

UNIVERSITY OF OKLAHOMA  
GRADUATE COLLEGE

PSYCHOLOGICAL CAPITAL AND MORAL POTENCY OF  
INTERDISCIPLINARY TEAM MEMBERS: DOES PROFIT STATUS MATTER IN  
HOSPICE CARE?

A DISSERTATION  
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PSYCHOLOGICAL CAPITAL AND MORAL POTENCY OF INTERDISCIPLINARY  
TEAM MEMBERS: DOES PROFIT STATUS MATTER IN HOSPICE CARE?

A DISSERTATION APPROVED FOR THE  
GRADUATE COLLEGE

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## **Abstract**

The hospice industry has seen major profit status shift over the last 15 years from nonprofit agencies to for profit agencies primarily providing care. This major shift has sparked much debate about whether differences exist between for profit and nonprofit hospice agencies and the impact on the quality of care provided. This study examines the psychological capital and moral potency of interdisciplinary members in hospice care, and the relationship between these capacities and the perception of authentic leadership. The results of this exploratory study indicated a significant difference between organizational types in the overall perception of the authenticity of the leader and the subscales of transparency and internalized moral perspective. Results indicated that there were no significant differences between organizational types in the overall scores of psychological capital or moral potency, but there was a significant difference found in the self-awareness subscale of psychological capital. A small positive correlation was found between authentic leadership and the psychological capital and authentic leadership and the moral potency of interdisciplinary team members.

*Key words:* Authentic Leadership, Hospice, Profit Status, Psychological Capital, Moral Potency

## **Chapter One: Introduction**

### **Problem Statement**

Over the last 20 years the utilization of hospice care nationally has increased 30% for the terminally ill from 1,545 hospice agencies in 1983 to 5,800 hospice agencies in 2013 (National Hospice and Palliative Care Organization, 2014). Over the last 15 years, the profit status of these agencies has also shifted, “Four out of Five Medicare-certified hospices that entered the market place between 2000 and 2009 were for profit” (Thompson, Carlson, & Bradley, 2012 p.1286). In 1999, 18% of hospice agencies were for profit and 76% nonprofit (NHPCO, 2001). In 2013, 66% of hospice agencies were for profit and 30% nonprofit (NHPCO, 2014). This profit status shift has sparked much debate as to whether or not differences exist between for profit and nonprofit hospice agencies. One potential difference within this debate is to the concern that quality of care may be different depending on the organizational type. This is a concern in the healthcare industry as a whole as reported by Gray (1986). Gray stated that quality of care “rests on the assumption that for-profit organizations are more likely than not-for-profit organizations to judge the performance managers on narrow economic grounds, thereby inducing them to take steps that could negatively affect quality” (Gray, 1986 pg. 127). Another explanation for why this debate exist is the thought of making a profit in an industry that provides care to the dying makes people uncomfortable.

The interdisciplinary team is a key component of hospice care because of their direct ability to impact patient quality of care. Interdisciplinary team members are a resource in hospice care with relatively little targeted research. Therefore, they represent

an important aspect to understand hospice care and the impact in the lives of patients regardless of profit status.

With the dramatic increase of hospice agencies, it is important to have a better understanding of the capacities that exist in interdisciplinary team members and how leadership can have a positive effect on increasing these capacities. More research is needed to support leadership effectiveness in both types of hospice organizations. The leadership within these agencies needs to be both positive and moral in order to maintain an organization whose employees are motivated to provide quality care to the terminally ill. The purpose of this study is to examine psychological capacity and moral potency of interdisciplinary team members providing hospice care to patients.

## **Hospice**

Hospice care is a type of medical care that a person may choose when they have been diagnosed with a terminal illness at the end of life (NHPCO, 2014). Hospice care takes place in a patient's home, a family member's home, a nursing home, assisted living centers, or in-patient facilities (NHPCO, 2014). The goal of hospice is to provide comfort care to the terminally ill who no longer seek curative care. Hospice utilizes a holistic approach that allows the hospice provider to address all types of comfort to include, physical, emotional, spiritual, and social (NHPCO, 2014).

Hospice care came to the United States around 1974 at a time when most deaths occurred in institutions, isolated from family members and when most patients had little decision making power (Ott, 2009). Florence Wald and Elisabeth Kubler-Ross were vital to the implementation of hospice care and development of the holistic approach. The research provided by Kubler-Ross regarding the five stages of dying was utilized to

develop the Medicare Hospice Benefit (Ott, 2009). Florence Wald began the first hospice in 1974 utilizing the interdisciplinary approach or holistic approach to treating the body and soul as one, known as the grass root movement (Ott, 2009). This movement was utilized to move care for the dying from institutions to homes surrounded by family.

There are four different agency types provide hospice: free standing, hospital association, home health association, or nursing home association (NHPCO, 2014). A free standing hospice is an organization with the primary focus of providing hospice care to those who qualify. Other hospices may be associated or utilize employees who provide hospice care in addition to other focuses such as hospital care, home health care, or nursing home care. For example, a hospital may have a hospice room or unit that provides hospice care to patients who qualify.

Hospice providers are classified by organizational tax status: for profit, nonprofit, and government. The primary funding source is Medicare, which certifies and regulates 93% of hospice agencies providing care (NHPCO, 2014). In order to be eligible for Medicare hospice benefits, all of the Medicare conditions must be met which include: eligible for Medicare Part A; a physician certifies that you are terminally ill and have 6 months or less to live if your illness continues at this rate, choose hospice over other benefits, and you get care from a Medicare approved hospice agency (Medicare, 2015). The other 7% of hospices could include providers who are in the process of becoming Medicare certified or are a part of an existing healthcare organization and run purely by volunteers (NHPCO, 2014).

## **Hospice Leadership**

Leadership in hospice care is dependent on the organizational type. For profit agencies typically have an owner and/or CEO. Nonprofit agencies have a governing board who hires and annually evaluates an executive director or administrator. Hospices utilize differing titles that include: executive directors, administrators, and managers. For purposes of this study, hospice leadership will be defined to include all titles of executive directors, administrators, and managers in leadership positions.

## **Interdisciplinary Teams**

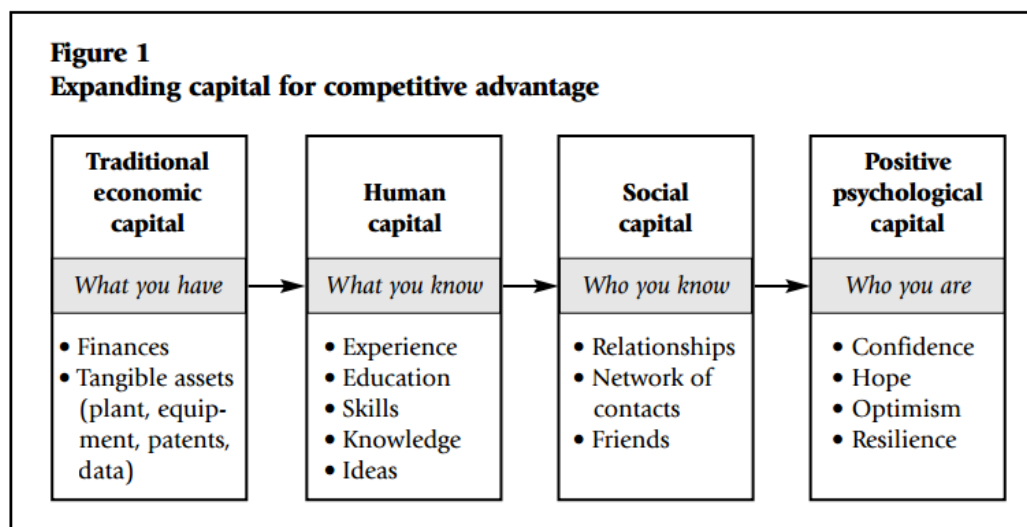
According to the hospice philosophy, the key component to providing quality care is the interdisciplinary team (Cherlin, Carlson, Herrin, Schulman-Green, Barry, McCorkle, Johnson-Hurzeler, & Bradley (2010). Hospice care is provided by an interdisciplinary team that includes a medical director (physician), patient's primary physician, patient care coordinator (nurse), nurses, social workers, chaplains, bereavement staff, volunteer coordinator, nurse aides, volunteers, dieticians, pharmacists, physical therapists, and occupational therapists. The primary goal of the interdisciplinary team is to identify problems, develop a plan, and carry about the plan in a holistic manner that incorporates the patient's perspective for end of life care (Ferrell, 2011).

## **Forms of Capital**

Organizations are always looking for the competitive edge and several aspects have been researched such as economic capital, human capital, and social capital (Luthans, Luthans, & Luthans, 2004). One of the more recent aspects that has gained attention is psychological capital (Luthans, Luthans, & Luthans, 2004). Psychological

capital is defined by the capacities of confidence, hope, optimism, and resiliency which is “who you are” (Luthans, Luthans, & Luthans, 2004). The economic capital of organizations has been examined by looking at financial and tangible assets also known as “what you have” (Luthans, Luthans, & Luthans, 2004). Human capital can be identified in organizations as “what you know”, for example, experience, education, skills, knowledge, and ideas (Luthans, Luthans, & Luthans, 2004). Social capital is also important due to the value in relationships, networks and friends, “who you know” (Luthans, Luthans, & Luthans, 2004). Each of these aspects can be seen as a competitive edge, meaning if utilized by leadership the organizations could improve outcomes.

**Figure 1 (Luthans, Luthans, & Luthans, 2004)**



Another aspect that could also be utilized is moral capital which includes the capacities of moral courage, moral ownership, and moral efficacy or “what you believe or value”. Each of these aspects of organizations are valuable and could be used to examine organizations. However, the focus of this study will be to examine the psychological capital and moral capital (moral potency) of interdisciplinary team

members in hospice care. Research has shown that both of these forms of capital can be developed and increased through authentic leadership. Therefore, this study would like to examine these capacities that exist and the relationship with authentic leadership in the context of hospice care.

## **Purpose**

This study has three distinct purposes in order to achieve its overall goal, which is to empirically contribute to the body of knowledge in both theory and practice. The first purpose is to examine the psychological and moral capacities that exist in hospice interdisciplinary team members. The second purpose of this study is to examine psychological and moral capacities differences in for profit and nonprofit that may or may not exist in hospice agencies. Lastly, this study seeks to examine the relationship between the perceptions of authentic leadership these capacities.

## **Significance of the Study**

This study will be beneficial for the following reasons. It will provide some insight into the psychological and moral capacities of interdisciplinary team members, which can be useful for future development of the team. The development of the psychological and moral capacity of the interdisciplinary team may improve the quality of care provided. Secondly, it will help to identify differences that may exist between for profit and nonprofit agencies and provide more insight regarding the capacities in both types of providers. Lastly, this study will contribute a better understanding of how the follower's perception of the authenticity of the leader relates the follower in this context according to the Authentic Leadership theory.

## **Theoretical Framework**

### **Authentic Leadership Theory**

The theory of authentic leadership has continued to develop since 1966 (Gardner, Cogliser, Davis, & Dickens, 2011). This is a relative new leadership theory and there is no single accepted definition of authentic leadership (Northouse, 2010). Authentic leadership can be defined using three different perspectives to include intrapersonal, interpersonal, and developmental (Chan, 2005). These perspectives include looking at the authenticity of the leader, the relationship between the leader and the follower, as well as the impact of the leader on the follower. For purposes of this study “Authentic leadership” is defined as

a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development” (Walumbwa et al., 2008, p. 94).

A surge of research began after Luthans and Avolio in 2003 conceptualized a new model that included positive organizational behavior, transformational/full-range leadership, and ethical perspective-taking (Gardner, et al., 2011). Luthans and Avolio (2003) utilized a pragmatic approach to identify two key elements that should be included when discussing the concept of an authentic leader, to include the authenticity of a leader and the leadership multiplier. The authenticity of a leader can be predicted by how authentic they are as a person; this determines how authentic they are as a leader (Chan, 2005).



The need for authentic leadership in hospice care is demonstrated by the level of uncertainty in the hospice industry, in regards to the increase in for profit agencies, recent policy changes, revenue sources, staffing, future patient and family demographics, community resources, and government regulation of hospice services (Comeaux, 2010). Specifically, if the leader-follower relationship is perceived as transparent then it leads to stability and predictability. Transparency is achieved when leaders self-disclose their values and beliefs consistently (Chan, 2005). The authentic leadership, if provided in these agencies, would allow them to influence their followers in a positive way to increase their capacity to make quality decisions and provide quality care.

For purposes of this study, I will focus on the follower's perception of the leader's authenticity and how it impacts the follower. Leaders who are authentic and enhance their self-awareness, relational transparency, balanced processing and internalized moral perspective also have a high level of psychological capital. Therefore, if leaders are thought to be authentic and have high levels of psychological capital then so should their followers according to the leadership multiplier effect. "Leadership multiplier is when leaders are perceived as authentic, their leadership interventions are more favorably received and the resultant impact multiplied" (Chan, 2005, p. 16). Leaders are able to achieve this effect because they demonstrate behaviors that are consistent with their own values, which fosters a trusting relationship with their followers inferring authenticity (Chan, 2005). The follower's perception of authenticity of the leadership in hospice care is needed in order to identify how it impacts the followership of the IDT member's capacity to make quality care decisions. The

leadership multipliers' effect is based on how followers perceive their leader (Gardner, Avolio, & Walumbwa, 2005). Therefore, examining the follower's perception of the authenticity of the leader and how it impacts the followership will support the need for authentic leaders in hospice care. As more hospice agencies continue to provide care due to the increase of the utilization of hospice services and the uncertainty of the hospice care field it is important to better understand the impact of leadership on followership to ultimately increase the capacities that they have to make quality decisions.

In order to examine the follower's perception of the authenticity of the leader this study will utilize the definition of Walumbwa, Avolio, Gardner, Wernsing, and Perterson, 2008. "Authentic leadership" is defined as

a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development" (Walumbwa et al., 2008, p. 94).

