Anatomizing Public Health Education Leadership for the Next Generation

by

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DISSERTATION APPROVAL

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Over the past quarter-century, the increased awareness of public health leadership has developed a need for training opportunities in the multidimensional components of leadership. However, despite the call for formal leadership training, the number of leadership development opportunities in the public health realm remain limited. Because public health is a broad field, it is important to focus on its different components to improve the understanding of leadership.

This study uses a convergent mixed method design to understand leadership styles, attitudes, and behaviors of certified and master certified health education specialists. The researcher proposes to gather qualitative data from semi-structured interview survey questions with health education leaders in the United States. Quantitative data are analyzed using descriptive statistics, chi-square tests of independence, and binomial logistical regressions.

Health education is an important component of public health and plays a vital role in facilitating the preservation, protection, and improvement of individual, community, and global health. Health educators have a distinct position to confront public health challenges and develop interventions based on different behavioral theories and models to improve the health of individuals, communities, and societies. Therefore, the purpose of this proposed study is two-fold. First, it aims to offer a quantitative perspective of leadership styles and behaviors of Certified and Master Certified Health Education Specialists in the United States regardless of leadership position. Second, it seeks to understand public health leadership in the United States qualitatively by having discussions with renowned leaders in health education. These actions will

aid understanding that will inform the educational and professional workforce development in

one of the main fields of public health.

The acknowledgments are brief notes of appreciation for assistance given to the candidate in the research and preparation of the dissertation. This section is OPTIONAL and should be double-spaced if used in the Dissertation.

DEDICATION

The dedication, as the name suggests, is a personal dedication of one's work. This section is OPTIONAL and should be double-spaced if included in the Dissertation.

PREFACE

A preface or foreword may contain the author's statement of the purpose of the study or special notes to the reader. This section is OPTIONAL and should be double-spaced if used in the Dissertation.

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CHAPTER 1

INTRODUCTION

In this proposed study, I plan to investigate leadership styles and behaviors of health education leaders, certified health education specialists, and master certified health education specialists in the United States. Additionally, I plan to examine public health leadership perspectives within health education from renowned health education leaders. Chapter 1 will discuss the purpose of the study and how the findings might be significant to the field of health education. The chapter also outlines research questions, aims, theoretical framework, limitations, and delimitations for the study.

Background

Public health requires individuals who can work in complex evolving environments that require robust, comprehensive, and collaborative leadership. Over the past quarter-century, the increased awareness of the need for leaders in the public health industry has developed a need for formal training in the multifaceted components of leadership. However, despite the call for formal leadership training, the number of leadership development opportunities in the public health realm remain limited. Therefore, the current preparation of public health professionals needs to strengthen the public health infrastructure in the United States to clarify its vision for the 21st century.

Public health leadership in the United States does not lack vision, it requires solutions, and it has been argued that inadequate resources have been applied to the preparation of public health leaders (McDermott, Wright, et al., 2000) it is necessary that public health leaders lead the progression of health care from the individual level to the community level and beyond

(Yphanditis, 2015, Keck, Scutchfield, & Holsinger, 2012; Grimm et al., 2017). Therefore, to implement and sustain change at the intrapersonal and interpersonal level, new leadership skills are essential (Yphanditis, 2015, Keck, Scutchfield, & Holsinger, 2012; Grimm et al., 2017).

Public health leaders have been called upon for their lack of determination and direction, policy stances, government connections, and failure to train the next generation (Day et al., 2014; Horton, 2011; Shickle et al., 2014). The necessity to build and enhance public health leadership has been acknowledged in several countries, such as the United States, United Kingdom, Canada, Australia, and Africa (Bloland et al, 2017; Gadiel et al, 2013; Shickle et al, 2014, Public Health Agency of Canada, 2005; Monroe-Wise et al, 2016). Since 1988, the Institute of Medicine has noted the importance of public health leadership:

"Effective public health action for many problems requires organizing the interest groups, not just assessing a problem and determining a line of action based on top-down authority … This capability requires appropriate leadership skills and techniques, as well as an attitude that the community itself is a source of public health actions." (p. 122)

Furthering leadership development in the public health sector may facilitate the process of reaching the World Health Organization's (WHO) target of 'the enjoyment of the highest attainable standard of health' for every human being' (Koh & Jacobson, 2009; WHO, 2014). To develop well-prepared public health leaders that can respond to the vast changes in the public health sector – changes in the academic and public health systems must occur. As proposed by the Institute of Medicine in 2003, the more our nation develops "educated citizenry," the more it will achieve a "readiness for change" to improve and promote health behaviors (Yphantides et al. 2015; IOM, 2003).

Statement of the Problem

There is a lack of understanding in the concepts of leadership and leadership styles in the field of public health, particularly because public health is a broad field that is made up of many different components. Presently, the public health field is changing and will continue to evolve in many significant ways through the coming years. Therefore, understanding public health leadership styles will aid in recognizing behaviors, attitudes, and organizational changes required in the field. This study will help public health leaders develop the necessary understanding of leadership styles amongst health educators to identify gaps and improve leadership practices in the field of health education.

Need for the Study

Health education specialists work in a variety of settings, and their duties vary depending on the environment in which they operate. They serve a vital role in the public health field by promoting healthy lifestyles through a variety of ways such as patient education, health literacy, risk communication, and worksite health promotion (APHA, 2015). The Department of Labor has predicted that there will be a 13% increase in the demand for health educators from 2014 to 2024 because of increased attention to health-related issues (USDOL, 2014).

Because all the responsibilities and competencies of certified health education specialist have leadership elements, this study will provide insight on which leadership style health educators demonstrate regardless of leadership position (Fertman, 2003; NCHEC, 2015). Furthermore, this study will provide insight for those in academia on how to train and educate

future leaders in the public health and health education field. According to Yphanditis et al (2015), one of the main challenges facing the new generation of public health leaders lies in a pitfall in health professions education as many of those in higher ranking teaching positions in academia are yet to acquire the new vision and value of public health.

By adding to the common knowledge of leadership in public health, this study can be a stepping-stone for the development and improvement of public health leadership programs. Additionally, it can help in revising course curricula to target skills and attitudes vital to the development of the future public health leader choosing the path of health education. According to McDermott (2009), integrating leadership paradigms into the professional preparation of future leaders and applying leadership theory to develop solutions may assist in the leadership development process. Understanding the leadership styles held in different occupations will aid in customizing programs of leadership specific to the occupations where health education specialists work.

Purpose of the Study

The purpose of this proposed study is two-fold. First, it aims to explore leadership styles, and behaviors of certified health education specialists (CHES) and master certified health education Specialists (MCHES) based on factors of gender, age group, years of experience, and highest academic degree earned. Second, this research seeks to understand gaps in public health leadership in health education from the perspective of health education leaders. This will be explored through telephone interviews with key informants in health education before and after the MLQ survey is conducted.

Research Questions

1. What are the most prevalent leadership styles among CHES/MCHES?

2. Do gender, age, occupation, ethnicity, certification, and educational level correlate with leadership styles?

3. What are the most frequent leadership behaviors among CHES/MCHES within each leadership style?

4. How do the responses of key informants in health education confirm or diverge from the responses of the survey?

Significance to Health Education

Health educators are a vital part of health care and are increasingly needed due to the shift towards prevention. Health education aims to improve the quality of health among people by targeting areas that have a direct impact on maintaining and enhancing the health of the population (educational, political, environmental, regulatory, and organizational mechanisms) and by providing education and skills to enable individuals in making quality health decisions that suit their health status and living conditions. Health education also aims for social change by involving people in collective action to create health-promoting environments and lifestyles. Although health educators play a fundamental role within the public health realm, they often overlook many opportunities that exist for more significant contributions. As the nation is on the verge of developing the *Healthy People 2030* objectives, progress is needed to increase the visibility of the health education profession, educating employers about health educator

competencies, and promoting understandings of leadership styles and behaviors to strengthen health educator professional preparation and in-service training.

Research Methods

This study will use a concurrent cross-sectional, mixed methods design to understand leadership styles, attitudes, and behaviors of certified and master certified health education specialists along with leaders in health education. The researcher will survey health education specialists in the United States with the CHES or MCHES certification. Quantitative data will be analyzed using descriptive statistics, chi-square tests of independence, and binomial logistical regressions. Qualitative data will be performed prior to passing out the MLQ survey to inform additional items that may be added to it. After survey results have been analyzed, semi-structured interviews with key informants in the health education field will be conducted to cross check the results.

Instrument

The Multifactor Leadership Questionnaire (MLQ) will be used for the current research study. First published by Dr. Bernard Bass in 1985, the Multifactor Leadership Questionnaire (MLQ) is a data collection tool utilized by thousands of researchers to attain quantitative data regarding leadership styles. Since its initial formation, the MLQ has gone through several revisions to strengthen its level of reliability and accuracy (Bass & Avolio, 1995; Bass & Avolio, 2000). There are two types of surveys' that can be used for the MLQ: the *Leader Survey* and the *Rater Survey*. The Leader Survey measures the leadership style of the individual taking the survey, and the *Rater Survey* measures the perceived leadership style of the individual 'leading'

the individual taking the survey. For this study, the Leader Survey will be used to assess how health education specialists and leaders in health education perceive themselves regarding leadership styles, behavior, and attitudes.

Sample and Participant Selection

The populations of interest for this study is health education leaders and health education specialists with either CHES or MCHES certification. The health education specialists who participated in the study were selected from the national list of CHES and MCHES provided by the National Commission of Health Education Credentialing. Once certified health education specialists are grouped according to region, the primary researcher will randomly select participants from each region. Additionally, snowball sampling was used to form a list of renowned health education leaders in the United States regardless of health educator certification status. This list will be used to recruit future subjects among their acquaintances via email and sampling will continue until 80% data saturation.

Theoretical Framework

This research study is based on the full range leadership model (FRL). Burns (1978) initially established this conceptual framework to clarify the influence of transformational and transactional leadership styles on follower performance. The primary foundation of the FRL framework was later expanded upon by Bass in which he added leadership style characteristics. According to Bass (1985), the transformational leadership style consists of 4 main attributes: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. On the other hand, the transactional leadership style consists of contingent reward and management-by-exception (Bass, 1985). Lastly, laissez-faire was not classified as a

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leadership style (Bass, 1985). The FRL framework embraces fundamental components from many theories such as the situational theory, the contingency theory, and the path-goal leadership theory (Bass, 1996).

Transformational Leadership

| Idealized Influence Attributed/Behavioral | + | Inspirational Motivation | + | Intellectual Stimulation | + | Individualized Consideration |

Transactional Leadership

Management-by-Exception (A) & (P)

+

Contingent Reward

Expected Effort

Expected Performance

Heightened Motivation to Attain Designated Outcomes (Extra Effort)

Performance Beyond Expectations

Figure 1. Transformational and Transactional Leadership Process. From "Multifactor Leadership Questionnaire," Bass, B, and Avolio, A, 2005, MindGarden Inc. Reprinted with permission.

Limitations

1. Certain areas in the United States have more employed health educators than others; therefore, higher response rates may skew towards certain areas.

2. The data collected from health educators are self-reported, so their fidelity to the questions and their understanding of them could impact their responses.

3. Not all health education specialists have a clear understanding of leadership.

Delimitations

1. This study includes only participants contained on the NCHEC CHES and MCHES membership list up through April 1, 2019.

2. This study excludes non-certified health educators from the quantitative portion of this study.

3. This study examines at a subset specialty (health education) in the public health field.

Definition of Terms

1. Transactional leadership: leaders of this type work under the existing boundaries and standards established by an organization and avoid risk, focusing primarily on stability, control, productivity, processes, and predictability (Bass & Avolio, 2000)

2. Transformational leadership: leaders of this type are experts at motivating others and delivering meaningful change (Bass & Avolio, 2000)

3. Laissez-faire leadership. The leader demonstrates a hands-off approach toward the performance of employees and is not considered a leadership style (Bass & Avolio, 2000)

4. Servant leadership: leaders of this type prioritize the service element and share a natural inclination to support others.

