followed with a review of the literature exploring dominant constructs of spiritual health.

In Canda and Furman (1999), the holistic model of spirituality recognized spirituality as an aspect of human existence and functioning tantamount to physical, psychological, and social domains. Holism has emerged as a contemporary trend in the health sciences, although the concept traces back to ancient times (Seaward, 2006; Westgate, 1996). The overlap between physical, mental, emotional, spiritual and social domains was captured in Moberg's (1971) summary of experiences that comprise the aspect of an individual's "spirit," including but not limited to the following description:

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… esthetic thrills, satisfaction with achievements, adjustment to oneself or to others, feelings of self-respect and human dignity, that which pertains to the unknown future, happiness, elations, gregariousness, empathy and sympathy, morale, mental health, optimism, sexual orgasm, a feeling of identity with Nature, and experiences induced by psychedelic drugs. (p. 8)

Seaward (2007) further expounded upon the interrelationship of each domain of human functioning and the total composite of spirituality:

Undoubtedly, the human spirit includes the facets of higher consciousness, transcendence, self-reliance, self-efficacy, self-actualization, love, faith, compassion, enlightenment, creativity, self-assertiveness, community, and bonding, as well as a multitude of other components. Yet each aspect alone is not sufficient to describe the essence of human spirituality. (p. 53)

The holistic model of spirituality was portrayed not only as a four-fold aspect of humanity, but as the essence of one's personhood and the overarching wholeness that relates one to all (Canda & Furman, 1999). Moberg (1971) maintained that while the evidence of a person's spirit may be intangible, human experience as it has been recorded in various sacred writings throughout the ages reasonably reveals that "man is essentially spiritual at the core of his being" (p. 9). This enveloping wholeness of spirituality has been emphasized in descriptions that posit spirituality as an integrated dimension interwoven within all areas of one's life and representative of the totality of human conduct (Canda & Furman; Ellison, 1983; Ingersoll, 1994; Moberg, 1971; Seaward, 2007). Ellison asserted it is one's spirit which "synthesizes the total personality and provides some sense of energizing direction and order" (p. 332). Canda and Furman

conceptualized spirituality as the "gestalt of the total process of human life and development" (p. 43).

Canda and Furman (1999) proposed a second model of spirituality focused exclusively on aspects of spirituality. It was believed that an operational representation of various spiritual elements might advance a more exact and pragmatic means of studying and applying spiritual concepts (p. 49). In this operational schema, Canda and Furman identified six interrelated manifestations of spirituality representative of the human experience: spiritual drives, spiritual experiences, functions of spirituality, spiritual development, contents of an individual's or group's spiritual perspective, and religious expressions in individuals and groups (p. 49).

Spiritual drive was summarized as the fundamental force compelling an individual's search for meaning (Canda & Furman, 1999). While meaning, like spirituality, has been difficult to define, it has been described in a broad way as that which inspires the desire to live (Frankl, 1984, Ingersoll, 1994). Literature in the stream of psychology identified three core themes pertaining to meaning: purpose, sense-making, and coherence (Lips-Wiersma, 2002). Other streams of literature coincided with these themes. Purpose was defined as "to know what to do and why, who (we) are, and where we belong in relation to ultimate concerns" (Blaikie & Kelsen, as cited in Ellison, 1983, p. 331). Sense-making was conceptualized as a cognitive "map-making" process ultimately guiding an individual's perceptions, understandings, beliefs and, behaviors (Lips-Wiersma). Coherence was linked to spiritual themes of wholeness, harmony, and integration, wherein all of the pieces of one's life fit together congruently (Lips-Wiersma).

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Canda and Furman (1999) asserted that spiritual drives prompt individuals to participate in life, which in turn incites spiritual experiences. Spiritual experiences encompass encounters with the world in ways ranging from the mundane to the miraculous (Canda & Furman; Chandler et al., 1992; Ellison & Fan, 2008). The breadth of spiritual experience therefore may include "*any* experience of transcendence of one's former frame of reference that results in greater knowledge and love" (Chandler et al.). Spiritual experience has been defined in four fundamental ways: as an occurrence felt in the now; an awareness of the transcendent dimension; a catalyst for meaning; and a stimulator for growth and development (Hinterkopf, 1994). Ellison and Fan distanced spiritual experiences from religion, maintaining that spiritual experiences may emerge in diverse settings where there is no formal religious practice. Connection was emphasized as the crux of a spiritual experience, whether in an intimate sense of relating to the Divine, or a broader sense of uniting with all of life (Ellison & Fan).

The functions of spirituality were threefold distinguished as perceiving, interpreting, and relating (Canda & Furman, 1999). Perceiving is concerned with activating the five human senses to expand discernment of the unique and divine (Canda & Furman). Interpreting serves to explain what is meaningful in life, and may be expressed in an array of sacred stories and symbols (Canda & Furman). Pargament (1999) suggested that the power of religion largely is steeped in the sanctification process, whereby certain objects are distinguished as sacred by their relationship to that which is divine: "The search for meaning, community, self, or a better world are likely to be transformed when they are invested with sacred character" (p. 12). Values have been considered another manifestation of the interpreting function and constitute a framework

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by which to understand life (Canda, 1988; Westgate, 1996). The third function of

spirituality, relating, thematically emerged in the literature as relationship, connectedness,

and interconnectedness (Houston & Cartwright, 2007; Ingersoll, 1994; Purdy & Dupey,

2005; Westgate). Relating is demonstrated in the human striving to attain a feeling or a

condition of connectedness with self, others, nature, or a transcendent power source

(Ingersoll; Purdy & Dupey).

Spiritual development is a life-long process (Canda & Furman, 1999; Moberg,

1984; Peck, 1993). Scholars from varied backgrounds have described stages of spiritual

growth occurring from infancy to late adulthood (Canda & Furman; Carroll, 1998; Peck,

1993; Seaward, 2006). Carroll suggested that the manifestation of spiritual growth may

be both qualitative and quantitative in nature. A holistic model of spirituality recognizes

spiritual growth qualitatively, in the ways an individual views the world and enhances

awareness of connectedness with oneself, others, and the universe (Carroll, p. 7).

Spiritual growth, in an operational context, appears quantitatively as the extent of

awakening to the transcendental and a burgeoning relationship with that source (Carroll,

p. 7). Changes in one's perspective or depth of connection represent a spiritual

emergence, which has been understood as "the total process of development of meaning,

morality, relationships, and orientation toward ultimacy throughout the life span (Canda

& Furman, p. 233).

Spiritual emergence may transpire in a range of experiences, from gentle to

startling, and depending upon the perceived intensity of events, be marked by gradual or

urgent spiritual change (Canda & Furman, 1999; Chandler et al., 1992). Canda and

Furman suggested the course of spiritual emergence is marked with peaks, pits, and

plateaus, with peak and pit experiences often linked to extreme events and feelings of

exhilaration or devastation, and plateau experiences tied to ordinary occurrences with

profound potential for transcendent realizations. Seaward (2007) expounded upon the

peak and pit phenomenon:

> when we think of spiritual moments, we are quickly drawn to what psychologist
>
> Abraham Maslow called 'peak' or 'mystical moments' – the Disney World view
>
> of awesome sunsets, mountain vistas, angelic realms, and glorious bear hugs –
>
> where we truly feel a oneness with God. Conversely, stressful episodes are
>
> thought of as moments of 'divine abandonment,' with an ever-increasing chasm
>
> of separation. (p. 141)

Carroll (1998) named the loss of conscious connectedness "non-emergence," and

noted that this separation from meaning manifests in disease and dysfunctional responses

which may culminate in a crisis. Seaward (2006, 2007) identified several obstacles that

may sever one's spiritual connection and impede spiritual growth, including anger, fear,

and addiction. Peck (1993) called addiction "the sacred disease," and Carroll (1998)

highlighted the opportunity that addiction and dysfunction affords for spiritual growth.

Chandler et al. (1992) discussed near-death experiences as another type of "spiritual

emergency" that may overwhelm a person and catalyze spiritual development. The

common understanding which has emerged in literature about spiritual development is

that crises and suffering are opportunities to realize spiritual potential and growth

(Carroll; Chandler et al.; Frankl, 1984; Peck, 1993).

Various spiritual interventions have been recognized as facilitating spiritual

development (Brennan & Heiser, 2004; Canda & Furman, 1999; Carroll, 1998; McGee et

al., 2003; Seaward, 2006, 2007). Seaward (2006, 2007) identified four processes which in sum support spiritual growth: centering, emptying, grounding, and connecting. The centering process involves contemplation and is believed to incite the emptying process, wherein spiritually adverse thoughts, beliefs, and perceptions are released (Seaward, 2006, 2007). Emptying prompts the grounding phase, characterized as "a time of revelation and resolution with regard to life purpose and value conflicts" (Seaward, 2006, p. 179). The remaining process, connecting, has been understood as "linking with others, nature, and with some power greater than oneself" (McGee et al., p. 588). Spiritual activities which have been identified in relationship to spiritual development include but are not limited to prayer, meditation, visualization, journaling, ritual, and participation in formal and informal support groups (Carroll; McGee et al.; Seaward, 2006, 2007). Research has suggested that spiritual interventions that engage the four processes of spiritual development influence spiritual health (McGee et al.).

In the operational model of spirituality, spiritual drives, experiences, functions and development all comprise the contents of spiritual perspectives (Canda & Furman, 1999). Canda and Furman conceptualized that spiritual strivings compel spiritual functions, which seek to attain and explain the spiritual experiences that ultimately form the contents of spiritual perspectives. Peck (1978), in describing the spiritual worldview, underscored the role of spiritual experiences and development:

> As human beings grow in discipline and love and life experience, their understanding of the world and their place in it naturally grows apace. Conversely, as people fail to grow in discipline, love and life experience, so does their understanding fail to grow. Consequently, among the members of the human

race there exists an extraordinary variability in the breadth and sophistication of our understanding of what life is all about. (p. 185)

The final feature of the operational model of spirituality outlined in Canda and Furman (1999) was religious expressions. Religious expressions are similar to contents of spiritual perspectives, in that each is applicable to both individuals and groups. Canda and Furman defined religion in essence as a social system organized around a shared set of spiritual experiences, functions, perspectives, and expressions. Peck (1978), however, argued that the spiritual worldview may be independent of religious beliefs and expressions.

Emergent Constructs of Spiritual Health

Literature has explored whether spirituality can be defined operationally, and distilled to observable characteristics which can be measured to determine spiritual health. Canda and Furman (1999) suggested that the feasibility of operationalization depends upon the definition of spirituality that is used. It was considered that a holistic understanding of spirituality would preclude attribution or assessment because the very process of identifying or measuring would transgress the essence of the spiritual concept of wholeness. The grasp of spirituality as an aspect of humanity, however, was believed to encourage discernment of those activities and descriptions which represent the spiritual dimension (Canda & Furman, p. 55-56).

Ellison (1983) argued that subjective interpretations of spirituality were restrictive to the study of spiritual health and wellness, and that since definitional limitations had been surmounted in other areas of research, these constraints ought to be negotiated in the spiritual domain:

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It is probably because such terms as "spiritual" and "well-being" appear to have subjective meanings which are impossible to operationalize that behavioral scientists have avoided the study of spiritual health and disease. And yet, if we are willing to live with questions of validity that are involved with the measurement of any phenomenon which cannot be directly observed – whether attitudes, emotions, values, intelligence, or spiritual well-being does not really matter – we should be able to systematically and scientifically develop indicators of this hidden dimension. Of course, any such definition will not capture the whole of spiritual, and every definition will be unsatisfactory to some. (p. 331)

Ingersoll (2003) found that in lieu of an absolute definition of spirituality, spiritual constructs – religiosity, spiritual well-being, and spiritual wellness – have been utilized to "point to spiritual health without pretending to be able to define spirituality" (p.290). Spiritual health, according to Seaward (2006), is the actualization of an array of inner resources, including but not limited to love, humor, imagination, and patience. Seaward's conceptualization of spiritual health as the realization of spiritual potential was consistent with other literature which underscored internal resources and the maximization of one's capabilities as integral to wellness (Adams, Bezner, Drabbs, Zambrano, & Steinhardt, 2000; Westgate, 1996). Scholars have cautioned that spiritual constructs ought not to be mistaken as spirituality or spiritual health, but recognized as heuristic devices to aid understanding and recognition of spirituality (Ellison, 1983; Ingersoll).

Religiosity is one construct researchers have used to examine spirituality. Canda and Furman (1999) noted religiosity has a propensity to describe spiritual health in the

context of religious beliefs and practices. Based upon the work of Glock and Stark, Sigler and Thweatt (1997) suggested that religiosity may be manifested in additional dimensions which include the experiential, ritualistic, ideological, intellectual, and consequential. In Sigler and Thweatt, religiosity was examined by investigating indicators of traditional beliefs and activities as well as religious satisfaction and influence of religion in one's life. Canda and Furman also conceptualized religiosity by multiple factors, including religious preference, formal religious organizational affiliation, credal assent, personal religious behavior, attendance at places of religious practice, organizational activity, amount of financial support given to religious groups, sense of religious despair or hope, and the extent of seeking growth through religious contexts (p. 55-56). Religiosity as a construct of spiritual health is limited because of its omission of spiritual experiences and worldviews that are distinct from a religious approach (Canda & Furman; Ellison & Fan, 2008; Peck, 1978). Brennan and Heiser (2004) argued, however, that most people exercise spirituality via religiousness, though an active religious lifestyle does not ensure a mature spirituality.

Another measure of spiritual health, spiritual well-being, was defined by the National Interfaith Coalition on Aging as "the affirmation of life in a relationship with God, self, community and environment that nurtures and celebrates wholeness" (as cited in Moberg, 1979, p. 5). Ellison (1983) intimated from the National Interfaith Coalition on Aging definition that religious, social, and psychological elements comprise spiritual well-being. In Moberg (1971, 1984), various social and psychological components were related to spiritual well-being, including but not limited to sociocultural needs, fear and anxiety, end-of-life issues, personality, dignity, and life philosophy. However, the

definition of spiritual well-being provided by the National Interfaith Coalition on Aging was considered insufficient for operational needs of research (Moberg, 1979).