According to the author's definition, the self-awareness, internalized moral perspective, balanced processing of information and relational transparency of the leader should have a positive effect on the psychological capacities and ethical climate of the followers based on the leadership multiplier effect.

The authentic leadership literature leads to the following research questions in regards to hospice interdisciplinary team members. Further clarification of the

constructs of psychological capital and moral potency will be discussed in more detail in the forthcoming sections.

*Hypotheses: There is a positive statistical relationship between authentic leadership and psychological capital in hospice interdisciplinary team members?*

*Hypotheses: There is a positive statistical relationship between authentic leadership and moral potency in hospice interdisciplinary team members?*

*Hypotheses: There is a statistical difference between how interdisciplinary team members employed at nonprofit and for profit agencies perceive the authenticity of their leader?*

### **Positive Organizational Behavior**

Positive Organizational Behavior is the application and management of strengths and capacities that comprise human capital in an organization to improve performance (Luthans, 2002). Positive Organizational Behavior is valuable to the success of organizations that face uncertainty. Uncertainty, specifically in hospice care, includes “revenue sources, staffing, future patient and family demographics, community resources, and government regulation of hospice services” (Comeaux, 2011, p. 260). When an organization faces an unpredictable environment or uncertainty a leader must develop and utilize the resource that they do have, which is the psychological capital of their followers (Luthans, Youssef, & Avolio, 2007).

### **Psychological Capital**

The value of psychological capital is that it expands our view of capacities from traditional ones such as economic capital, human capital, and social capital. This is not to say that the traditional capacities are not important but that knowing “who you are” is also important. Psychological capital is a type of resource that describes, “who you are”

defined by the capacities of confidence, hope, optimism, and resilience (Luthans, Luthans, & Luthans, 2004). By developing the psychological capacity of followers, it can be utilized as a resource for leadership to improve an organization during times of uncertainty.

Psychological Capital is a higher order core construct; therefore, the impact of these four components working together is higher than each of them individually. An example of how they can work together was provided by Luthans (2007). He stated that individuals with high hope are motivated to overcome challenges, which results in resiliency, a person with high resiliency will easily adapt to challenging situations, which results into flexible optimism, and that confident individuals will apply hope, self-efficacy, and resiliency throughout any aspect of their lives. (Luthans, 2007)

This study aims to provide insight regarding the capacities that interdisciplinary team members have by examining their psychological capital. The results will not only allow us to determine if there are differences in the interdisciplinary staff members of for profit and nonprofit agencies but determine the capacities they have to make the necessary decisions to provide quality care to patients. The construct of psychological capital will be used to determine the capacities and differences between organizational types which leads to the below hypotheses.

*Hypotheses: There is a statistical difference between the psychological capital of interdisciplinary team members employed at nonprofit and for profit hospice agencies?*

### **Confidence**

Confidence (or self-efficacy) is defined as an “individual’s conviction...about his or her abilities to mobilize the motivation, cognitive resources, and courses of action

needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998b, p. 66). Characteristics of people with high self-efficacy include the ability to set high goals, to thrive when challenged, be highly self-motivated, willing to put forth the effort, and have high perseverance (Luthans et al., 2007). These are the types of characteristics that are helpful in hospice care due to the degree of autonomy that is needed for each interdisciplinary team member to best serve their role on the team. The level of confidence that a person has when providing care to patients will also help patients and their families to feel at ease during difficult times.

### **Hope**

A person who has the will power and a plan to achieve the goal will have a better chance of obtaining their goals. Hope is a positive state that is composed of agency and pathways in order to reach goals (Snyder, Irving, and Anderson, 1991). Agency is the goal-directed energy and pathways are the plan to meet the goals. The higher the hope an individual has increases their capacity to develop new pathways or plans to meet their goals when pathways are blocked (Snyder, Irving, and Anderson, 1991). Again, the role of the interdisciplinary team members is to create a plan with other team members to develop and achieve the goals of the patient. This process often requires high hope because pathways are blocked due to certain physical, environmental, or social limitations. Therefore, an interdisciplinary team member’s capacity to hope is helpful to succeed in meeting the goals of the patient.

A potential pitfall for organizations with members that do have high hope is that they may value their personal goals so much that they are tempted to seek pathways that are not compatible with their personal or organizational values (Luthans, et.al, 2007).

For example, members who have a strong will power to increase the number of hospice patient admissions may seek pathways such as falsifying documents to appear that patients are in compliance with Medicare guidelines when they are not.

### **Optimism**

Optimism is a term that most people are familiar with and believe that it is the ability to think positively about the future. In terms of psychological capital, it is much more than just this ability; it is how you apply the appropriate explanatory style.

Optimism is defined as an explanatory style to which a person interprets positive events to be caused by personal, permanent, and pervasive reasons and interprets negative events to be due to external, temporary, and situation-specific reasons (Seligman, 1998).

The opposite of this, the pessimistic explanatory style, refers to how a person interprets negative events to be caused by personal, permanent, and pervasive reasons and interprets positive events to be due to external, temporary and situation-specific reasons (Seligman, 1998). For purposes of psychological capital is the ability to evaluate the situation and apply the appropriate explanatory style whether the event occurring is negative or pessimistic (Luthans, 2007).

### **Resiliency**

Resiliency is defined as “the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility”

(Luthans, 2002, p. 702). Specific to this study, the role of values should be noted. The values and beliefs of a person are the foundation that helps to equip them with what they need to overcome challenging situations. The strength and stability of these values and beliefs will enhance a person’s capacity to be resilient. Therefore, if a person is not

clear what their values or beliefs are it may be difficult to overcome challenges. Again, in times of uncertainty in the future of hospice care it is beneficial for interdisciplinary team member's or follower's values to be in sync with the values of the leader to overcome the challenges.

Confidence, hope, optimism, and resiliency are measured as subscales of psychological capital will provide more detail regarding the specific capacities of confidence, hope, optimism, and resiliency that interdisciplinary team members possess. Each of these capacities are important in the hospice industry due to the type of care that they provide. This exploratory research may provide results that could lead to future studies related to how these capacities are related to the quality of care provided to patients. The below research question will help to examine the capacities.

**Research Question:** What psychological capacities do hospice interdisciplinary team members have?

### **Moral Potency**

This study will utilize the model by Hannah & Avolio, (2010) to address the capacity of followers to make ethical decisions. The integration of the components of moral ownership, moral efficacy, and moral courage together support the capacity for an individual to make ethical decisions. "We define *moral potency* as a psychological state marked by an experienced sense of ownership over the moral aspects of one's environment, reinforced by efficacy beliefs in the capabilities to act to achieve moral purpose in that domain, and the courage to perform ethically in the face of adversity and persevere through challenges"( Hannah & Avolio, 2010, p. 291).

Hannah, Avolio, & May (2011) proposed in the conclusion of their study that unethical behavior can be decreased and virtuous behavior increased if moral capacity is developed. Once we can identify the differing levels of moral ownership, efficacy, and courage, it will increase our understanding and encourage development of future programs to increase their capacity to behave with virtue and decrease unethical behavior.

This study hopes to provide more insight regarding the capacities that interdisciplinary team members have by examining their moral potency. The results will again not only allow us to determine if there are differences in the interdisciplinary staff members of for profit and nonprofit agencies but determine the capacities that they have to make the necessary decisions to provide quality care to patients. Below are the hypotheses and research question that will help to examine the capacities and possible differences between organization types.

*Hypotheses: There is a statistical difference between the moral potency of interdisciplinary team members employed at nonprofit and for profit hospice agencies?*

**Research Question:** What is the current moral potency of hospice interdisciplinary staff members?



## **Chapter 2: Literature Review**

There are limited studies have examined the leadership or followership in the context of hospice care, specifically in regards to differences between organizational types. Several studies have evaluated the differences based on the delivery of services (Carlson, Gallo, & Bradley, 2004; Lorenz, Ettner, Rosenfeld, Carlisle, Leake, & Asch, 2002; O'Neill, Ettner & Lorenz, 2009) interdisciplinary staffing patterns (Cherlin, Carlson, Herrin, Schulman-Green, Barry, McCorkle, Johnson-Hurzeler, & Bradley, 2010), economic incentives (Noe, 2011; Gandhi, 2012), and profitability (O'Neill, 2008; Lorenz, 2003). However, few studies have examined the leadership or followership differences among for profit and nonprofit hospice agencies.

### **Leadership**

After reviewing the literature, it was discovered that only two studies have specifically researched Hospice leadership. Of these two studies neither study examined the leadership differences between for profit and nonprofit leaders. The literature review did provide one study regarding differences in private and public leadership but it was not specifically in the hospice industry (Thach & Thompson, 2007). However, it did provide some insight regarding differences in general organizations that could also exist in for profit and nonprofit hospice agencies which will be discussed later.

In 1986, Alperin and Richie looked at the hospice administrator's role as counselor and found that this specific counseling function occurred more often in hospice settings than in other health care settings, especially in the absence of social workers (Alperin & Richie, 1986). Alperin and Richie study brings up the question as to

whether or not the health care administration training provided enough coverage in regards to the skills that were needed to provide counseling. The study suggested that hospice administrators often participated in a counseling role due to their educational background or due to the absence of a social worker; however, it is questionable whether or not they have the appropriate training to do so (Alperin & Richie, 1986).

Another study conducted by Paul Longenecker (2006) evaluated three different leadership styles: transformational; the process that allows the leader to engage with the follower in order to motivate and elevate the morals of both the leader and the follower, transactional; which focuses on the exchanges that occur between the leader and the follower, and laissez faire; which is the non-leadership approach that requires little effort to satisfy followers or help them to grow (Northouse, 2009). The results of this study concluded that skill sets of hospice executives appeared more transformational over the other two styles (Longenecker, 2006). This study was leader focused and did not take in to account the perception of the followers nor the impact that the styles had on the followers.

According to Thach and Thompson in 2007, the competency level between for profit and a public/nonprofit leader is the same but their focus is where they differ. This was a qualitative study which included structured interviewed of 300 leaders (158 for profit and 142 nonprofit) from small to medium sized organizations in California (Thach & Thompson, 2007). The responses were then coded according to different leadership competencies (Thach & Thompson, 2007). These competencies were determined after reviewing existing models used in previous literature (Thach & Thompson, 2007). Examples of these competencies were integrity/honest, developing

others, technical competence, communication, diversity consciousness, political savvy, strategic/visionary thinking, customer focus, interpersonal skills, business skills, team leadership, results-orientation, change management, problem-solving, decision making, influence skills, and conflict management as cited by Thach and Thompson, 2007)

Leaders were then given a deck of 23 cards with the competencies and asked to select the top 7-10 cards that would provide the best positive results. Then they were asked to rank the top three and provide an explanation for why they chose the top three (Thach & Thompson, 2007). The results showed only minor differences between the two sectors when examining the competency of the leadership. The most common competencies include, integrity/honesty, developing others, technical competence, communication, diversity consciousness, political savvy, strategic/visionary thinking, customer focus, interpersonal skills, business skills, team leadership, results-orientation, change management, problem-solving, decision-making influence skills, and conflict management (Thach & Thompson, 2007).

The for profit agencies' top competencies were: time management, self-knowledge, and marketing/sales. Public/non-profit agencies top competencies were inspirational and managing conflict. The authors stated that for profit agencies focused more on profits and rewards than time management, knowledge and marketing/sales would play a larger role in leadership style (Thach &Thompson, 2007). However, public/non-profits must rely on inspiration to motivate employees who may be paid less than the private sector, who must deliver quality service on a minimal budget and who utilize unpaid volunteers (Thach &Thompson, 2007). The authors concluded that “Public (and non-profit) organizations tend to be focused on public interest, while the

goals of private organizations are driven by profits and self-interest” (Thach & Thompson, 2007, p. 358).

The lack of studies regarding the leadership in the hospice industry and specifically regarding differences in organizational types is apparent. Studies are needed to examine both the leadership and the followers in the industry in order to support improvements in the quality of care provided. The leaders in hospice care provide leadership to the followers who are composed of interdisciplinary teams that provide direct care to patients.

### **Interdisciplinary Teams**

In 2004, De Loach and Monroe explored job satisfaction among hospice workers. The study found that job satisfaction according to hospice workers was “having task significance, supervisory support, integration, distributive justice, positive affectivity, autonomy, routinization, no role overload, and high levels of work motivation” (De Loach & Monroe, 2004, p. 434). Other factors that also contributed to their job satisfaction were again task significance (hospice goals), competence (comfort level), and integration (team relations) (De Loach & Monroe, 2004).

Wittenberg-Lyles, Parker-Oliver, Demiris, & Regehr (2005) looked at the difference of perception and actual collaboration of interdisciplinary team members in hospice care. The authors found that the reflection process (informal discussion regarding work stress, caregiver circumstances, etc.) appeared to be the most demonstrated collaborative act by the team members yet the interdisciplinary team members perception was that it was the least collaborative act (Wittenberg-Lyles et al., 2005). They also found that the when caregivers were present during interdisciplinary

team (IDT) meetings the reflection process dropped from most collaborative act to least collaborative act. The findings of this study also suggested that regardless of the presence of caregivers the IDT member's perception of their collaboration was much higher than the actual collaboration (Wittenberg-Lyles et al., 2005). Caregiver involvement during IDT meetings did have a positive effect on communication processes by creating new professional activities such as the caregivers need for a reflection process (Wittenberg-Lyles et al., 2005).

O'Connor, Fisher, & Guilfoyle (2006) explored the perceptions of interdisciplinary team dynamics in hospice care. This qualitative study revealed two major themes: lack of clear role boundaries and lack of ways to maintenance role boundaries (O'Connor, Fisher, & Guilfoyle, 2006). The authors state that there is a need for development of interdisciplinary team training programs that support the interdisciplinary team model (O'Connor, Fisher, & Guilfoyle, 2006).