5. MLQ: Multifactor Leadership Questionnaire (Bass & Avolio, 2000)

6. CHES: Certified health education specialist (NCHEC, 1989)

7. MCHES: Master certified health education specialist (NCHEC, 2011)

Summary

Much of our understanding of leadership is tied to understanding human behavior and how influence, power, and fellowship impact an individual's ability to lead other human beings. Just as human beings adapt and change with time, perhaps the process and science of leadership also will be forever tied to further development. Although many theories have been developed to improve understanding of leadership, the critique of such theories shows that the research within the field of leadership is not yet complete. A comprehensive understanding of how different areas, cultures, countries, backgrounds, ethnicities, and stages of development impact leadership can be a stronger step in the right direction. Without such a comprehensive approach, leadership within organizations will be an art by which managers and organizational founders will be searching to improve. Therefore, in an era where health care is transforming, the significance of recognizing the need for public health leadership development cannot be understated.

CHAPTER 2

LITERATURE REVIEW

Public health is experiencing major changes as it seeks to reshape health care services aimed at improving the quality of life for families and communities at the local and national level. Thus, effective leadership in public health is called upon to bridge the gap between the health of individuals and the health of the population by setting the foundation for public health improvements. This chapter provides a background to the study, an overview of existing literature relevant to the synthesis and purposes of this study. More specifically, I examined leadership from historical perspectives, public health leadership, and leadership in health education. Furthermore, I tied in the effects of globalization, social loafing, communication, and health education on public health leadership.

Background

Public health is calling for more leaders due to challenges surfacing from increasing health issues in the United States and around the world. As aspiring public health professionals prepare for action, there remains a lack in proper instruction, models, and frameworks used to direct them (Koh, McCormack, & Kellerman, 2006). Rowetz (2013) argues that public health professionals are educated at the technical level to become experts in their chosen career path but are not trained to become leaders. This is because most traditional public health curricula do not teach and engrave the core skills required to develop effective leaders. With a gap in public health literature, those eager to grasp leadership concepts may possibly turn to the teachings generated from other sectors such as education, business, government, and even sports (Koh & Jacobson, 2009; Rowetz, 2013). Such approaches abandon the distinctive make-up of public health problems and the contingencies that make public health leadership an abundant source of "inspiration, frustration, and fascination" (Koh, 2009). In public health, leadership training should not be a one-way street; rather, it should be evolving, like building an onion layer by layer. As Turnock (2015) states, "leadership in public health involves more than individual leaders or leaders in individual positions; public health is intimately involved in leadership as an agent of social change" (p. 311).

Public health focuses on improving the health of individuals, families, and populations by targeting social, economic, and physical factors. In the early 19th century public health focused on actions governments and societies should take to sustain and protect the health of the people (Krieger & Birn, 1998). Last (2007) provided a foundational description of public health as an "organized activity of society to promote, protect, improve, and when necessary, restore the health of individuals, specified groups, or the entire population" (p. 306).

Public health demonstrates itself as a form of practice, a health or social institution, an arm of government, a concept, and a set of scientific and professional disciplines (Last, 2007). Most often, the term public health refers to the function it serves in the health system ranging from services, policies, programs, and strategies that fulfill the needs of the population. These include health education, promotion, and protection; disease and injury prevention research; detection of infectious diseases, and emergency preparedness and response (Centers for Disease Control & Prevention, 2018). Where as governments have the responsibility to ensure the fulfillment of these functions, they cannot do it without outside support. Therefore, Bailey and Dal Poz (2010) stress that to improve the health of the population and reduce health inequalities, collaborative action needs to be compulsory (Bailey & Dal Poz, 2010).

As part of the Government of Canada's commitment to strengthen public health, it has established the National Collaborating Centre for Determinants of Health (NCCDH). In the three recent environmental scans conducted by the NCCDH, leadership was identified as an important factor to advance health equity. Most respondents (75%) stated that public health leadership is necessary to advance health equity and improve the social determinants of health (NCCDH, 2011). This has not been the only incidence in which leadership was identified as a priority to respond better to public health issues. It has been a need called upon in many research reports (Koh & Jacobson, 2009; Koh & Nowinski, 2010; WHO, 2009). A key challenge identified in public health leadership is the vague understanding of what public health is supposed to do and what it possibly can do. This challenging and vague understanding comes about because public health is multi-faceted, has many goals, and aims to target multiple aspects of the social system at once. Additionally, other challenges include having a restricted evidence base, being muscular in achieving behavior change, having rigid organizational practices, having shortcomings in

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organizational capacity, experiencing a lack of leadership, especially regarding communication, and enduring deficiencies in supportive political environments (Brassoloto, 2014).

Once recognized that health care professionals needed some training for leadership positions, it became an initial belief that degree programs like the MBA and MPH would solve the problem (Schwartz et al., 2000). Such programs offer subject-specific training (e.g., in epidemiology, global health, health care financing, etc.), alongside administration and management skills. However, this form of training does not provide individuals with the needed skills to become effective leaders in their specific field. There is a substantive difference between a manager or administrator and a leader. Any single individual may be a competent manager, administrator, and leader, but frequently this does not pertain. Curtis et al. (2012) defined managers as those responsible for administration, maintenance, control, and initiation, and who take a short-term perspective to solve problems (Curtis et al., 2012). Other types of managers might be responsible for problem-solving, resource organization, plans, and budgets. However, leaders, "innovate, develop, inspire, challenge the status quo, and focus on a long-term vision" (p.4). Management, Kotterman (2006) discusses is related to practical, procedural, and complex matters, whereas leaders deal with changes. Although many leaders can benefit from the skills offered through different master's programs, to develop a wide range of leadership skills more specific leadership programs are required (Sonnino, 2016).

Souba (2003) discusses the shifts in leadership in health care over time as he looked at what was necessary for leadership in the past compared to the view of it that is taken today. Throughout the previous decades, clinical leaders were never required to possess administrative or business skills; now they are essential. In the past, leaders were seen almost as dictators, handing down commands, whereas now engaging colleagues for the creation of shared visions

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and encouraging teamwork is the norm. Being able to communicate well is desirable, but not critical for success. However, many leaders in the modern era who cannot communicate are unlikely to succeed. Perhaps the most significant change that has taken place is the requirement for leaders to be emotionally competent, i.e., to have the capability of introspection and self-analysis. Being aware and authentic is recognized as being highly desirable, as is the ability to empathize and to assist in the development of others by acting as a mentor and coach.

Although some people may have traits that make them natural leaders, every leader requires a degree of formal training regarding the abilities needed for good leadership, either learning new skills or refining existing ones. Not everyone has the desirable traits of leadership ingrained in their personality, and there are many aspects of governance, law, and regulation that must be learned by all. Those leaders who feel that they can succeed having not undergone any formal training may encounter a degree of success, but ultimately, come across situations with which they cannot cope. It is at this point that they try to acquire the skills and resources needed for success, but this is frequently too late.

It is vital to understand, that, when looking for a leader, selecting a person who is an expert in their profession and expecting them to develop leadership skills on their own no longer works. In both clinical health care and the academic world, we need to have individuals in place who are trained and ready to take over leadership positions, who have acquired the necessary skill set through formal training; these individuals will be much more likely to succeed when they assume a leadership position. If there was more accessibility to training opportunities, we could reduce the risk of having inexperienced individuals take upon important public health missions and not recognizing the requirement to train them until they become involved in a major catastrophe due to lack of experience.

The need for leadership training is worldwide. The Foundation for Advancement of International Medical Education and Research (FAIMER), found that teaching management and leadership skills become more successful when tailoring them according to an individual's specific country and culture. Such training will make leaders from those backgrounds better able to serve their local community, become more trusting in their personal ability, and thereby, remove the need to be dependent on other nations. The experience of this foundation demonstrates that the leadership training principles applicable in the American system can be scaled up to the global health communities (Morahan et al., 2010; Rothenberger, 2015).

In the UK, Warren and Carnall (2011) recognized that the country's health care providers did not focus sufficiently on training physicians for leadership (Warren & Carnall, 2011). Training encouraged physicians to adopt skill sets and levels of comprehension that exceeded little technical specialist expertise such as being able to formalize their vision, communicate it to others, and make it clear where they wanted to go. These authors concluded that leadership education worked best if the individuals participating had an opportunity, during training, to undergo real world experiences in dealing with some of the challenges facing them in their usual work environment. Training programs are most valuable if they took place over a longer timeframe because they will give learners the opportunity to have a period of absorption and reflection on their learning and to integrate it into their daily routine.

Whichever sector of health care a leader may come from (administration, nursing, public health, dentistry, medicine, or allied health providers), the best training should focus on being interdisciplinary and applicable for all these areas (Sonnino, 2016). The best programs must encompass the most essential universally applicable leadership competencies (financial

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management, negotiating, managing conflict, etc.), and opportunities for the development of personal abilities.

Therefore, an effective program needs to give learners an insight into their personality and expose them to situations in which they learn how to carry effective interaction with diverse groups of people, both those who are highly similar and those who are extremely different.

The ideal leadership training program would encompass a core curriculum addressing fundamental broad-spectrum health care issues, taught through a diversity of methods, with room for hands-on experience, coaching, mentorship, and traditional teaching (Sonnino, 2016). Sonnino (2016) suggests that there must be areas of the curriculum specific to the sector in which the individual wishes to be considered as a leader, whether that is the academic environment, the clinical environment, or administration. If it is possible, it may be useful to customize teaching even further, tailoring it to the individual's specific occupation; for example, an operating room nurse, surgeon or anesthetist will need to learn leadership skills specific to the operating room, whereas clinical nurses and physicians dealing with outpatients require other skills more to keep up with their work environment. Individual researchers may not need the same mastery as a person running a comprehensive research initiative, those involved in education require skills for developing curricula, introducing new practices, and so forth.

For all incipient health care leaders, training in leadership styles and situational leadership must be a part of their curriculum, giving them the capacity to comprehend and work with those who do not share their particular style (Sonnino, 2016; Rogers, 2012). In a comprehensive leadership program, many competencies must be covered, including financial management, economic awareness, managing time, dealing with conflict, ethics, work/life balance, individual professional development, adaptive leadership, strategy and planning, and

exposure to new emerging issues within the field (Sonnino, 2016). Long-existing leadership programs such as the Executive Leadership in Academic Medicine program have shown that it is helpful if learners have opportunities to be involved in the development of a specific project that will benefit their career path. Thereby, gaining practical workplace experience in a way that makes it more likely for the leadership skills taught to become integral to the individual (Morahan et al., 2010; McDade et al., 2004; Dannels et al., 2008). Successful leadership programs include the creation of reinforcement of supportive cultures which involve senior figures as mentors, a multiplicity of learning styles, long-term learning periods with ongoing support, engendering a commitment for continuous improvement, and encouraging learners to become owners of their self-development programs (Blumenthal et al., 2012).

Leadership from historical perspectives

Historically, the definition of leadership focused on the leader's position, a person who guides or directs a group, and did not distinguish between administration, management, and control. Over time, this definition of leadership has evolved and today we acknowledge various leadership styles and behaviors. Throughout history, the works of Aristotle, Cicero, and Machiavelli have stood the tests of time in providing valuable and irreplaceable lessons for leaders, regardless of era, region, or context. Such experiences give not only a glimpse of history for leaders looking to perfect the art of leadership, but also transpose a relevant and applicable guide for leadership in contemporary times. Although the works may not relate specifically to the terms, environments, organizations, or institutions of our time today, many of the described situations between the works have direct application to public health issue we face in the modern day.

Aristotle on Ethics

The application of Aristotle's *Ethics* to the topics of contemporary leadership relates whole-heartedly to understanding what the subject of ethics aims for (Aristotle & Rackman, 1934, p.3). Aristotle points out that every art is "thought to aim at some good" (Aristotle & Rackman, 1934, p. 4). Therefore, leadership inherently also aims to establish an objective that is of value and "good" to the organization. However, within an organization, there may be varying levels of achieving "good," some of which may result in a tangible result, whereas others may not.