One study that explored perceptions of spiritual well-being and its characteristics and influences revealed several attributes believed to be a requisite for spiritual well-being, including but not limited to peace with God, inner peace, and faith in Christ (Moberg, 1979). The researcher found religiosity and spiritual well-being coincided, as indicated by the relationship between perceived spiritual well-being and participation in church and theological activities (p. 9). Moberg's (1979) research about perceptions of spiritual well-being indicated that individuals tended to believe spiritual well-being was a condition one either possessed or did not possess, and that it was possible to achieve spiritual well-being and then lose it. Ellison (1983) argued, however, that "it is not a matter of whether or not we have it [spiritual well-being]. Rather, it is a question of *how much*, and how we may enhance the degree of spiritual well-being that we have" (p. 332).

Research and literature has focused on discerning indicators of spiritual well-being (Ellison, 1983; Moberg, 1984). The Spirituality Well-Being Scale conceptualized spiritual well-being as dichotomous measures of religious and existential well-being; religious well-being was considered beliefs rooted in God or a higher power, and existential well-being reflected meaning and purpose in life (Ellison). Other work suggested additional indices of spiritual well-being, including Christian faith, self-satisfaction, personal piety, subjective spiritual well-being, optimism, religious cynicism, elitism, and various social factors such as involvement in political, religious, and charitable endeavors (Moberg, 1984).

A third construct of spiritual health, spiritual wellness, emerged from the medical perspective of holism, wherein spiritual wellness was but one component among several necessary for optimum health (Ingersoll, 2003; Westgate, 1996). Scholars across multiple disciplines have identified attributes of spiritual wellness, with a consistent emphasis on several shared spiritual themes (Howden, 1992; Ingersoll; Westgate). In Westgate, a comprehensive review of the literature revealed four categories of spiritual wellness congruent in scholarship about spirituality: meaning and purpose, intrinsic values, transcendent beliefs and experiences, and community and relationship. The Spirituality Assessment Scale operationalized spirituality based on four attributes which the researcher identified as consistently emergent in literature; for the purposes of Howden's work, these attributes were labeled Purpose and Meaning in Life, Innerness or Inner Resources, Transcendence, and Unifying Interconnectedness. Conceptualization of spirituality in other scholarly works similarly expounded upon spiritual wellness in these four areas (Banks, 1980; Espeland, 1999; Hinterkopf, 1994; Ingersoll, 1994; Purdy & Dupey, 2005; Seaward, 2006, 2007).

Meaning and purpose were examined earlier in this chapter in relation to spiritual drives. Frankl (1984) asserted that the search for meaning was not only the primary motivation of humanity, but that meaning was an absolute variable of wellness. Striving and growth consistently emerged in the literature as attributes of spiritual wellness (Chandler et al., 1992; Espeland, 1999; Ingersoll, 1994, 2003). One indicator of health for Frankl was "tension between what one has already achieved and what one still ought to accomplish, or the gap between what one is and what one should become" (p. 127). Frankl conceived that the crux of wellness and human existence is one's commitment to

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determining the unique task set before him or her and carrying out that mission. Another way of understanding life and achieving spiritual wellness is by making meaning of death (Espeland; Frankl; Peck, 1993; Purdy & Dupey, 2005).

In literature about spiritual wellness, hope and faith were named as two spiritual qualities compatible with meaning (Espeland, 1999; Ingersoll, 2003). In Ingersoll, a description of hope emerged based on Snyder's notion of "hopeful thought," and was comprised in part of goals and motivations, which was consistent with Frankl's understanding of meaning. Espeland further asserted that "meaning and purpose are crucial outcomes of the spiritual aspects of hope" (p. 38). Faith, which has been recognized as a variation of hope, is congruent with meaning and purpose in that it "allows individuals the motivation to act with purpose" and "is one way that individuals can make meaning of the unexplainable" (Purdy & Dupey, 2005, p. 101).

Literature has underscored that failure to discern or pursue one's life purpose leads to stress and spiritual distress (Espeland, 1999; Frankl, 1984; Seaward, 2006, 2007). Frankl identified self-transcendence as one means of meaning-making. Espeland suggested that reflective questions and exercises may aid individuals in achieving spiritual wellness by helping to crystallize one's special life meaning and direction. Meaning also may be gleaned from an experience of the present moment (Hinterkopf, 1994; Ingersoll, 2003). Hinterkopf described the sensing of subtle feelings as a spiritual experience that catalyzes new, explicit meanings for a person. Ingersoll suggested present-centeredness as a component of spiritual wellness, and recognized meditation as one such means of sharpening attention to the now.

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The interior life also has been presented as a component of spiritual wellness (Banks, 1980; Howden, 1992; Seaward, 2006, 2007; Westgate, 1996). The interior nature of one's spiritual life has been recognized primarily in two categories: a general feeling of calm and strength, particularly in times of crisis or uncertainty, and a system of values or principles by which one is guided (Banks; Howden; Seaward, 2006, 2007; Westgate). Howden conceptualized the interior dimension of spirituality as Innerness or Inner Resources, and defined the dimension as "the process of striving for or discovering wholeness, identity and a sense of empowerment" (p. 15). Inner resources involved in this process include but are not limited to attributes such as humor, creativity, optimism, courage, willpower, patience, acceptance, forgiveness, intuition, compassion, curiosity, humility, faith, and love (Seaward, 2006). Seaward noted:

> In times of stress, no matter the intensity, it is these remarkable qualities that help us dismantle, remove, circumscribe, or transcend the barriers that fall in our path. These resources are not gifts for a chosen few; they are birthrights for each and every individual. Our inner resources are the sinew of our spiritual muscle. However, like muscles that atrophy with disuse, our inner resources will also fail to help us meet the challenge that we encounter if we neglect them (p. 80).

Literature additionally has portrayed free will, or independent choice, as another facet of innerness (Ingersoll, 2003; Seaward, 2006). Ingersoll conceived of spiritual freedom as a dimension of spiritual wellness, in that "the person who is spiritually free feels safe in the world…When we are coerced from within or without we tend to feel less safe as we are always vigilant regarding the source of our coercion" (p. 294).

Values and principles have been described as a distinct feature of spiritual wellness (Banks, 1980; Canda & Furman, 1999; Howden, 1992; Seaward, 2006). Values were defined as "constructs of importance: personal beliefs based on the concepts of goodness, justice, and beauty that give meaning and depth to our thoughts, attitudes, and behaviors" (Lewis, as cited in Seaward, p.182). Values include but are not limited to love, honesty, self-esteem, independence, leisure, education, privacy, forgiveness, and respect for Mother Earth (Seaward, p. 182). Principles, which have been understood as enduring, fundamental ideas that guide human conduct, have been distinguished from values insomuch that one's values may not necessarily reflect or appreciate principles (Covey, 2004). Principles include but are not limited to service, fairness, patience, integrity, and human dignity (Covey). In Banks' (1980) study about health and perceptions of the spiritual dimension, a set of principles or ethics by which to live was a very important component of spirituality. In other literature, a personal system of beliefs and values was shown to comprise spiritual wellness (Myers, 1990).

A range of explanations have emerged in the literature about another dimension of spiritual wellness, transcendent beliefs and experiences (Westgate, 1996). Howden (1992) defined transcendence as "the ability to reach or go beyond the limits of usual experience; the capacity, willingness, or experience of rising above of overcoming bodily or psychic conditions; or the capacity for achieving wellness and/or self-healing" (p. 16). Howden's work in part was based upon the scholarship of Frankl (1984), who believed meaning and purpose, the crux of human health, were attainable only through transcending the self. Frankl identified three means of self-transcendence: activity which

results in creation or deeds performed; interacting with other people, primarily through love; and choosing a response to human suffering.

Westgate's (1996) review of literature about spiritual wellness included a summary of transcendence as mysterious, universal, and a greater force of being. In Chandler et al. (1992), transcendence was emphasized as "moving beyond" one's typical level of functioning through experiences with self, humanity, planet, and cosmos (p. 169). In Banks (1980), several factors germane to spiritual wellness centered on God, the universe, and the inexplicable. The model of spiritual wellness presented in Ingersoll (2003) included three dimensions related to the transcendent: mystery, ritual, and an idea of the absolute or divine. Ingersoll emphasized that one's conception of the origin of life is integral to one's understanding about the absolute or divine; unique interpretations of this life source often lead to a range of descriptions, including God or higher power. Purdy and Dupey (2005) asserted that regardless of interpretation, belief in a force or power is essential to spiritual wellness.

Ritual and mystery are two experiences which facilitate spiritual wellness by calling one's attention to the transcendent (Espeland, 1999; Ingersoll, 2003; Seaward, 2006). Ingersoll defined ritual as "a regular activity that directs a person's mind and/or body to the transcendent" (p. 297). Meditation has been identified as one practice consistent with ritual and the maintenance of spiritual wellness (Espeland). Mystery includes experiences spanning from doubt or confusion to mystical happenings which cannot be explained by science (Ingersoll; Seaward, 2006). Seaward noted that "the mystical side of life begs our attention, if only to better appreciate the complexity of life

in the universe" (p. 184). Awe, wonder, and present-centeredness all have been recognized as spiritual conditions related to mystery and transcendence (Ingersoll).

The fourth and final dimension of spiritual wellness consistently denoted in the literature is community and interconnectedness (Howden, 1992; Westgate, 1996). Community manifests in various relationships with self, others, nature, and conceptions of the transcendent, such as God, the divine, or a higher power source (Ingersoll, 2003; Purdy & Dupey, 2005; Seaward, 2006; Westgate). An internal relationship with oneself may be developed through exploring one's own thoughts, emotions, and perceptions, and resolving conflicts which arise within these areas (Seaward, 2006). Purdy and Dupey elaborated upon connectedness in relation to others, the environment, and the transcendental:

> Connectedness can be the feeling or state of being one with others (e.g., in a work environment where all parties are thinking of like mind in a very productive flow), one with nature as when standing on a mountain top with nothing but the trees; or one with a universal force as when one feels transparent and all important and not important in the same moment. (p. 101)

Love, caring, compassion, forgiveness, and encouragement all have been identified as factors related to relationships and spiritual wellness (Chandler et al., 1992; Espeland, 1999; Frankl, 1984; Ingersoll, 2003; Purdy & Dupey, 2005). Peck (1978) defined love as "the will to extend one's self for the purpose of nurturing one's own or another's spiritual growth" (p. 81). Love facilitates spiritual growth by enabling the one who is loved to actualize his or her potentialities (Frankl). Caring and compassion also have been characterized as selfless, enriching behaviors (Espeland; Purdy & Dupey).

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Compassion may be exercised through forgiveness, which can help alleviate stress, anxiety, guilt, and depression (Espeland; Purdy & Dupey). Encouragement, which accentuates the best, authentic qualities in a person, has been considered another aspect of relationships that involves risk, support, and vulnerability (Espeland).

Chandler et al. (1992) conceived that spiritual wellness was a "balanced openness to or pursuit of spiritual development," which may manifest in any of the four dimensions of meaning, innerness, transcendence, and relationships. Equilibrium in spiritual development balances two conditions on opposite ends of a spiritual plane: repression of the sublime and spiritual emergency. Repression of the sublime was recognized as one's outright denial of spirituality, whereas spiritual emergency was understood as one's preoccupation with spirituality at the expense of other domains of wellness, such as the physical and psychological (Chandler et al.). Only when equilibrium is maintained between dejection and obsession of one's spirituality may spiritual development and spiritual wellness be realized (Chandler et al.).

<div align="center">The Role of Spirituality in Health Outcomes</div>

Constructs of spirituality have been considered critical for research (Ellison, 1983; Moberg, 1984; 1971). Spirituality assessment tools designed to measure aspects of religiosity, spiritual well being, and spiritual wellness have been utilized in studies linking spirituality to various physical and psychological health outcomes (Moritz et al., 2006; Morris, 2001; Hong, 2008; Pargament, Koenig, Tarakeshwar, & Hahn, 2004). Systematic reviews of the burgeoning corpus of literature about spirituality and health have been guides for clarifying the relevance of religion and spirituality in health.

In a systematic review of 724 quantitative analyses of spirituality and mental health (Koenig, McCullough, & Larson, as cited in Koenig, 2009) 476 studies demonstrated statistically significant positive relationships between religion, spirituality, and mental health concerns such as depression, suicide, anxiety, psychosis, and substance abuse. Larson and Greenwold Milano (1995) identified several studies and systematic reviews of research about religion, spirituality, and health care which supported religion and spirituality as clinically germane variables in matters such as illness prevention and health enhancement, suicide prevention, substance abuse prevention, heart disease and high blood pressure prevention, and enhanced longevity.

Conceptual models have been developed to aid interpretation of research results and explicate how religion and spirituality factor as variables in health outcomes (Gall et al., 2005; Hill & Pargament, 2003; Park, 2007). For the purposes of this literature review, the conceptual framework set forth by Gall et al. primarily was used because of its focus on stress and spirituality in relationship to wellness. This conceptual framework for understanding the nature and role of spirituality in health and coping was based on a contemporary model of transactional stress and coping developed by Folkman and Greer (as cited in Gall et al.). The models shared several features in common, including primary and secondary appraisals, person factors, coping behavior, coping resources, and meaning-making. The remainder of this section reviewed research and literature about spirituality and health in the light of the framework presented by Gall et al.