One qualitative study found several themes through a content analysis of 81 interdisciplinary meetings that concluded improvement was needed to progress the overall flow of communication (Demiris, Washington, Parker-Oliver & Wittenberg-Lyles, 2008). The specific themes that would improve communication included access to and recording of information, documentation of services, obtaining information from absent team members, data redundancy, and updating of recorded information (Demiris et al., 2008).

One study looked at the staffing patterns of hospice interdisciplinary teams, specifically differences between organizational types (Cherlin et al, 2010). The authors found that for profit hospices had significantly fewer full-time registered nurses, fewer

full time medical social workers, and fewer full time staff as a proportion of total staff (Cherlin, et al, 2010). They also found that nonprofit agencies utilized more volunteers than for profit or governmental agencies (Cherlin, et. al, 2010).

However, there have been no studies that evaluated the psychological capital or moral potency of the individual interdisciplinary team members. The interdisciplinary team is such a key component of hospice care because of their direct ability to improve patient quality of life. They are a huge resource that needs to be examined and further developed to make a more beneficial impact in the lives of patients and their families.

### **Profit Status**

Due to the increase of hospice agencies, specifically for profit agencies, an ongoing debate over the last decade exists regarding whether or not there are differences between for profit and nonprofit hospice agencies. The debate regarding differences in for profit and nonprofit organizations in healthcare has been ongoing even before it appeared in hospice care.

The book titled “For-Profit Enterprise in Health Care” by Dr. Bradford H. Gray provides a great insight between the distinction between nonprofit and for profit organizations in health care. These distinctions include type of ownership, how surplus are distributed, taxes, purpose, mission, and decision making (Gray, 1986). For profit organizations either have an owner and/or owned by investors and nonprofit organizations do not have an owner and are ran by a board. For profit organizations can distribute surplus to owners or shareholders, while nonprofits cannot distribute the surplus to the board or employees (Gray, 1986).

Nonprofit agencies are exempt from taxes where for profit organizations are not. The purposes of the organizational types differ as well. For profits have a “legal obligation to enhance the wealth of shareholders within boundaries of the law and does so by providing services” (Gray, 1986, pg.6). Nonprofits have “a legal obligation to fulfil the stated mission and must maintain economic viability to do so. Revenues derived from services and donations” (Gray, 1986, pg.6). The mission of for profits is growth, efficiency, and quality and the mission for nonprofits is charity, quality, and community but may pursue growth (Gray, 1986). Due to the differences in mission, for profits seem to have a streamlined decision making process and implementation of major decisions while the mission of nonprofits often complicates the decision making process and implementation (Gray, 1986).

The debate in regards to differences between organizational types in hospice care specifically began approximately in 2002. One of the first studies to begin this discussion was in 2002 by Lorenz, et al, titled “Cash and Comparison: Profit Status and the Delivery of Hospice Services”. The authors of this study concluded that for profit hospices served a higher percentage of patients with non-cancer diagnosis, patients with a longer length of stay, and patients with government pay sources than nonprofit agencies (Lorenz et al, 2002). They also concluded that nonprofit hospices provided an 11% higher number of skilled nursing visits than for profit hospices (Lorenz et al, 2002). However, they reported that there were no differences between them when evaluating availability of palliative services (Lorenz et al, 2002).

In response to this published article, Barry Kinzbrunner’s editorial quoted Sister Irene Kraus, a former chair of the AHA, who stated “No margin, no mission?”

Kinzbrunner made the point that without paying attention to the “bottom line” there would be no organization left to continue the mission. He also responded to three of the conclusions made by the authors of “Cash and Comparison: Profit Status and Delivery of Hospice Services.” The first conclusion implying that patients were “selected” is purely speculative, and one could also conclude that for profits actually reach out to noncancerous diagnosis patients and perhaps nonprofit agencies avoid noncancerous patients because of increased regulation (Kinzbrunner, 2005). Secondly, in response to the conclusion by Lorenz et al. (2002) regarding incremental length of stay, Kinzbrunner (2005) agrees that the data show for profit hospices having a higher percentage of patients with stays of more than 90 days but the difference is lost at 180. He then proposes the question that perhaps for profit hospices are better at assisting patients to access care earlier than nonprofit agencies. Lastly, Kinzbrunner stated there were no actual differences between actual number of skilled nursing visits per patient per day and that for profits actually provided a higher number of non-skilled nursing services per patient per day (Kinzbrunner, 2005). He goes on to say that, there is more than one way to interpret data and questions regarding differences remain unanswered; the most important issue when choosing a hospice is the quality of care provided (Kinzbrunner, 2005). This response to the study is an example of the ongoing debate in the hospice industry regarding whether or not differences exist between for profit and nonprofit hospice agencies.

Another study in 2004 by Carlson, Gallo, and Bradley attempted to explain the impact of profit status by examining the range of services received by patients of for profit hospices and nonprofit agencies. They concluded that patients of for profit



hospices received a significantly narrower range of services than nonprofit agencies (Carlson et. al, 2004). Range of services include both core services: skilled nursing, physician, dietary services, counseling, social services, spiritual care, and volunteer services and non-core services: continuous home care, occupational, intravenous, speech, and physical therapy; durable medical equipment and supplies; respite care; personal care; medications; homemaker/household services, and high tech care. For profit hospice patient received less non-core services than nonprofit hospices. The individual analyses of the hospice agencies in the study found that continuous home care and durable medical equipment were statistically lower in for profit agencies. The findings of this data could not support any explanations but just that the differences existed.

In 2007, Lindrooth and Weisbrod concluded in their research study that for profit hospices are less likely to admit patients with a shorter and less profitable expected length of stay. This study found that for profit hospices have a longer length of stay of about 14 days longer than nonprofit hospices. However, they did not find any difference in the timing of admission when looking at ownership (Lindrooth, 2007).

Another study that initiated more debate was “Paying the Price at the End of Life: A Consideration of Factors that Affect the Profitability of Hospice” by O’Neill, Phil, Ettner, & Lorenz in 2008. The purpose of their study was to examine the financial performance of hospice agencies. They concluded that overall profitability is low; the length of stay of patients is strongly associated with financial performance; greater profitability is related to lower costs; for profit agencies provide RN care (versus LPN);

and few hospices overall provide charitable care or special costly services (O'Neill et al., 2008).

The editor-in-chief of the *Journal of Palliative Medicine*, Charles F. von Gunten, M.D. responded to this article stating that although both types of agencies provide care under the same set of rules that the organizational type determines how they should be measured. Hospices are paid the same rate by Medicare regardless of the organizations profit status (von Gunten, 2008). He is concerned that if both agency types are paid the same rate then why is there such a huge difference in the profit margin, specifically a 1.6 billion difference. He frankly notes, "either the robber barons are running the for profit hospices or the not-for-profits fritter money away" (von Gunten, 2008, p. 954). He then calls for better definition of quality and its measurement (von Gunten, 2008).

Another response to the 2008 study by O'Neil, Phil, Ettner, & Lorenz was a letter to the editor by Jan Cetti. Cetti (2009) criticized the authors because they concluded no differences in care to patients by only collecting data from the California Office of Statewide Health Planning and Development 2003 survey and not the hospice agencies themselves (Cetti, 2009). She then goes on to explain that nonprofits serve a social mandate and for profits serve a business mandate (Cetti, 2009). She feels that due to the differing mandates that they must be measured differently; however, to measure social value is difficult (Cetti, 2009). Cetti goes on to say that finding the right balance of managing the finances of a nonprofit and still providing social value is difficult. Cetti concludes, "compliance with minimum standards must not be construed to mean that all hospice programs are the same" (Cetti, 2009, p.12)

O'Neill (2009) then responds to both von Gunten and Cetti stating that their study was never intended to capture more qualitative measures of social value. O'Neil reinforced that they "stressed in the conclusion that the study was only to promote factors affecting the profitability and financial viability of hospice, and highlighted the need for patient-level information about the quality of care in order to evaluate the implications of our findings" (O'Neill, 2009, p. 14). He did agree with Cetti and von Gunten that further development of methods needed to be developed to measure the impact of hospice.

In 2010, a study evaluated whether or not there were interdisciplinary staffing pattern differences between nonprofit and for profit agencies (Cherlin et al., 2010). The authors concluded that interdisciplinary staffing patterns significantly differed according to their organizational type. They also concluded that more research was needed to determine the impact this has on patients and their families.

Other studies propose that economic incentives may support why there has been an increase in for profit hospice agencies (Noe, 2011). The initial admission (first day) and discharge (last three days) costs for hospice patients are higher than the middle of the hospice stay (Nicosia, Reardo, Lorenz, Lynn, & Buntin, 2006). Since the admission and the discharge are more expensive, this creates an incentive to seek patients with longer lengths of stay, such as non-cancerous diagnosis like Alzheimer's disease (Nicosia et al., 2006).

The way the services are provided, and to what extent, is at the discretion of the executive leadership and the interdisciplinary team members. The values, goals, and mission of the leadership influence the day to day operations of how and to what extent

services are provided. One concern is that providers are driven by these economic incentives may cause the quality of care to diminish (Noe, 2011). It is not clear to what level the quality of care may be diminishing due to these economic incentives.

Wachterman (2011) compared nonprofit and for profit agencies based on patient diagnosis, location of care provided, number of visits per day, and length of stay. They concluded “Compared with nonprofit hospice agencies, for profit hospice agencies had a higher percentage of patients with diagnoses associated with lower-skilled needs and longer lengths of stay” (Wachterman, 2011, p., 472). Paul Rousseau, a feature editor, responded to the study conducted by the authors. Rousseau (2011) criticized the authors for an underrepresented sample, that it lacked data on important agency characteristics beyond metropolitan statistical area and chain status, lacked data on costs and revenue that diagnosis is an imperfect measure of disease severity, and lastly they were unable to assess the relationship between profit status and quality of care. A press release quoted Gary W. Polsky, chief executive officer at Solari Hospice Care, in response to the same article (Wachterman, 2011): “Having IRS 501(c) (3) nonprofit status does not automatically equate to superior care for terminally ill patients. There is no correlation between the profit status of a hospice program and the quality of care provided.” (Solari Hospice Care, 2011). Polsky also concluded that the focus should be on the quality of care provided not profit status: “Hospice practices, including quality of care, depend on an organization’s staff and leadership, not tax status. In any field of business, there are ‘good’ companies and ‘bad’ companies, and hospice is no different.” (Solari Hospice Care, 2011).

Sabina Ohri Gandhi conducted another study comparing patient quality and patient selection of nonprofit and for profit agencies in 2012. The author concluded that for profit agencies receive more referrals from long-term care facilities than traditional referrals from physicians (Gandhi, 2012). The results of the study also found that both provider types provide similar numbers of staff visits, but for profit providers make significantly less skilled nursing visits (Gandhi, 2012). In addition, there was weak evidence of lower quality of care by profit providers, but the results were inconclusive (Gandhi, 2012). They evaluated quality of care by the type of deficiencies they received. The deficiencies included the categories of quality of care, client assessment, clients' rights, pharmacy, administration, and any other quality of care (Gandhi, 2012).

Lastly, a study (Barry, 2012) looked at the scope and intensity of bereavement services provided to family members. They found no significant differences in bereavement services provided to families, labor intensive services, or services by looking at ownership type. They did find that nonprofit agencies provided more bereavement services to the community who were not active patient family members than for profits (Barry, 2012). Medicare requires bereavement support provided by hospice agencies; however, the reimbursement rates are not based on the quality of care provided (Barry, 2012).

Some argue that it does not matter what differences there are; the focus should be on quality of care. Others argue that of course there are difference because they were each created for different reasons. For example, nonprofit agencies were created to provide a service and social value to the community, and for profit agencies were created to provide a service and to make a profit. However, with the huge shift of profit

status from nonprofit to for profit it is prudent to question why there is an increase and how this impacts patients. If quality of care is the concern for all parties then perhaps we can better determine the quality of the care by the quality of the staff.

## **CHAPTER 3: Methods**

### **Target Population**

In this study, the target population includes interdisciplinary team members employed at hospice agencies in the United States. In 2013, there were 5,800 hospice agencies (primary and satellite) providing care in the United States. (NHPCO, 2014) Of the 5,800 hospice agencies 66% were for profit agencies, 30% were nonprofit, and less than 5% were government operated. (NHPCO, 2014)

### **Sampling**

A convenience sample of hospice agencies in Oklahoma and Texas were solicited to participate in this study. The agencies that agreed to participate, then provided the information to the interdisciplinary team members employed at the agency. A self-selected sample of interdisciplinary team members were then utilized for this study. An interdisciplinary team member could include a medical director (physician), patient's primary physician, patient care coordinator (nurse), nurses, social workers, chaplains, bereavement staff, volunteer coordinator, nurse aides, volunteers, dieticians, pharmacists, physical therapists, and occupational therapists

### **Procedures**

Prior to the study, initial approval was obtained from the University of Oklahoma Institutional Review Board. See Appendix A. Access to the contact information for the agencies was gained through the public website [www.hospiceanalytics.org](http://www.hospiceanalytics.org). Upon approval and permission from the director of the website, they provided a concise list of all the agencies in Texas and Oklahoma. This included 556 "parent" agencies and did not include "satellite" offices. The list provided

by the website only provided a limited number of email addresses. Therefore, the University of Oklahoma Institutional Review Board approved a modification of the study protocol to allow the researcher to contact the agencies by phone to obtain email addresses that were not provided by the public website. See Appendix B. Upon approval, the researcher contacted each agency by phone to request either a general email address and/or the email address of the administrator. Of the 556 agencies provided by the website, 161 agencies from Texas and 85 agencies from Oklahoma provided a total of 246 email addresses. An electronic message that provided a letter of intent and solicitation was sent to each of the agencies. The solicitation included instructions for the agency if they chose to participate to forward the information to their employees. The researcher had no contact with potential participants who were forwarded the information. Participants were provided the link to the electronic survey using the [www.qualtrics.com](http://www.qualtrics.com) that included the consent form, authentic leadership questionnaire, psychological capital questionnaire, moral potency questionnaire, and the demographic questionnaire.