Aristotle makes an important stipulation in highlighting the difference between the sciences of ethics and mathematics. Although "it is the mark of an educated man to look for precision in each class of things" the reality is that the "scientific proofs" will not be found in the subject of ethics (Aristotle & Rackman, 1934, p. 5). Therefore, applying ethics to leadership means that it is not an exact science and there are no precise "right" or "wrong" answers in the traditional sense of the words. Aristotle goes on to relate that ethics should strive to attain "what is the highest of all goods achievable by action" and that is agreed upon to be "that which leads to happiness (Aristotle & Rackman, 1934, p. 6). Ethical Leadership must inherently not only be aiming for good within the organization, but such leadership must strive to provide happiness as a result (Aristotle & Rackman, 1934, p. 6).

Not only should leaders be seeking to provide happiness for their communities and organizations, but they must consolidate such an objective with the varying definitions of happiness that may be present within the organizations and communities they are serving. These concepts of leadership and happiness go hand in hand to the many goals of public health. Research examining the connection between happiness and health is unfolding rapidly, and there is strong support that unhappiness may possibly contribute to higher disease risk (Steptoe, 2019).

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According to the World Happiness Report (2018), the United States falls is eighteenth in its

ranking of happiness. It has been stressed that the United States should strive to increase

happiness levels by focusing on America's complex social crisis such as isolation, corruption,

inequality, and mental health issues rather than centering the focus on economic growth (World

Happiness Report, 2018).

Whereas the United States has the means to resolve numerous public health dilemmas,

the main barrier remains in corporate lobbying that withholds dangerous corporate practices and

inflicts a myriad of encumbrances on the most underprivileged and impoverished parts of the

U.S. population (World Happiness Report, 2018). This coupled with the malfunction of the

American political system to recognize the increasing social crisis in the U.S. commands that

healthier levels of well-being and happiness require policy, politics, economics, and collective

individual and community-based action (World Happiness Report, 2018).

The discussion centered on knowing the varying definitions of happiness for different

people is crucial for a leader. By clearly identifying what individuals in communities, societies,

and organizations need to fulfill health and happiness, leaders will be able to address their needs

better. Conversely, without knowing what people value may prove detrimental for leaders in

achieving public health outcomes. Therefore, understanding the value of happiness among

different individuals, communities, and societies, is of utmost importance to those working in the

public health field.

Cicero and Machiavelli

Cicero and Machiavelli have contributed to many primary leadership teachings we follow

today, and although both thinkers agree on specific lessons, they also disagree on many. The

overarching lesson that Machiavelli poses for leaders is to be pragmatic and apply whatever

action is necessary to yield the greatest reward (Machiavelli & Bondanella, 2005, p. 7). In fact,

from the beginning, Machiavelli mentions his disdain for complex rhetoric that is inapplicable

(Machiavelli & Bondanella, 2005, p. 4). For Machiavelli, a leader must be able to apply what he

has learned and attain the reward. Cicero, on the other hand, emphasizes that duty and virtuous

actions are of utmost importance for a leader, regardless of the outcome (Cicero & Tullius, 1913,

p. 15). For instance, in the United States, the obesity epidemic can be associated directly to the

fast-food industry, mainly through excessive marketing of sugar additives and obesogenic

processed foods. If public health leaders were to follow Cicero's advice on virtuous actions to the

public health of the population, they would cut off the marketing of sugar additives and the

availability of obesogenic processed foods to improve health outcomes. According to Lustig

(2017), sugar is a lethal and addictive substance "that has been dangerously foisted on an

unsuspecting and poorly informed public by the U.S. government and the fast-food industry."

Regarding how a leader should prepare, Machiavelli points out that a leader must be both

physically and mentally fit to warrant the extraordinary show of power from his followers

(Machiavelli & Bondanella, 2005, p. 44). Cicero, on the other hand, discredits the need for

physical preparation of a leader, and instead, structures development around the "good spirit" and

"virtue" of a leader (Cicero & Tullius, 1913, p. 76). Although there is some similarity in the

effort that a leader should put on his/her mind and studies to lead successfully, the differences

between the two approaches to preparation are more prevalent.

Similarly, Machiavelli makes many mentions of the need for fear and decisive action

both in the face of war and in peace (Machiavelli & Bondanella, 2005, p. 77). Cicero, however,

advises his son through the work that war is something that will never yield a good result and

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insists, instead, diplomacy is of utmost importance (Cicero & Tullius, 1913, p. 47). This, again, directly relates to the differing lessons between the two regarding cruelty and evil actions. Staying true to his theme of virtue and keeping ones' duty as a leader, Cicero does not make an exception for a leader to ever act in a manner that may be cruel, even to ones' enemies (Cicero & Tullius, 1913, p. 48). For Cicero, a leader always must act in a manner that employs "justice" to each human spirit (Cicero & Tullius, 1913, p. 52). Justice to the human spirit serves as the core value of the public health mission. Public health aims to achieve justice to each human spirit by advancing the well-being of individuals specifically by concentrating on the needs of the most disadvantaged.

Machiavelli, on the other hand, proposes the possibility of instances in which a leader must be cruel and commit atrocious acts (Machiavelli & Bondanella, 2005, p. 34). Machiavelli explains that if cruel or immoral acts are needed to secure power, one should calculate all the actions and do them in "one stroke" to allow his/her followers to slowly forget such acts over time (Machiavelli & Bondanella, 2005, p. 35).

The best fusion of the different lessons that both Machiavelli and Cicero propose comes in the concept of leaders keeping up with their word. Machiavelli goes to great lengths in explaining that, for a leader, the illusion of keeping ones' word is the most important (Machiavelli & Bondanella, 2005). There may be instances, Machiavelli explains, that a leader must break his/her word to attain what is important at that time (Machiavelli & Bondanella, 2005, p. 58). Although he does go on to explain that a leader must not engage in such actions as continuously breaking ones' word, he does believe that it is acceptable to do so during certain times.

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Through the dissection of the lesson of Cicero and Machiavelli, it may appear on a superficial level that both are of vastly differing points of view. The reality, however, lies in that both viewpoints on the execution of leadership are similar. Machiavelli makes continuous mention of the importance of virtue, keeping one's word, and avoiding violence and fear (Machiavelli & Bondanella, 2005, p. 59).

The difference, however, lies in the differing viewpoints of idealism and realism. Machiavelli accepts that it is ideal for a leader, in all situations, to act in a dutiful and virtuous manner (Machiavelli & Bondanella, 2005, p. 46). Instead, however, Machiavelli chooses to position his advice in the realistic viewpoint that in some circumstances and contexts a leader may not always act in a dutiful and virtuous manner. By acknowledging the importance of duties but still highlighting scenarios of exception, Machiavelli provides a complete lesson for public health leaders in a variety of situations.

Cicero ends his lessons for leaders by commenting on the ambiguity of honor and the inability of man to classify whether a decision is virtuous and honorable (Cicero & Tullius, 1913, p. 278). At first, such a statement may appear to contradict the preceding emphasis on continuous virtuosity and duty towards others; however, the over-arching theme shows otherwise. By continuously reiterating the importance of responsibilities in preceding chapters, Cicero advises leaders on the value of striving. For instance, maintaining public health duties to all populations may not be attainable in every situation, context, and environment, but striving to do so is the critical lesson for public health leadership. Machiavelli, on the other hand, maintains his viewpoint on pragmatism throughout the work by additionally providing case studies of leaders who either successfully or unsuccessfully applied such lessons.

Overall, both Machiavelli and Cicero offer different forms of advice for leaders seeking to rule successfully. Perhaps, the correct answer and advice lie not in any single type of leadership, but instead, must consider the situation, context, environment, and mindset of the followers. By weighing the historical backgrounds of the two works on leadership, one can improve understanding of the individual differences between the lessons of Machiavelli and Cicero, and apply them to the context of public health leadership.

Leadership

Leadership is among the most complex of human constructs (Bass & Riggio, 2006). In emphasizing its importance almost 40 years ago, Burns (1978) wrote that a universal craving "of our time is a hunger for compelling and creative leadership" (p. 1). Whereas leadership is one of the most observed phenomena in the world, it is among those that are the least understood (Burns, 1978). According to Northouse (2013), "leadership is a process whereby an individual influences a group of individuals to achieve a common goal" (Northouse, 2013, p. 5). This definition focuses on leadership as a process and eliminates classifying leadership as a trait. Viewing leadership from a "process" perspective shows that leaders affect and are affected by their followers in either positive or negative ways (Yukl, 2007). This indicates that leadership is not a linear event in which only leaders change followers but rather a bidirectional and bi-mutual relationship in which leaders and followers influence each other (Yukl, 2007).

Leadership is a concept that has alluded many managers and organizational founders in its definition and explanation. Not only does leadership have different styles, but it also comes in forms of titles, roles, and even informal relationships within organizations. Leadership also can be closely related to the topics of power, influence, management, and capability. As a result, understanding the process of leadership may not be as straightforward as organizational

managers and leaders would like. In cases where an individual may have the most influence within a group, we typically identify such a person as a leader. Greenberg (2011) formally defines leadership as, "the process whereby one individual influences other group members toward the attainment of defined group or organizational goals" (p. 400). To differentiate leadership from management and supervision within the organization, three foundational characteristics must be established (Greenberg, 2011). First, leadership involves non-coercive influence which means that the individuals who are being influenced by the leader cannot be forced in any way to obey the orders of the leader. If they are, then the process of leading would be known as dictatorship instead of leadership. Second, leadership influence is goal oriented (Greenberg, 2011). As a result, leaders who influence their group have a specific and attainable goal that is pursued and is the purpose of their leadership. Finally, leadership requires followers (Greenberg, 2011). Without followers, the relationship between the leader and whom he/she is influencing is nonexistent. Leadership is a process by which there is a two-way exchange from the leader and the followers.

Leadership theories have been developed to aid in defining leadership, and the situations or characteristics leaders should exhibit. The first theory came into existence in the 19th century and became known as the Great Man Theory. The Great Man Theory classified leaders based upon specific traits and characteristics with which they are naturally born (Kirkpatrick & Locke, 1991). Qualities such as charisma, motivation, cognitive ability, and confidence, according to the Great Man Theory, could not be developed nor crafted and were the result of leaders innately being different. Other theories such as behavioral, contingency and situational leadership Theories, came about in the 20th century and contradicted many aspects of the Great Man Theory. In stating that leaders could be created and learned, these theories revolutionized the

modern understanding of leadership (King, 2009). By studying the traits of established leaders, aspiring leaders could develop their leadership ability just like a skill. Eventually, the further development of the modern understanding of leadership began to incorporate additional variables of follower-leader orientation, participative versus autocratic styles, and even how leadership related to delegation and management (Greenberg, 2011).

Not all research and studies have been in full support of leadership theories. Leadership researcher Gary Yukl argues that there is an inherent weakness within leadership theories in "not fully describing their underlying influence" (Yukl, 1999, p. 301). Because leadership theories do not specify leadership behaviors, Yukl suggests, the disconnection between leadership theories and their relationship with the processes within the workplace are significant (Yukl, 1999).

Other researchers have pointed out the lack of theory development in the context of international application in different countries. A research program by the name of "Globe" (Global Leadership and Organizational Behavior Effectiveness) concludes that many of the theories related to leadership have much development to do in developing their understandings of different cultures and countries and how they impact the modern knowledge of leadership (House, Javidan, Hanges, & Dorfman, 2002). These conclusions, in addition to those from researchers studying leadership in applied settings, have demonstrated that although leadership is an intensely studied process, there is still much more to understand. Such applied studies have indicated the stability over time of leadership theories and call into question the balance of leadership theories when used over a more extended period (Epitropaki & Martin, 2004).

Public Health Leadership

Public health today is sanctioned and influenced by corporations and powerful interests through their control of politics and the economy as compared to the past when public health and

science dictated political and economic sanctions and direction. The field of public health lost its voice and momentum and is in need to retrace its steps back to the past when it was higher on the hierarchy surpassing both political and economic interests (Fairchild et al., 2010).

Until the early 20th century, public health focused on environmental and sanitation reforms due to the common infectious disease burden at the time. The position of public health in the 19th century centered around social, housing, and engineering reforms on curtailing the growing problems of urbanization, industrialization and large-scale immigration. The position strengthened following advances in bacteriology from the works of Louis Pasteur and Robert Koch, which later shifted the focus from social and environmental medicine to the laboratory. This fragmentation led to the growth of "academic public health." As William Welch, the father of public health education, mentions, although housing and urban reform were necessary for health, they belonged to departments other than public health.