Spiritual appraisal as a component of spiritual coping consists of primary and secondary evaluations of events (Gall et al., 2005). In the spiritual appraisal process, the occurrence of certain events may be attributed to self, chance, others, God, or the devil,

thus impacting coping activities which contribute to functioning (p. 91). A sense of

desecration during the primary appraisal phase may influence psychological adjustment

after a traumatic situation in which an event has been perceived to have violated an area

of one's life closely related to God or the sacred (Gall et al.). Sanctification, the

assignment of sacred qualities to objects and goals, also has been considered as a health

factor in instances where one's body and wellness have been sanctified to the effect of

salutary lifestyle choices and behaviors (Hill & Pargament, 2003; Park, 2007). In the

secondary level of spiritual appraisal, one's assessment of the accessibility and efficacy

of spiritual coping methods also may factor as an influence on one's coping behavioral

choices (Gall et al.).

Person factors are one's beliefs and are comprised of religious denomination,

doctrine, orientation and spiritual coping styles and attitudes (Gall et al., 2005). Literature

intimated that religious denomination and doctrine, much like spiritual appraisal, are

influences on one's behavioral coping choices, thus again relating to health outcomes

(Gall et al.). Religious orientation has been posited to influence coping through extrinsic

and intrinsic religiosity factors, such as engaging in a religious activity for one's own

sake, or deepening one's understanding of the transcendent dimension via principles and

relationships (Gall et al.). Intrinsic spirituality consistently has been linked with positive

health outcomes, whereas extrinsic religious orientation was thought to have mixed

influence on health. Gall et al. suggested extrinsic religious orientation may lead to an

experience of security that promotes a positive sense of well-being, or a degree of stress

that leads to a negative sense of well-being. Pargament (2003) expounded upon the role

of religious orientation in health:

Religion and spirituality orientations can offer not only a sense of ultimate

destinations in living but also viable pathways for reaching these destinations. For

example, in the effort to sustain themselves and their spirituality in stressful

situations, those with stronger religious frameworks may have greater access to a

wide array of religious coping methods (e.g., spiritual support, meditation,

religious appraisals, rites of passage). These methods have been linked to better

mental and physical health (Pargament, 1997). Similarly, in the pursuit of

spiritual growth or a relationship with the transcendent, the individual may be

more likely to avoid the vices (e.g., gluttony, lust, envy, pride) and practice the

virtues (e.g., compassion, forgiveness, gratitude, hope) that have themselves been

associated with mental and physical health status. (p. 68)

Another aspect of person factors which Gall et al. (2005) posited as a factor in

well-being was spiritual coping styles, which manifest in four types of responses to

stress: self-directing, deferring, collaborative, and surrender. Acting independently,

passively, or cooperatively with a transcendent source such as God was considered

critical to anxiety and psychosocial adjustment outcomes (Gall et al.). Park (2007)

suggested coping styles also may result in physical health consequences because

"different ways of viewing God's control of one's health may lead to different health

outcomes, such as influencing individuals' motivation to perform health-related regimens

and engaging in risky health behaviors" (p. 322). Gall et al. identified hope as a person

factor with implications for health due to its relationship to cognitive appraisal,

behavioral coping choices and emotional well-being. Hope, defined as one's sense of

goal-directed purpose and one's perception of being able to maintain goal-directed

behavior, consistently emerged in literature in relation to physical and psychological health outcomes (Gall et al.; Hill & Pargament, 2003; Park, 2007).

The third domain of spiritual coping identified by Gall et al. (2005) was spiritual coping behavior, comprised of three elements: organizational religious behavior, private religious behavior, and nontraditional spiritual practices. Organizational religious behavior was portrayed as the formal participation in public religious events, such as worship services or volunteer commitments, whereas private religious behavior was presented as other informal activities, such as praying, reading sacred literature, or watching religious programs. Nontraditional spiritual practices may draw on traditional religious expressions, such as prayer and meditation, but are expressed in manners distinct from orthodox form (Gall et al.). The literature has yielded limited information about the precise means by which spiritual practices may affect health, though has considered the influence of spiritual actions on psychological adjustment and physiological processes (Gall et al., 2005; Park, 2007).

Research about health and spiritual coping behaviors has demonstrated mixed results. One longitudinal study which was focused on religious coping methods in medically ill and hospitalized elderly patients found positive religious coping responses were associated with enhancements in health (Pargament et al., 2004). Another study examined the practice of cultivating sacred moments and the implications on stress and well-being and determined that participants who practiced a spiritual intervention reported significant positive improvements in well-being and stress-reduction (Goldstein, 2007). It ought to be noted that in the same study, participants who were engaged in a secular practice also manifested changes in well-being, though the researcher suggested

that certain secular activities may inspire appreciation and increased presence, which are catalysts for spiritual qualities. Additional studies also have supported the relationship between regimens which included spiritual coping behaviors, such as meditation and visualization, and positive outcomes in physical, psychological, and spiritual well-being (Kennedy et al., 2002; Moritz et al., 2006; Morris, 2001). Spiritual coping behaviors, such as prayer, have been correlated with pain and other health limitations in the literature; Park (2007) suggested this correlation may reflect the tendency for individuals to turn to prayer in distressing times.

Coping resources, the fourth component of spiritual coping in Gall et al.'s (2005) conceptual framework, have been recognized primarily as spiritual connections. This paradigm revealed three areas where spiritual connections may be forged and fostered, including nature, others, and a transcendent source such as God. Theoretical literature underscored a strong relationship between the environment, spirituality and human health (Delaney, 2003; Seaward, 2007). Other work illumined the relationship between salutary outcomes and spiritual connection with others, with a distinction noted between general social support and religious and spiritual social support (Hill & Pargament, 2003; Park, 2007). Park noted:

> The sense of belonging and social integration that comes from prolonged or intimate social contact with others within one's congregation or religious tradition may provide particularly potent support for one's values and beliefs. Such social connections provide strength and validation for one's life and lifestyle, deepening one's sense of meaning in life (p. 321).

Outside of the theoretical literature, however, empirical evidence has been insufficient to validate any definite conclusions about spiritual connections and physical and psychological outcomes (Gall et al.; Hill & Pargament).

In the third aspect of spiritual connection, the relationship with that which is transcendent, Gall et al. (2005) asserted that this connection can "fulfill various functions, including the provision of comfort, social support, and a sense of belonging, the encouragement of inner strength and acceptance, empowerment, and control, the relief of emotional distress and specific fears (e.g. death), and the creation of meaning" (p. 95). Hill and Pargament (2003) further illuminated how a bond with God may impact well-being:

> Attachment theory suggests that people who experience a secure connection with God should also experience greater comfort in stressful situations and greater strength and confidence in everyday life. Lower levels of physiological stress and lower levels of loneliness are other logical consequences of a secure tie to God (p. 67).

Conversely, an unsatisfactory relationship with God has been related to deleterious physical and mental health outcomes. A negative spiritual connection with the transcendent may include concepts of God as a punisher or suppresser (Gall et al.). Literature noted religious and spiritual struggles may manifest as "questioning God's presence, benevolence, sovereignty, or purpose (Hill & Pargament). Park (2007) noted that in times of sickness, spiritual struggle ostensibly was associated with poorer physical and psychological health. A review of the literature yielded mixed empirical results for

positive and negative relationships with God and manifest wellness (Gall et al.; Hill & Pargament; Park).

The fifth and final component of spiritual coping outlined in Gall et al. (2005) was meaning-making, a theme which has been explored in other literature in relationship to health (Hill & Pargament, 2003; Park, 2007). Meaning in life, which has been considered the ultimate direction for one's life, has been linked empirically to positive physical and psychological conditions in multiple studies (Hong, 2008; Morris, 2001; Schafer, 1997). A study of college students recruited from three Beijing universities concluded that self-transcendence, the "specific human capacity to reach beyond oneself and act for the sake of someone one cares about, or for the sake of a meaningful cause," demonstrated a moderating effect on mental health, depression, and self esteem (Hong, p. 537). Other research with students enrolled in a public university in California revealed that those who indicated a clear sense of meaning, purpose, and direction manifested lower personal distress (Schafer). In another study, patients with coronary issues were shown to display a significant change in stenosis, or constriction, where higher scores were obtained on the transcendent dimension of spirituality (Morris).

Spirituality and Law Enforcement

Despite the burgeoning body of literature about spirituality in multiple disciplines, the subject largely has been neglected in the stream of literature about the law enforcement profession. Research involving spiritual matters, such as religiosity and spiritual practices, largely was limited before the 1990s. Similarly, paradigms illuminating the role of spirituality in law enforcement remained underdeveloped until the late 1990s and subsequent turn of millennium (Carlier, 1998; Feemster, 2009a; Marsili,

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2007). This section of the literature review was concerned with the seminal work that has explored spirituality in the context of law enforcement, theoretically and in quantitative and qualitative research approaches.

Spirituality has received cursory attention in several works focused on police stress and well-being (*On the Front Lines,* 1991; Figley, 1999; Gilmartin, 2002). In a 1991 hearing where experts met to discuss police stress before the House of Representatives, spiritual and religious implications for law enforcement officers were considered in testimony. In one prepared statement, spiritual wellness was mentioned as the first priority that police officers must balance for optimal stress management (Reese, 1991). Another expert discussed a closely related matter, religion, as it pertained to police families and coping, noting that though research had failed to establish religion as a coping mechanism among police, police spouses appeared to have a deep conviction which helped in times of conflict (*On the Front Lines*, p. 53-54).

Gilmartin (2002) recognized spirituality as one of several dimensions that comprised a "sense of self" for police officers prior to their entering law enforcement (p.74). It was suggested that these dimensions tend to diminish under the demands of a police career, and that care must be taken to maintain all the areas comprising one's sense of self in order to enhance health and functioning as a police officer. Figley (1999), who considered a manifestation of police stress called "police compassion fatigue," also intimated that the spiritual dimension may become a casualty in police work (p. 37). In addition to impacting the cognitive, emotional, behavioral, physical, personal, and professional areas of functioning, police compassion fatigue was believed to affect the spiritual domain in various repercussions, including questioning the meaning of life and

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previous religious beliefs; loss of faith and purpose; hopelessness and anger at God; and increased religious skepticism and decreased self-satisfaction (p.41).

Feemster (2009b) delineated a model of spirituality for law enforcement practice based on the idea that policing embodies spirituality in four key areas: practice, performance, vitality, and longevity. These four domains emerged from the author's previous work with members of law enforcement at the Federal Bureau of Investigative Services (FBI) (Feemster, 2007). In Feemster (2009b), a summary of the significant conclusions from previous work was outlined:

> …spirituality is the continual *intentional* nurturing of the inner person (spirit) that motivates and implements the spirit of the law. Spirituality is not sectarian nor (sic) institutionalized in denominations and, thus, is different from religion. But, religion can nurture spirituality and vice versa. In addition, spirituality in law enforcement constitutes an essential internal coping power for identifying and confronting the reality of evil and its toxicity across careers. A true understanding of spirituality reveals that more than tactical training is needed to combat current conditions affecting officers. Law enforcement training academies must include spirituality in their curricula; officers must take charge of their own spirituality; and agencies and communities must become actively involved in the effort. (p. 3)

Feemster's (2009b) model of spirituality for law enforcement practice further explicated that the spiritual core served as the operative source of emotional intelligence, intuitive policing, ethics, and stress management in law enforcement. Moreover, these four strategies were believed to support a healthy spirituality and compel positive outcomes in law enforcement practice, performance, longevity, and vitality.

The limited breadth of writing about spirituality and policing has marginalized resources to affirm or negate Feemster's (2009b) conceptualization. Literature has yielded resources, however, which demonstrate the pertinence of spirituality in law enforcement and contextualize theoretical aspects of Feemster's work. Carlier's (1999) work discussed meaning, an integral element of spirituality consistently identified in the literature, as it pertained to police officers who have experienced police traumas. Carlier suggested positive outcomes in police officer vitality and longevity as the result of a five-step process which included but was not limited to realizing existential questions and awareness. Marsili (2007) offered a broader focus on spirituality and law enforcement and emphasized a two-tiered approach for utilizing spiritual-based concepts and activities as a means of mitigating police stress and improving organizational outcomes.

Marsili's (2007) theory was geared toward police management and delineated setting a departmental value system to which police officers are accountable and infusing the presence of spirituality into the police agency. A departmental value system may be developed from suggestions elicited from police officers, and then gradually introduced into the police culture via several avenues, including in-service training, increased communication between police administrators and personnel, and enforcement of the value system. Marsili recognized the conflict inherent in the mandated separation of church and state and suggested several ways to appropriately infuse police culture with spirituality, including a departmental commitment to supporting diverse faith traditions and events, and police administrators intentionally leading by example by placing values into action.

Limited research has been conducted to illuminate spirituality in law enforcement (Charles, 2005; Kowalski & Collins, 1992; Patton, 1998; Sigler & Thweatt, 1997). Kowalski and Collins interviewed members of the law enforcement community and suggested that indicators of spiritual wellness were evident in the group. Patton's qualitative work suggested several patterns related to spiritual wellness yet realized continual exposure to crime, danger, suffering, and violence incited spiritual distress in veteran police officers. Charles determined that law enforcement officers who consistently maintained spiritual practices, such as prayer and meditation, perceived enhanced work performance. In a quantitative investigation into religiosity and stress, Sigler and Thweatt (1997) discovered that religious satisfaction and religious influence may increase stress levels in police officers. Whereas Sigler and Thweatt found no significant relationship between religious activity and beliefs and stress and stress variables, the results indicated greater levels of stress correlated with greater measurements of religious satisfaction and life influence. The following explanation addressed these findings:

> Police officers confront sinful behavior in the performance of their duties and quickly learn that they have to accept levels of behavior from others which are contrary to the teachings of their religion. Police officers are not able to exercise behaviors consistent with strong religious values. Good investigation and crisis intervention can require the use of deception. When behaviors tolerated or performed cannot be reconciled with religious beliefs, stress will increase. The more strongly the religious beliefs are held, the more likely the conflict between behavior and values will be to cause stress. (p. 22)

Kowalski and Collins (1992) presented one of the earliest qualitative pieces about law enforcement and spirituality. Interviews with six law enforcement officers and one spouse were compiled in a book which allowed participants to discuss the police vocation and Christian faith. This work was not based on a scientific methodology and instead allowed participants the opportunity to "comment on the way their religious faith interacted with a career in law enforcement and conversely how that career affected their spiritual lives and religious commitments" (p. 9). The authors concluded that approaches to spirituality and a law enforcement career vary among officers, and that aspects of spiritual wellness appear to increase as a police career advances.