After the initial solicitation email, the agencies were sent a reminder one week after the initial email and a final reminder two weeks after the initial email. The online survey was open for two months. After two months 136 respondents opened the survey link, of those respondents 52% (N=72) completed 100% of the survey, 22 % (N=31) completed 90% of the survey, and 24% (N=33) completed less than 80% of the survey. Only 103 respondents completed at least 90% of the survey. A decision was made by the researcher to attempt to increase the sample by contacting selected agencies and solicit their participation using paper-and-pencil surveys. Prior to doing so the



researcher then gained approval from the University of Oklahoma Institutional Review Board to modify the study protocol to deliver paper-and-pencil surveys to selected agencies. See Appendix C. The researcher contacted four local agencies in Texas and three agencies in Oklahoma to solicit participation in study using the paper-and-pencil version of the survey. Only one agency in Texas and three agencies in Oklahoma agreed to participate and distribute the paper-and-pencil surveys to their staff members. Examination of the previous distribution of the emailed survey link as well as confirmation of the agencies was utilized to minimize the duplication of responses of the online and paper version of the surveys. The four agencies were provided paper-and-pencil surveys packets that included a letter of intent, consent form, demographic questionnaire, authentic leadership questionnaire, moral potency questionnaire, the psychological capital questionnaire and paid self-addressed envelope. The agency in Texas was provided 90 surveys and the other three agencies were provided a combined total of 60 surveys. The paper surveys were distributed by the hospice administration to their staff members along with paid self-addressed envelopes to minimize any influence of the administration. Of the 150 surveys distributed 49 surveys were returned. The returned survey responses were then uploaded to qualtrics.com and combined with the results of the online survey. The raw scores were then exported into an excel spreadsheet and scored by the researcher.

The combined total of online and paper-and-pencil surveys received was 185. A more detailed description of useable data is provided in the missing data section. A final response rate was unable to be calculated due to the unknown number of employees at each agency.

## Measures

The **Authentic Leadership Questionnaire** is a theory driven survey instrument that was developed in 2007 (Avolio, Gardner and Walumbwa 2007). This instrument includes four 5-point Likert scales that measure the level of transparency (items 1-5), level of moral/ethical standards (items 6-9), the level of balanced processing (items 10-12), and the level of self-awareness (items 13-16). Each respondent rates each statement by selecting the appropriate response (0=not at all, 1=once in a while, 2=sometimes, 3=fairly often, 4=frequently, if not always). Scoring is completed by averaging the items from each scale to create the raw score for the scale. The overall score can be completed by a sum of all of the subscale scores. The overall score determines the authenticity of the leader; the higher the score, the more authentic the leader is perceived to be. The average score in this study was  $M= 64.25$  ( $SD=13.02$ ), with the highest score being 80 and the lowest score being 25. See Table 1 for further details.

According to the authors of this scale, they estimated the internal consistency and found that each scale was acceptable: self-awareness, .92; relational transparency, .87; internalized moral perspective, .76; and balanced processing, .81 (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). Confirmatory factor analysis provided support for the high order construct and structural equation modeling provided predictive validity for support for authentic leadership beyond ethical and transformational leadership (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). See Appendix D for a sample of the Authentic Leadership Questionnaire

**Table 1: Authentic Leadership Scores**

| Variable                       | n   | Mean Score | SD    | Highest Score | Lowest Score |
|--------------------------------|-----|------------|-------|---------------|--------------|
| Overall                        | 159 | 64.45      | 13.02 | 80            | 25           |
| Self-Awareness                 | 159 | 3.97       | .97   | 5             | 1            |
| Relational Transparency        | 159 | 4.09       | .81   | 5             | 1            |
| Internalized Moral Perspective | 159 | 4.23       | .79   | 5             | 1            |
| Balanced Processing            | 159 | 3.91       | .94   | 5             | 1            |

*Note: Overall Mean:* total raw score **Subscale Mean:** Itemized score

The **Psychological Capital Questionnaire**, was developed by Luthans, Avolio, and Avery in 2007 to measure the resource of psychological capital. It measures hope (items 7-12), resiliency (items 13-18), optimism (19-24), and self –efficacy (confidence) (items 1-6) of 24 items using a 6-point Likert-type scale (1=strongly disagree, 2=somewhat disagree, 3=disagree, 4=agree, 5=somewhat agree, 6=strongly agree). Scoring is completed by simply totaling the points, but items 13, 20, and 23 require reverse scoring. The overall score can be determined by a sum of all of the subscale scores. The overall score determines the level of psychological capital they have, the higher the score, the more capacity they have. The average score in this study was M=116.52 (SD=13.62), with the highest score being 142 and the lowest score being 57. See Table 2 for further detail.

The authors examined the internal consistency of each scale using four different samples: hope (.72, .75, .80, .76); resilience (.71, .71, .66, .72); self-efficacy (.75, .84,

.85, .75); optimism (.74, .69, .76, .79); and the overall PsyCap (.88, .89, .89, .89) (Luthans, Avolio, Avery, & Norman, 2007). The authors state that even though the second sample for the resiliency and optimism scales are questionable the overall psychological capital internal consistency scores using all four samples, is above acceptable standards for this measurement (Luthans, Avolio, Avery, & Norman, 2007). Confirmatory factor analysis provided preliminary support for the questionnaire and model comparison results showed that the construct of psychological capital could be represented as a high-order construct (Luthans, Avolio, Avery, & Norman, 2007). See Appendix E for a sample of the Psychological Capital Questionnaire.

**Table 2: Psychological Capital Scores**

| Variable      | n   | Mean Score | SD    | Highest Score | Lowest Score |
|---------------|-----|------------|-------|---------------|--------------|
| Overall       | 149 | 116.52     | 13.62 | 142           | 57           |
| Hope          | 149 | 4.99       | .63   | 5             | 1            |
| Resiliency    | 148 | 4.86       | .64   | 5             | 1            |
| Optimism      | 148 | 4.63       | .69   | 5             | 1            |
| Self-efficacy | 149 | 5.18       | .69   | 5             | 1            |

*Note* **Overall Mean:** total raw score **Subscale Mean:** Itemized score

The **Moral Potency Questionnaire** is a 12-item scale that measures the moral potency of an individual based on three capacities: moral ownership (3 items), moral efficacy (5 items), and moral courage (4 items) (Hannah & Avolio, 2010). Respondents read each statement and rate it by selecting the appropriate response (1= strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, or== 5=strongly agree). The authors state that all three scales of the questionnaire were found to have satisfactory internal consistency (Hannah & Avolio, 2010). The overall score can be

completed by a sum of all of the subscale scores. The overall score determines the level of moral potency they possess; the higher the score, the higher the moral potency. The average score in this study was  $M= 50.70$  ( $SD=7.56$ ), with the highest score being 60 and the lowest score being 30. See Table 3 for further detail. Appendix F contains a sample of the Moral Potency Questionnaire.

**Table 3: Moral Potency Scores**

| <b>Variable</b> | <b>n</b> | <b>Mean Score</b> | <b>SD</b> | <b>Highest Score</b> | <b>Lowest Score</b> |
|-----------------|----------|-------------------|-----------|----------------------|---------------------|
| Overall         | 155      | 50.70             | 7.56      | 30                   | 60                  |
| Moral Courage   | 155      | 4.25              | .70       | 5                    | 1                   |
| Moral Ownership | 154      | 4.25              | .72       | 5                    | 1                   |
| Moral Efficacy  | 155      | 4.26              | .69       | 5                    | 1                   |

*Note* **Overall Mean:** total raw score **Subscale Mean:** Itemized score

The **Demographic Questionnaire** attempts to capture basic information regarding the organization that they are employed, by as well as individual information as employees. See Appendix G for the full Demographic Questionnaire.

## Chapter 4: Results

### Purpose of the study

This study examines the psychological and moral capacities that exist in hospice interdisciplinary team members. It attempts to identify differences, if any, of the psychological capital, moral potency, and perceptions of authentic leadership in for-profit and nonprofit that may or may not exist in hospice agencies. Lastly, this study seeks to better understand the relationship between the perceptions of authentic leadership for these capacities.

### Hypotheses

*H1: There is a statistical difference between the psychological capital of IDT members employed at nonprofit hospice agencies and for-profit hospice agencies.*

*H2: There is a statistical difference between the moral potency of IDT members employed at nonprofit hospice agencies and for-profit hospice agencies.*

*H3: There is a statistical difference between how interdisciplinary team members employed at nonprofit and for-profit agencies perceive the authenticity of their leader.*

*H4: There is a positive statistical relationship between authentic leadership and psychological capital in hospice IDT members.*

*H5: There is a positive statistical relationship between authentic leadership and moral potency in hospice IDT members.*

### Demographics

The demographic questionnaire was administered to provide a description of the participants as well as the agencies where they are employed. The demographics of the participants included age, gender, race/ethnicity, profession, professional experience, and years with their current organization. The demographics of the agency they are employed with include the organizational type, age of the organization, and number of

patients served. The questionnaire also included a text box to include the professional title of the leader that they wanted to evaluate when completing the Authentic Leadership Questionnaire. The demographic details of the sample are provided in Table 4 and 5 below.

**Table 4: IDT Demographics**

| <b>Demographic</b>             | <b>Categories</b>                                | <b>%</b>  | <b>N</b> |
|--------------------------------|--|-----------|----------|
| <b>Age</b>                     | 18-24 years                                      | 3%        | 6        |
|                                | 24-34 years                                      | 20%       | 35       |
|                                | 35-44 years                                      | 20%       | 36       |
|                                | 45-54 years                                      | 28%       | 49       |
|                                | 55-64 years                                      | 23%       | 40       |
|                                | 65+ years  | 6%        | 10       |
| <b>Gender</b>                  | Male   | 16%       | 29       |
|                                | Female   | 84%       | 147      |
| <b>Race/Ethnicity</b>          | American Indian/<br>Native American              | 2%        | 3        |
|                                | Asian/Pacific Island                             | 1%        | 2        |
|                                | Black/African American                           | 9%        | 16       |
|                                | Hispanic/Latino                                  | 14%       | 24       |
|                                | White/Caucasian                                  | 74%       | 128      |
|                                | Other  | 1%        | 1        |
| <b>Profession</b>              | Physician  | 0%        | 0        |
|                                | LPN  | 5%        | 8        |
|                                | RN   | 35%       | 61       |
|                                | Nurse Aide                                       | 10%       | 17       |
|                                | Social Worker                                    | 11%       | 20       |
|                                | Chaplain/<br>Spiritual Counselor                 | 7%        | 12       |
|                                | Bereavement Coordinator                          | 2%        | 3        |
|                                | Volunteer Coordinator                            | 2%        | 4        |
|                                | Volunteer  | 0%        | 0        |
|                                | Dietitian  | 0%        | 0        |
|                                | Pharmacist                                       | 0%        | 0        |
|                                | Occupational Therapist                           | 1%        | 1        |
|                                | Physical Therapist                               | 0%        | 0        |
|                                | Other  | 57%       | 99       |
| <b>Professional Experience</b> | 0-5 years  | 25%       | 43       |
|                                | 6-10 years                                       | 18%       | 32       |
|                                | 11-15 years                                      | 23%       | 41       |
|                                | 16-20 years                                      | 9%        | 16       |
|                                | 20+ years  | 25%       | 43       |
|                                | <b>Number of years with current organization</b> | 0-2 years | 53%      |
| 3-5 years                      |  | 21%       | 37       |
| 6-10 years                     |  | 16%       | 28       |
| 11-15 years                    |  | 6%        | 11       |
| 16-20 years                    |  | 1%        | 1        |
| 20 + years                     |  | 2%        | 4        |

**Table 5: Organization Demographics**

| Demographic                                    | Category      | %  | N  |
|--|---------------|----|----|
| <b>Organizational Type</b>                     | For Profit    | 57 | 99 |
|  | Non Profit    | 41 | 72 |
|  | Government    | 0  | 0  |
|  | Unknown       | 2  | 4  |
| <b>Organizational Age</b>                      | 0-5 years     | 17 | 30 |
|  | 6-10 years    | 23 | 41 |
|  | 11-15 years   | 14 | 25 |
|  | 16-20 years   | 3  | 5  |
|  | 20+ year      | 35 | 61 |
|  | Unknown       | 8  | 14 |
| <b>Number of Patients<br/>(served per day)</b> | 0-19 x small  | 21 | 36 |
|  | 20-24 small   | 17 | 30 |
|  | 50-124 medium | 25 | 44 |
|  | 125-199 large | 13 | 23 |
|  | 200+ x large  | 23 | 41 |
|  | Unknown       | 1  | 1  |

**Missing Data**

The number of respondents who began the survey was 185. Of the 185, 56% (N=105) completed the entire survey, 47% (N=47) completed 90% of the survey, the remaining 33 respondents completed less than 80% of the survey. The respondents who did not provide consent or continue after opening the link were deleted from the dataset (9 respondents). Due to limited distribution normality, both Welch's t-test and Whitney-Mann-Wilcoxon tests were performed to determine if there were any significant differences between results of missing scores and complete scores. A Whitney-Mann Wilcoxon test indicated a significant difference in moral potency results ( $z=-2.20$ ,  $p<.05$ ) and psychological capital results ( $z=-2.38$ ,  $p<.05$ ) between those who completed



the surveys and those who did not. This could be perhaps that participants with higher moral potency and psychological capital are more likely to complete the full survey.