At the turn of the 20th century, advances in medicine, urbanization, and industrialization enriched health in a multitude of ways, but industrialization formed new threats and diseases through exposures to toxic materials such as lead, tobacco and air, water and soil pollutants. The Franklin D. Roosevelt administration passed a proposal in 1939 that viewed poor health as partly caused by uneven economic structure and not just individual inability to afford health care. This proposal was deficient in that whereas it led to a boom in the health industry, it did not make any provisions for paying for medical care, either private or public. The result was that public health gave away medical care to insurance companies, hospitals, physicians, and other interest groups that generally ignored social factors in the differential application of their services and charges in the market-driven sense (Turnock & Handler, 1997). As Fairchild et al. (2010) state, the post-world war two era or progressive era became "dangerous when class analysis lost status within

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the intellectual community and was even equated with anti-Americanism in the context of the affluent society of the McCarthy era" (p.6).

In 1940, the American Public Health Association (APHA) established six core areas of focus for public health departments: vital statistics data collection, communicable disease control, environmental sanitation, laboratory services, maternal, and child services, and public health education, which did not capture any influence on politics or the economy that influenced health and health care (Turnock, & Handler, 1997). Although acknowledging that public health cannot be easily characterized, Fairchild et al. (2010) believe that the existing economic catastrophe shaping the health and well-being of people all over the world presents opportunities to rethink the economic and social system of the U.S. Public health is situated in a position where it needs to find its place as a key ingredient in "emerging reform movement" (Fairchild et al, 2010, p.9) — where health needs and the social determinants of health guide public policy and economic direction rather than the opposite.

Public leadership has been defined as "the process of persuasion or example by which an individual induces a group to pursue objectives held by the leader or shared by the leader and his or her followers" (Gardner, 1993, p. 1). More specifically, the Public Health Agency of Canada (PHAC describes public health as "the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of their community and/or the organization in which they work" (PHAC, 2010). It involves inspiring people to craft and achieve goals through mentoring, coaching and recognition. Public health leadership should encourage empowerment which in turn allows other leaders to emerge. (PHAC, 2008, p. 12).

According to Betker and Oickle (2018) "public health leadership occurs in a multi-sectoral relational and dynamic environment, which influences the actions that can be taken and

makes strong and ongoing relationships necessary" (p.7). Butler-Jones (2008), in his report on the health status of Canadians, emphasized that a critical component of advancing health equity is to have strengthened public health leadership. Even with the significant agreement regarding the priority of public health leadership, there was little consensus or available evidence about effective public health leadership practices and the factors that supported or limited leaders (NCCDH, 2013).

When health care organizations are not receptive to responding to the demands of the public, people are going to reach out to other organizations or create new ones (Nyswander, 1967). Therefore, environments that promote trust, partnerships, and positive outcomes develop not only from good leadership but also good followership. "Followers are never powerless, because power is a relationship, not a possession" (Grint & Holt, 2011, p. 16). Hence, the quality of the relationships built between leaders and followers are pivotal in supporting the communal and distributed nature of public health leadership (Betker & Oickle, 2018).

Koh and Jacobson (2009) contend that public health leaders are typically motivated in their work by a deep sense of mission and purpose. Nonetheless, Arbabi and Mehdinezhad (2015) observe that leaders must consider their followers' ambitions and needs to achieve the objectives of their mission (Arbabi & Mehdinezhad, 2015). Leadership occurs at all levels of the public health system and public health leadership competencies apply across a multitude of organizational positions and health professions (Betker, 2018). To strengthen public health leadership at any organizational level, attributes such as skill, knowledge, and expertise are necessary.

Initially, degree programs like the MBA and MPH were thought to solve the problem of the lack of public health leadership. Such programs offer subject-specific training (e.g., in

epidemiology, global health, health care financing, etc.), alongside administration and management skills (Schwartz et al., 2000). However, undergoing this form of educational training does not automatically make an individual a good leader (Sonnino, 2015). There is a substantive difference between a manager or administrator and a leader. Any one individual may be a competent manager, administrator, and leader, but frequently, this does not pertain. Therefore, public health schools have begun to tackle this need by developing specific leadership programs outside of the public health core curriculum (Uno & Zakariasen, 2010). However, not many comprehensive leadership programs have been reviewed and evaluated. Stoller (2013) noted that "true return on investment analysis of a leadership development program has yet to be done" (Stoller, 2013, page citation).

The modern leader, in contrast to those of the past, must be able to listen, empathize, persuade, be aware, have foresight, conceptualize, be a good steward, help build communities, and be committed to individual growth. Furthermore, leaders in the health care field also must demonstrate authenticity, altruism, commitment, and integrity (Stoller, 2013; Sonnino, 2016). Immediate resolutions to public health issues are not viable, and public health leaders understand that they need to be committed to gradual long-term processes that may or may not lead to the desired outcome.

Health Education Specialists and Leadership

The start of organized modern health education goes back just a few decades. It began in the 1970s when President Richard Nixon created a Committee on Health Education. From there, essential developments in health education began to occur such as the creation of a National Center for Health Education in 1975 and the Department of Education and the modern version of

the Department of Health and Human Services in the 1980s. Thus, began the true modern era of health education in the United States.

Health education encompasses areas of history, humanities, political science, philosophy, and biomedical sciences. More specifically, health education utilizes behavioral sciences in multiple fields such as psychology, sociology, social psychology, and anthropology. Health education involvement in the public health sector include the areas of environmental health, school health, epidemiology, health services, and population health (APHA, 2015). Although health education may be one of the most borrowing professions, it has brought about critical thinking processes as health education specialists fuse models, theories, and principles to develop intervention plans that work. By professional commitment, health education specialists are concerned with all sources of health care in their communities (Nyswander, 1967). Health educators are a vital part of health care and continue to serve a vital role in population health due to the shift towards prevention. Furthering prevention methods serves as the main purpose of the health education profession (Nyswander, 1967, p. 31).

The public health and health education profession is about team-based care, about improving the quality of health care to others, and allowing others to become educated when providers cannot offer them the time or education needed. It combines health techniques and theories to improve health and prevent disease and disability in the population.

The Joint Committee on Terminology (2012, p.17) has defined health education as "any combination of planned learning experiences based on sound theories that provide individuals, groups and communities the opportunity to acquire information and the skills needed to make quality health decisions." Health promotion as defined by the Joint Committee on Terminology is "any planned combination of educational, political, environmental, regulatory, or

organizational) mechanisms that support actions and conditions of living conducive to the health of individuals, groups, and communities (Green & Kreuter, 2005) These definitions influence the philosophy of health education and health promotion by giving health educators the opportunity to use a variety of educational strategies and methods to improve the health of individuals, groups, communities, and the nation as a whole.

Health education and promotion are two interconnected health disciplines that aim to improve the quality of health among people by targeting areas that have a direct impact on maintaining and enhancing the health of the population. By providing education and skills, they enable individuals to make quality health decisions that suit their health status and living conditions.

Health education also aims for social change by involving people in collective action to create health-promoting environments and lifestyles (Freudenberg, 1978). In his article, Freudenberg presents questions the validity and desirability of behavior change as the goal of health education. Although broadly accepting that the mission of health education is to contribute to people's adoption of health-supportive behaviors, Freudenberg suggests two strategies: persuasion of people to abandon unhealthy behaviors in favor of healthier ones (behavior change) and fortification of already existing healthy behaviors. In Freudenberg's view, health educators often overlook the second strategy as most of them focus on achieving behavior change. Because it is not always easy to get people to change their behaviors, this fuels the impression that health educators are "warriors against pleasure" (Russell, 1963).

To the extent that behavior change is the central point in health education practice, the author argues that merely preaching behavior change does not guarantee change because multiple factors (social, economic, environmental, etc.) influence and affect the behaviors in

which people do or do not engage. Freudenberg believes that emphasis on behavior change as the goal of health education is the result of health educators being evaluated based upon achieving behavior outcomes, a fact that makes health education appear ineffective.

Regardless of the definition of 'health education" it is generally agreed upon that health education is an important component of public health and plays a vital role in facilitating the preservation, protection, and improvement of ones' health and that of communities. "A health educator may be compared to the captain of a ship, …, Tides, winds and weather will influence the navigator in his steering, but his goal is determined" (Jean, 1951, p. 963).

Health education specialists now more than ever before need to serve in leadership positions within different sectors to aid in the development, expansion, and the delivery of public health education and health promotion services. Health educator preparation involves distinctive training to address public health needs by applying theories and models to develop interventions and programs that aim to improve population health. A distinguished framework for professional preparation and training has been developed for the health education profession. Today, health education and promotion is taught at more than the 300 degree programs at the undergraduate and graduate level nationwide (Wright et al., 2003). Undergraduate- and graduate-level preparation and practice of health educator competencies were established to lay the blueprint of academic programs and contribute to furthering the direction of continuing professional education (Wright et al, 2003; National Task Force on the Preparation and Practice of Health Educators, 1985; Joint Committee for the Development of Graduate Level Preparation Standards, 1997). To maintain the highest level of competence in the health education workforce, graduates of such programs can proceed to take the CHES or MCHES (Certified Health

Education Specialist and Master Certified Health Education Specialist exams administered by the National Commission for Health Education Credentialing, Inc).

However, as the nation is getting close to generating the Healthy People 2030 objectives, improvements are necessary to develop awareness amongst employers about the competencies of health educators and strengthening the professional preparation and hands-on training of health education specialists (Bruening et al., 2018). The health education profession should be persistent in striving to put into practice the broad-based skills that identify with the current needs of the public health workforce. To keep abreast amidst the rising challenges of public health, health educators are increasingly required to employ strategic skills that address the social, community, and economic determinants of health (deBumeont Foundation, 2017).

To respond to these needs, many opportunities for those in leadership positions presently exist for advocating to make the profession more visible. For instance, health educators can present their human resource departments with the competencies of professionally trained health educators, the different career paths in health education, certifications, recruitment avenues, and the contributions of health educators to the public health workforce (Auld, 2017). Furthermore, they can amplify the value of health education to the public health community by endorsing certification as a quality assurance mechanism, disseminating results about the contributions that health educators have made to achieve health outcomes, and by evaluating the core competencies needed to tackle contemporary public health challenges (Bruening et al., 2018).

Those involved in health education must be able to interact with others, navigate politics, advocate for policies, mobilize communities, create communities, design the best strategies, and manage organizations, coalitions, interdisciplinary teams and so forth (Allegrante et al, 2001; Gielen, McDonald & Auld, 1997; National Commission for Health Education Credentialing,

1995; Schwartz, Goodman & Steckler, 1995). Leaders in health education need to challenge ingrained beliefs within organizations and professions regarding the ways in which one develops integrated systems and improves performance capacity within communities to expedite social change agents and systems put in place to improve public health (Allegrante et al., 2001; Altman, Balcazar, Fawcet, Seekins, & Young, 1994). Building community health capacity must be the primary objective, with a focus on helping systems to change and evolve (Task Force on Public Health Workforce Development, 1999).

When examining the requirements of the continuing education needs of those currently working in the health education sector, invetsigators found that the most important areas that require development were building coalitions, planning, and development in the community health sector, and leadership (Allegrante et al, 2001; Wright, 2003; Hans et al, 2006) A 1998 Institute of Medicine report indicated that leadership is so vital that it is negligent to hope that suitable leaders will appear. Due to this report, many frameworks have appeared that stress the importance of leadership capabilities. Such frameworks include the Association of Schools of Public Health Education Committee conceptual framework for a masters-level public health competence, the competency framework for development of leadership in public health and the standards for health education at graduate level (Wright et al, 2003).

Health education leaders need to confront organizational and professional assumptions regarding the development of integrated systems and how to improve performance capacity in communities. Doing so will make it possible to achieve changes in social structures and targeting factors that shape the anticipated health outcomes. The primary goal should focus on changing and evolving systems to achieve the objective of building community and organizational capacity. Current and potential leaders in health education have numerous opportunities in which

they can create visibility for the profession. Therefore, it is vital that health education specialists focus on creating change agents to develop successful health education and health promotion services and interventions. As public health demands continue to mount, public health agencies and organizations must come together to deploy the capabilities of public health professionals, including health educators, at their optimal competence levels.