Patton's (1998) study of spirituality with veteran police officers was a qualitative investigation based on an established research methodology. The study sought no particular religious affiliation among participants and consisted of eight male Caucasian police officers from the Huntington Police Department in West Virginia with six or more years of law enforcement experience. The research focused on how spirituality was affected by continuous exposure to crime, danger, violence, and suffering, and whether spiritual wellness facilitated coping in veteran police officers. Utilizing surveys, interviews, and participant observations, the researcher was able to determine several patterns related to inherent police stress and spirituality, including desacralization, alienation, affiliation, unique life experiences, searching and yearning, and search for ecstasy. These patterns were manifested in police officers' experiences of meaninglessness, distrust, hope, and truth seeking. Additionally, the study found police officers believed spiritual wellness could facilitate coping, and discerned three patterns in law enforcement officers related to spiritual wellness, including preserving integrity,

affirmations, and reformation and renewal. These patterns manifested as morality, belief systems, and personal reflection and life direction. Patton's conclusions established that police officers experience pronounced spiritual pain as a result of continuous exposure to crime, danger, violence and suffering, and patterns of spiritual wellness and spiritual distress may co-exist in police officers.

A third research study honed in on the patterns of spiritual wellness in police officers and examined how participants with at least five years of police experience and five years of a commitment to a spiritual practice incorporated spirituality into police work (Charles, 2005). The researcher interviewed 10 police officers, seven men and three women, who were employed at various police agencies across the United States. The conclusion of this study was that three core themes related to spirituality and affected police officers' lives and careers: spiritual philosophies and practices; relationships which promote a humanistic service style; and spiritual responses which manifest in experiences of human destructiveness, suffering, and growth (p. 95). Subthemes germane to police work and spirituality included spiritual ethics and spiritual calling; spiritual maturity and compassion in policing and coping in police culture; and death and experiences of evil and human destruction. The findings suggested spiritual practices enhanced police performance.

<div align="center">Conclusion</div>

A review of the literature yielded resources that illuminated spirituality and police stress. Findings in these streams of literature largely were isolated to their distinct disciplines, however, neglecting to account for the implication of conclusions about spirituality and police stress. The findings in literature with which this study were

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concerned were threefold: the relationship between police stress and deleterious physical and psychosocial outcomes in the lives of police officers; the interrelatedness of spirituality to all dimensions of human functioning; and the significant relationship which research demonstrated between spirituality and physical and mental health outcomes. The specific issue this research was designed to address was the gap in literature about spirituality in the police population and the relationship to police stress. The following chapter delineated the methodology utilized to respond to the research problem.

CHAPTER III

METHODOLOGY

Introduction

A review of the literature about police stress and spirituality revealed several findings that encouraged the purpose of this study, which was to quantitatively assess spirituality in a sample of police officers and evaluate the relationship to police stress. Researchers have studied personality characteristics of police officers and organizational characteristics of police agencies, both of which have illuminated antecedent factors of police stress (Kroes, Hurrell, et al., 1974; Kroes, Margolis, et al., 1974; Lefkowitz, 1975; Reiser, 1974a; Skolnick, 1993; Spielberger et al., 1981; Symonds, 1970). Critics (Dantzer, 1987) have argued police work factors are no more demanding or different than what is encountered in other professions, yet studies have demonstrated police officers perceive greater levels of stress than other professionals (Sigler & Wilson, 1988; Silbert, 1982). This conclusion is meaningful because stress has acute implications for health (Seaward, 2006).

In the literature, the experience of police stress consistently was linked with various deleterious consequences, which were physical, psychological, and behavioral in nature (Gershon, 1999; Gilmartin, 2002; Li-Ping Tang & Hammontree, 1992; *On the Front Lines,* 1991; "Researchers Investigate Impact," 2008; Silbert, 1982; Violanti et al., 2006; Violanti et al., 1985). The literature also revealed a significant association between spirituality and health (Koenig, 2009; Larson & Greenwold Milano, 1995).

However, the implication of these two findings remained largely unexplored, as demonstrated in the dearth of research about spirituality and police stress.

One quantitative inquiry into police stress and religiosity suggested that religious satisfaction and perceived influence of religion were related to higher stress levels in police officers (Sigler & Thweatt, 1997), yet these findings were of limited breadth given the argument that religiosity is a particularly narrow construct of spiritual health (Canda & Furman, 1999; Ellison & Fan, 2008; Peck, 1978). Other qualitative investigations explored the spirituality of police officers and concluded that spirituality influenced, and was influenced by, a career in law enforcement (Charles, 2005; Kowalski & Collins, 1992; Patton, 1998). Similar to the quantitative study of Sigler and Thweatt (1997), these examinations encountered methodological limitations. Researchers urged additional study about spirituality in law enforcement; specifically, Patton encouraged a quantitative research design.

This chapter was prepared to explicate the research design and procedures that enabled this researcher to meet the expressed need for quantitative research into spirituality in law enforcement and satisfy the question about the relationship of spirituality to police stress. As such, the theoretical basis justifying the research methodology and sample selection was outlined, along with a demographic description of research participants in this sample. The two research instruments which were used to collect data, the Spirituality Assessment Scale and the Police Stress Survey, were explained and evaluated to clarify each one's appropriateness for the research purpose. Additionally, details about the data collection process were expounded upon to illuminate to the steps which were undertaken to accomplish the task, and the conditions under

which information was gathered. The statistical techniques used to analyze this data similarly were identified and explained. The close of this chapter recognized the limitations encountered in this study, and how these restrictions ultimately may have impacted the results and conclusions drawn in the fourth and final chapter.

Research Design

The topic of spirituality and law enforcement has been examined in several qualitative works, which is an appropriate methodology when the research question is exploratory in nature (Leedy & Ormrod, 2005). Although findings were varied in the limited body of research about police spirituality, the overarching conclusion drawn in these studies was that a relationship exists between police work and spirituality (Charles, 2005; Kowalski & Collins, 1992; Patton, 1998). Patton (1998) specifically urged a quantitative approach to further advance research into spirituality among police officers, and thus the design of this study aimed to satisfy this need. Leedy and Ormrod (2005) suggested that qualitative and quantitative research is complementary in nature, and that qualitative findings often produce tentative conclusions which quantitative research further might establish, confirm, or validate.

Data collection in this research centered on three research questions:

1. What measure of spirituality is reported among police officers?

2. What measure of police stress is reported among police officers?

3. What is the relationship, if any, between measures of spirituality and police stress reported among police officers?

The first research question addressed the quantitative direction encouraged by Patton (1998) by eliciting a measure of spirituality in a sample of police officers. As

literature has suggested spirituality and stress intersect, particularly in the sphere of health outcomes, the second research question sought a measure of police stress since this variable has been associated with health-related factors in the police population. The third research question addressed the gap in understanding about the relationship between spirituality and police stress, which has resulted from limited focus on the correlation in literature. Correlational research is a quantitative method for determining whether and to what extent a relationship exists between variables (Gay et al., 2006). Therefore, the design and procedures of this study were aligned to accomplish the goal of correlational research.

The basic design of correlational research requires a collection of scores for each of the affected variables (Gay et al., 2006). Once these scores are obtained from the sample, the totals are matched to obtain a correlation coefficient that describes both the size and direction of relationship between variables (Gay et al.). A survey design enables the numerical description of characteristics, opinions, or previous experiences in a sample for the purpose of extending such understanding to its larger population (Creswell, 2003; Leedy & Ormrod, 2005). Survey research typically employs questionnaires or interviews for such data collection purposes (Creswell, 2003).

This researcher utilized questionnaires as the method to satisfy data collection for all three research questions, and made this selection based on the attribute of anonymity promoted in the survey approach. Researchers have suggested that the element of anonymity in surveys encourages confidence and truthfulness in participants when discussing sensitive subjects (Leedy & Ormrod, 2005, p. 185). Charles (2005) recognized spirituality as a vulnerable topic in the law enforcement community, thus indicating that

questionnaires might be most appropriate for quantitative research into police spirituality. Researchers also have suggested that police officers may demonstrate general reluctance and distrust as research participants (Charles; Zachar, 2005), further reinforcing the benefit of a questionnaire in this study.

Survey design may employ a cross-sectional or longitudinal approach. Cross-sectional surveys collect data from participants in a single time period, and longitudinal surveys obtain data at two or more times to measure development over time (Gay et al., 2006). The research purpose of this study was concerned with the measures and relationship of spirituality and police stress at one point in time in order to maximize economy of time and minimize loss of participants in the study, both of which have been considered advantages of the cross-sectional approach (Leedy & Ormrod, 2005). Literature has reinforced the cross-sectional design as consistent with relational and survey designs (Robson, 2002).

Correlational research is divided into two categories of studies, relationship and prediction, each with a distinct purpose (Gay et al., 2006). The intention of a relationship study is to gain insight into a complex variable, whereas a prediction study aims to forecast the outcome of measure for one variable based on another variable's score (Gay et al.). As the combined study of police stress and spirituality was in its earliest stages at the time of this study, the primary concern of this research was to establish descriptive knowledge. Therefore, the research focus was on relationship rather than prediction, with the function of the research design solely to express the nature of relationship between police stress and spirituality. Additionally, Leedy and Ormrod (2005) cautioned against logic which assumes that a relationship between variables means one influences the

other. It must be noted that in addition to dismissing predictive conclusions, this research design was not equipped to determine causal conclusions.

Population

Law enforcement is a global community. Given this breadth, the distinction between target population and accessible population is imperative for defining the population to which the results of this research may be generalizable. Gay et al. (2006) defined target population as the group to which results ideally would be applicable, and accessible population as the group which is realistic and procurable for research purposes. The accessible population for this research endeavor was police officers in and surrounding a large metropolitan area in the Midwest. The research sample was purposive and comprised of police officers enrolled in graduate-level courses at three institutions of higher education in this Midwest metropolis area.

Gay et al. (2006) described purposive sampling as a process in which participants are selected on the assumption they are representative of a given population. The assumption is supported with the understanding that "clear criteria provide a basis for describing and defending purposive samples" (p.113). The criterion for this research sample was current enrollment in graduate-level studies, and was based upon literature that emphasized a paradigmatic shift in the educational expectations of officers as a result of modern community policing models (Breci, 1997; Varricchio, 1998). This shift has indicated that officers' careers in law enforcement are contingent upon continuing education; thus this researcher had reason to believe that institutions of higher education were appropriate sites to locate officers representative of today's police force.

The sample in this study was comprised of participants drawn from three institutions of higher education. These educational institutions were selected based on this researcher's knowledge that each of these schools actively recruited and enrolled police officers. The first site was a private, independent school focused on psychology coursework in a large, Midwestern metropolis setting. This school offered 13 master's degree programs, in addition to one doctorate program with seven doctoral level concentrations and four certificate programs. Approximately 700 students were enrolled at the site's urban campus in Fall of 2009. This researcher coordinated with an administrator involved in the master's level police psychology program at this institution in order to access participants.

The second educational institution was a private, liberal arts university with a campus in the same Midwestern metropolis as the first site. Approximately 5,000 students were enrolled in this institution for the 2009-2010 school year, with a head count of nearly 3,900 students at the site's urban campus. Graduate level enrollment for 2009-2010 was comprised of approximately 2,000 students. The school offered 43 undergraduate degree programs and 11 graduate degree programs, with more than 40 graduate program options in arts and sciences, business, education, and nursing, and various continuing and professional studies options. This researcher coordinated with the graduate school of management administration to identify participants for this study.

The third site was a private liberal arts institution located near the border of the aforementioned urban location. Approximately 1,250 students were enrolled in programs at this school, with 160 of those students in the graduate program. This school offered master's, bachelor's, and associate's degrees, in addition to certificate programs. Sixteen

undergraduate degree programs, four accelerated degree programs, and five graduate and certification programs comprised this institution's academic offerings. This researcher coordinated with administrators from the graduate-level public safety administration program at this site to obtain participants.

A total of 110 respondents from these three schools returned questionnaires for this research. After seven surveys were omitted due to insufficient responses or illegibility, 103 participants remained in the sample. The first site provided 26 of this study's participants (25.2%), the second site provided 23 participants (22.3%), and the third site provided 54 participants (52.4%). The common and minimally accepted sample size expected in correlational research studies is 30 participants (Gay et al., 2006).

The research sample was described by frequency counts and valid percent totals in this study. The sample was comprised of 72 male (69.9%) and 31 female (30.1%) participants. Participants in this study ranged in age from 22 to 56, with a mean age of 38.53. The sample included 57 Caucasian (55.3%), 25 African American (24.3%), 17 Spanish American/Hispanic (16.5%); less than a cumulative 4% of participants identified as other or multiple races. Fifty-seven participants (55.9%) were in married or domestic partnerships and 21 members (20.6%) of the sample were single. Thirteen participants (12.7%) were divorced, and 11 (10.8%) were single but in a committed relationship. As participants were graduate-level students, all held bachelor-level degrees; 15 (14.7%) of these participants previously had earned graduate degrees.

The experience of crises varied across the sample, with 48 (46.6%) having experienced a crisis during the last year, 17 (16.5%) between one and two years prior, and 20 (19.4%) between two and five years prior. Sixteen participants (15.5%) had

encountered crises more than 5 years before, and two (1.9%) responded to having not experienced any crisis. The physical health description was returned as good for 67 (65.7%) participants, with another 20 (19.6%) responses marked as excellent and 14 (13.7%) as fair. One percent reflected a mixed response. Forty-five participants (44.1%) identified as both religious and spiritual, with another 26 (25.5%) identifying as religious only and 19 (18.6%) as spiritual only. Twelve participants (11.8%) identified as neither religious nor spiritual.

Years of police experience varied between 1 to 35 years of seniority in the sample, with the average length of service being 11.47 years. Sixty-nine (67%) participants identified as police officers, 16 (15.5%) as sergeants, five (4.9%) as detectives, and five (4.9%) as lieutenants. The remaining nine (7.8%) participants identified with other titles to describe their rank. Shift assignments varied among participants, with 40 (38.8%) assigned to the day watch, 30 (29.1%) to afternoons, and 17 (16.5%) to midnights. Another 16 (15.5%) participants identified with other or overlapping shift assignments. City agencies employed 98 (96.1%) of the participants; county or state agencies each employed one participant apiece, and another two members of the sample were employed with other types of law enforcement agencies. Ninety (88.2%) of the participants' departments were in urban environments, and another 12 (11.7%) in suburban or rural settings. The department size for 87 (84.5%) participants' agencies was 400 or more officers, with another 10 (9.7%) working in departments with up to 50 officers, and the remaining six participants (5.8%) at agencies with between 51-400 officers.

Data Collection

The specific variables to be investigated in this study were spirituality and police stress. The spirituality of participants was assessed utilizing the Spirituality Assessment Scale, (Howden, 1992), a 28-item questionnaire which measured four areas of spirituality consistent with the contemporary understanding of spiritual wellness in the literature. The labels given in the study to these four areas of spirituality were Purpose and Meaning in Life, Transcendence, Innerness or Inner Resources, and Unifying Interconnectedness (Howden). The response scale for each item was categorized as strongly agree, agree, agree more than disagree, disagree more than agree, disagree, and strongly disagree.

The Spirituality Assessment Scale was developed as part of a multi-step process that entailed an extensive literature review and content analysis, synthesis, derivation, and operationalization (Howden). After two test instrument revisions, internal consistency for the final 28-item instrument was evaluated with a Cronbach alpha correlation coefficient and yielded a score of .92. Factor analysis in Howden's research supported construct validity for the four-factor model of spirituality presented in the Spirituality Assessment Scale, as demonstrated in item-total correlations of .30 to .70, item-subscale correlations of .50 to .70, and subscale-subscale correlations of .55 to .70 (Howden).

Delaney (2003) acknowledged the attempt to distinguish spirituality from religiosity in the Spirituality Assessment Scale was not supported by research results, and that different data analysis methods may have been more appropriate. Additionally, the Spirituality Assessment Scale initially was used with one homogenous sample of participants, which was cited as a limitation in Howden's (1992) study. Later research was conducted utilizing this instrument with a separate sample of participants (McGee et

al., 2003). The Spirituality Assessment Scale was selected for this research for its ability to assess spirituality in key areas consistently recognized in contemporary research, and to approach spirituality in a manner distinct from religiosity – a construct identified as limiting in other literature (Canda & Furman, 1999; Ellison & Fan, 2008; Peck, 1978).

Police stress was measured using the Police Stress Survey (Spielberger et al., 1981), a 60-item test instrument designed to assess various police stress factors. Spielberger and colleagues compiled a list of stressors believed to be related to the law enforcement profession, and categorized these stressors as physical or psychological threats, or administrative or organizational pressures. For the purposes of the current study, these categories were identified as inherent police stress and organizational police stress, respectively, which was consistent with the labels used in other research utilizing this instrument (Violanti & Aron, 1993)

The Police Stress Survey was field-tested and allowed participants to comment on stressors which were included in the survey. Participants also were able to report on other factors which may have been omitted. Researchers analyzed feedback about each stressor and arrived at a final test instrument comprised of 60 police stress factors included in this study. This revised instrument was field-tested and analyzed for reliability. Researchers presented factor analysis results indicating item correlations ranging from .30 to .79. A later study using the Police Stress Survey disclosed total factor scales at .90 for organizational stressors and .92 (Violanti & Aron, 1993).

The Police Stress Survey was designed to capture the frequency as well as intensity of police stressors in participants' experiences. Spielberger et al. (1981) noted that participants in initial research efforts largely failed to respond to the frequency

portion of the instrument. In other research, Violanti and Aron (1995) omitted the frequency portion of the instrument in the interests of brevity and avoiding recall bias in participants' responses. This researcher similarly opted to modify the Police Stress Survey by eliminating the frequency section from the test instrument administered to participants and using the 60 indicators of police stress only.

Additionally, this researcher modified the rating system and original test instrument instructions in order to align with and accomplish the purpose of this study. The primary goal in Spielberger et al. (1981) was to discern the specific job-related factors that law enforcement officers considered stressful. As such, the Police Stress Survey originally assigned an arbitrary value to one of the events on the survey and instructed participants to compare each of the remaining items to this value on this item. The interest of this researcher's study, however, was to obtain the measure of police stress in a sample of police officers. Consideration was given to the fact that participants in this study may not have encountered particular events, and thus a Likert scale was constructed with an option indicating the event did not apply to the participant. Additionally, the modified scale included assigned numerical values between zero and four to represent experiences of stress including none, less than average, average, above average and greatest. Modifications to the Police Stress Survey were made with the principal investigator's consent.

In order to attain a measure of police stress, participants were instructed to take into account whether the various police stressor events had happened or were happening to them, and the time and energy necessary for them currently to adjust or cope with their occurrence. Participants were given instructions for how to respond if an event was not

causing an experience of stress or was not applicable to a participant's experience. Participants' responses were rated overall and in subscales and then described by mean and standard deviation scores to determine the measure of police stress in the sample.

Demographic and situational details of the research sample were collected using questions which were utilized in the original Police Stress Survey and Spirituality Assessment Scale instruments. This study's participant demographic survey was comprised of a total of 24 questions. The final test instrument administered to the research sample was a 12-page document with 112 questions divided into three parts: a participant demographic survey, the Spirituality Assessment Scale, and the Police Stress Survey.

This researcher coordinated with administrators at the three identified institutions in this study, and determined graduate-level classes in which police officers were enrolled. Upon identifying classes with police officer enrollment, test instrument packets and informed consent letters were distributed to students/police officers in these classes. This researcher administered materials at two of the sites, and arrangements were made with an administrator at the final site to distribute packets. Data was collected over a period of seven months, beginning in November of 2009 and ending in May 2010. The purpose of the study was explained and student/police officers were advised that participation was voluntary and that they may stop or withdraw from the process any time prior to submitting responses. Student/police officers were informed to not include any names or identifiers on the pages of the survey, and that anonymity and confidentiality were to be maintained at all times throughout the study. Student/police officers indicated willing participation by completing and returning the test instrument packet. The

researcher's contact information was provided for anyone interested in learning more about the study's results upon its conclusion.

Analytical Methods

Descriptive statistics are the first step in data analysis and enable researchers to describe, or summarize, data (Gay et al., 2006). Gay et al. recognized statistical computer software as one means of obtaining efficient and accurate analyses and underscored the Statistical Package for the Social Sciences (SPSS) as a common and widely used tool for performing data analysis in research. Data which was collected in this study was entered into the SPSS PASW Statistics program. Measures of central tendency, measures of variability, and measures of relationships are the three types of descriptive statistics that provide information that researchers often seek in research (Leedy & Ormrod, 2005). All three research questions in this study were satisfied utilizing these descriptive statistics. This section explicated the various descriptive statistics techniques which were used to answer each research question, and the complementary statistical procedures which extended conclusions.

Measures of central tendency provide the typical, or average, measure in a data set through three data considerations: mode, median, and mean (Argyrous, 2005; Gay et al., 2006). The mean is the preferred measure of central tendency in instances where extreme scores do not exist, and provides the average value of the data set (Gay et al.). Measures of central tendency alone do not sufficiently describe a data set, and measures of variability must be utilized to form sound conclusions about the data set (Gay et al.; Leedy & Ormrod, 2005). Measures of variability include range, quartile deviation, variance, and standard deviation. Standard deviation is considered the most stable

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measure of variability and illuminates the amount of spread in a data set (Gay et al.).

Responses from the Spirituality Assessment Scale were analyzed by means and standard deviations, given that these were identified as the most desirable representations of central tendency and variability. Additionally, mean and standard deviation measures were provided for subscales of Purpose and Meaning in Life, Transcendence, Innerness or Inner Resources, and Unifying Interconnectedness. This researcher also took into account that participants in the sample were located at three different sites. The mean and standard deviation were obtained categorically by site, and a simple analysis of variance (ANOVA) was performed to determine whether statistically significant differences existed between means of the group. As appropriate, the Cohen's measure of effect size was obtained to determine whether statistical differences were of any practical importance.

The mean and standard deviation were obtained from participant responses on the Police Stress Survey, and in this way, the second research question about measures of police stress was satisfied in the same manner as the first research question. Means were adjusted in the data analysis process to account for events which yielded no experience of stress or were not applicable to participants. One way of managing data with zero or missing values is to impute the means and utilize the overall average so as to not distort the results. This approach was employed in this study to yield adjusted measures in overall police stress and in subscales of inherent and organizational police stress. Additionally, the adjusted mean and standard deviation scores were distinguished by participant site, and the ANOVA statistical technique was applied to look at group differences.

The third and final research question addressed the relationship between police stress and spirituality in the research sample. Correlation analysis is the statistical process for determining the nature of relationship between variables (Leedy & Ormrod, 2005). The Pearson product-moment correlation is a common measure of correlation and appropriate to utilize when variables are linear and the data set is continuous with interval or ratio values (Gay et al., 2006). The Pearson product-moment correlation was applied to overall and subscale measures of spirituality and police stress. Additionally, the common variance between spirituality and police stress measures was evaluated to understand the extent to which these measures differed when paired together.

<center>Limitations</center>

The first limitation which may be noted of this study is its survey design. Survey research relies on self-report data, which may be inaccurate or manipulated by participants and/or environmental factors (Leedy & Ormrod, 2005). Additionally, limitations with the test instruments also may affect results, as noted in the literature. In other studies conducted with police officers, researchers noted that common characteristics in the police population, such as guardedness and invulnerability, may have implications for validity and reliability in research (Charles, 2005; Zachar, 2004).

Another limitation of this research was its cross-sectional nature. Data captured during one point of time may be influenced by factors which cannot be controlled for in research. Cross-sectional studies therefore run the risk of environmental factors affecting conclusions (Leedy & Ormrod, 2005). During the time period in which surveys were completed for this study, two police officers were killed in the line of duty in the metropolis where the sample was based; another police officer had been killed less than

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six months earlier. These events were prominent in media coverage; additionally, an unknown number of participants were police officers in the same department where the fallen officers had worked. In these ways, this researcher was unable to account for the influence of these circumstances in the experience and responses of participants.

The results of this study also may have been limited by the purposive sample. Although literature has supported continuing education as a trend in contemporary policing (Breci, 1997; Hepler, 1994; Lane, 2005; Varricchio, 1998), limiting the sample to police officers enrolled in graduate studies may have marginalized the remainder of the police population and restricted the generalizability of results. One study about police stress indicated that police officers with a post-graduate level of education demonstrated significant differences in responses to various inherent and organizational stress indicators compared to their counterparts in other educational categories. Such items as "on-the-spot decision-making," "excessive paperwork," and "high moral standards" were marked less stressful for officers at the post-graduate level than for officers with different levels of formal education (Spielberger et al., 1981, p. 24). Police officers at the post-graduate educational level also indicated that an "incapacitating injury" was more stressful than did their counterparts in other categories of formal education. No explanation was provided for the differences, and researchers cautioned that the differences which were observed among various police stress items based on demographic categories, including educational level, may be due to chance (Spielberger et al.).

Other demographic variables which have been evaluated to determine differences in police stress levels include age, race, gender, rank, years of experience, marital status,

and size and location of police agency (He, Zhao, & Ren, 2005; McCarty, Zhao, & Garland, 2007; Morash & Kwak, 2006; Spielberger et al., 1981; Zachar, 2004). Several studies have suggested that female officers have higher levels of work-related stress than their male colleagues (He, Zhao, & Ren; McCarty, Zhao, & Garland; Morash & Kwak). Research also revealed that male Caucasian officers demonstrate significantly higher levels of stress than African American male colleagues (He, Zhao, & Ren). Age and years of experience as a police officer also affected outcomes in stress measures related to occupational factors (Spielberger et al.; Zachar). Rank, marital status, and police agency size and locale additionally yielded differences in police stress responses to various inherent and organizational stressors (Spielberger et al.).

Howden (1992) noted that age, gender, marital status, income, health condition, and the experience of a crisis event all were factors and characteristics influential to one's spirituality. In the literature, crises and other tribulations have been recognized as opportunities for spiritual growth (Frankl, 1984; Krok, 2008; Lancia, 2000; Peck, 1978). Additionally, spiritual coping behaviors have been linked to various health outcomes (Park, 2007). A review of the literature did not reveal the correlation between educational levels and spirituality, nor illumine the nature of relationship between other demographic variables and spirituality.

This study did not control for demographic variables in its final analysis of spirituality and police stress measures. The extent to which these factors may have influenced results therefore was unaccounted for, and may be considered another limitation of this research.

CHAPTER IV

FINDINGS AND CONCLUSIONS

Introduction

Literature has substantiated a significant relationship between spirituality and

physical and psychological health conditions (Koenig, 2009; Larson & Greenwold

Milano, 1995), as well as a connection between police stress and negative physical and

psychosocial outcomes in the police population (Gershon, 1999; Gilmartin, 2002; Li-Ping

Tang & Hammontree, 1992; *On the Front Lines,* 1991; "Researchers Investigate Impact,"

2008; Silbert, 1982; Violanti et al., 2006; Violanti et al., 1985). Thus far, however, a

literary gap has existed in what is known specifically about the relationship between

spirituality and police stress, as demonstrated in the overall dearth of literature about

spirituality in the law enforcement community.

A review of the literature revealed several studies concerned with police and

spirituality (Charles, 2005; Kowalski & Collins, 1992; Patton, 1998; Sigler & Thweatt,

1997). One quantitative study evaluated stress in a sample of police officers and

firefighters and its relationship with a singular subset of spirituality – religiosity (Sigler &

Thweatt). The researchers' conclusions failed to substantiate religiosity as a mediating

variable in stress reduction, though greater stress levels were identified in police officers

who demonstrated higher measures of religious satisfaction and perceptions of religious

influence on their everyday lives. The three remaining works identified in the literature

review about police and spirituality were qualitative in nature, with two of these based on an established methodology (Charles; Kowalski & Collins; Patton). Overall, these qualitative findings indicated that spirituality was integral to police work. Patton concluded a relationship between continual exposure to inherent police stressors and spiritual distress, as well as several patterns of spiritual wellness.

The limited purview about police spirituality compelled researchers to urge additional study of the subject (Charles, 2005; Patton, 1998). The emergence of stress as a focus in separate streams of literature about police and spirituality suggested one commonality meriting further exploration. A quantitative inquiry into the relationship between spirituality and police stress was undertaken in this study to bridge the schism, yielding three research questions poised to satisfy understanding: 1) what measure of spirituality is reported among police officers; 2) what measure of police stress is reported among police officers; and 3) what is the relationship, if any, between measures of spirituality and police stress reported among police officers? Numerical findings related to each of these questions were presented and interpreted in this chapter to realize conclusions germane to the purpose of this research.

<div align="center">Findings</div>

Research Question 1

The first research question sought the measure of spirituality reported in the study's sample of police officers. Howden (1992) established three ranges and qualitative labels to describe and interpret measures which were obtained using the Spirituality Assessment Scale. These measures were divided into three ranges based on various sum scores. For the purposes of this study, the following ranges corresponded with the values

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and labels identified by Howden: 1) 5.00 to 6.00 represented strong, positive spirituality; 2) 3.00 to 4.00 represented fair, or mixed positive and negative spirituality; 3) 1.00 to 2.00 represented weak, or negative spirituality. Measures which fell between the second and first ranges ($M = 4.01 - 4.99$) were interpreted as moderate, positive spirituality. Scores between the third and second ranges were considered moderate, negative spirituality ($M = 2.01 - 2.99$).

In this study, the overall mean score on the Spirituality Assessment Scale yielded 4.79, a finding of moderate, positive spirituality. The standard deviation of the overall measure of spirituality in the group was .60, which extended results of positive spirituality in the sample. The first research question also was concerned with understanding measures of spirituality in each of the four subscales comprising spirituality overall (see Table 1). The Purpose and Meaning in Life subscale resulted in a mean score that demonstrated a strong, positive measure of spirituality in participants in regards to their seeking and finding value in life and reason for living. The dimension of spirituality involving Innerness and Inner Resources realized a score indicative of a positive spirituality in terms of striving for wholeness and identifying, developing, and utilizing one's innate qualities. Unifying Interconnectedness, representative of the relationship component of spirituality, yielded a score representative of positive spirituality in the group. Means in Innerness and Inner Resources and Unifying Interconnectedness subscales revealed moderate, positive spirituality, though the standard deviations suggested mean differences that encompassed strong levels. The subscale of Transcendence also demonstrated a moderate, positive spirituality where the sample's capacity for surpassing physical and mental limitations was concerned, though it may be

noted that the mean spread included mixed positive and negative spirituality in addition to strong levels of spiritual positivity.

Table 1

Spirituality Assessment Scale Mean and Standard Deviation Results

	M	SD
Spirituality Overall	4.79	0.60
Purpose And Meaning in Life	5.16	0.66
Innerness/Inner Resources	4.92	0.72
Unifying Interconnectedness	4.68	0.59
Transcendence	4.50	0.82

Items, when ranked by descending means, appeared most frequently from the subscales of Innerness and Inner Resources, Purpose and Meaning in Life, and Unifying Interconnectedness. Half of the 10 highest ranking responses were related to Innerness and Inner Resources, as demonstrated in strong means in items about feeling good about oneself, relying on inner strength, having and finding inner strength, and sensing balance in life. Having life goals was the item with the strongest response in the sample and was related to Purpose and Meaning in Life. A general sense of belonging and enjoyment in serving others, both from the Unifying Interconnectedness subscale, additionally were among the top measures in the group. The Spirituality Assessment Scale items ranked by the top 10 mean score responses were presented in Table 2. An extended table with responses ranked by descending means for all of the items in the Spirituality Assessment Scale additionally was provided in Appendix A.

Participants in this study were drawn from multiple sites, resulting in three distinct subsets of measures. Site one was a private, independent school of psychology in

a large metropolis in the Midwest, where participants were involved in a master's level police psychology program. The mean score of overall spirituality in the group was 5.05, with a standard deviation of .55, indicating a strong, positive spirituality with a spread inclusive of moderate levels of spiritual positivity. The means and standard deviations in subscales of Purpose and Meaning in Life and Innerness and Inner Resources demonstrated a similar pattern. Unifying Interconnectedness and Transcendence mean scores at this site reflected a moderate, positive spirituality, with a mean difference that reached levels of strong spiritual positivity.

Table 2

Spirituality Assessment Scale Items Ranked by 10 Highest Mean Scores

	M	SD
Have Life Goals	5.62	0.56
Feel Good About Self	5.42	0.68
General Sense of Belonging	5.34	0.75
Life Has Meaning/Purpose	5.26	0.84
Rely on Inner Strength	5.17	0.88
Have Inner Strength	5.10	0.83
Enjoy Serving Others	5.07	0.94
Found Inner Strength in Struggle	5.06	0.93
Sense of Balance in Life	5.03	0.80
Fulfillment in Life	5.03	0.83

Site two was a private university grounded in the tradition of the liberal arts and situated in the same Midwestern locale as site one. Here, participants in the study were

police officers engaged in graduate school of management coursework. The mean score of spirituality overall in this group was recorded as 4.63, with a standard deviation of .59, indicative of a moderate, positive spirituality, with a mean spread in the realm of strong spiritual positivity. The mean score in Purpose and Meaning in Life was 5.01, showing a strong, positive spirituality in the group. In the remaining subscales of Innerness and Inner Resources, Unifying Interconnectedness, and Transcendence, all yielded mean scores demonstrative of moderate, positive spirituality, with standard deviation scores reflecting mean differences with varying levels of spirituality. In the Unifying Interconnectedness and Transcendence subscales, the mean ranges spanned into the mixed positive and negative spirituality.

The third site was a private liberal arts college bordering the metropolis in which the first two sites were located. The participants drawn from this site were police officers pursuing studies in the graduate-level public safety administration program. Spirituality overall in this group measured a mean of 4.73 and standard deviation of .60, demonstrating a moderate, positive spirituality with a range reaching strong spiritual positivity. The subscale of Purpose and Meaning in Life reflected a strong, positive spirituality with a mean difference which spread into the range of moderate, positive spirituality. Innerness and Inner Resources and Interconnectedness each measured means in the level of moderate, positive spirituality, with a mean range that encompassed strong, positive spirituality. Transcendence also measured a mean score demonstrative of moderate, positive spirituality, but with a mean spread that reached into levels of mixed positive and negative as well as strong, positive spirituality. Table 3 displayed the mean

and standard deviation measures overall and in subscales by sample site for Spirituality

Assessment Scale results.

Table 3

Spirituality Assessment Scale Mean and Standard Deviation Results by Site

	M	SD
Site 1		
Spirituality Overall	5.05	0.55
Purpose And Meaning in Life	5.33	0.60
Innerness/Inner Resources	5.15	0.73
Unifying Interconnectedness	4.96	0.50
Transcendence	4.83	0.72
Site 2		
Spirituality Overall	4.63	0.59
Purpose And Meaning in Life	5.01	0.83
Innerness/Inner Resources	4.75	0.68
Unifying Interconnectedness	4.49	0.57
Transcendence	4.41	0.82
Site 3		
Spirituality Overall	4.73	0.60
Purpose And Meaning in Life	5.14	0.60
Innerness/Inner Resources	4.88	0.71
Unifying Interconnectedness	4.64	0.60
Transcendence	4.37	0.83

A simple analysis of the variance (ANOVA) was run to determine whether significant differences existed in the means of spirituality scores from the sites where participants were drawn for this study. A one-way ANOVA revealed significant differences in the mean range of Spirituality Overall and Unifying Interconnectedness scores (Spirituality Overall: F (2, 100) = 3.61, p = .03; Unifying Interconnectedness: F (2, 100) = 4.46, p = .01). This researcher selected the Bonferroni comparison test as the post hoc procedure to evaluate differences, in that this commonly used method allowed for adjustments in the significance level and controlled the overall error rate. The results of the post hoc showed significant mean differences at the .05 level between sites one and two in Spirituality Overall and Unifying Interconnectedness subscale measures (Spirituality Overall: Mean Difference = .41, p = .05; Unifying Interconnectedness: Mean Difference = .46, p = .02). The Cohen's measure of effect size procedure was employed to obtain the effect size of this difference in order to evaluate any practical significance in this finding. Effect sizes crossed the threshold of what has been considered a small effect size (Gay et al., 2006) and approached a medium effect size (Spirituality Overall: d = .34; Unifying Interconnectedness: d = .40).

Research Question 2

The second research question this study endeavored to answer was the measure of police stress reported in the sample. Participants in this study assessed 60 items on the Police Stress Survey utilizing a Likert scale. A measure of 2.00 was labeled and interpreted as an average degree of stress for the participant, whereas 1.00 was a less than average degree of stress, and zero represented no experience of stress. Conversely, a 3.00

rating marked an above average degree of stress, and 4.00 represented a great degree of stress.

The mean score on the Police Stress Survey registered at 2.02, with a standard deviation of .62, thus reflecting an average experience of stress and a mean spread that crossed the threshold into a lower degree of stress. Police Stress Overall was comprised of two subscales, which this study identified as Inherent Police Stress and Organizational Police Stress. The mean measure of Inherent Police Stress revealed a less than average experience of stress in dangerous, high pressure events related to policing. The mean spread encompassed the average stress range. Organizational Police Stress, which accounted for stressors associated with administrative and non-emergency law enforcement matters, demonstrated an average experience of stress in the sample. The mean difference included less than average stress levels. The above findings were presented in Table 4.

Table 4

Police Stress Survey Mean and Standard Deviation Results

	M	*SD*
Police Stress Overall	2.02	0.62
Inherent Police Stress	1.96	0.62
Organizational Police Stress	2.05	0.67

A police officer killed in the line of duty, an inherent police stressor, was the only event to demonstrate a mean score indicative of an above average degree of stress. Only one of the five police stressors to exceed the mid-range in the average degree of stress

echelon was inherent to policing: exposure to dead and battered children ($M = 2.71$, $SD =$ 1.18). Overall, the highest ranking mean scores were found in organizational police stressors, with inadequate department support, coworkers not doing job, court leniency, and political pressure in department at the top. The Police Stress Survey items ranked by the top 10 highest mean score responses were presented in Table 5. An extended table with responses ranked by descending means for all of the items in the Police Stress Survey was presented in Appendix B.

Table 5

Police Stress Survey Items Ranked by 10 Highest Mean Scores

	M	*SD*
PO Killed In Line of Duty	3.18	1.03
Inadequate Department Support	2.74	1.15
Exposed to Dead/Battered Children	2.71	1.18
Coworkers Not Doing Job	2.55	1.05
Court Leniency	2.54	1.15
Political Pressure (Within Department)	2.52	1.16
Partner Incompatible	2.46	1.26
Manpower Insufficient	2.46	1.04
Equipment Poor/Inadequate	2.43	1.07
Killing Someone in Line of Duty	2.42	1.32

Mean police stress scores were distinguished for each site (see Table 6). At site one, the mean of Police Stress Overall and in both subscales reflected an average experience of stress and a mean difference that included the less than average stress level.

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The second site showed means slightly under the average experience of police stress in overall and inherent categories, with a mean range that crossed the threshold. Mean Organizational Police Stress scores registered at the average experience of stress level, with a standard deviation that encompassed less than average stress ratings. Site three participants essentially demonstrated scores reflective of the average experience of police stress, overall and in both subscales, with a mean difference that crossed the less than average threshold. The one-way ANOVA procedure determined no significant differences existed among the mean measures of police stress at the three sites whence participants came.

Table 6

Police Stress Survey Mean and Standard Deviation Results by Site

	M	*SD*
	Site 1	
Police Stress Overall	2.03	0.70
Inherent Police Stress	2.01	0.75
Organizational Police Stress	2.04	0.70
	Site 2	
Police Stress Overall	1.96	0.54
Inherent Police Stress	1.82	0.46
Organizational Police Stress	2.04	0.60
	Site 3	
Police Stress Overall	2.03	0.63
Inherent Police Stress	2.00	0.62
Organizational Police Stress	2.06	0.69

Research Question 3

The final research question considered the relationship between spirituality and police stress among police officers. The commonly used Pearson product-moment correlation statistic was selected to satisfy this query. Measures of spirituality and police stress that were obtained from the sample thus were paired overall and in subscales to obtain a correlation coefficient indicative of the degree of relationship between variables. For the purposes of this study, this researcher utilized the following interpretation of correlation coefficients to understand the strength of relationship between spirituality and police stress: a coefficient lower than +.35 or -.35 demonstrated low or no relationship between variables; a coefficient between +.35 and +.65 or -.35 and -.65 indicated a moderate relationship between variables; and coefficient higher than +.65 or -.65 showed a high relationship between variables (Gay et al., 2006).

The direction of relationship between spirituality and police stress was determined by the sign of the correlation coefficient (i.e. positive, negative). A positive coefficient value therefore reflected a positive relationship in which measures of spirituality increased at the same time measures of police stress increased. A negative coefficient value suggested a negative relationship in which measures of spirituality and police stress were inversely related (Leedy & Ormrod, 2005).

The Pearson product-moment correlation obtained for overall spirituality and police stress measures demonstrated a weak, positive relationship between variables ($r =$ .18, $p = .07$). Spirituality Overall correlated minimally with the subscales of police stress, as shown in $r = .27$ ($p = .01$) in the Inherent Police Stress subscale and $r = .11$ ($p = .25$) in the Organizational Police Stress subscale. Police Stress Overall similarly demonstrated a

low, positive correlation with individual subscales of spirituality. None of the subscales of spirituality and police stress surpassed the weak correlation threshold in relationship to one another. All of the correlation coefficient values obtained in the matrix reflected a positive direction of relationship between variables. (See Table 7).

Table 7

Correlation Matrix for Spirituality Assessment Scale and Police Stress Survey Measures

		1	2	3	4	5	6	7	8
Spirituality Overall	r	1							
	Sig.								
Police Stress Overall	r	.18	1						
	Sig.	.07							
Purpose and Meaning	r	.81**	.14	1					
	Sig.	0	.17						
Innerness/Inner Resources	r	.94**	.21*	.74**	1				
	Sig.	0	.03	0					
Interconnectedness	r	.82**	.17	.57**	.67**	1			
	Sig.	0	.09	0	0				
Transcendence	r	.86**	.07	.63**	.79**	.54**	1		
	Sig.	0	.48	0	0	0			
Inherent Police Stress	r	.27**	.94**	.19	.29**	.27**	.14	1	
	Sig.	.01	0	.05	0	.01	.17		
Organizational Stress	r	.11	.98**	.09	.17	.10	.02	.85**	1
	Sig.	.25	0	.37	.09	.33	.86	0	

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)

The common variance between spirituality and police stress measures also was evaluated to understand the extent to which variables' measures differed when paired together. The coefficient of determination was used to accomplish this task, and was obtained by squaring the Pearson product-moment correlation coefficient. Robson (2002) suggested that a measure less than 0.3 generally lacked merit for further investigation of the relationship between variables. The proportion of variance explained (PVE) of spirituality and police stress measures overall was $r^2 = .03$, which failed to cross the recommended threshold. According to this standard, every coefficient of determination value obtained for police stress overall and in subscales to spirituality overall and in subscales failed to account for variances of scores in a meaningful, systematic way.

Conclusions

One of the contributions of this study was enlarging understanding of police officer spirituality through a quantitative approach. This study's finding of a moderate, positive spirituality that approached the threshold of strong, positive spirituality supported qualitative conclusions about spiritual wellness in law enforcement professionals (Charles, 2005; Kowalski & Collins, 1992). Additionally, this study's strong, positive measure of Purpose and Meaning in Life converged with a synonymous pattern of spiritual wellness that Patton (1998) qualitatively identified as reformation and renewal in veteran law enforcement officers. It may be noted that in other qualitative studies, sample sizes were smaller and almost exclusively involved participants whom were open to or committed to particular spiritual affiliations, beliefs, and practices. The quantitative methodology in this study encompassed this range of participants, as well as those who considered themselves neither religious nor spiritual, and who did not attend or

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engage in religious events or spiritual activities. This was one way this research extended findings about spirituality and police to a broader demographic than seen in previous qualitative studies.

The positive measures of spirituality which were obtained in this study overall and in various attributes contrasted with several theoretical conclusions in the literature about police officer characteristics and behaviors. The stream of literature pertinent to spirituality has emphasized that a strong spirituality requires time, energy, and attention (Covey, 2004; Peck, 1978), and the positive measure of spirituality in this sample suggested spiritual cultivation indicative of these conditions to a moderate degree. The current stream of literature about police officers has asserted that officers often sever ties to extracurricular interests, including those tangential to spirituality, due to the demands of a law enforcement career (Gilmartin, 2002; Violanti, 1999). The positive level of spirituality therefore did not support the degree of detachment maintained in the literature.

Additionally, theoretical literature intimated that social isolation is characteristic of police officers (Lefkowitz, 1975; Skolnick, 1993). In contrast, this study's finding of moderate, positive spirituality in the Unifying Interconnectedness subscale corroborated qualitative research conclusions about the positive value of relationships and desire for affiliation found among officers (Charles, 2005; Patton, 1998). In the Transcendence subscale, the score which was obtained reflected the lowest measure of all attributes and spirituality overall. Literature has considered transcendence the capacity to reach or exceed beyond ordinary physical or psychological limits. One theme which emerged in the theoretical literature about police officers was the sense of being invincible and

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"superhuman" (Violanti, 1996). The lower measure of Transcendence which was obtained in this study failed to support this idea of omnipotence as a dominant perspective in the sample.

One unexpected conclusion about spirituality in this research was a finding of significant differences in means of spirituality scores at the participant sites, which were private institutions of higher education. Moreover, the effect sizes of the differences approached the moderate threshold, suggesting the practical importance of this outcome. This researcher's review of the literature failed to yield any conclusions about this phenomenon.

The conclusions drawn about police stress in this study were both congruent and divergent with the existing corpus of literature. The overall finding of an average experience of police stress in this sample contrasted with literature that concluded a greater experience of stress in law enforcement professionals (Selye, 1978; Sigler & Wilson, 1988; Silbert, 1982). The mean response of participants in this study revealed an average experience of stress related to organizational police stress factors, and a less-than-average experience of stress related to inherent police stressors. The higher mean score of Organizational Police Stress in this sample reflected findings from seminal qualitative studies that realized administrative factors were most bothersome to officers (Kroes, Margolis, et al., 1974). This conclusion, however, was inconsistent with contemporary studies that indicated inherent police stressors were the most problematic area of police stress for officers (Spielberger et al., 1981; Violanti & Aron, 1995). There was agreement in this study and other research, however, regarding the rank order of stressors encountered in policing. A fellow officer killed in the line of duty, killing

someone in the line of duty, and exposure to dead or battered children consistently manifested among the most stressful events inherent to police work (Spielberger et al.; Violanti & Aron, 1995). Additionally, inadequate department support was maintained in this study as one of the most prevalent organizational police stressors (Kirkcaldy et al., 1995; Kroes & Gould, 1979).

The overall trend concluded in this study was a weak, positive relationship between spirituality and police stress measures. In other quantitative research concerning stress and spirituality among police, this similarly was the pattern (Sigler & Thweatt, 1997). There was a significant, positive finding between Inherent Police Stress and Spirituality Overall in this study, which was a distinct conclusion from Paton's (1998) qualitative work, which suggested a negative association and pronounced spiritual distress in relation to routine exposure to crime, danger, suffering and violence. Additionally, there was a positive and significant relationship between Inherent Police Stress and attributes of Innerness and Inner Resources and Unifying Interconnectedness, as well as Police Stress Overall and Innerness and Inner Resources.

<center>Implications and Recommendations</center>

The conclusions reached in this study implicated new directions of research in the disciplines of spirituality and police stress, as well as the need to extend the limited corpus of literature about police spirituality. The first research question specifically sought to understand measures of spirituality in a sample of police officers. Quantitative validation of positive spirituality in police officers that was suggested in qualitative works (Charles, 2005; Kowalski & Collins, 1992) was valuable in itself, yet obtaining this confirmation from a broader group of participants who aligned with no particular

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spiritual affiliation or practice urged further inquiry into the phenomenon. It is the recommendation of this researcher that police officers be involved in future studies that consider the diverse manifestations of spirituality in order to better understand how spiritual wellness may be realized within the population.

This study anticipated that better understanding of police spirituality might increase insight for helping professionals working with police officers. The strong, positive measure of spirituality demonstrated in the Purpose and Meaning in Life subscale implicated the utility of interventions related to this facet of spirituality in the population. Meaning-making was recognized in the literature as one component of spiritual coping (Gall et al., 2005), and has been explored for its utility in assisting police officers with posttraumatic stress disorder (Carlier, 1999). Additionally, research has linked meaning to various positive health outcomes in individuals (Hong, 2008; Morris, 2001; Schafer, 1997). Future qualitative research might investigate this attribute singularly in police officers in order to determine any shared themes or other conclusions pertinent to this group which have not been explicated in the current corpus of literature.

Organizational stress literature has sought to understand stress through the exploration of personality as one antecedent variable. Police characteristics in the current stream of literature about police stress appeared incompatible with the positive measures of spiritual attributes determined in this study. New questions about the police personality emerged from this inconsistency. Given the relevance of personality characteristics for understanding and managing occupational stress, a reappraisal of police personality which accounts for spiritual attributes may be one direction of research in the future. A focus on themes related to interconnectedness and transcendence especially may serve to

contemporize knowledge about police stress in a critical way, as this researcher realized a dichotomy in the ideas presented in theoretical literature and the findings about these attributes in this study.

An unexpected conclusion in this research was the average experience of police stress in participants, as literature consistently has emphasized policing is a stressful occupation. Aaron (2000) asserted that coping styles determine the acclimation of police officers to distressing events. The finding of spiritual wellness in this sample suggested religious or spiritual coping may be relevant to managing police stress. Further evaluation of religious and spiritual coping styles in the police population may be considered an appropriate direction for future research.

Another significant contribution of this study was illuminating police spirituality and spiritual attributes as a precursor to evolving holistic law enforcement curriculum and training. The strong measures of Purpose and Meaning in Life in this study suggested that programs focused on themes related to this attribute may elicit the greatest response with police officers. Conversely, the lower measures observed in the Transcendence subscale intimated that police officers may not be as amenable to interventions related to this attribute. Stress management training has been recognized as one departmental strategy for intervening in police stress (Waters & Ussery, 2007). Many interventions in contemporary stress management programs involve relaxation techniques, such as meditation, which have been linked in the literature to the spiritual attribute of transcendence (Espeland, 1999; Ingersoll, 2003; Seaward, 2006). The finding in this study that transcendence-related measures ranked lowest among the four attributes of spirituality encouraged one way to extend research about police stress and spirituality,

specifically by assessing the influence of stress management exercises on this spiritual attribute in the police population and its effect on spirituality and police stress.

Another unanticipated outcome in this research was the significant differences in participants' spirituality at the various school sites. Moreover, effect sizes approaching the moderate threshold suggested the practical importance of this finding. The relationship between education and spirituality was not the focus of this study, but the conclusion suggested educational interests might have a relationship to varying levels of spiritual wellness in police officers. With continuing education as the contemporary trajectory in law enforcement, future research might evaluate the relationship between education and spirituality in police officers.

This study determined several positive, significant relationships between spirituality and police stress overall and by various attributes and types. However, these were weak relationships with a minimal proportion of variance explained between variables. This low correlation reinforced the complexity of the involved variables in this study. Rather than serving to discourage future research, this finding might stimulate additional studies focused on singular attributes or factors of spirituality and police stress in order to better understand relationships which demonstrated a positive, significant correlation in this study.

Inherent Police Stress was one factor which consistently manifested a positive, significant relationship to spirituality, overall and in subscales of Unifying Interconnectedness and Innerness and Inner Resources. One implication suggested in this finding is that spirituality may be resourceful for police officers managing stress following a critical incident. Moreover, officers' perceptions about relationships and

innate qualities might be instrumental in the coping process. As emphasized in the literature, a strong spirituality demands time, effort, and attention. A critical incident may happen at any time in a police officer's career. Therefore, spiritual programs and interventions, particularly those emphasizing themes related to interconnectedness and innerness and inner resources, may be considered vital in a holistic law enforcement curriculum. Additionally, as Police Stress Overall demonstrated a significant, positive relationship with Innerness and Inner Resources, stress management training might consider the efficacy of interventions concerned with this attribute. Future research might investigate these spiritual attributes singularly in the police population to garner more information than is available in the current corpus of literature.

The positive relationship between spirituality and police stress measures in this study suggested a correlation between spiritual wellness and police stress. In law enforcement, job responsibilities stand to strain the physical, mental, emotional, social, and spiritual resources of police officers and impact various aspects of health. Of these resources, spirituality has been considered the core, superlative and gestalt of all (Canda & Furman, 1999). This study's determination about the relationship between spirituality and police stress implicated the need for officers to maintain enhanced spiritual wellness in order to accommodate increasing levels of police stress. More must be done to understand and support spirituality in police officers, and it is hoped that this research has contributed to such movement.

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Appendix A

Spirituality Assessment Scale Items Ranked by Mean Scores

Spirituality Assessment Scale Items Ranked by Mean Scores

Spirituality Assessment Scale Items	*M*	*SD*
Have Life Goals	5.62	0.56
Feel Good About Self	5.42	0.68
General Sense of Belonging	5.34	0.75
Life Has Meaning/Purpose	5.26	0.84
Rely on Inner Strength	5.17	0.88
Have Inner Strength	5.10	0.83
Enjoy Serving Others	5.07	0.94
Found Inner Strength in Struggle	5.06	0.93
Sense of Balance in Life	5.03	0.80
Fulfillment in Life	5.03	0.83
I Have Ability to Rise Above Conditions	5.01	1.03
Trust When Discouraged	4.96	0.85
Kinship To Other People	4.81	0.93
Innerness Helps When Uncertain	4.80	1.03
Life Meaning Provides Peace	4.73	1.04
Reconciling Relationships is Important	4.68	1.12
Sense of Harmony/Inner Peace	4.61	1.01
Inner Strength Related to High. Power/Sup. Being	4.59	1.34
Inner Spiritual Guidance	4.52	1.32
Concerned with Environment	4.52	1.07
Responsible to Preserve Planet	4.48	0.92
Connected To All of Life	4.48	1.02

Spirituality Assessment Scale Items	*M*	*SD*
I Am Able to Forgive	4.42	1.30
Feel A Part of Community	4.38	1.19
Ability to Self Heal	4.29	1.22
Ideas of Universe Extend Beyond Norm	4.26	1.31
Peace In Moments of Devastation	4.25	1.32
Rise Above Change or Loss in Body	4.16	1.21

Appendix B

Police Stress Survey Items Ranked by Mean Scores

Police Stress Survey Items Ranked by Mean Scores

Police Stress Survey Items	M	SD
PO Killed in Line of Duty	3.18	1.03
Inadequate Department Support	2.74	1.15
Exposed to Dead/Battered Children	2.71	1.18
Coworkers Not Doing Job	2.55	1.05
Court Leniency	2.54	1.15
Political Pressure (Within Department)	2.52	1.16
Partner Incompatible	2.46	1.26
Manpower Insufficient	2.46	1.04
Equipment Poor/Inadequate	2.43	1.07
Killing Someone in Line of Duty	2.42	1.32
Court Decisions Restricting Police	2.35	1.03
Inaccurate/Negative Media Coverage	2.29	1.04
Catastrophic Injury	2.28	1.28
Political Pressure (Outside Department)	2.28	1.29
Salary Inadequate	2.26	1.15
Poor or Inadequate Supervision	2.25	1.08
Physically Attacked	2.23	1.13
Ineffective Judicial System	2.22	1.08
Ineffective Corrections System	2.22	1.08
Confront Aggressive Crowd	2.20	1.02
Discipline Excessive/Inappropriate	2.18	1.15
Public Criticism	2.16	1.04

Police Stress Survey Items	M	SD
Job Conflict	2.10	0.89
Negative Attitude Toward Colleagues	2.10	0.97
Disagreeable Department Regulations	2.09	1.02
Competition for Advancement	2.04	1.12
POs Put Down/Mistreated in Court	2.04	1.07
Inadequate Supervisor Support	2.01	1.27
Use of Force Situations	1.98	0.98
Pleas/Rules Leading to Case Dismissal	1.98	1.11
Good Work Unrecognized	1.97	1.12
No Input on Department Policies	1.97	1.14
Making Arrests Alone	1.97	1.12
Disagreeable Duty Assignment	1.96	1.02
Excessive Paperwork	1.95	1.05
Change Shift Day to Night	1.92	1.28
On Duty Traffic Accident	1.91	1.21
Day Off Court Appearance	1.90	1.19
Dealing with Crises and Domestics	1.89	1.03
Family Demands for Time	1.86	1.08
Delivering Death Notice	1.85	1.27
New Duties Assigned	1.81	1.01
Public Apathy Toward Police	1.81	1.01
Racial Pressure/Conflict	1.80	1.22
In Progress Felony Calls	1.80	0.89
Traffic Pursuits	1.77	1.16

Police Stress Survey Items	*M*	*SD*
Increased Responsibility	1.74	1.02
Making Critical Decisions Immediately	1.74	0.94
Second Job	1.71	1.14
Exposed to Adults in Pain	1.62	0.90
Minor Injury Possible on Job	1.60	0.94
Bad Supervisor Relationships	1.60	1.12
Promotion/Commendation	1.59	1.28
Frequent Changes in Activity Levels	1.58	0.94
Demands For High Moral Standards	1.55	1.02
Inactive/Boring Periods	1.44	1.07
Insult from Citizen	1.42	0.95
Non-police Tasks	1.41	1.06
Non-police Friend Relations	1.39	1.22
Civilian Deaths	1.33	1.03

Appendix C

Participant Package

PARTICIPANT DEMOGRAPHIC SURVEY

DIRECTIONS: Please circle or write in the response which best describes your demographic characteristics. The information will be used to provide a composite of participants who contributed to this research. Participant anonymity and confidentiality will be maintained by the researcher. Please do not include your name or any other identifiers on any of the pages.

A. Gender
          (1) Male
          (2) Female

B. Age   _____ Years   D.O.B. _____

C. Race/Ethnicity
          (1) Caucasian/Non-Hispanic
          (2) African American/Black
          (3) Spanish American/Hispanic
          (4) Asian American
          (5) Native American
          (6) Middle Eastern
          (7) Other (specify) _____

D. Marital Status
          (1) Single
          (2) Single/Committed Relationship
          (3) Married/Domestic Partnership
          (4) Divorced
          (5) Widowed

E. How many people reside in your household?   _____

F. What is your individual income per year?

          (1) Under $50,000/Year
          (2) $50,001 - $80,000/Year
          (3) $80,001- $100,000/Year
          (4) Over $100,000/Year

G. What is the highest educational level you have completed? (List degrees attained)

          (1) Bachelor _____
          (2) Graduate _____
          (3) Doctoral _____

H. What level of current graduate program have you completed?

        (1) First Year
        (2) Second Year
        (3) Third Year
        (4) Other _____

I. Rank/Title at Work

        (1) Police Officer
        (2) Detective
        (3) Sergeant
        (4) Lieutenant
        (5) Captain
        (6) Other (specify) _____

J. Years of Experience in Police Work   _____

K. Shift Assignment

        (1) Days
        (2) Afternoons
        (3) Midnights
        (4) Other (specify)   _____

L. Present Duties

        (1) Patrol
        (2) Traffic
        (3) Patrol and Traffic
        (4) Tactical
        (5) Investigative
        (6) Administrative

M. Type of Department

        (1) City
        (2) County
        (3) State
        (4) University
        (5) Other (specify)   _____

N. Location of Department

        (1) Urban
        (2) Suburban
        (3) Rural

O. Size of Department

        (1) 0-50 Officers
        (2) 51-400 Officers
        (3) 400+ Officers

P. Religious Affiliation(s)   _____

Q. Do you consider yourself religious, spiritual, both or neither?

        (1) Religious
        (2) Spiritual
        (3) Both, religious and spiritual
        (4) Neither, religious nor spiritual

R. How often do you attend religious events?

        (1) Daily
        (2) At Least once a week
        (3) At least once a month
        (4) 2-3 times a year
        (5) Not at all
        (6) Other (specify) _____

S. How often do you participate in spiritual activities?

        (1) Daily
        (2) At Least once a week
        (3) At least once a month
        (4) 2-3 times a year
        (5) Not at all
        (6) Other (specify) _____

T. Do you believe in a Higher Power or Supreme Being?

        (1) Yes
        (2) No
        (3) Other (specify) _____

U. Do you consider yourself to be a(n):

        (1) Agnostic
        (2) Believer
        (3) Atheist
        (4) Other (specify) _____

V. How recently have you experienced a crisis event in your life? (i.e. death of someone close to you, prolonged illness or injury, divorce, change at home or work, financial difficulty, violence or catastrophic disaster):

    (1) I have not experienced any crisis in my adult life (skip to question X)
    (2) More than 5 years ago
    (3) Between 2 and 5 years ago
    (4) Between 1 and 2 years ago
    (5) During the past year

W. If applicable, please briefly describe the nature of the crisis or significant life change.

_____

_____

X. How would you describe your physical condition?

(1) Excellent
(2) Good
(3) Fair
(4) Poor
(5) Other (specify) _____

SPIRITUALITY ASSESSMENT SCALE *

DIRECTIONS: Please indicate your response by circling the appropriate letters indicating how you respond to the statement.

MARK:
"SA" if you STRONGLY AGREE
"A" if you AGREE
"AM" if you AGREE MORE than DISAGREE
"DM" if you DISAGREE MORE than AGREE
"D" if you DISAGREE
"SD" if you STRONGLY DISAGREE

There is no "right" or "wrong" answer. Please respond to what you think or how you feel at this point in time.

1.   I have a general sense of belonging.   SA A AM DM D SD

2.   I am able to forgive people who have   SA A AM DM D SD
     done me wrong.

3.   I have the ability to rise   SA A AM DM D SD
     above or go beyond a physical or
     psychological condition.

4.   I am concerned about destruction of   SA A AM DM D SD
     the environment.

5.   I have experienced moments of peace   SA A AM DM D SD
     in a devastating event.

6.   I feel a kinship to other people.   SA A AM DM D SD

7.   I feel a connection to all of life.   SA A AM DM D SD

8.   I rely on an inner strength in   SA A AM DM D SD
     hard times.

9.   I enjoy being of service to others.   SA A AM DM D SD

10. I can go to a spiritual dimension   SA A AM DM D SD
     within myself for guidance.

11. I have the ability to rise above or go   SA A AM DM D SD
     beyond a body change or body loss.

12. I have a sense of harmony or   SA A AM DM D SD
     inner peace.

13.	I have the ability for self-healing.	SA A AM DM D SD
14.	I have an inner strength.	SA A AM DM D SD
15.	The boundaries of my universe extend beyond usual ideas of what space and time are thought to be.	SA A AM DM D SD
16.	I feel good about myself.	SA A AM DM D SD
17.	I have a sense of balance in my life.	SA A AM DM D SD
18.	There is fulfillment in my life.	SA A AM DM D SD
19.	I feel a responsibility to preserve the planet.	SA A AM DM D SD
20.	The meaning I have found for my life provides a sense of peace.	SA A AM DM D SD
21.	Even when I feel discouraged, I trust that life is good.	SA A AM DM D SD
22.	My life has meaning and purpose.	SA A AM DM D SD
23.	My innerness or an inner resource helps me deal with uncertainty in life.	SA A AM DM D SD
24.	I have discovered my own strength in times of struggle.	SA A AM DM D SD
25.	Reconciling relationships is important to me.	SA A AM DM D SD
26.	I feel a part of the community in which I live.	SA A AM DM D SD
27.	My inner strength is related to a belief in a Higher Power or Supreme Being.	SA A AM DM D SD
28.	I have goals and aims for my life.	SA A AM DM D SD

POLICE STRESS SURVEY *

DIRECTIONS: Please indicate the intensity of stress that you believe the below events are causing you. The number 2 represents an average experience of stress for you, with larger numbers indicating a greater degree of stress and smaller numbers indicating a lesser degree of stress. Mark zero if the event applies or has applied to you and there is no current experience of stress. Select N/A if the event is not applicable to you.

Before marking your response, take into account whether the event has happened or is happening to you, and the time and energy necessary for you currently to adjust or cope with its occurrence. There is no "right" or "wrong" answer. Please respond with your experience of stress, at this point in time, resulting from the event.

1. Assignment of disagreeable duties

   N/A   0   1   2   3   4

2. Changing from day to night shift

   N/A   0   1   2   3   4

3. Assignment to new or unfamiliar duties

   N/A   0   1   2   3   4

4. Fellow officers not doing their job

   N/A   0   1   2   3   4

5. Court leniency with criminals

   N/A   0   1   2   3   4

6. Political pressure from within the department

   N/A   0   1   2   3   4

7. Political pressure from outside the department

   N/A   0   1   2   3   4

8. Incapacitating physical injury on the job

   N/A   0   1   2   3   4

9. Working a second job

   N/A   0   1   2   3   4

10. Strained relations with nonpolice friends

    N/A   0   1   2   3   4

11. Exposure to death of civilians

    N/A   0   1   2   3   4

12. Inadequate support by supervisor

    N/A   0   1   2   3   4

13. Inadequate support by department

    N/A   0   1   2   3   4

14. Court appearances on day off or day following night shift

    N/A   0   1   2   3   4

15. Assignment of incompatible partner

    N/A   0   1   2   3   4

16. Delivering a death notification

    N/A   0   1   2   3   4

17. Periods of inactivity and boredom

    N/A   0   1   2   3   4

18. Dealing with family disputes and crisis situations

    N/A   0   1   2   3   4

19. High speed chases

    N/A   0   1   2   3   4

20. Difficulty getting along with supervisors

    N/A   0   1   2   3   4

21. Responding to a felony in progress

    N/A   0   1   2   3   4

22. Experiencing negative attitudes toward police officers

    N/A   0   1   2   3   4

23. Public criticism of police

    N/A   0   1   2   3   4

24. Disagreeable departmental regulations

    N/A   0   1   2   3   4

25. Confrontations with aggressive crowds

    N/A   0   1   2   3   4

26. Fellow officer killed in the line of duty

    N/A   0   1   2   3   4

27. Distorted or negative press accounts of police

    N/A   0   1   2   3   4

28. Making critical on-the-spot-decisions

    N/A   0   1   2   3   4

29. Ineffectiveness of the judicial system

    N/A   0   1   2   3   4

30. Ineffectiveness of the correctional system

    N/A   0   1   2   3   4

31. Personal insult from citizen

    N/A   0   1   2   3   4

32. Insufficient manpower to adequately handle a job

    N/A   0   1   2   3   4

33. Lack of recognition for good work

    N/A   0   1   2   3   4

34. Excessive or inappropriate discipline

N/A   0   1   2   3   4

35. Performing nonpolice tasks

N/A   0   1   2   3   4

36. Demands made by family for more time

N/A   0   1   2   3   4

37. Promotion or commendation

N/A   0   1   2   3   4

38. Inadequate or poor quality equipment

N/A   0   1   2   3   4

39. Assignment of increased responsibility

N/A   0   1   2   3   4

40. Racial pressures or conflicts

N/A   0   1   2   3   4

41. Lack of participation on policy-making decisions

N/A   0   1   2   3   4

42. Inadequate salary

N/A   0   1   2   3   4

43. Accident in a patrol car

N/A   0   1   2   3   4

44. Physical attack on one's person

N/A   0   1   2   3   4

45. Demands for high moral standards

N/A   0   1   2   3   4

46. Situations requiring use of force

    N/A   0   1   2   3   4

47. Job conflict (by-the-book vs. by-the-situation)

    N/A   0   1   2   3   4

48. Court decisions unduly restricting police

    N/A   0   1   2   3   4

49. Killing someone in the line of duty

    N/A   0   1   2   3   4

50. Making arrests while alone

    N/A   0   1   2   3   4

51. Public apathy toward police

    N/A   0   1   2   3   4

52. Competition for advancement

    N/A   0   1   2   3   4

53. Poor or inadequate supervision

    N/A   0   1   2   3   4

54. Exposure to battered or dead children

    N/A   0   1   2   3   4

55. Plea bargaining and technical rulings leading to case dismissal

    N/A   0   1   2   3   4

56. Frequent changes from boring to demanding activities

    N/A   0   1   2   3   4

57. Exposure to adults in pain

    N/A   0   1   2   3   4

58. Possibility of minor physical injury on the job

    N/A   0   1   2   3   4

59. Put-downs and mistreatment of police officers in court

    N/A   0   1   2   3   4

60. Excessive paperwork

    N/A   0   1   2   3   4