The Whitney-Mann Wilcoxon test did not indicate a significant difference in authentic leadership in regards to missing and complete scores ( $z=-1.84, p>.05$ ). The results of the t-test indicated a significant difference in the missing and complete scores of moral potency  $t(150) = -2.44, <.05$  but no significant differences in authentic leadership  $t(154) = -1.11, p>.05$  or psychological capital  $t(137) = -1.63, >.05$ . Since the results of the two tests differ, Zimmerman suggest to accept the Whitney-Mann Wilcoxon results over the t-test results. (Zimmerman, 2011)

### **Violation of Assumptions**

Before beginning analysis, the data was screened for violations of parametric tests to include scale of measurement, random sampling from a defined population, and normal distribution. The dependent variables of authentic leadership, moral potency and psychological capital were all measured using ordinal scales. Participants were self-selected which does limit the generalizability. The Shapiro-Wilk test was performed on each of the variables and tested significant, rejecting the null that the variables were from a normally distributed population. Histograms and box plots were also examined the data to determine a normal distribution. Various methods were attempted to remove any outliers, so that the variables would become normally distributed. If outliers were removed, significant amounts of data would have had to be removed resulting in theoretically inappropriate data and/or would not have been representative of the population After evaluating the variables using statistical tests as well as graphics, it

was concluded that the variables violated the assumption of normal distribution. Therefore, parametric tests may not be appropriate.

### **Reliability**

The internal consistency of the Authentic Leadership Questionnaire, Moral Potency Questionnaire, and the Psychological Capital questionnaire were examined using the Cronbach Alpha Coefficient in this study sample. The raw coefficient for each of the total score of the instruments was above the acceptable level of .70 (Nunnally 1978). The results were as follows: Authentic Leadership Questionnaire, .95, Psychological Capital Questionnaire, .80 and the Moral Potency Questionnaire, .86. The subscales of Authentic leadership were examined and found that each sub scale was acceptable: self-awareness, .93; relational transparency, .94; internalized moral perspective, .94 and balanced processing, .94. The subscales of the Psychological Questionnaire were also examined using the Cronbach Alpha Coefficient: Self-Efficacy, .75, Hope, .70, Resiliency, .75, and Optimism, .80. Lastly, the subscales of the Moral Potency Questionnaire were also examined using the Cronbach Alpha Coefficient: Moral Ownership, .77, Moral Efficacy, .87, and Moral Courage, .75.

**Table 6: Total Scale Reliability**

| Scale                               | n (Items) | Raw | Alpha |
|-------------------------------------|-----------|-----|-------|
| Authentic Leadership Questionnaire  | 16        | .95 | .95   |
| Psychological Capital Questionnaire | 24        | .80 | .80   |
| Moral Potency Questionnaire         | 12        | .86 | .86   |

**Table 7: Subscale Reliability**

| <b>Authentic Leadership Questionnaire</b>  | <b>n (Items)</b> | <b>Mean Score</b> | <b>SD</b> | <b>Raw with Total</b> | <b>Raw Alpha</b> | <b>STD with Total</b> | <b>STD Alpha</b> |
|--|------------------|-------------------|-----------|-----------------------|------------------|-----------------------|------------------|
| Self-Awareness                             | 4                | 3.97              | .97       | .92                   | .93              | .92                   | .93              |
| Relational Transparency                    | 5                | 4.09              | .81       | .88                   | .94              | .89                   | .94              |
| Internalized Moral Perspective             | 4                | 4.23              | .79       | .87                   | .94              | .87                   | .94              |
| Balanced Processing                        | 3                | 3.91              | .94       | .88                   | .94              | .87                   | .94              |
| <b>Psychological Capital Questionnaire</b> | <b>n (Items)</b> | <b>Mean Score</b> | <b>SD</b> | <b>Raw with Total</b> | <b>Raw Alpha</b> | <b>STD with Total</b> | <b>STD Alpha</b> |
| Hope                                       | 6                | 4.99              | .63       | .72                   | .70              | .72                   | .71              |
| Resiliency                                 | 6                | 4.86              | .64       | .62                   | .75              | .61                   | .76              |
| Optimism                                   | 6                | 4.63              | .69       | .52                   | .80              | .52                   | .80              |
| Self-efficacy                              | 6                | 5.18              | .69       | .62                   | .75              | .63                   | .75              |
| <b>Moral Potency Questionnaire</b>         | <b>n (Items)</b> | <b>Mean Score</b> | <b>SD</b> | <b>Raw with Total</b> | <b>Raw Alpha</b> | <b>STD with Total</b> | <b>STD Alpha</b> |
| Moral Courage                              | 4                | 4.25              | .70       | .78                   | .75              | .78                   | .75              |
| Moral Ownership                            | 3                | 4.25              | .72       | .76                   | .77              | .76                   | .77              |
| Moral Efficacy                             | 5                | 4.26              | .69       | .65                   | .87              | .65                   | .87              |

**Hypotheses Testing**

Since the study sample violated the assumption of normality for parametric tests, both parametric tests and non-parametric tests were used to test the hypotheses in this study. The t-test is robust to non-normality according to Guiard and Rasch who recommend that it can be used even if the distributions are far from normal

(Guiard & Rasch, 2004). Zimmerman suggests, in order to decide which test is appropriate, to run both non parametric and parametric to decide which results to accept (Zimmerman, 2011). He suggests that if the results are the same then it is reasonable to accept the parametric; if they differ, then it is better to accept the non-parametric results (Zimmerman, 2011). The Welch's t-test and Wilcoxon Mann-Whitney Test were used to test hypotheses 1, 2, and 3. The Pearson's Product Moment Correlation and the Spearman Rank-Ordered Correlation were used to test hypotheses 3 and 4. Exploratory analysis will be used to identify the moral and psychological capacities that exist in interdisciplinary team members, as well the relationship between any demographic variables and authentic leadership, moral potency, and psychological capital.

### **Testing Hypotheses 1**

The Welch's t-test and Wilcoxon Mann-Whitney test were used to determine if there was a statistical difference between the psychological capital of interdisciplinary team members employed at nonprofit and for profit hospice agencies. The Wilcoxon Mann-Whitney results indicated no significant difference in the overall psychological capital of interdisciplinary team members,  $z=.176$ ,  $p>.05$ . The subscales of psychological capital were also used to evaluate any differences between nonprofit and for profit agencies. The only subscale that was significant was self-efficacy,  $z=-2.04$ ,  $p<.05$ . The remaining subscales were all found not significant: hope,  $z=-.48$ ,  $p>.05$ , resiliency,  $z=.39$ ,  $p>.05$ , and optimism,  $z=.72$ ,  $p>.05$ .

The Welch's t-test also indicated no significant difference in the overall psychological capital of interdisciplinary team members,  $t(147) = -.25$ ,  $p<.05$ . The t-test also indicated only one significant subscale, self-efficacy,  $t(117.92) = 2.27$ ,  $p<.05$ .

The remaining subscales were all found not significant: hope,  $t(147) = .50, p > .05$ , resiliency,  $t(146) = -.15, p > .05$ , and optimism,  $t(146) = -.078, p > .05$ . Since, there is no difference in the results of the t-test and the Wilcoxon Mann-Whitney test, we will accept the Welch's t-test results. Therefore, we fail to reject the null that there is no statistical difference between the psychological capital of IDT members employed at nonprofit and for profit hospice agencies.

*Ho: There is no statistical difference between the psychological capital of interdisciplinary team members employed at nonprofit and for profit hospice agencies.*

*H1: There is a statistical difference between the psychological capital of interdisciplinary team members employed at nonprofit and for profit hospice agencies.*

**Table 8: t-test Results comparing Psychological Capital by Organizational Type**

| Scales  | Type | n  | Mean  | SD    | t            | df     | p     |
|---|------|----|-------|-------|--------------|--------|-------|
| Overall   | FP   | 84 | 116.3 | 13.48 | <b>-0.25</b> | 147    | 0.80  |
|   | NP   | 65 | 116.8 | 13.89 |              |        |       |
| Hope  | FP   | 84 | 5.02  | 0.59  | <b>0.50</b>  | 147    | 0.62  |
|   | NP   | 65 | 4.96  | 0.69  |              |        |       |
| Resiliency  | FP   | 83 | 4.85  | 0.62  | <b>-0.15</b> | 146    | 0.88  |
|   | NP   | 65 | 4.87  | 0.67  |              |        |       |
| Optimism  | FP   | 83 | 4.60  | 0.72  | <b>-0.78</b> | 146    | 0.44  |
|   | NP   | 65 | 4.69  | 0.67  |              |        |       |
| Self-Efficacy   | FP   | 84 | 5.30  | 0.60  | 2.27         | 117.92 | 0.03* |
|   | NP   | 65 | 5.04  | 0.78  |              |        |       |
| <p>Note *<math>p &lt; .05</math><br/> <b>Overall Mean:</b> total raw score <b>Subscale Mean:</b> Itemized score<br/> <b>Bold t- statistic:</b> Pooled <b>Non-Bold t- statistic:</b> Satterthwaite</p> |      |    |       |       |              |        |       |

## Testing Hypotheses 2

The Welch' t-test and Wilcoxon Mann-Whitney test were used to determine if there was a statistical difference between the moral potency of interdisciplinary team members employed at nonprofit and for profit hospice agencies. The Wilcoxon Mann-Whitney results indicated no significant difference in the moral potency of interdisciplinary team members,  $z=-.42$ ,  $p>.05$ . The subscales of moral potency were also used to evaluate any differences between nonprofit and for profit agencies. The subscales were all found not significant: moral courage,  $z=-.13$ ,  $p>.05$ , moral ownership,  $z=.09$ ,  $p>.05$ , and moral efficacy,  $z=-1.24$ ,  $p>.05$ .

The Welch's t-test results also indicated no significant difference in the overall moral potency of interdisciplinary team members,  $t(153) = .50$ ,  $p>.05$ . The subscales also were found to have no significant differences: moral courage,  $t(153) = -.14$ ,  $p>.05$ , moral ownership,  $t(152) = -.14$ ,  $p>.05$ , and moral efficacy,  $t(153) = 1.31$ ,  $p>.05$ . Since, there is no difference in the results of the t-test and the Wilcoxon Mann-Whitney test, we will accept the Welch's t-test results. Therefore, we fail to reject the null that there is no statistical difference between the moral potency of IDT members employed at nonprofit and for profit hospice agencies.

*H<sub>0</sub>: There is no statistical difference between the moral potency of IDT members employed at nonprofit hospice agencies and for profit hospice agencies.*

*H<sub>2</sub>: There is a statistical difference between the moral potency of IDT members employed at nonprofit hospice agencies and for profit hospice agencies*

**Table 9: t-test Results comparing Moral Potency by Organizational Type**

| Scales             | Type | n  | Mean  | SD   | t            | df  | p    |
|--------------------|------|----|-------|------|--------------|-----|------|
| Overall            | FP   | 88 | 50.98 | 7.51 | <b>0.50</b>  | 153 | 0.61 |
|                    | NP   | 67 | 50.36 | 7.69 |              |     |      |
| Moral<br>Courage   | FP   | 88 | 4.25  | 0.73 | <b>-0.14</b> | 153 | 0.89 |
|                    | NP   | 67 | 4.26  | 0.66 |              |     |      |
| Moral<br>Ownership | FP   | 87 | 4.25  | 0.75 | <b>-0.14</b> | 152 | 0.89 |
|                    | NP   | 67 | 4.26  | 0.70 |              |     |      |
| Moral<br>Efficacy  | FP   | 88 | 4.33  | 0.66 | <b>1.31</b>  | 153 | 0.19 |
|                    | NP   | 67 | 4.18  | 0.74 |              |     |      |

*Note \*p<.05*  
**Overall Mean:** total raw score **Subscale Mean:** Itemized score  
**Bold t- statistic:** Pooled **Non-Bold t-statistic:** Satterthwaite

### Testing Hypotheses 3

The Welch's t- test and Wilcoxon Mann-Whitney test were used to determine if there was a statistical difference between how interdisciplinary team members employed at nonprofit and for profit agencies perceive the authenticity of their leader. The Wilcoxon Mann-Whitney test results indicated a significant difference in the way that interdisciplinary team members perceive the authenticity of their leader,  $z=2.39$ ,  $p<.05$ . The subscales of authentic leadership were also used to evaluate any differences between nonprofit and for profit agencies. Two of the subscales were found to be significant: transparency,  $z=2.71$ ,  $p<.05$  and moral and ethical,  $z=2.23$ ,  $p<.05$ . The other remaining scales were not found to be significant: balanced,  $z=1.45$ ,  $p>.05$ , and self-awareness,  $z=1.57$ ,  $p>.05$ .

The Welch's t-test also indicated a significant difference in the way that interdisciplinary team members perceive the authenticity of their leader,  $t(157) = -2.36$ ,  $p < .05$ . Two of the subscales were also found significant: transparency,  $t(156.96) = -2.92$ ,  $p < .05$ , and moral and ethical,  $t(157) = -2.25$ ,  $p < .05$ . The other remaining scales were not found to be significant: balanced,  $t(157) = -1.59$ ,  $p > .05$ , and self-awareness,  $t(157) = -1.49$ ,  $p > .05$ . Since, there is no difference in the results of the t-test and the Wilcoxon Mann-Whitney test, we will accept the Welch's t-test results. Therefore, we reject the null that there is no statistical difference between the psychological capital of IDT members employed at nonprofit and for profit hospice agencies.

*Ho: There is no statistical difference between how interdisciplinary team members employed at nonprofit and for profit agencies perceive the authenticity of their leader.*

*H3: There is a statistical difference between how interdisciplinary team members employed at nonprofit and for profit agencies perceive the authenticity of their leader.*



**Table 10: *t*-test Results comparing Leadership Authenticity by Organizational Type**

| Scales               | Type | n  | Mean  | SD    | t            | df     | p      |
|----------------------|------|----|-------|-------|--------------|--------|--------|
| Overall              | FP   | 90 | 62.36 | 13.77 | <b>-2.36</b> | 157    | .02*   |
|                      | NP   | 69 | 67.20 | 11.53 |              |        |        |
| Self-Awareness       | FP   | 90 | 3.87  | 1.02  | <b>-1.49</b> | 157    | 0.13   |
|                      | NP   | 69 | 4.10  | 0.91  |              |        |        |
| Transparency         | FP   | 90 | 3.94  | 0.88  | -2.92        | 156.56 | 0.004* |
|                      | NP   | 69 | 4.29  | 0.66  |              |        |        |
| Int. Moral Standards | FP   | 90 | 4.11  | 0.85  | <b>-2.25</b> | 157    | 0.03*  |
|                      | NP   | 69 | 4.39  | 0.69  |              |        |        |
| Balanced Processing  | FP   | 90 | 3.81  | 1.00  | <b>-1.59</b> | 157    | 0.11   |
|                      | NP   | 69 | 4.06  | 0.85  |              |        |        |

Note \* $p < .05$  Overall Mean: total raw score Subscale Mean: Itemized score **Bold t- statistic:** Pooled **Non-Bold t-statistic:** Satterthwaite

#### Testing Hypotheses 4

The Spearman Rank-Order Correlation and the Pearson Product Moment Correlation were used to examine if there was a statistical relationship between authentic leadership and psychological capital in hospice interdisciplinary team members. The Spearman Rank-Order Correlation Coefficient  $r_s(149) = +.21, p < .01$  indicated a significant positive small correlation. The Pearson Product Moment Correlation Coefficient  $r(149) = +.17, p < .05$  indicated a positive small correlation. Therefore, we reject the null hypotheses and accept the alternative that there is a positive statistical relationship between authentic leadership and psychological capital.

*Ho: There is no statistical relationship between authentic leadership and psychological capital in hospice IDT members.*

*H4: There is a positive statistical relationship between authentic leadership and psychological capital in hospice IDT members.*

### **Testing Hypotheses 5**

The Spearman Rank-Order Correlation was used to examine if there was a statistical relationship between authentic leadership and moral potency in hospice interdisciplinary team members. The Spearman Rank-Order Correlation Coefficient  $r_s(155) = +.32, p < .0001$  indicates a significant positive medium correlation. The Pearson Product Moment Correlation Coefficient  $r(155) = +.24, p < .01$  indicated a positive small correlation. Therefore, we reject the null hypotheses and accept the alternative that there is a positive statistical relationship between authentic leadership and moral potency.

*Ho: There is no statistical relationship between authentic leadership and moral potency in hospice IDT members.*

*H5: There is a positive statistical relationship between authentic leadership and moral potency in hospice IDT members.*

A correlation matrix that includes the overall and subscale correlations was analyzed to examine the relationships between the overall scale and subscales of authentic leadership with the subscales of psychological capital and moral potency. The strongest correlation between the overall authentic leadership and the subscales of psychological capital was optimism ( $r(159) = +.33, p < .001$ ) ( $r_s(159) = +.24, p < .01$ ). The strongest correlation between the overall authentic leadership and subscales of moral potency was moral ownership ( $r(159) = +.29, p < .001$ ) ( $r_s(159) = +.33, p < .001$ ). The subscales of authentic leadership were examined as well with the subscales of psychological capital and moral potency. Results indicated that the subscale of self-

awareness was most strongly associated with hope ( $r(159) = +.28, p < .001$ ) ( $r_s(159) = +.31, p < .001$ ) and optimism ( $r(159) = +.28, p < .001$ ) ( $r_s(159) = +.33, p < .001$ ) subscales of psychological capital and moral ownership ( $r(159) = +.27, p < .001$ ) ( $r_s(159) = +.32, p < .001$ ) subscale of moral potency. The subscale relational transparency had the strongest correlation with optimism ( $r(159) = +.30, p < .001$ ) ( $r_s(159) = +.28, p < .001$ ) a subscale of psychological capital and moral ownership ( $r(159) = +.23, p < .01$ ) ( $r_s(159) = +.26, p < .01$ ) a subscale of moral potency. The internalized moral perspective scale strongly associated with optimism ( $r(159) = +.38, p < .001$ ) ( $r_s(159) = +.38, p < .001$ ), a subscale of psychological capital and moral ownership ( $r(159) = +.30, p < .001$ ) ( $r_s(159) = +.33, p < .001$ ), a subscale of moral potency. Lastly, the subscale of balanced processing was had the strongest correlation with hope ( $r(159) = +.27, p < .001$ ) ( $r_s(159) = +.28, p < .001$ ) and optimism ( $r(159) = +.26, p < .001$ ) ( $r_s(159) = +.28, p < .001$ ), subscales of psychological capital and moral courage ( $r(159) = +.28, p < .001$ ) ( $r_s(159) = +.34, p < .001$ ) and moral ownership ( $r(159) = +.27, p < .001$ ) ( $r_s(159) = +.34, p < .001$ ), subscales of moral potency. For further details regarding the total sample correlations, see tables 11 and 12.

**Table 11: Total Sample Pearson Product Moment Correlation Matrix**

|                          | N   | Mean  | SD    | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9     | 10     | 11     | 12     | 13     | 14 |
|--------------------------|-----|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|----|
| 1. PCQ Total             | 149 | 116.5 | 13.62 |        |        |        |        |        |        |        |        |       |        |        |        |        |    |
| 2. Hope                  | 149 | 4.99  | .63   | .72*** |        |        |        |        |        |        |        |       |        |        |        |        |    |
| 3. Resiliency            | 148 | 4.86  | .64   | .76*** | .53*** |        |        |        |        |        |        |       |        |        |        |        |    |
| 4. Optimisim             | 148 | 4.63  | .69   | .75*** | .52*** | .45*** |        |        |        |        |        |       |        |        |        |        |    |
| 5. Self-Efficacy         | 149 | 5.18  | .69   | .68*** | .66*** | .53*** | .35*** |        |        |        |        |       |        |        |        |        |    |
| 6. MPQ Total             | 155 | 50.71 | 7.56  | .52*** | .43*** | .41*** | .33*** | .52*** |        |        |        |       |        |        |        |        |    |
| 7. Moral Courage         | 155 | 4.25  | .70   | .41*** | .36*** | .32*** | .29*** | .42*** | .85*** |        |        |       |        |        |        |        |    |
| 8. Moral Ownership       | 154 | 4.25  | .72   | .43*** | .34*** | .30*** | .30*** | .36*** | .86*** | .77*** |        |       |        |        |        |        |    |
| 9. Moral Efficacy        | 155 | 4.26  | .69   | .53*** | .52*** | .44*** | .32*** | .83*** | .84*** | .63*** | .59*** |       |        |        |        |        |    |
| 10. ALQ Total            | 159 | 64.45 | 13.02 | .17*   | .27**  | .07    | .33*** | .08    | .24**  | .26**  | .29*** | .18*  |        |        |        |        |    |
| 11. Self-Awareness       | 159 | 3.97  | .97   | .14    | .28*** | .01    | .28*** | .10    | .24**  | .24**  | .27*** | .19*  | .94*** |        |        |        |    |
| 12. Rel. Transparency    | 159 | 4.09  | .81   | .11    | .20*   | .03    | .30*** | .00    | .17*   | .20**  | .23**  | .00   | .88*** | .82*** |        |        |    |
| 13. Int. Moral Standards | 159 | 4.23  | .79   | .22**  | .29*** | .14    | .38*** | .11    | .27*** | .28*** | .30*** | .20*  | .89*** | .81*** | .86*** |        |    |
| 14. Balanced Processing  | 159 | 3.91  | .94   | .14    | .27**  | .00    | .26*** | .14    | .26*** | .28*** | .27**  | .21** | .85*** | .90*** | .81*** | .78*** |    |

**Table 12: Total Sample Spearman Rank Correlation Matrix**

|                          | N   | Mdn   | SD    | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14 |
|--------------------------|-----|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----|
| 1. PCQ Total             | 149 | 117   | 13.62 |        |        |        |        |        |        |        |        |        |        |        |        |        |    |
| 2. Hope                  | 149 | 5.00  | .63   | .75*** |        |        |        |        |        |        |        |        |        |        |        |        |    |
| 3. Resiliency            | 148 | 4.83  | .64   | .75*** | .53*** |        |        |        |        |        |        |        |        |        |        |        |    |
| 4. Optimisim             | 148 | 4.66  | .69   | .75*** | .50*** | .49*** |        |        |        |        |        |        |        |        |        |        |    |
| 5. Self-Efficacy         | 149 | 5.33  | .69   | .68*** | .61*** | .51*** | .35*** |        |        |        |        |        |        |        |        |        |    |
| 6. MPQ Total             | 155 | 51.00 | 7.56  | .56*** | .43*** | .44*** | .36*** | .54*** |        |        |        |        |        |        |        |        |    |
| 7. Moral Courage         | 155 | 4.25  | .70   | .45*** | .38*** | .35*** | .31*** | .50*** | .88*** |        |        |        |        |        |        |        |    |
| 8. Moral Ownership       | 154 | 4.33  | .72   | .49*** | .39*** | .34*** | .33*** | .41*** | .87*** | .78*** |        |        |        |        |        |        |    |
| 9. Moral Efficacy        | 155 | 4.40  | .69   | .55*** | .50*** | .49*** | .34*** | .64*** | .84*** | .70*** | .66*** |        |        |        |        |        |    |
| 10. ALQ Total            | 159 | 67.00 | 13.02 | .22**  | .30*** | .15    | .34*** | .12    | .33*** | .32*** | .33*** | .26**  |        |        |        |        |    |
| 11. Self-Awareness       | 159 | 4.25  | .97   | .20*   | .31*** | .09    | .33*** | .14    | .32*** | .30*** | .32*** | .26*** | .91*** |        |        |        |    |
| 12. Rel. Transparency    | 159 | 4.20  | .81   | .14    | .22**  | .12    | .28*** | .02    | .24**  | .24**  | .26*** | .13    | .89*** | .82*** |        |        |    |
| 13. Int. Moral Standards | 159 | 4.50  | .79   | .26**  | .32*** | .19*   | .38*** | .13    | .33*** | .33*** | .32*** | .24**  | .90*** | .81*** | .82*** |        |    |
| 14. Balanced Processing  | 159 | 4.00  | .94   | .18*   | .28*** | .06    | .28*** | .15    | .34*** | .34*** | .32*** | .30*** | .86*** | .86*** | .75*** | .76*** |    |

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).  
 \*\*\*. Correlation is significant at the 0.001 level (2-tailed).

Results from the Welch’s t-test in Hypothesis 3 indicate that there *is a statistical difference between how interdisciplinary team members employed at nonprofit and for profit agencies perceive the authenticity of their leader*. In response to these results the

researcher decided to split the data by organizational type (for profit and nonprofit) in order to determine if there was a significant difference between the relationship between authentic leadership and psychological capital as well as authentic leadership and moral potency.

The Pearson Product Moment Correlation Coefficient  $r(84) = +.08, p > .05$  did not indicate a significant relationship between authentic leadership and psychological capital for the organizational type of for profit. The Pearson Product Moment Correlation Coefficient for the organizational type of nonprofit was significant  $r(65) = +.30, p < .05$ . However, there was no significant difference between the correlation coefficients when examining organizational type  $z = -.91, p > .05$ .

The Pearson Product Moment Correlation Coefficient  $r(88) = +.20, p > .05$  did not indicate a significant relationship between authentic leadership and moral potency for the organizational type of for profit. The Pearson Product Moment Correlation Coefficient for the organizational type of nonprofit was significant  $r^s(67) = +.34, p < .05$ . However, there was no significant difference between the correlation coefficient when examining organizational type  $z = -1.35, p > .05$ .

Multiple regression analysis was also used to test if the subscales of Authentic Leadership: (self-awareness, transparency, internalized moral perspective, and balanced process) predicted the overall psychological capital of interdisciplinary team members. The results indicated that only one predictor explained 7% of the variance ( $R^2 = .07, F(4,144) = 2.65, p < .05$ ). It was found that the internalized moral perspective subscale significantly predicted the overall psychological capital of interdisciplinary team members ( $\beta = .44, p < .01$ ).

Multiple Regression was also used to test the subscales of authentic leadership with the overall moral potency of interdisciplinary team members. The results indicated that two predictors explained 10% of the variance ( $R^2=.10$ ,  $F(4,150) = 4.30$ ,  $p < .01$ ). It was found that the internalized moral perspective subscale significantly predicted the overall moral potency of interdisciplinary team members ( $\beta = .34$ ,  $p < .05$ ), as did transparency ( $\beta = -.033$ ,  $p < .05$ ).

**Table 13 Multiple Regression Summary; Psychological Capital**

| Independent Variables  | B     | Std. Error | $\beta$ | p-value |
|------------------------|-------|------------|---------|---------|
| Self-Awareness         | -.77  | 2.95       | -.05    | .80     |
| Rel. Transparency      | -4.49 | 2.97       | -.27    | .13     |
| Int. Moral Perspective | 7.63  | 2.87       | .45     | .008    |
| Balanced Processing    | .87   | 2.68       | .06     | .75     |

$R^2 = .07$ ,  $F(4,144) = 2.65$ ,  $p < .05$

**Table 14 Multiple Regression Summary; Moral Potency**

| Independent Variables  | B     | Std. Error | $\beta$ | p-value |
|------------------------|-------|------------|---------|---------|
| Self-Awareness         | -.01  | 1.57       | -.001   | .99     |
| Rel. Transparency      | -3.16 | 4.59       | -.33    | .049    |
| Int. Moral Perspective | 3.29  | 1.54       | .34     | .034    |
| Balanced Processing    | 2.11  | 1.42       | .26     | .14     |

$R^2 = .10$ ,  $F(4,150) = 4.30$ ,  $p < .01$

## Exploratory Analysis

The Kruskal-Wallis test was used to explore the differences between the demographic variables and authentic leadership, moral potency, and psychological capital. The number of patients served per day was the first demographic variable examined and were grouped by x-small (0-19), small (20-49), medium (50-124), large (125-199), x-large (200 or more) and unknown. There were no statistical differences in these groups when examining the authentic leadership variable  $X^2=2.8$ ,  $p>.05$ , moral potency variable  $X^2=.69$ ,  $p>.05$ , or the psychological capital variable  $X^2=1.79$ ,  $p>.05$ . The next demographic variable was the profession; which included: Physicians, LPN, RN, Nurse Aide, Social Worker, Chaplain/Spiritual Counselor, Bereavement Coordinator, Volunteer Coordinator, Volunteer, Dietician, Pharmacist, Occupational Therapist, Physical Therapist, and Other. There were no statistical differences in these groups when examining psychological capital  $X^2=6.92$ ,  $p>.05$  or moral potency  $X^2=10.26$ ,  $p>.05$ . The years of professional experience which also had no statistical differences when evaluating psychological capital  $X^2=1.93$ ,  $p>.05$  and moral potency  $X^2=5.44$ ,  $p>.05$ . The number of years with the agency was also analyzed and found no statistical differences in psychological capital  $X^2=5.73$ ,  $p>.05$  or moral potency  $X^2=3.11$ ,  $p>.05$ . There were no statistical differences among race when evaluating psychological capital  $X=6.17$ ,  $p>.05$  and moral potency  $X^2=5.94$ ,  $p>.05$ . Next, was gender which also had no statistical differences between psychological capital  $X^2=-.95$ ,  $p>.05$  and moral potency  $X^2=-.03$ ,  $p>.05$ . The age of the agency was also evaluated and found no statistical differences between psychological capital and moral potency.

Lastly, there were no statistical differences between psychological capital and moral potency when evaluating the age of the agency.

The subscales of psychological capital and moral potency were used to explore differences between professions. However, there were no statistical differences among the professions when evaluating the subscales of psychological capital: self-efficacy  $X^2=12.58$ ,  $p>.05$ , resiliency  $X^2=5.95$ ,  $p>.05$ , optimism  $X^2=5.45$ ,  $p>.05$ , and hope  $X^2=7.2$ ,  $p>.05$  or moral potency: moral courage  $X^2=9.80$ ,  $p>.05$ , moral ownership  $X^2=12.20$ ,  $p>.05$ , and moral efficacy  $X^2=10.73$ ,  $p>.05$ . The below table shows the means of each profession according to the overall scales and subscales. Professions not included were physicians, volunteers, dieticians, pharmacist, and physical therapist, due to lack of participation in the survey.

**Table 15: Profession Based Mean for Psychological Capital**

| Overall                      | N  | Mean   | SD    |
|------------------------------|----|--------|-------|
| Bereavement Coordinator      | 3  | 126.62 | 12.10 |
| LPN                          | 8  | 120.62 | 10.68 |
| Social Worker                | 20 | 119.55 | 10.86 |
| RN                           | 61 | 117.48 | 16.17 |
| Volunteer Coordinator        | 4  | 115.50 | 10.14 |
| Spiritual Counselor/Chaplain | 12 | 155.44 | 9.51  |
| Other                        | 50 | 115.02 | 11.96 |
| Nurse Aide                   | 17 | 112.50 | 15.87 |
| Occupational Therapist       | 1  | 111.00 | -     |



**Table: 15 Continued.**

| <b>Self-Efficacy</b>         | <b>N</b> | <b>Mean</b> | <b>SD</b> |
|------------------------------|----------|-------------|-----------|
| Social Worker                | 20       | 5.42        | .45       |
| LPN                          | 8        | 5.41        | .54       |
| Bereavement Coordinator      | 3        | 5.38        | .34       |
| RN                           | 61       | 5.30        | .68       |
| Spiritual Counselor/Chaplain | 12       | 5.20        | .53       |
| Other                        | 50       | 5.09        | .73       |
| Volunteer Coordinator        | 4        | 5.04        | .73       |
| Occupational Therapist       | 1        | 5.0         | -         |
| Nurse Aide                   | 17       | 4.65        | .82       |

| <b>Hope</b>                  | <b>N</b> | <b>Mean</b> | <b>SD</b> |
|------------------------------|----------|-------------|-----------|
| Bereavement Coordinator      | 3        | 5.11        | .41       |
| Social Worker                | 20       | 5.11        | .59       |
| Spiritual Counselor/Chaplain | 12       | 5.10        | .45       |
| RN                           | 61       | 5.07        | .68       |
| Volunteer Coordinator        | 4        | 4.95        | .47       |
| LPN                          | 8        | 5.0         | .63       |
| Other                        | 50       | 4.90        | .56       |
| Nurse Aide                   | 17       | 4.78        | .83       |
| Occupational Therapist       | 1        | 4.16        | .56       |

**Table: 15 Continued.**

| <b>Resiliency</b>            | <b>N</b> | <b>Mean</b> | <b>SD</b> |
|------------------------------|----------|-------------|-----------|
| Bereavement Coordinator      | 3        | 5.33        | .60       |
| Social Worker                | 20       | 5.03        | .45       |
| LPN                          | 8        | 4.97        | .31       |
| RN                           | 61       | 4.92        | .63       |
| Spiritual Counselor/Chaplain | 12       | 4.87        | .42       |
| Occupational Therapist       | 1        | 4.80        | -         |
| Nurse Aide                   | 17       | 4.75        | .82       |
| Other                        | 50       | 4.74        | .74       |
| Volunteer Coordinator        | 4        | 4.70        | .41       |
| <b>Optimism</b>              | <b>N</b> | <b>Mean</b> | <b>SD</b> |
| Bereavement Coordinator      | 3        | 5.16        | .72       |
| LPN                          | 8        | 4.81        | .94       |
| RN                           | 61       | 4.71        | .74       |
| Volunteer Coordinator        | 4        | 4.68        | .92       |
| Social Worker                | 20       | 4.66        | .67       |
| Nurse Aide                   | 17       | 4.61        | .63       |
| Spiritual Counselor/Chaplain | 12       | 4.53        | .71       |
| Other                        | 50       | 4.52        | .63       |
| Occupational Therapist       | 1        | 4.52        | -         |

**Table 16: Profession Based Means for Moral Potency**

| <b>Overall</b>               | <b>N</b> | <b>Mean</b> | <b>SD</b> |
|------------------------------|----------|-------------|-----------|
| RN                           | 61       | 52.61       | 6.65      |
| Social Worker                | 20       | 51.50       | 6.50      |
| Occupational Therapist       | 1        | 51.00       | -         |
| LPN                          | 8        | 50.00       | 8.89      |
| Other                        | 50       | 49.81       | 8.61      |
| Bereavement Coordinator      | 4        | 48.25       | 6.65      |
| Volunteer Coordinator        | 4        | 48.25       | 6.65      |
| Spiritual Counselor/Chaplain | 12       | 48.22       | 7.10      |
| Nurse Aide                   | 17       | 45.66       | 9.81      |

| <b>Moral Courage</b>         | <b>N</b> | <b>Mean</b> | <b>SD</b> |
|------------------------------|----------|-------------|-----------|
| RN                           | 61       | 4.37        | .75       |
| Social Worker                | 20       | 4.35        | .52       |
| Occupational Therapist       | 1        | 4.25        | -         |
| Other                        | 50       | 4.21        | .71       |
| Volunteer Coordinator        | 4        | 4.12        | .59       |
| Spiritual Counselor/Chaplain | 12       | 4.10        | .65       |
| LPN                          | 8        | 4.06        | .78       |
| Nurse Aide                   | 17       | 3.91        | .78       |
| Bereavement Coordinator      | 3        | 3.91        | 1.66      |
| <b>Moral Ownership</b>       | <b>N</b> | <b>Mean</b> | <b>SD</b> |
| Social Worker                | 20       | 4.43        | .52       |
| RN                           | 61       | 4.40        | .72       |
| LPN                          | 8        | 4.37        | .62       |
| Other                        | 50       | 4.19        | .71       |
| Volunteer Coordinator        | 4        | 4.08        | .68       |

**Table 16: Continued.**

|                              |          |             |           |
|------------------------------|----------|-------------|-----------|
| Occupational Therapist       | 1        | 4.0         | -         |
| Spiritual Counselor/Chaplain | 12       | 3.96        | .48       |
| Nurse Aide                   | 17       | 3.86        | 1.02      |
| Bereavement Coordinator      | 3        | 3.66        | 1.52      |
| <b>Moral Efficacy</b>        | <b>N</b> | <b>Mean</b> | <b>SD</b> |
| RN                           | 61       | 4.44        | .59       |
| Social Worker                | 20       | 4.39        | .56       |
| Bereavement Coordinator      | 3        | 4.33        | .98       |
| LPN                          | 8        | 4.25        | .81       |
| Other                        | 50       | 4.11        | .82       |
| Occupational Therapist       | 1        | 4.11        | -         |
| Spiritual Counselor/Chaplain | 12       | 4.06        | .70       |
| Volunteer Coordinator        | 4        | 3.90        | .52       |
| Nurse Aide                   | 17       | 3.78        | .99       |

## Chapter 5: Discussion

### Purpose of the study

The overall purpose of this study was to gain more insight regarding the interdisciplinary staff members who provide care to those in hospice care. This study investigated the psychological and moral capacities that exist in hospice interdisciplinary team members. Additionally, differences in the psychological capital, moral potency, perception of authentic leadership, for profit and nonprofit were tested.

### Conclusions Related to Hypotheses 1

The Welch's t test analysis was used to test that *H1: There is a statistical difference between the psychological capital of IDT members employed at nonprofit hospice agencies and for profit hospice agencies*. This was not supported. Although there was not a significant difference in the overall psychological capital between the groups, there was a significant difference of self-efficacy. The mean score of self-efficacy of IDT members employed at for profit hospices was higher than those employed at nonprofit agencies. A person with high self-efficacy can be described as 1) those who can set high goals and self-select difficult tasks, 2) those who can thrive in challenges, 3) are highly self-motivated, 4) put forth needed effort to accomplish goals, and 5) and have great perseverance. (Luthans, Youssef, & Avolio, 2007). There is no evidence in this study to support whether or not those who have high self-efficacy are drawn to working at for profit agencies or that other factors such as the organizational environment or leadership influence the level of self-efficacy that IDT members possess.

The overall scores of psychological capital were not found to be significantly different between those employed at for profit agencies and nonprofit agencies. Both organizational types seem to have an overall high average of psychological capital. Psychological capital has been positively associated with desirable attitudes to include job satisfaction, organizational commitment, and psychological well-being and desirable behaviors such as employee performance (Avery, Reichard, Luthans, Mhatre, 2011). It also has been negatively associated with undesirable attitudes of employee cynicism, turnover intentions, and employee stress and anxiety, as well as undesirable behaviors such as deviance (Avery, Reichard, Luthans, Mhatre, 2011)

## **Conclusions related to Hypotheses 2**

The Welch's t test analysis was used to determine that *H2: There is a statistical difference between the moral potency of IDT members employed at nonprofit hospice agencies and for profit hospice agencies*. This was not supported. The overall scores of moral potency for both organizational types were high. The integration of the three components of moral ownership, moral efficacy, and moral courage together support the capacity for an individual to make ethical decisions. Hannah, Avolio, & May (2011) proposed in the conclusion of their study that unethical behavior can be decreased and virtuous behavior increased if moral capacity is developed. Hannah and Avolio propose that leaders who possess high levels of moral potency, to include taking ownership, having the courage, and confidence have the capacity to influence their followers to take action based on their own moral values (Hannah & Avolio, 2010). The results of this study show no differences between moral potency of interdisciplinary team

members of for profit and nonprofit agencies, further research is needed to examine the moral potency of the leadership.

### **Conclusions related to Hypotheses 3**

The Welch's t test analysis was used to determine if *H3: There is a statistical difference between how interdisciplinary team members employed at nonprofit and for profit agencies perceive the authenticity of their leader*. This was supported. The overall mean of the perception of authenticity was higher in nonprofit agencies than in for profit agencies. Authentic leadership is defined as “ a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development” (Walumbwa et al.,2008, p. 94). The perception of authenticity in the leadership in both for profit and nonprofit hospice agencies differed, with perception of nonprofit leadership being more authentic than the perception of for profit leadership.

The transparency and moral /ethical subscales were also significantly different between the two groups. The group mean scores of both subscales were higher for nonprofit agencies. Transparency is when a person presents one's true self to others and their internalized moral perspective is guided by internal moral standards and taking action that is consistent with those internalized values. (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, et al., 2005) The perception of the authenticity of for profit leaders is that they are less transparent and have a lower internalized moral perspective. Perhaps this is due to the different focuses that for profit and nonprofit leaders have.

Thach and Thompson stated that “Public (and non-profit) organizations tend to be focused on public interest, while the goals of private organizations are driven by profits and self-interest” (Thach & Thompson, 2007, p. 358). If for profit leaders are driven by profits and self-interest than it may be that there is less of a need to be highly transparent or have a high internalized moral perspective. Further research would be needed to support this claim.

The findings of this study support that the perception of leadership in nonprofit agencies is more authentic, more transparent, and have a higher internalized moral perspective than for profit agencies. Further research would be needed to explore possible explanations of why nonprofits perceive their leaders as more authentic than for profit leaders.

### **Conclusions related to Hypotheses 4 and 5**

The Spearman Rank-Order Correlation was used to examine if *H4: There is a statistical relationship between authentic leadership and psychological capital in hospice interdisciplinary team members*. This hypotheses was supported by a significant small positive correlation of .23. The Spearman Rank-Order Correlation was also used to examine if *H5: There is a statistical relationship between authentic leadership and moral potency in hospice interdisciplinary team members*. This hypotheses was also supported by significant small positive correlation of .32. Authentic leadership literature suggests that the leadership multiplier effect which is when a leaders are “perceived as authentic, their leadership interventions are more favorably received and the resultant impact multiplied” (Chan, 2005, p. 16). Therefore,



even though the above correlations demonstrate a small positive relationship, it reflects what the literature has shown.