Theoretical Framework

Transformational Leadership

Transformational leadership is the most dominant leadership theory of our time. First conceptualized by Burns in 1978, it is a leadership style that focuses on the process of changing people that will eventually lead to their transformation and the social system surrounding them. Transformational leadership focuses on inspiring, stimulating, and motivating followers to achieve results that have a permanent impact. In its ideal form, transformational leadership has an end goal of developing followers into leaders.

Transformational leadership assumes that leaders' behaviors and interactions with followers will enable transformational change on both a small community level and on a bigger societal and national level. The prime influence behind transformational leadership is to enable followers to accomplish more than what they believe they can do making it facilitative in nature. Ultimately, transformational leadership does two things; first, it drives engagement, and second, it develops a mutual self-interest between the leader and followers. These are both established through listening and communicating effectively.

Bass further elaborated on transformational leadership and introduced four dimensions to transformational leadership (Bass, 1985). These four dimensions included idealized influence, inspirational motivation, idealized consideration, and intellectual stimulation. Charisma or idealized influence provides a vision for followers while inspirational motivation articulates that vision into tangible appeal and inspiration (Kastenmuller, Fischer, & George, 2014). Idealized consideration provides followers with one-on-one activities such as coaching and mentoring. Throughout the process, intellectual stimulation is intertwined to challenge new ideas from followers (Kastenmuller, Fischer, & George, 2014).

Within public health, transformational leadership involves the process of envisioning the outcome and understanding the current reality to allow for opportunities that will lead to improved health care. Public health leaders realize that healthier communities develop only through positive collaboration. This proposes that transformational leadership style facilitates community based participatory research processes and helps professionals in the public health field surmount challenges (Martinez et al., 2017). Transformational leadership often interconnects with the concepts of community organizing because good organizers immerse

themselves in the community and listen to the needs and interests of the people to promote

leadership capacity (Martinez et al., 2017).

The literature on leadership development in public health reveals a marked need for

highly-trained leaders who can inspire populations to engage in a transformational change to

maintain and improve public health and well-being. Therefore, public health calls for change-

agent transformational leaders. However, while public health calls for transformational

leadership, it is important to note that regular management duties must still be satisfied to

guarantee the achievement of public health initiatives.

The transformational leadership style enables public health leaders to engage more

effectively within communities to improve population health. It has been pointed out that

transformational leadership is the desired style of leadership in most situations and the most

influential theory guiding health care leadership research since it is much more facilitative in

nature (West et al, 2015). However, researchers have found that some transformational leaders

use their charisma toward evil ends (Vann, Coleman, & Simpson, 2014).

In their systematic review of health care leadership research from 1989 to 2005,

Gilmartin and D'Aunno (2007) concluded that studies in health care provide strong support for

transformational leadership theory and its association with job satisfaction, team performance,

organizational climate, and turnover (West et al., 2015). Despite these results, Gilmartin and

D'Aunno (2007) argue that opportunities to develop general leadership theory in the public

health sector are missing (West et al., 2015). These opportunities include examining the role of

health professionals as leaders (e.g., medical doctors, nurses, professors, etc.) and developing an

understanding of the role of gender in preferred leadership tactics. Sally Lucas Jean (1951)

conceptualized that health knowledge is not enough for affecting the lives of people; rather,

action is essential in the transformation of health for all people. Therefore, health promotion is a transformative process. The transformative process of health promotion requires training grounded on political and social action along with a profound understanding of the effects of the social determinants on the health and well-being of individuals, communities, and populations.

Transactional Leadership

Bass (1990) defines transactional leadership as a leadership style that attains its desired outcomes by focusing upon regulation, organization, management, reward, and standards. This researcher proposed that the most effective leaders encompass both transactional and transformational styles. Burns (1978), by contrast, proposed that these leadership styles were almost diametrically opposed and had different elements at their heart. Burns sees transactional leadership as being one that employs rewards for good performance and punishments for bad performance (Judge & Piccolo, 2004). Those who demonstrate the transactional leadership style motivate followers through the exchange process by enticing their own self-interests. For example, promotions and increased wages are given contingent upon employee work labor.

Rewards and positive reinforcement are provided or mediated by the transactional leader. Thus, the emphasis on meeting specific targets or objectives makes the process of transactional leadership more practical in nature (Aarons, 2007; Avolio & Bass, 1988; Evans, 1974; House & Mitchell, 1974). Transactional leaders with poor qualities usually intervene in the problem-solving process when it is too late because they fail to foresee issues in the beginning. On the other hand, more effective transactional leaders respond to issues and challenges in a timely manner (Jung, 2001). Bass argues that leaders should demonstrate both transactional and transformational behaviors depending on the situation. The caveat, however, depends on the

goal, as transformational leadership qualities should be predominantly displayed when a leader's goal is reform or change.

Bass and Avolio (2000) describe transactional leadership as comprised of four dimensions: contingent reward, passive management by exception, active management by exception, and laissez-faire.

1. Contingent Reward: The leader gives incentives or rewards when expectations are met to appointed tasks.

2. Passive Management by Exception: In response to an unacceptable performance the leader uses correction or punishment.

3. Active Management by Exception: The leader uses constructive feedback to warrant that the completed tasks correspond to the desired standards.

4. Laissez-faire leadership. The leader demonstrates a hands-off approach toward the performance of employees. They ignore the needs of others, do not monitor performance, and lack the ability to find solutions.

A transactional leadership style may ensure that followers adhere to defined standards, but it is not always innovative. Public health practitioners aim to improve the health of their population, and transformational leadership may be extremely useful for this, but in terms of the necessary changes and every day running of an organization in the public health sector, using technical and managerial expertise from the transactional leadership style is more effective. Delivering public health initiatives on a local level is a highly technical process, and so a spectrum of leadership styles is required, which includes transactional leadership styles; this frequently may be neglected if leaders have an idealized vision of their task (Carlton, Holsinger, Riddell, and Bush, 2015).

Leadership styles have an impact on achieving health-related outcomes and they may either enlarge or shut the present gap in health care. Calling attention to the public health leadership gap in an ever-changing and demanding world should shape the present and forthcoming goals of 21st century health care. To improve quality indicators in health care, public health organizations must develop practical and specialized expertise, increase opportunities, build organizational culture, and balance leadership priorities (SFantou et al, 2017). In health care, there are three main prevalent leadership styles:

1. Transactional leadership: Leaders of this type work in accordance with the existing boundaries and standards established by an organization and avoid risk, focusing primarily on stability, control, productivity, processes, and predictability.

2. Transformational leadership: Leaders of this type are experts at motivating others and delivering meaningful change.

3. Servant leadership: Leaders of this type prioritize the service element and share a natural inclination to support others.

In health care organizations, transactional leadership will ensure that the status quo is maintained. However, servant and transformational leadership are the most likely to help health organizations progress (SFantou et al, 2017). Rogers (2012) states that it is essential for health care leaders to develop a strong understanding of both relationship and task behaviors. Task behaviors are mutual enabling agents that function on the leadership and individual levels. These behaviors help leaders to provide practical guidance to others and help followers to achieve their objectives. In contrast, relationship behaviors include the capacity to interact and communicate in a manner that is inclusive and supportive.

In differing circumstances, leaders may take a more relationship-oriented or task-oriented approach. Thus, it is vital for those working in the health profession to develop a sense of self-awareness of their leadership style and behaviors. Developing this self-understanding will enable individuals to enhance their communication skills with their team and beyond. For instance, Stoller (2009) notes that medical practitioners receive no training in leadership styles and behaviors. Due to the nature of their profession, Sonnino (2016) asserts that medical professionals tend to pursue outcomes with little regard for the processes required to achieve them. Nonetheless, in daily interactions with patients and families and medical practice itself, leadership is fundamental.

Leaders in health care reach their leadership positions through different routes. Rogers (2012) undertook an analysis of the ways in which leaders in each major sector of an academic health center (administration, medicine, nursing) communicated and led their team. Her research looked at ways in which leadership styles vary between different branches of health care in administration, medicine, and nursing (Rogers, 2012). Rogers reached the conclusion that all branches of health care should be more aware of their actions and their leadership styles and engage in reflective practices (Rogers, 2012). For instance, many who enter the nursing profession expect, or at least hope, to attain leadership roles (Sonnino, 2016). This is the primary reason why nursing was quicker to adopt leadership training than other sectors (Schwartz et al., 2000; Scott, 2010; Rogers, 2012; Sonnino, 2016). Hospital administrators tend to be those who have a good overview of the institution, having generally worked at several levels of administration. These individuals will generally have some experience of managing, so they adapt to leadership quite seamlessly, provided they have a visionary capacity in addition to being able to manage (Sonnino, 2016). However, it would be wrong to assume that downright

management ability is enough to become an effective leader in such a complex and widespread area as health care. Health care professionals must develop a schema of integrated leadership to respond to the needs of health care delivery systems (Scott, 2010).

For a physician to become an effective modern leader requires much effort and training, which frequently means they must move away from their established and comfortable ways of working (Souba, 2011). Many physicians are actively resistant to the idea of taking a leadership position (Scott, 2010). It is distinctly the case with senior physicians that they are unable to take on a holistic view of the public health system, a highly valuable skill for leaders in health care (Sonnino, 2016). Arroliga et al. (2014) stress that if we do not introduce proper training to health care leaders the impacts on society could be detrimental in the long term. It is argued (ibid) that the ways of choosing leaders traditionally employed (through seniority, productivity, or academic ability) were not sufficient, as those chosen in this way would merely copy those they succeeded and would not formally develop the necessary capabilities, either personal or professional, required for good leadership (Arroliga et al., 2014; Sonnino, 2016).

There is much debate on whether men and women demonstrate different behaviors in leadership roles. However, in general, it is agreed upon that men do not face much barriers to reaching leadership positions as compared to women since many leadership positions are male-dominated (Eagly & Schmidt, 2001; Book, 2001). To attain higher positions and leadership roles, women are more likely required to meet much higher standards than men and maintain their performance to preserve their position (Eagly & Schmidt, 2001).

In many studies, women have been found to exceed men in transformational leadership styles and attributes (Fontenot, 2012; Lanz, 2008; Ridgeway, 2001; Eagly & Schmidt, 2001 Davidhizar, 2001; Book, 2001; Ross & Offerman, 1977). Women in leadership positions ranked

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higher performance levels in the idealized influence, inspirational motivation, and individualized consideration of the transformational leadership style (Fontenot, 2012; Lanz, 2008; Ridgeway, 2001; Eagly & Schmidt, 2001). These behaviors found that female leaders exhibited attributes that (1) nurture followers to feel their sense of value and respect in an organization (2) show enthusiasm and eagerness to achieve future goals (3) and made continuous efforts to guide followers. In the transactional scale of contingent reward, it has been shown that female managers are more likely to give their followers rewards for good performance than their male counterparts (Fontenot, 2012; Lanz, 2008; Ridgeway, 2001; Davidhizar, 2001; Book, 2001; Ross & Offerman, 1977). In contrast, men have been found to demonstrate behaviors in the transactional scales of laissez-faire leadership, active management by exception, and passive management by exception (Fontenot, 2012; Lanz, 2008; Ridgeway, 2001; Eagly & Schmidt, 2001 Davidhizar, 2001; Book, 2001; Ross & Offerman, 1977).

Transformational leadership, to a certain degree, is highly associated with the female than the male gender role. Many studies show that followers spot a notable resemblance between leaders' feminine character traits and its association with the transformational leadership style (Fontenot, 2012; Lanz, 2008; Ridgeway, 2001). Therefore, female leaders demonstrate more democratic and transformational behaviors while male leaders are inclined to exhibit transactional and autocratic behaviors.

Transactional and transformational leadership can be modeled in a stick figure. A stick figure without a head models' transactional leadership because it only focuses on the outputs and tasks (Fulwiler, 2015). However, when a smile and a heart become part of the stick figure that is when the transformation occurs because the transformational leader begins to see the workforce as a whole person with a mind and a heart (Fulwiler, 2015). By engaging the whole individual in

the transformation process, the leader will end up with a better transformation whether it be on an individual, community, societal, or global level.

Communication

Communication is at the core of who we are as human beings and a basic instinct that humans are born engaging in. Without strategic communication, public health initiatives would not be successful. In contradiction, communication in public health continues to be poorly-funded, underrated and only incorporated in health care programs as an addendum. (Wallace et al., 2008). However, professionals in the health care field understand instinctively that exchanging information and demonstrating excellent communication skills play a pivotal role in achieving positive results. Communication, for instance, takes place when physicians interpret the symptoms of patients, when researchers examine health data and when public health officials respond to a health crisis. Nonetheless, little research has been done to support communication in public health to maximize its efficacy and efficiency. Consequently, there is a significant need for cost-benefit data to inform investment in strategic communication to aid vulnerable populations globally (Wallace et al, 2008).

Through the use of social media, public health professionals and health educators are able to network and share information obtained through evidence-based research (Hansen et al. 2011). According to Hanson et al. (2011), 61% of adults in the United States use the internet to access health information. This could be in part due to the increasing number of health care organizations using Health Information Technology (HIT) portals such as personal health records (PHR) to provide access to health and medical information to their clients. Not only do these systems allow clients and health care providers to communicate using technology but also

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deliver health education for the management of chronic disease. Implementing technology to

provide health education resources for clients does not go without its challenges. As indicated by

Stellefson et al. (2013) many people who are on limited incomes or who are at or below the

poverty level may not be able to afford internet services. Therefore, these people are not able to

access health information via the internet.

Additionally, the lack of literacy among individuals and the ability to retrieve valid health

information on the internet is a major drawback. For this reason, Hou (2011), and Stefellson et

al. (2008) have indicated that public health professionals must determine the literacy rates as

well as cultural backgrounds of individuals so they can plan programs that target their knowledge

of technology, knowledge in general (i.e., reading level), and specific cultural needs. This, in

return, will help in increasing the health literacy of individuals and their ability to access valid

and reliable health information on the internet.

According to Bernhardt (2004), political, social, behavioral and environmental factors, all

have a profound impact on health. This ecological perspective embraces itself in public health

communication by promoting communication strategies and interventions at multiple levels,

such as tailored messages at the individual level, social marketing at the community level, media

advocacy at the policy level, and mass media campaigns at the population level. However, it has

been found that poor communication between health care and public health organizations have

led to a failed partnership, particularly regarding achievable health outcomes (West and Pillinger,

1995; West and Slater, 1996).

A great deal of research into public health care teams has focused on difficulties around

inter-professional communication. In one study, interviews with 96 primary health care team

members were conducted to gain insights into the factors that affect health care teamwork and

communication strategies (West & Field, 1995). West and Field (1995) found that a number of factors impact intra-team communication, for example, team-building, team cohesiveness and the provision of a set time and structure for decision-making. The existing literature emphasizes the assumption that physicians should be leaders and differences in power, position, assertiveness and education level among team members serve as instrumental factors in the failure of health care teams and in poor communication (West & Pillinger, 1995; West & Slater, 1996).

The nature of communication is unique in that all humans demonstrate their own methods of communication. Therefore, to "fully appreciate the process of organizational communication, some of the fundamental principles of communication must be addressed" (Greenberg, 2011, p. 293). Within organizations, the process of communication often relies on a variety of additional factors that may attribute to its effective or ineffective reception. Dessein (2002) points out in his study of authority and communication in organizations that the connection between position and authority within the organization poses a real threat to the communication process (Dessein, 2002). Additionally, the attribution of upward and downward communication along organizational hierarchy also provides insight into how process must be adapted to fit positions within the organization (Dessein, 2002). Roberts and O'Reilly (1974) at UC Berkley found that failure in upward communication in organizations the factors of trust, influence, and positional mobility. The greater each of the three factors is between the two individuals communicating within the organization, the greater the likelihood of the message successfully being transmitted (Roberts & O'Reilly, 1974). However, in upward communication within organizations, the three factors may differ and result in employees not being able to communicate effectively to those in higher positions (Tourish, 2007).

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Alternative processes of communication within organizations may also exist. One such form is known as informal communication in which the culture of the organization contributes to the communication process and can take on different channels of communication that relate more to personal relationships rather than organizational structure (Kraut, Fish, Root, & Chalfonte, 2002). There are, however, critiques on the lack of research on communication processes within organizations that have instigated a more in-depth look into the more informal aspects of organizations and their employees (Fulk & Boyd, 1991).

Communication is vital not only to the healthy understanding of information between individuals but also between groups and organizations. The process of communication has many very distinct steps that are crucial to understanding when to communicate and receive information from another party. The various types of communications within organizations such as formal and informal and the ability for communication to be had in an upward or downward direction provides a level of complexity to communication that would otherwise appear straightforward. In gaining a better grasp of the processes of communication that take place within their organizations, leaders can better equip themselves and those within their organization to handle the issues and challenges that may arise from miscommunication. In doing so, they are more easily able to focus their efforts into manifesting their organizational vision and mission.

Globalization

Globalization has affected every aspect of the society in which we live today. The rise of globalization has had a direct impact on communication, economics, business, education, and even travel. By definition, globalization is "the process of interconnecting the world's people with respect to the cultural, economic, political, technological, and environmental aspects of their

lives (Greenberg, 2011)." The implications of globalization, however, have far transcended the simple connection of the world and have resulted in what the Global Policy Forum cites as "the largest shift in global interaction the world has ever experienced (Global Policy Forum, 2006). Although generally considered positive, the effects of globalization provide a conflicting reality for the 21st century.

Jerald Greenberg in the text *Behavior in Organizations* postulates the factors contributing most to the rise of globalization, all relating specifically to the increase in international trade. The factors, Greenberg suggests, that have facilitated this international trade are technology, laws related to trade, promotion of imports and exports across borders (Greenberg, 2011). He points out that by lowering the costs of transportation and communication, technology has allowed ideas, commerce, and culture to transcend the borders of their origin and spread to a global level (Greenberg, 2011).

In support of technology's effects on globalization, Thomas Friedman in *The World is Flat,* identifies four of the ten total "flatners" of the world that have contributed to globalization as a result of technologically related advancements and popularizations (Friedman, 2005). With the ability of technology came the regulation of laws related to trade that "liberalized" the free trade policies across borders (Greenberg, 2011). These two factors along with "developing nations seeking to expand their economies" have solidified the doors by which foreign companies can seek commerce opportunities in other nations (Greenberg, 2011).

Because of the inherent link between globalization and international trade, an unforeseen byproduct of such a trend has been the decrease of war and foreign policy violations between nations. Globalization has "increased the regional penetration and transcontinental linkages of trans-border activity of all types" and as a result has resulted in the increased dependence of the

economies of the country on such foreign trade (Duffield, 2014). Interestingly, research has found a positive correlation between the amount of trade and economic relations between nations and the decreased likelihood of any military aggression between such nations (Bearce & Fisher, 2002). Essentially, going to war with a nation of which many economic variables depend is a notion that very few countries consider possible within foreign policy.

Globalization and the increase in trade among countries have been beneficial not only for developed countries such as the United States but it has also substantially impacted the economic potential and ability for developing countries across the world (Lukas, 2000). As pointed out by Aaron Lukas, "in the past half-century since the founding of the General Agreement on Tariffs and Trade, the world economy has grown 6-fold" and "globalization has made it possible for more people to lift themselves out of grinding poverty more quickly than was ever possible before" (Lukas, 2000).

Such is the presiding notion amongst scholars about the impacts of globalization on developing countries. Research also has suggested a notion "opposite to conventional wisdom" in that globalization has increased the inequality between developed and developing nations because of matured markets taking advantage of still developing economies (Pavcnik & Goldberg, 2007). Although considered mainstream, this research hints at a darker side to the negative implications of globalization that may have gone unnoticed amongst the euphoria of a more interconnected world.

Globalization has effectively created a flatter, open, and smaller world by which people, companies, and countries are able to interact easily. Such a trend has been driven mainly by international trade and has been aided by the implantation and usage of technology across the globe. This trend of globalization has brought about implications related to the decrease of war

and violence between nations, the open ability to share ideas, and the increase of information and knowledge. The trend of globalization is, however, more intricate than what traditional understandings may suggest. Although history may not possess any answers to such new age issues that arise, one thing is for certain, the reality of our world today is much different than that of recent years and continues to drastically change through globalization.

Globalized Diseases

Public health and medicine have been described as two trains running on parallel train tracks (Lurie & Fremont, 2009). The trains look out at the same landscape, but their windows face opposite directions. The former Secretary of Health and Human Services, Donna Shalala, explained that the passengers of the medicine train look out on individual trees and take note of nuanced differences in their size, condition, age and color (Lurie & Fremont, 2009; Shalala, 1996). In contrast, the passengers of the public health train look out on the forest; they see groups of similar trees that grow together and face the same burning sun and pouring rain (Shalala, 1996). These two outlooks have the potential to complement each other, but initiatives to enhance care, personal health, and public health have been hindered by disjointed data systems and poor coordination and communication between professionals in public health and medicine (Lurie & Fremont, 2009). Moreover, different outlooks and fragmented data have impeded the usefulness of collective initiatives such as health plans and community-based organizations involving health professionals and other stakeholder groups. People have been calling for greater cooperation between public health and medicine for many years, but technological advances and the crucial need for reform have made it both necessary and opportune for public health and medicine to work together (Institute of Medicine, 2002; Lurie & Fremont, 2009; Shalala, 1996).

Communicable diseases continue to affect multiple areas around the world. This is due to the rapid expansion of demographic, environmental, social, and technological factors that have a direct effect on the way humans live. During the past decades,' there has been an emergence of new infectious diseases (Ebola, SARS, HIV/AIDS) and the return of familiar ones (e.g., tuberculosis, cholera), with the burden falling mostly on poor countries. Historically, human movements associated with pilgrimage, trade, military campaigns, and refuge have accelerated the spread of infectious diseases (Colwell, 1996; Labonte, Mohendre, & Schrecker, 2011).

Nowadays, modern transportation has allowed pathogens to expand faster with no consistent pattern (Tatem et al., 2011). However, global factors influencing the emergence and comeback of infectious disease are not only related to travel and migration methods. "Major international public goods for health, notably communicable disease control (including vaccination) and control of antibiotic resistance but also disease surveillance, are conspicuously undersupplied by today's economic institutions, reflecting the dramatic decay in local and global public health capacity" (Labonte, Mohendre, & Schrecker, 2011).

Climate change is partially responsible in the spread of infectious diseases. Global warming and the instability of temperature is increasing the transmission rates of vector- and rodent-borne diseases (Mirski, Bartoszccze, & Bielwaska-Drozde, 2011). Research and policy attention is being intensified to better understand the globalization of infectious diseases and to develop sophisticated tools that accurately model their spread (Labonte, Mohendre, & Schrecker, 2011). Long before the discovery of the role of infectious disease agents in the nineteenth century, there was always an understanding among humans on how climatic conditions affect epidemic diseases. For instance, to avoid malaria during the summer season, Roman aristocrats would retreat to hill resorts (World Health Organization, 2011).

On the other hand, chronic non-communicable diseases such as diabetes, heart disease, and stroke have been on the rise. Presently, non-communicable chronic diseases account for the highest global burden of disease and outweigh the proportion of infectious diseases in all developing countries aside from the sub-Saharan Africa (Mirski, Bartoszccze, & Bielwaska-Drozde, 2011). The emphasis to target communicable diseases continues to be on top of the hierarchy while public health policy and practices at the international level remain slow in responding to the rising problem of chronic diseases.

A future direction for health education and public health pertains to larger social issues is the multiple challenges of concomitant morbidities (Clark, 2011). More than half of Americans suffer from chronic disease, and one in four Americans have two or more chronic conditions (CDC, 2014). This threat poses a challenge for the public health and health education professions as the focus of behavioral change is not limited to eradicating or maintaining one chronic condition for each individual, but several co-existing conditions.

Research is limited in terms of interventional approaches to deal with a combination of chronic conditions that impact a quarter of Americans. Since the management of co-morbidities occurs outside the health care system, there is a great emphasis on social influences such as the home, work, and school to provide managed care. Therefore, public health is charged with reaching beyond the scope of clinical practice and extend their educational efforts into the community where the health care system leaves off. No effective multiple morbidity intervention models are available.