### **Conclusions of Exploratory Analysis**

Even though there were no statistical differences among any of the demographic variables when evaluating the psychological and moral capital of the interdisciplinary team member, the profession mean scores did provide some insight on the capacities they possess. In Tables 15 and 16, represent the overall and subscale mean scores of psychological capital and moral potency organized by the profession with the highest to the lowest mean scores. There were a few patterns that were observed after reviewing the tables.

One pattern observed was that the nurse aides had consistently lower mean scores on both of the overall and all of the subscale scores. This could be due to lower education levels, more exposure to direct patient care, or less access to employee support services. Further research would be needed to determine why perhaps that they appear to have lower scores of moral potency and psychological capital. This could identify focus areas for training or resources needed to improve their capacities. This is particularly important because the nurse aids spend the greatest amount of time with hospice patients than any other profession in hospice care.

The second pattern observed was that Registered Nurses had consistently higher mean scores of both the overall and subscales of moral potency. This could be due to the strong ethical codes taught in their education or the nature of the profession. Further

research would be needed to determine why they have higher scores and if this is true in other healthcare industries.

Another pattern observed was that Bereavement Coordinators had consistently higher mean scores of both the overall and subscales of psychological capital. The role of the bereavement coordinator is to provide support and encouragement to survivors after the death of their loved one. Therefore, this can be seen as very positive that they possess strong capacities of hope, resiliency, optimism, and self-efficacy. This would be essential in order to provide quality support to survivors. However, further research would be needed since this is only representative of 3 participants.

Lastly, another pattern observed was that Spiritual Counselors/Chaplains had consistently lower mean scores for the overall and subscales of moral potency. This could be due to the level of exposure to the range of morals that patients deal with as they face mortality. Perhaps, they are continually evaluating their own morals due to this exposure. Further research would be needed to explore.

The above patterns are not generalizable, but they do provide some insight on possible future studies that could be used to explore the depth of each of these capacities for each of the professions. Perhaps qualitative analysis would be more appropriate. Training programs could then be developed to increase the capacities in all professions.

### **Limitations and Future Studies**

There were several limitations of this study. One limitation was that it was a single self-reporting survey. The participants were not only asked to evaluate

themselves regarding their own psychological capital and moral potency but also evaluate their leadership. This limitation could influence participants to respond as though they think they should respond regarding their own psychological capital and moral potency. When evaluating their leadership, the responses could be exaggerated by their emotions or strong opinions of their leadership constructed from both positive and negative experiences skewing an unbiased account of their leader's qualities. Since this was a self-reported survey it does limit the generalizability to the population. This study utilized a convenience sample of hospices agencies only in Oklahoma and Texas and should only generalize to this region of the United States. Therefore, further studies in other regions of the United States or perhaps a national study is needed to provide more generalizable results to account for regional perceptions, religious attenuations, cultural backgrounds, or numerous other aspects.

Few studies have examined the leadership in hospice care, while no studies have evaluated the theory of authentic leaderships. Furthermore, no studies have evaluated the psychological capital or moral potency of interdisciplinary team members. Since these were first time findings, it should be considered an exploratory study requiring future studies to confirm and explore in greater detail.

Since this study focused on the interdisciplinary staff members in hospice care, and future studies are needed to better evaluate the leadership aspect of hospice care not just the perception of leadership. Further research is needed to determine why for profit IDT members score higher self-efficacy than nonprofit IDT members. Possible reasons could be explored such as: "Are for profit leaders more likely to hire employees with

high self-efficacy?” “And is this the reason for the profit status shift in the hospice industry?”

The perception of the authenticity of their leadership also differed among for profit and nonprofit interdisciplinary team members. The mean score for the perception of authentic leadership was higher for nonprofit interdisciplinary team members. Further research is needed to evaluate further if nonprofit leaders are more authentic than for profit leaders? If so, then why is this important and how does this impact the hospice industry? Do authentic leaders feel morally disinclined to seek profits for hospice patients?

Lastly, the exploratory analysis provided some insight to the different psychological capacities and moral potency of the different professions in hospice care. A more representative sample is needed to further explore these capacities not only to provide more support, but to also explore why some professions differ in these capacities. Training programs could be developed to improve these capacities.

This study provides more insight on the capacities of interdisciplinary team members, identifies differences between organizational types, and provides a better understanding of the relationship that the perception of authenticity of leaders have on followership. This study presents first time findings; requiring additional studies to further explore (or refine) these areas. A better understanding of the capacities, differences, and the leadership/followership interaction in hospice care will help to identify areas that are in need of improvement.

## **Implications**

The findings of this study indicate that hospice interdisciplinary team members in this sample have high psychological capital and moral potency, but there is always a need for improvement. Literature supports that both psychological capital and moral potency can be developed (Luthans, et. al, 2006; Hannah & Avolio, 2010). Therefore, hospice leadership could conduct ongoing assessments of the capacities of their interdisciplinary teams in order to develop training programs that continue to improve existing capacities as well as any deficiencies.

One recent study also found that it is more impactful if authentic leaders spend more effort on developing followers who have low psychological capital, doing so could lead to improvements in performance. (Wang, Sui, Luthans, Wang, & Wu, 2014) Also, followers with low psychological capital depend more on authentic leaders in order to perform well. (Wang, Sui, Luthans, Wang, & Wu, 2014) Therefore, authentic leaders could again aim to develop those within their organization that have low psychological capital and focus less on those with high psychological capital.

The results of this study also indicate a difference in the perception of authenticity of leadership differences between the organizational types of for profit and nonprofit hospice agencies. This study found that perception of authenticity of leadership is higher in nonprofit agencies than for profit agencies, specifically the internalized moral standards and transparency. The leadership in for profit agencies could benefit from authentic leadership in order to create more trust and effectiveness in their organizations. One study found that the level of transparency that a leader possesses, along with the level of psychological capital impacts the level of trust they

have with followers. It also impacts the perceived effectiveness of the leader. (Norman, Avolio, Luthans, 2010) Authentic leaders who have a high internalized moral perspective also have a high capacity for self-regulation according to their own morals and standards against others and; are able to make ethical based decisions according to these values (Avolio, 2005). Hannah, Avolio, Luthans, and Harms (2008) argue that the interactions between leaders and their followers, can transfer to followers and that when a leader utilized confidence when encountering a moral issue it reinforces the followers to do the same when they face moral issues (Avolio & May, 2011). Both for profit and nonprofit hospice agencies should strive to develop more authentic leadership in their organizations, specifically being more transparent and to have a higher internalized moral perspective.

By encouraging authentic leadership in agencies, this would foster higher levels of psychological capital and moral potency in their followers. The findings of this study do not suggest how this will impact the quality of care provided to patients. However, it can easily be argued that improved leadership and followership could impact the quality of care. Further research is needed to examine how decisions made by leadership and carried out by interdisciplinary team members directly impacts the quality of care. Even though this research did not conclusively implicate how quality of care is impacted by leadership and followership, it did highlight areas of further research that could lead to improvement of existing capacities, and improved quality of care.

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## Appendix A Initial IRB Approval Letter



**Institutional Review Board for the Protection of Human  
Subjects Approval of Initial Submission – Exempt from IRB  
Review – AP01**

**Date:** February 17, 2014

**IRB#:** 3933

**Principal  
Investigator:** Kendra D Burnside, Org Leadership

**Approval Date:** 02/13/2014

**Exempt Category:** 2

**Study Title:** Psychological Capital and Moral Potency of Interdisciplinary Team Members in Hospice Care

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or [irb@ou.edu](mailto:irb@ou.edu).

Cordially,

A handwritten signature in black ink that reads 'Aimee Franklin'.

Aimee Franklin, Ph.D.  
Chair, Institutional Review Board

## Appendix B IRB Approval of Study Modification 1



### Approval of Study Modification – Expedited Review – AP0

**Date:** September 05, 2014 **IRB#:** 3933  
**Principal** Reference No: 625211  
**Investigator:** Kendra D Burnside, Org Leadership  
**Study Title:** Psychological Capital and Moral Potency of Interdisciplinary Team Members in Hospice Care  
**Approval Date:** 9/5/2014

#### Modification Description:

Revising study protocol to note that the researcher will now telephone each agency to gather email addresses for potential participants.

The review and approval of this submission is based on the determination that the study, as amended, will continue to be conducted in a manner consistent with the requirements of 45 CFR 46.

To view the approved documents for this submission, open this study from the My Studies option, go to Submission History, go to Completed Submissions tab and then click the Details icon.

If the consent form(s) were revised as a part of this modification, discontinue use of all previous versions of the consent form.

If you have questions about this notification or using iRIS, contact the HRPP office at (405) 325-8110 or [irb@ou.edu](mailto:irb@ou.edu). The HRPP Administrator assigned for this submission: Sierra Smith.

Cordially,

A handwritten signature in black ink that reads 'Aimee Franklin'.

Aimee Franklin, Ph.D.  
Chair, Institutional Review Board

## Appendix C IRB Approval of Study Modification 2



### Approval of Study Modification – Expedited Review – AP0

**Date:** November 20, 2014

**IRB#:** 3933

**Principal Investigator:** Kendra D Burnside, Org Leadership

**Reference No:** 633769

**Study Title:** Psychological Capital and Moral Potency of Interdisciplinary Team Members in Hospice Care

**Approval Date:** 11/14/2014

**Modification Description:** Deliver paper copies of their survey directly to selected agencies.

The review and approval of this submission is based on the determination that the study, as amended, will continue to be conducted in a manner consistent with the requirements of 45 CFR 46.

To view the approved documents for this submission, open this study from the My Studies option, go to Submission History, go to Completed Submissions tab and then click the Details icon.

If the consent form(s) were revised as a part of this modification, discontinue use of all previous versions of the consent form.

If you have questions about this notification or using iRIS, contact the HRPP office at (405) 325-8110 or [irb@ou.edu](mailto:irb@ou.edu). The HRPP Administrator assigned for this submission: Wesley A Womack.

Cordially,

A handwritten signature in black ink that reads 'Aimee Franklin'.

Aimee Franklin, Ph.D.  
Chair, Institutional Review Board

## Appendix D Sample of the Authentic Leadership Questionnaire (ALQ)

|                  | Not at all   | Once in a while | Sometimes | Fairly often | Frequently, if not always |          |          |          |
|------------------|--|-----------------|-----------|--------------|---------------------------|----------|----------|----------|
|                  | 0  | 1               | 2         | 3            | 4                         |          |          |          |
| <b>My Leader</b> |  |                 |           |              |                           |          |          |          |
| <b>1.</b>        | <b>says exactly what he or she means</b>                     |                 |           | <b>0</b>     | <b>1</b>                  | <b>2</b> | <b>3</b> | <b>4</b> |
| <b>6.</b>        | <b>demonstrates beliefs that are consistent with actions</b> |                 |           | <b>0</b>     | <b>1</b>                  | <b>2</b> | <b>3</b> | <b>4</b> |
| <b>13.</b>       | <b>seeks feedback to improve interactions with others</b>    |                 |           | <b>0</b>     | <b>1</b>                  | <b>2</b> | <b>3</b> | <b>4</b> |

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**Appendix E Sample of the Psychological Capital (PsyCap)  
Questionnaire (PCQ)**

|  | <b>Strongly<br/>Disagree</b> | <b>Somewhat<br/>Disagree</b> | <b>Disagree</b> | <b>Agree</b> | <b>Somewhat<br/>Agree</b> | <b>Strongly<br/>Agree</b> |          |          |          |          |
|--|------------------------------|------------------------------|-----------------|--------------|---------------------------|---------------------------|----------|----------|----------|----------|
|  | <b>1</b>                     | <b>2</b>                     | <b>3</b>        | <b>4</b>     | <b>5</b>                  | <b>6</b>                  |          |          |          |          |
| <b>1.</b> This person feels confident analyzing a long-term problem to find a solution.                              |                              |                              |                 |              | <b>1</b>                  | <b>2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> |
| <b>7.</b> If this person should find him/herself in a jam at work, he/she could think of many ways to get out of it. |                              |                              |                 |              | <b>1</b>                  | <b>2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> |
| <b>13.</b> When this person has a setback at work, he/she has trouble recovering from it, moving on.                 |                              |                              |                 |              | <b>1</b>                  | <b>2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> |

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## Appendix F Sample of the Moral Potency Questionnaire (MPQ)

|                              |                 |                                       |              |                           |
|------------------------------|-----------------|---------------------------------------|--------------|---------------------------|
| <b>Strongly<br/>Disagree</b> | <b>Disagree</b> | <b>Neither Agree<br/>nor Disagree</b> | <b>Agree</b> | <b>Strongly<br/>Agree</b> |
| <b>1</b>                     | <b>2</b>        | <b>3</b>                              | <b>4</b>     | <b>5</b>                  |

*I will...*

|  |          |          |          |          |          |
|--|----------|----------|----------|----------|----------|
| <b>go against the group's decision whenever it violates my ethical</b>     |          |          |          |          |          |
| <b>1. standards</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| <b>2. assume responsibility to take action when I see an unethical act</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |

In answering the following questions, when you think of your knowledge, skills, and abilities, indicate your **level of confidence** in your ability to accomplish each item below. Use the following scale to rate your level of confidence. A score of 5 represents total confidence, whereas a score of 1 means no confidence at all.

|                                 |          |                                 |          |                              |
|---------------------------------|----------|---------------------------------|----------|------------------------------|
| <b>Not Confident<br/>at All</b> |          | <b>Moderately<br/>Confident</b> |          | <b>Totally<br/>Confident</b> |
| <b>1</b>                        | <b>2</b> | <b>3</b>                        | <b>4</b> | <b>5</b>                     |

*I am confident that I can...*

|   |          |          |          |          |          |
|---|----------|----------|----------|----------|----------|
| <b>3. work with others to settle moral/ethical disputes</b> |          |          |          |          |          |
|   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |

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