As global financing for health issues continues to increase, public health policy, leadership, and practice continue to face challenges that arise from globalization. The paradigm shift toward global health and global leadership among public health leaders calls for new training programs,

resources, and solutions for health problems away from the conventional health care provision. It demands the need for leaders and public health professionals to communicate strategies across disciplines and iron out public health issues to develop integrated approaches, formulate teams, and request and allocate funds. To coordinate the solving of global health problems and achieve health equity communication linkages will be vital. It is necessary for those who are in the front lines of leading global public health efforts to formulate inclusive and well thought out plans that draw from an enhanced understanding of global health means along with what it should encompass.

David de Ferranti, of the World Bank, has illustrated globalization as a natural force of gravity in which the human force has no power to stop (Lee, 2004). On the contrary, Lee (2004) argues that globalization is created and controlled by the people; therefore, making it a social force. To address challenges arising from globalization, it is vital to recognize that globalization does not possess a predetermined trajectory, but is modeled in a way in which certain interests are more favorable, and that puts other interests at a disadvantage.

It is integral for the public health community to understand that the globalization can affect health in both positive and negative ways. Depending on one's geographical location and demographic factors such as sex, age, ethnicity, and socioeconomic status globalization may bring widespread benefits or costs. The challenge, however, lies in being able to untangle these different factors and understand their distribution among different populations. Therefore, public health needs to take a stronger step in developing policy actions to control the health impacts of globalization.

Social Loafing

The universality and significance that teamwork holds in the health care field is well

recognized (West et al, 2013). Yet, depending on the occupation, health care teams widely vary

in their make-up and efficiency. Due to these differences in team processes and desired health

outcomes, public health programs may become at risk of stagnation. Social Loafing, also known

as "free riding," is the phenomenon by which individuals exert less effort to achieve a goal when

they are working in a group or organization compared to when they work alone (Greenberg,

2011). Related to the concept of additive tasks, social loafing occurs when the more individuals

who are contributing to the task, the less everyone's contributions tend to be (Greenberg, 2011).

The social impact theory has described social loafing in terms of "diffused responsibility" in

stating that the larger the size of the group, the lower the impact of its force on any one member

(Greenberg, 2011, p. 189).

Alan Ingham and his colleagues in 1974 conducted one of the earliest pieces of research

that aimed to highlight the effects of social loafing on group participation (Ingham, Levinger,

Graves, & Peckham, 1974). The group simulated a rope pull of a heavy object by a group of

individuals (Ingham, Levinger, Graves, & Peckham, 1974). By measuring the amount of effort

exerted by each individual and comparing that to the effort exerted when they attempted to pull

the heavy object alone, the results showed that there was a decrease in individual performance in

the group setting (Ingham, Levinger, Graves, & Peckham, 1974). Similar experiments were

administered within the realms of clapping and shouting to identify the intensity by which an

individual's exerted effort in various situations and contexts (Latane, Williams, & Harkins,

1979).

In adopting such historical examples of social loafing to organizations and the workplace,

similar implications are observed by employees and participants. Hwee Hoon and Min-Li Tan

have pointed out that social loafing is a behavior that organizations are actively working to eliminate within the organization and instead promote citizenship behavior (Hoon & Tan, 2008). Seen as the opposite to social loafing, citizenship behavior promotes individuals to work to the best of their ability and as a result can lead to significant productivity increases within the organization (Hoon & Tan, 2008).

In identifying the causes of social loafing Latane, Williams, and Harkins identify three major causes for the phenomenon (Latane, Williams, & Harkins, 1979). First, the implications of attribution and equity within group dynamics highlight the comparison between individuals of the group (Latane, Williams, & Harkins, 1979). Participants within the group are likely to compare themselves to others, and if they are seen to be providing more input to the groups work, they are likely to decrease that input to more comparable levels of other participants within the group (Latane, Williams, & Harkins, 1979).

The lack of trust between group members and the fear of having to exert more effort within the group also intensifies the impact of social loafing. Second, participants within the group may internally redefine the goal or task and engage in submaximal goal setting (Latane, Williams, & Harkins, 1979). In this case, participants do not exert their maximum effort because their understanding of the goal has become easier due to more participants aiding in goal acquisition (Latane, Williams, & Harkins, 1979).

Finally, participants may feel as though they are able to avoid negative consequences of underperformance by "hiding in the crowd" and as a result will underperform due to the lack of individual accountability (Latane, Williams, & Harkins, 1979). In concluding their research, Latane, Williams, and Harkins (1979) point out that social loafing is, in fact, a social disease that is contagious and can provide negative consequences to the entire group. If only a few

participants in a group are to engage in such an act, it becomes very straightforward the phenomenon to spread to the rest of the group rapidly.

As seen from previous research, the lack of individual accountability is one of the primary drivers for social loafing. As a result, a variety of strategies and techniques can be utilized to reduce the impact of social loafing within groups and organizations. In his text *Loafing on The Job*, James Larsen mentions the utilization of measuring individual productivity and output within group settings as a means of combatting social loafing (Larsen, 2008).

Through the individual measurement of output, the numerical value can provide quantifying information for participants to hold each other and themselves accountable to perform, even in the face of group conformity. Additionally, reducing group size and implementing peer evaluations within group work settings in the organization can further eliminate the ability for participants to "hide within the group" or behind the work of other members (Price, 2006). Reducing group size also impacts the trust and team cohesion between group members and provides further individual accountability to further reduce the impacts of social loafing within organizations.

Research has shown that health care teams are significantly affected in terms of performance by leadership and by the social loafing phenomenon. As interdisciplinary teams will often have many degrees of status within them and a certain amount of inter-professional conflict, it is not surprising that leadership is frequently inadequate (West, 2011; Ovretveit, 2002). West (2003) undertook an analysis of almost 300 teams of health care providers (including cancer teams, community mental health teams, and primary health care teams), and revealed that without consistent leadership the working of the team and the achieved outcomes were both detrimentally impacted. Additionally, a clear definition of leadership was found to

lead to more participation, more clarity of objectives, a greater sense of purpose, a desire for excellence, and more enthusiasm for innovation (West 2003). However, only around a third of primary health care teams, and only 10% of community mental health teams, felt that the leadership roles in their teams were clearly defined (West 2003).

Although social loafing is a phenomenon that inherently follows organizations and group output within the workplace, it most definitely can be controlled and minimized. By understanding the causes of the social loafing, leadership processes, and gaining a deeper insight on the nature of groups, organizations can increase the productivity of their groups and teams and continue to provide more value for their stakeholders. To reduce social loafing in public health and health education it is imperative to emphasize the prominence of the profession in such a way that individuals and organizations consider their tasks as both significant and necessary.

Summary

Commentators have proposed that leadership training programs should commence early in an individual's career to have a maximum impact on their development; however, even now, many employees have no access to leadership training at any stage in their career (Sonnino, 2016; Savage, 2014). Employers must focus on increasing leadership development training opportunities and accessibility. The literature on the topic of leadership has increased significantly, however, reports on public health leadership training programs are still limited due to the scarcity of such programs (Rosenman, 2014; Careau, 2014; Sonnino, 2016). Most publications on leadership training focus on clinical health care fields, certain periods of training development, and often represent interventions that are formulated for specific populations (Rosenman, 2014; Careau, 2014; Sonnino, 2016).

Every sector of the health care system is facing increased demand for public health improvement, with requirements for a better health service, better public health, and improved health systems within schools. Those who will become public health leaders in years to come must be aware of the need to learn a wide range of new skills and competencies (Task Force on Public Health Workforce Development, 1999; US Department of Health and Human Services, 1997).

Many facets of leadership may apply to the public health realm. However, research focusing on leadership does not adequately describe the distinctive features of public health practice environments (NCCDH, 2010). Moreover, research does not consider issues such as the need for collaboration efforts amongst both health and non-health professionals for necessary public health action. There is a need for more research, particularly research that focuses on public health leadership to advance health equity, the understanding of leadership styles, and how to reinforce public health leadership. The current study aims to arm future researchers and public health professionals about the current leadership styles and behaviors of leaders in the health education field along with gaining an understanding of the leadership styles and behaviors of certified and master certified health education specialists.

CHAPTER 3

METHODS

Introduction

Public health holds the mantle for running both public and private efforts to improve the health of communities, societies, and nations. Without strong public health efforts, quality health care will not be accessible. Without the achievements of public health in the 20st century, it is possible that the United States would have seen 48,834,243 deaths between the years of 1901 and 2032 (Galea, 2016). Despite these achievements, public health still has a gap in effective leadership to achieve social change and respond to global issues. Minimal research appears in the literature for understanding public health leadership styles along with other non-clinical fields within public health. Therefore, the author has selected to focus on the field of health education to aid in building a stronger public health community and customize leadership programs and curriculums for different occupations within public health. This chapter focuses on the mixed methods design of the study, quantitative and qualitative procedures, instrumentation, and statistical methods used to analyze the data.

Research Approach and Design

This study follows a convergent mixed-methods design and uses descriptive and group comparisons in identifying leadership styles and behaviors among certified health education specialists and leaders in health education. Independent variables are changed or controlled to test the effects on the dependent variable. In this study, the independent variables are gender, age, occupation, ethnicity, certification, and highest academic degree earned. The dependent variables in this study are behavioral and leadership styles.

To examine research questions one and two, chi-square tests of independence will be conducted to determine whether the variables are related to each other. To examine research question three, binomial logistic regression will be conducted to investigate whether the independent variables— gender, age, occupation, ethnicity, health education specialist certification, and highest academic degree earned predict the dependent variable— leadership style. Multinomial logistic regression allows for more than two categories of the dependent variable and uses maximum likelihood estimation to evaluate the probability of categorical membership (Gliner, Morgan & Leech, 2009). Comparisons relating to gender, age, occupation, ethnicity, and educational level were analyzed among the participating health education specialists and leaders in health education.

The research design for this study consists of three main stages:

1. Identification of key informants in health education leadership.

2. Carrying out interviews with key informants to inform and expand leadership constructs to be surveyed.

3. Survey administration to individuals who have been credentialed by NCHEC as CHES and MCHES

4. Check results of survey with key leader informants to see how their responses confirm or diverge from the results of the survey.

Selection of Participants

There were two main populations of interest for this study: (1) health education specialists with either the CHES or MCHES certification credential; and (2) renowned leaders in health education regardless of their CHES/MCHES certification status. Health education specialists were selected from the national list of CHES and MCHES members provided by NCHEC.

Purposive sampling will be used in selecting certified participants based on residing in one of the four United States regions (West, Midwest, Northeast, and South) to decrease the possibility of over representing individuals from certain geographical regions. These four regions were identified by the U.S census bureau. Figure 1 displays the states included in each region. Once specialists were grouped according to region, the primary researcher randomly selected possible participants from each region. The researcher used purposive sampling so surveys were evenly distributed throughout the nation; thus, decreasing the risk of oversaturation of mailed surveys to a particular region that could occur with a random selection. Once there was an equal representation of all four regions, random selection of participants occurred in each population segment.

To estimate sample size for the current study, the Raosoft sample size power analysis calculator was used. For the total population of 12,887 certified health education specialists, a confidence level of 95%, the minimum calculated sample size for this study is 377 certified health education specialists. To identify leaders in health education a start-up list was provided by an expert leader in health education of key informants in the health education field. An email was sent to the key informants asking them to identify other key informants in the field of health education and provide their contact information (snowball sampling). The list will continue to develop until 80% saturation is reached.

U.S. Census Regions
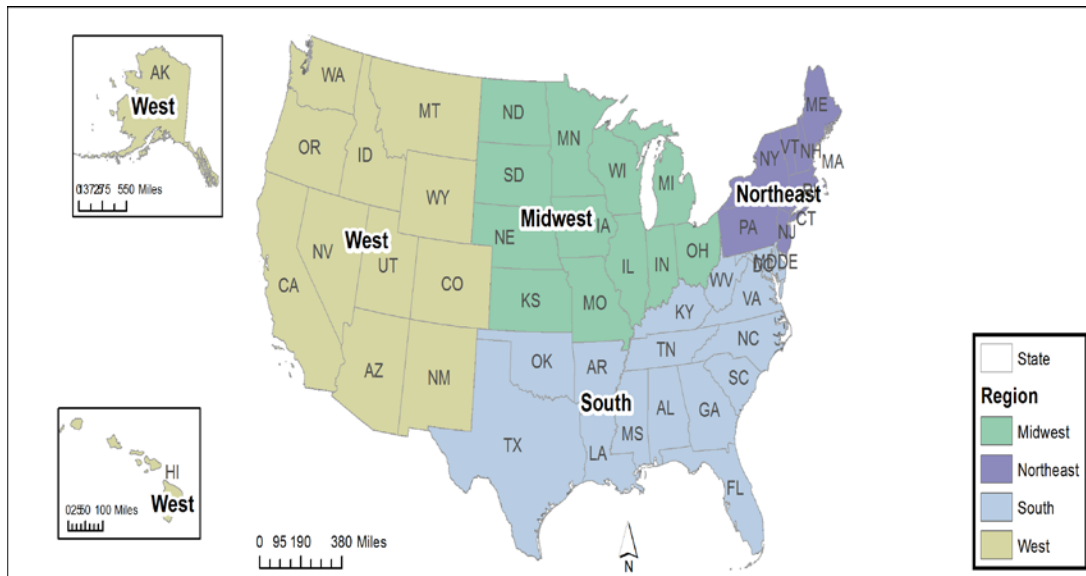
From United States Census Bureau

Figure 1. United States Census Regions

Qualitative Procedures

I will conduct telephone interviews with key informants in health education gathered from the email snowball sample before and after conducting the survey. A personal invitation email will be sent to key informants stating the nature and goals of the study, time expected, the voluntary nature of the study. After the key informants agree to participate, a mutual agreed upon day and time will be set. Before conducting the interviews with key informants the researcher will pretest the questions with Dr. Robert McDermott and Dr. Saran Donahoo to be reviewed for content validity.

Dr. McDermott and Dr. Donahoo hold vast expertise and experience in their fields including health education, leadership, higher education, and both qualitative and quantitative research methods. At present, Dr. Robert McDermott is a professor, graduate program director, and interim chair of the Public Health and Recreation Professions at Southern Illinois University Carbondale. Dr. Saran Donahoo is a professor and chair of the Department of Educational Administration & Higher Education. She is also the director of the doctoral program in the department of Higher Education and the College Student Personnel Program.

Two qualitative interviews will be conducted. The first interview will glean in items that might be added to the leadership style survey. The second interview will be a post-survey interview to examine the congruence of the results with leaders' understanding of leadership styles. The post survey interview will consist of semi-structured open-ended questions regarding the results of the MLQ survey. There are several advantages of conducting qualitative interviews: (1) they are useful for rapport building (2) they are exploratory and descriptive in nature, and (3) and it allows the researcher to view the issue from a multi-lens perspective (Creswell, 2007). The interview protocol will be uniform throughout the qualitative interview process. The interview will start with a brief synopsis of the study and consent to participate and record the interview. Afterword's, the researcher will begin the interview question process. Creswell (2007) suggest probing for at least four to five questions for further explanation of participants' ideas. In this study, the researcher will probe for five questions, to follow up and ask individuals to elaborate on their responses. Transcriptions of audio-recorded files will be typed word-for-word in Microsoft Word document. After initial transcription, the written document will be examined for precision and accuracy. For confidentiality and anonymity purposes all recorded data files and written word document transcriptions will be given

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pseudonyms. For qualitative data analysis and management, the ATLAS.ti 8 software will be used due to its high reliability in coding qualitative interviews. Coding is a qualitative method used to organize written manuscripts in groups with words that adequately describe the theme of the text within each group (Creswell, 2007). To verify proper coding of data, an outside coder will be asked to independently analyze the transcripts. The outside coder's analysis will be used as means of comparison with the original coding results. If inconsistencies within the analysis are found discussions will be held until coders reach an agreement. If agreement is not reached a third outside coder will called upon to code the data. The process will continue until there is almost complete unanimity regarding the coding results.

Quantitative Procedures

The researcher will gather emails of CHES and MCHES specialists provided by NCHEC. The researcher will purchase the remote online survey license via Mind Garden. After the purchase of the licenses, an email will be sent from info@mindgarden.com which includes a login link to the Mind Garden Transform Account where the researcher will administer the MLQ Self Form survey via a campaign (Mindgarden, 2018). The link will include steps to create the campaign, setting the campaign options, inviting participants to complete the survey, and monitoring their progress (Mindgarden, 2018). Demographic questions (gender, age, years of experience, occupation, and ethnicity) that pertain to the purposes of the study will be included in the MLQ survey. The transform system provided by Mindgarden will provide a data file with participants' raw data and raw scale scores along with generated group reports.

Conceptual Framework

The present study features a convergent mixed-methods design. Data collected through qualitative semi-structured interviews with key informants in health education will expand on the results of the MLQ survey to gain a better understanding of public health leadership. The goal is to triangulate the findings from survey results and semi-structured interviews conducted with key informants' in health education. Triangulation of the dual sets of findings assists in validating qualitative and quantitative outcomes or in generating outlooks in need of additional research (PHTC, 2018). Acquiring inclusive data will allow for the development of appropriate public health leadership programs, curriculums, training programs, and workforce development in the fields of public health and health education.

Data Collection

The Human Subjects Committee (HSC) of Southern Illinois University Carbondale (SIUC) approved the study methods prior to data collection. Approval from the National Commission for Health Education Credentialing to access the CHES and MCHES list of members and their email addresses was granted on December 7, 2017. Licenses to use the MLQ were purchased. Potential participants from different regions including the Midwest, South, and Northeast of the United States were selected from the contact list provided by NCHEC. Purposive sampling was used so that surveys were evenly distributed throughout the nation to decrease the risk of oversaturation in one region. Once potential participants were identified, the survey instrument and cover letter were sent to the email addresses provided by NCHEC. In order to track potential and participating responses, the MindGarden system will provide the researcher with progress information of participants. The researcher will use this information to monitor participant activity. To increase participation follow-up mailings to participants who did

not respond or complete the survey will be sent. A total of 600 surveys will be mailed in the first and second wave of emails. One week following the first request to participate in the survey a second wave of emails will occur. If the second wave of emails failed to produce the adequate number of responses needed for a sample size of 377 participants, a third wave of emails to the original potential participants who did not respond to the second wave will occur. Between each email sent to participants there will be three weeks.

Research Questions

Research Question	Data Analysis
What is the most prevalent leadership style (s) among CHES/MCHES?	**Chi Square test of Independence** The Chi-square test of independence will be used to see if the two categorical variables (leadership style/CHES, MCHES) are related to each other or not.
What are the most frequent leadership behaviors among CHES/MCHES within each leadership style?	**Chi Square test of Independence** The Chi-square test of independence will be used to see if the two categorical variables (leadership behaviors/CHES, MCHES) are related to each other or not.

	Binomial Logistic Regression
Do gender, age, occupation, ethnicity, and educational level predict leadership styles?	Binomial logistic regression will be conducted to investigate whether the independent variables— gender, age, occupation, ethnicity, and highest academic degree earned predict the dependent variable behavioral and leadership style.
How do the responses of key informants in health education confirm or diverge from the responses of the survey?	Semi-structured Telephone Interviews

Instrumentation

As the study of leadership has become more prevalent in the last few decades, researchers have elaborated not only on the types, theories, and styles of leadership, but also on how leadership can be measured. The Multifactor Leadership Questionnaire (MLQ), first published by Dr. Bernard Bass in 1985, is a data collection tool used by many researchers to attain quantitative data regarding leadership styles. Since its initial formation, the MLQ has went through several revisions to strengthen its level of reliability and accuracy (Bass & Avolio, 1995; Bass & Avolio, 2000). There are two types of surveys' that can be used for the MLQ: the *Leader Survey* and the *Rater Survey*. The Leader Survey measures the leadership style of the individual

taking the survey and the *Rater Survey* measures the percieved leadership style of the individual 'leading' the individual taking the survey. For the purposes of this study, the Leader Survey will be used to assess leadership styles, behaviors, and attitudes of certified health education specialists. The modern version of the MLQ named MLQ5x includes 45 questions broken down into nine scales and uses a 5-point behavioral rating scale (Bass & Avolio, 2004). It has been found that he MLQ can be useful in assessing public health leaders' approaches and outcomes and has been widely used to study full-range leadership styles (Avolio & Bass, 1999; Carlton et al, 2015).

Summary

To be prepared adequately for the challenges of public health leadership, we must grasp an understanding of how leadership styles can be applied to different health care occupations and scenarios. This chapter provided in-depth information about the mixed methods design of the study by discussing the quantitative and qualitative procedures. Additionally, information about the selection of participants, conceptual framework, instrumentation, and data analysis methods were discussed. The author believes that the methodology will provide a strong foundation to the purposes of the study.

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APPENDICES

APPENDIX A

APPENDIX TITLE

From: Eva Harara
Sent: Saturday, February 16, 2019 2:49 PM
Subject: Leadership in Health Education

Hello,

My name is Eva Harara. I am a graduate student at Southern Illinois University-Carbondale pursuing myPhD in Health Education. The purpose of my dissertation is to identify leadership styles, behaviors, and attitudes of Certified Health Education Specialists and Master Certified Health Education Specialists. Along with developing an understanding of leadership styles amongst CHES and MCHES credentialed health educators, the study seeks to to conduct qualitative interviews with key informants in health education to validate quantitative findings and generate insights for further research.

As such, I am currently developing a snow ball sample list of leaders in health education. If you are receiving this email that means you have been identified as a key leader in Health Education. I am seeking your help on expanding on my list of key informants. If there is any individual you believe is a key informant in health education please provide me with their name and contact information (if available).

I would greatly appreciate your help!

If you have any questions please don't hesitate to contact me.

Regards,

Eva Harara, M.A.

Public Health & Recreations Department
Department of Educational Administration & Higher Education
Southern Illinois University- Carbondale

APPENDIX B

NCHEC Membership List Approval

NCHEC
National Commission for
Health Education Credentialing, Inc.

Credentialing Excellence in Health Education

1541 Alta Drive, Suite 303
Whitehall, PA 18052-5642
Toll Free Phone: 888-624-3248
Toll Free Fax: 800-813-0727
Website: www.nchec.org

December 7, 2017

Eva Harara
Doctoral Student
Southern Illinois University- Carbondale

Re: Research Request

Dear Ms Harara:

This is the official notification regarding your request of the National Commission for Health Education Credentialing's (NCHEC) for the use of the CHES/MCHES contact list for purposes of your dissertation, "An analysis of preferred leadership styles among Certified Health Education Specialists (CHES) and Master Certified Health Education Specialists (MCHES)." The NCHEC Board of Commissioners (BOC) reviewed your request at their October 23, 2017 meeting. Based on your communication of November 6, 2017, it is my understanding that you have agreed to correct the terminology in your research instrument and also report findings from "health educator" to "health education specialist."

Based on that correction in terminology, your request has been approved. The release of the list is contingent upon the following:
1) Review and approval of the study by the Southern Illinois University IRB. It is expected that all IRB procedures will be followed.
2) Review and approval by NCHEC of the language to be used in the invitation to participate in the study survey.
3) A copy of the completed study will be shared with NCHEC.

If you have any questions, please contact me at llysoby@nchec.org or 1-888-623-3248, ext 13. I wish you the very best in your research.

Sincerely,

Linda Lysoby

Linda Lysoby MS, CAE, MCHES
NCHEC Executive Director

APPENDIX C

<mark>APPENDIX TITLE</mark>

VITA

Graduate School

Southern Illinois University

Eva A. Harara

eva.harara@hotmail.com (permanent email address after graduation)

University of Phoenix

Bachelor of Science, Health Administration, December 2012

University of Alabama

Master of Arts, Health Education, August 2016

Special Honors and Awards:

(OMIT IF NONE)

Dissertation Paper Title:

Anatomizing Public Health Education Leadership for the Next Generation

Major Professor: Robert J. McDermott

Publications: