AN ABSTRACT OF THE DISSERTATION OF

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Abstract approved:

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Michael Dalton

The primary purpose of this study was to determine which factors related to adult 4-H volunteer empowerment in 4-H youth development settings. This study examined the relationship of adult 4-H volunteers' perceived leadership styles of Oregon 4-H Youth Development Educators (YDE) to the adult 4-H volunteer sense of empowerment. In addition, selected demographic and environmental variables of gender, years in role, alumni background, educational background, leadership training, and level of involvement were examined for their correlation to adult 4-H volunteer sense of empowerment. Bass and Avoilio's Multifactor Leadership Questionnaire (rater form), Spreitzer's Psychological Empowerment Instrument, and a demographic/ environmental questionnaire were mailed to 498 randomly selected Oregon adult 4-H volunteers. There were 209 responses received for a 42% return rate. Participants

were described in terms of their demographics, perceived leadership styles, and sense of psychological empowerment. This study involved multiple variables, including the latent variables of transformational leadership style, transactional leadership style, and empowerment, so structural equation modeling (SEM) was used as the statistical analysis. SEM was able to test various models concerning the interrelationship between each of the independent variables (leadership styles and demographic/ environmental factors) and the dependent variable (empowerment). Preliminary analysis reported adequate Cronbach alpha reliabilities as well as appropriate convergent and discriminant validity. The confirmatory factor analysis with the two leadership style factors revealed a modest fit (CFI=0.846) and the confirmatory factor analysis with the empowerment factors revealed an excellent fit (CFI=0.99).

In the structural model, the only demographic/environmental variable to show a significant relationship to empowerment was years in role. The more years a volunteer had been in their leadership role, the more they expressed a sense of empowerment. A significant negative correlation (β= -0.693) was found when comparing transformational leadership style to transactional leadership style, meaning that 4-H YDE who are rated as using transformational leadership are very likely NOT to use transactional leadership. Finally, strong support was found for the hypothesis that transformational leadership style has a significant positive relationship (β= 0.031) to adult 4-H volunteer sense of empowerment. The 4-H YDE who are rated as using transformational leadership are very likely to be empowering adult 4-H volunteers.

Adult 4-H Volunteer Empowerment in 4-H Youth Development Settings

by

Pamela Olsen

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APPROVED:

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Dean of the College of Education

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Dean of the Graduate School

I understand that my dissertation will become part of the permanent collection
of Oregon State University libraries. My signature below authorizes release of
my dissertation to any reader upon request.

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Pamela Olsen, Author

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DEDICATION

The culmination of my doctorate and this document is dedicated to my parents, Harry M. Barduson and Arlys I. Barduson. They instilled in me, at a very young age, the belief that I could be and do anything in life, once I set my mind to it. This is a shining example of what their belief in me has made possible. Their belief in the value of education, the value of hard work & love for your family, and the value of being involved in the 4-H program, as a child and as an adult, have shaped me into the person I am today. Their commitment and unwavering encouragement have provided me with the "wings" to pursue my dreams.

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Adult 4-H Volunteer Empowerment in 4-H Youth Development Settings

CHAPTER 1
INTRODUCTION

Introduction

In the United States, 3500 professional youth development educators directly impact the lives of over seven million youth and 640,000 volunteer leaders through the organizational structure of the 4-H program (National 4-H Headquarters, USDA, 2007). To say that the leadership abilities of these professional educators would be important might be an understatement. 4-H is the Cooperative Extension System's dynamic, research-based, non-formal, educational program and organization for youth (5-19 years). 4-H stands for Head, Heart, Hands, and Health. For over 100 years, 4-H has used experiential learning practices to engage young people in life skill development through expressive arts, environmental education, leadership, technology as well as animal and plant sciences.

The professional extension educator focusing on 4-H youth development provides leadership to this program that combines the cooperative efforts of youth, volunteer leaders, state land-grant universities, state-local governments, and the Cooperative State Research, Education and Extension Service (CSREES) of the U. S. Department of Agriculture. Because of its direct access to 105 State Land Grant Universities in the U.S., 4-H is the only youth program with direct access to technological advances in agriculture, life sciences, human development, social sciences, and related areas helping young people to become mature, competent adults capable of providing leadership in their communities and positive contributions to the workforce. 4-H programs are conducted in 3,150 counties of the United States,

District of Columbia, Puerto Rico, Virgin Islands, Guam, American Samoa, Micronesia, Northern Mariana Islands, and army installations worldwide. 4-H type programs are also international, with youth in more than 80 countries in similar, independent programs.

In the Oregon 4-H program structure, State 4-H specialists/staff provide stewardship to statewide programs, technical expertise, and leadership for state initiatives/issues. Regional and county 4-H Youth Development Educators (YDE) provide direction supervision, leadership, and operation of the county 4-H programs. These educators work with adult 4-H volunteers who have been both screened and trained for their leadership role with young people. The adult 4-H volunteer works directly with 4-H members, co-leaders, and parents in directing or managing a 4-H club and related activities and events. The adult 4-H volunteers also work in partnership with the 4-H YDE, members, and community partners in planning and conducting countywide educational programs and activities.

As an organization, the adult 4-H volunteer role is critical to the success of the 4-H program. Therefore, the relationship *between* the 4-H YDE and the 4-H adult volunteer as well as the *leadership of* the 4-H YDE to the 4-H adult volunteer would be critical.

Theoretical Framework

The competencies needed by a 4-H professional educator are outlined in the 4-H Professional Research Knowledge Competencies (4-H PRKC) developed in 1985 and updated most recently in 2004. The competencies identified in the 4-H PRKC (National 4-H Professional Development Task Force [N4-HPDTF], 2004) represent a

composite of the knowledge, skills and behaviors demonstrated by outstanding 4-H youth development professionals. The five categories articulated in this document include: youth development, youth program development, organizational systems, partnerships, and volunteerism.

Competencies needed to specifically provide volunteer administrative leadership have been articulated both within the 4-H PRKC, (N4-HPDTF, 2004) and by the Council for Certification in Volunteer Administration (CCVA, 2008). Competencies within the 4-H PRKC "Volunteerism" category include: (a) personal readiness, (b) organizational readiness, (c) engagement of volunteers, (d) education of volunteers, and (e) sustainability of volunteers. The 4-H PRKC list does not refer to the competency of leadership, but some of the skills and abilities which encompass leadership are included. The CCVA list of competencies for volunteer administrators include: (a) ethics, (b) organizational management, (c) human resource management, (d) accountability, and (e) leadership and advocacy. The recent addition of "leadership" in the CCVA list begins to articulate some of the leadership skills needed in this area.

According to Bennis (2007) all exemplary leaders have six competencies: "They create a sense of mission, they motivate others to join them on that mission, they create an adaptive social architecture for their follower, they generate trust and optimism, they develop other leaders, and they get results." Burns' (1978, p. 425) definition of leadership is, "the reciprocal process of mobilizing, by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually

held by both leaders and followers." In his seminal work, Burns (1978) identified two types of leadership styles, transformational and transactional leadership.

Bass (1985) elaborated on Burns' works in his development of the full range leadership model. Bass (1990) wrote that transformational leadership encompassed four dimensions-- idealized influence or charisma, inspirational motivation, intellectual stimulation, and providing individualized consideration. Transactional leadership, likewise, had a unique set of characteristics - contingent reward, management-by-exception (active), and management-by-exception (passive). The last leadership style identified was laissez faire leadership. This is also distinguished as non-leadership or passive leadership. To articulate the difference one could say that transactional leadership works to maintain stability within an organization while transformational leadership tries to change the status quo by articulating a vision of what a new organization could be (Lussier & Achua, 2007).

Statement of the Problem

Research provides evidence that 4-H youth development educators lack proficiency in the competencies needed to effectively work with volunteers (Boyd, 2004; Sinasky, 2005; Deppe & Culp, 2001; Culp & Kohlhagen, 2004; King & Safrit, 1998). For example, in the descriptive-correlational study done by King and Safrit (1998), 4-H YDE indicated that they were only somewhat competent with each of the nine selected competencies, also indicating that only three competencies were important. Results indicate that if 4-H YDE do not believe competencies to be important, they are likely not to be motivated to become competent in that area.

Cooperative Extension programs are in a state of transition in the 21st century. Due to the limitations of fiscal resources and rapid shifts in society, the economy and technology, Extension programs are asked to address more needs with sometimes fewer staff and resources. In order to address these issues the presidents and chancellors, of all Land Grant Universities established in 1890, stressed the importance of leadership development emphasizing that leadership is of vital importance to empower individuals and communities, and should embrace characteristics of the transformational style (The Council of 1890 Presidents/Chancelors, 2000).

Transformational leadership is found to be a strong predictor of leadership effectiveness (Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996). The relationship of transformational/transactional leadership style and leadership effectiveness has been explored through research studies focused on Extension Administrators (Ali, 2005; Brown, et. al. 1996; Moore, 2003; Radhakrishna, Yoder & Baggett, 1994; Stumpf, 2003). Yet only three studies to date have tried to assess the transformational leadership styles of 4-H Youth Development professionals (Woodrum & Safrit, 2003; Stedman & Rudd, 2006; Sinasky & Bruce, 2006).

No studies have yet explored the relationship of 4-H YDE leadership style to the experience of the volunteer leader. Is the leadership style utilized by 4-H youth development professionals truly empowering individuals especially the 4-H volunteer leaders in their programs? No systematic studies have been conducted to substantiate researchers' claims that use of a transformational leadership style by 4-H youth development professionals will correlate to a sense of empowerment of adult 4-H

volunteers, especially as perceived by the volunteer leaders in the program. With a growing need for 4-H Youth Development professionals, within the Cooperative Extension System, to be transformative leaders in their programs and communities, it seems important to conduct research that can help enlighten both the leadership and 4-H youth development field in this arena.

Rationale/Need for Study

In Oregon, there are currently 4,872 adult 4-H volunteers working with 150,304 4-H members (Oregon ES237, 2007). This reflects an 18% decrease (1,066 volunteers) since 2003 while during the same time the number of members in club programs increased by 16% and by 38% in school enrichment/special interest programs. The adult 4-H volunteer works directly with the 4-H members in operating a club or afterschool program. The 4-H youth development program model relies heavily on 4-H volunteer leaders to assist in carrying out the experiential learning activities which engage young people in life skills development. Regional and County 4-H Youth Development Educators (4-H YDE) provide direction, supervision, and management of the adult 4-H volunteers and all of the programs offered at the local level. The 4-H YDE is required by their job description to lead. However, there is little attention placed on how the 4-H YDE leadership style is perceived by the adult 4-H volunteer and how this perception impacts the adult 4-H volunteer. This exploration of transformational leadership is intended to help determine the connections between leadership style and volunteer empowerment.

4-H YDE are encouraged to "empower" the 4-H volunteer to carry out the 4-H mission and increase the program's capacity to meet the needs of a growing number of

young people. As adult 4-H volunteers serve as the primary teachers and providers of the 4-H experience, it is the responsibility of the 4-H youth development educator, as their immediate mentor/supervisor, to create an environment in which the adult 4-H volunteers feel empowered.

In order to create an empowering environment, factors related to empowerment and the leadership required in providing the sense of empowerment need to be understood. This study examines specific variables to see which will positively relate to a sense of empowerment of adult 4-H volunteers. The results of this research will inform professional development trainings for 4-H YDE and 4-H youth development educator practices.

Purpose of the Study

The purpose of this study was to better understand the relationship between organizational environment, leadership style, and empowerment of the 4-H Youth Development Educators (YDE) and the sense of empowerment of the adult 4-H volunteers that the YDE's supervise.

With this purpose in mind, the study addresses the following research questions:

- What is the relationship between adult 4-H volunteer sense of empowerment and factors such as gender, years in volunteer role, 4-H alumni background, educational background, 4-H YDE/volunteer leader ratio, organizational structure, leader training, and level of involvement?

- What is the relationship between perceived 4-H YDE transformational or transactional leadership style and the adult 4-H volunteer sense of empowerment?

- What is the nature of the relationship between the sense of empowerment expressed by the 4-H YDE and adult 4-H volunteer sense of empowerment?

Rationale for the Methodology

The rationale for use of quantitative methodology is based on desired research outcomes and for my desire to enhance our Extension mission. Extension is about service, teaching, and scholarship. This is reflected in our mission statement and our job descriptions. The Oregon State University Extension Service Mission Statement reads:

> The Oregon State University Extension Service engages the people of Oregon with research-based knowledge and education that focus on strengthening communities and economies, sustaining natural resources, and promoting healthy families and individuals.

Educators are drawn to extension because of their desire to give people accurate and quality information whether through new research or through tested and informed best practices - scholarship. Scholarship for Extension professionals has been primarily in the form of peer reviewed journals and presentations. The primary form of research is quantitative due to its high level of validity, reliability, and application.

As a realist and pragmatist, I want my research to have real application and usefulness to the profession within which I work. That means my research needs to be objective and observable, free from bias and subjectivity. It should also be

generalizable to other audiences who read it, and they, in turn, should be able to replicate the research. I am an organized person and am comfortable with numbers and statistics. Taking on a quantitative research project does not overwhelm me; instead, it excites me, as it provides me an opportunity to the contribute to something I am very passionate about – the field of youth development.

I have a wonderful network with other 4-H youth development colleagues and administration within our extension system. I have been a 4-H Youth Development Educator for over 22 years. During that time I have served as President of the National Association of 4-H Extension Agents Association, served on numerous national boards and working groups, and traveled and presented programs to professionals across the country. Thus, I felt uniquely positioned to be able to conduct the research needed for my dissertation with great depth and respect for the organization.

My desired research outcome was to determine variables which strongly and positively relate to adult 4-H volunteers' sense of empowerment. The best way I felt this could be done was through a correlation study using quantitative methodology. Because my focus was also on empowerment, I wanted my research method to reflect the empowerment of volunteers within the research process. I wanted as many adult 4-H volunteer voices to be heard is this research process which also led me to utilize a quantitative method versus a qualitative process where only a limited number of voices would be included.

I approach my research from a modernist, positivist, and realist perspective. My assumptions are that there is a "real" world "out there," as stated by Lincoln and Guba (2003), and that to observe it, experience it, and know it is to conduct research in

a way that does not contaminate observations through my methods of gathering,

testing, and recording the information. I believe that this is best done in an objective

manner. Positivism and post positivism paradigm positions adopt a realist ontology,

relate to their inquiry from an objectivist perspective, and focus on methods that are

experimental and manipulative for the purpose of verifying or falsifying hypotheses.

However, Lincoln and Guba (2003) also refer to action as a desired outcome of the

inquiry process. I want the Extension System as an organization to benefit from the

conclusions of this research study and to possibly take action as an outcome of my

research results.

Definition of Terms

For the purposes of this investigation, the following operational definitions

were used.

4-H is the Cooperative Extension System's dynamic, research-based, non-formal,

educational program, and organization for youth (5-19 years). 4-H stands for Head,

Heart, Hands, and Health.

Adult Volunteer works directly with the 4-H members in operating a club or

afterschool program. In these roles, the adult 4-H volunteer works with co-leaders,

members, and parents to guide, direct, and manage club educational activities and

events. The adult 4-H volunteers also work in partnership with the 4-H YDE,

members, and community partners in planning and conducting countywide

educational programs and activities.

Youth Development Educator (YDE) is the professional extension educator focusing

on 4-H youth development who provides leadership to the 4-H program.

<u>Transformational Leadership</u> occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality. The four dimensions of transformational leadership often referred to as the four I's, are: idealized influence or charisma, inspirational motivation, intellectual stimulation, and individualized consideration.

<u>Transactional Leadership</u> is the process of leaders making exchanges with their followers for things they each value. The three dimensions of transactional leadership are: contingent reward, management-by-exception (active), and management-by-exception (passive). The non-leadership dimension of laissez-faire has been grouped, for the purposes of this study, within transactional leadership due to its similar qualities.

<u>Empowerment</u> is the intrinsic motivation manifested in four cognitions reflecting an individual's orientation to his or her work role: meaning, competence, self-determination and impact.

Overview of the remainder of the paper

The literature review which follows, will provide evidence to justify and the theoretical framework for this study of adult 4-H volunteer empowerment in 4-H youth development settings. To understand the variables which might influence or strongly correlate with adult 4-H volunteer empowerment, I looked to three theoretical frameworks: 1) systems theory as a conceptual framework for learning organizations, 2) leadership theory, particularly transformational/transactional leadership theory, and 3) empowerment theory.

CHAPTER 2
LITERATURE REVIEW

Theoretical Framework

The nature of this study necessitated a review of literature related to the theoretical frameworks of: (a) systems theory as a conceptual framework for learning organizations, (b) leadership theory, particularly transformational/transactional leadership theory, and (c) empowerment theory. The following sections will present the main assumptions and concepts of these theories and the way they were employed for the purposes of this study.

System Theory

The field of systems research is primarily focused around three main areas: (a) rational, (b) natural, and (c) open. In the rational systems model, systems are viewed primarily as (a collection of individuals) organizations oriented toward the pursuit of quite specific goals and exhibiting quite formalized social systems and structures. In the natural systems perspective, members of organizations tend to pursue both shared and individual interests, but recognize the value of perpetuating the organization as an important resource. Personal relationships among the members tend to be more influential than formal structures. From the open systems viewpoint, organizations are merely collections of somewhat interdependent activities linking shifting coalitions embedded in a much larger environment, population, and/or cultural structures.

The context for this research focus is found within the natural living systems research arena which looks at the more organic development and relationship within

an organization. Systems theory provides the encompassing background for the proposed study on the relationship of leadership and empowerment. Systems theory provides a conceptual framework for learning organizations. As the 4-H program is a part of a large learning organization, called the Cooperative Extension System, this section on systems theory will provide an overview of systems theory followed by three subsections exploring what systems theory means for: (a) organizational leader/follower relationships, (b) organizational effectiveness, and (c) organizational change. Each of these sections will provide linkages between conceptual theories and their implications for 4-H youth development.

General systems theory is a rigorous scientific discipline which developed from the study of biology in the 1920's (Haines, 1998). The theory focuses on the natural world, the living systems that lie within, and the common laws governing those systems. The major premise was that once these laws were understood, that they would serve as a conceptual framework for understanding the relationships within any system as well as any changes or problems that occur within the system. Systems theory, then, emphasized the value of viewing a system as a whole before examining its parts (Haines, 1998; Senge, 1990).

One of the systems studied within systems theory is organizations. Organizations as a distinct field of sociological inquiry did not begin until the late 1940's (Scott, 2003). Early theorists studied the structure and functioning of organizations from various perspectives or levels of analysis, such as the social psychological level, organizational structure level or the ecological level. The structural complexity of organizations has gained much attention in the last thirty

years with the immense changes in the economic and information environment caused by globalization and technology. This rapidly changing environment is reflected in the research literature studying the ability of organizations to learn and transform in order to adapt and survive (Marquardt, 1996; Senge, 1990, Scott, 2003). Marquardt (1996) in his book, *Building the Learning Organization*, explained in detail the five conditions he felt brought on these changes: globalization, economic and marketing competition, environmental and ecological pressures, new sciences of quantum physics and chaos theory, knowledge era, and societal turbulence.

When Peter Senge (1990) brought widespread attention to systems theory and learning organizations with his book *The Fifth Discipline* and other related articles, companies began to consider the process of transforming themselves into learning organizations. In his work in systems theory, Senge (1990) portrays the dynamics of an organization as a complex nonlinear system. He coined the phrase "systems thinking" (his fifth discipline) as the means for organizations to deal with information overload and rapid change. "Systems thinking is a conceptual framework, a body of knowledge and tools that has been developed over the past fifty years, to make the full patterns clearer, and to help us see how to change them effectively" (Senge, 1990, p. 7). Organizations are encouraged to look at their system from a holistic perspective being open to ideas surfacing from any part of the system. Organizations needing to respond to rapid change need everyone within the organization to be thinkers, creators, committed to and with the capacity for, learning. They need to become learning organizations.

Senge defined a learning organization as one "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together" (Senge, 1990, p. 3). Even though becoming a learning organization is not something an organization can do overnight, Senge proposed five disciplines that enable organizations to become learning organizations. Systems thinking is the fifth discipline, which, according to Senge integrated the other four disciplines of personal mastery, mental models, shared vision, and team learning:

> *Systems thinking* is a conceptual framework, which has developed over the past fifty years, to make full patterns of the problems and situations that confront us clearer.
> *Personal mastery* is the process of clarifying and deepening our personal vision, developing patience and seeing reality objectively.
> *Mental models* is the practice of examining deeply ingrained assumptions, generalizations or images that influence our behavior and understanding of the world.
> *Shared vision* is the bringing together of individuals around a common identity and desired future. It also makes clear and bonds members around agreed-upon values which guide how members interact with each other.
> *Team learning* is the practice of collective learning and group interaction. They together learn how to draw on the intelligence, creativity and abilities as a team more than individual members could do on their own.

Systems thinking is also considered to be the key to organizational sustainability (Fullan, 2005). Fullan defined sustainability as "the capacity of a system to engage in the complexities of continuous improvement consistent with deep values

of human purpose" (Fullan, 2005, ix). The key to this sustainability is for more leaders within the organization to become system thinkers. With more system thinkers, more strategies will come from a systems perspective altering people's mental awareness of the system as a whole, thereby contributing to altering the system itself.

This view of systems thinking as a part of systems theory resonated with the quantum view thinking presented by Wheatley (1994). For Wheatley, organizational capacity to learn and thrive requires a shift from Newtonian thinking to quantum (or systems) thinking. This required a shift in what organizations do, such as shifting from describing tasks to facilitating process and shifting from the unconnected individual to the connected team. Table 2.0 interprets the difference between Newtonian and quantum views.

Table 2.0 Contrast of Newtonian view versus quantum (or systems) view, as interpreted from reading Wheatley (1994)

Topic area	Newtonian View	Quantum View
Change	Incremental change – little by little, system by system	Quantum leaps – abrupt and discontinuous
Perspective	Focus on the parts	Look at the whole
Boundaries	Establish rules, limits, roles, guidelines, accountabilities	No boundaries
Power	Power is limited, generated by position and authority	Power is energy, generated by relationships
	Impose control	Dynamic connectedness

Table 2.0 *(Continued)*

Topic area	Newtonian View	Quantum View
Organizational View of Structure	Machine-based – organizational parts, charts, pieces, function	Organic-based – relationships, flowing, particles, mass
Culture	Lonely, individualism	Interconnected, collectivism
Measurement and observation	Scientific objectivity	Observer - chance
Organizational analysis	Plan then act Plan, design, implement based on plan	Act then plan Create environment through our intentions
What we do	Describe tasks	Facilitate process
View of universe	Great machine	Great thought

At the heart of a learning organization is a shift of mind. A shift of mind embracing systems/quantum thinking views the world and people in it as interconnected, where everyone in the organization is a learner and contributor to the whole of the organization, and our thoughts create the images and shared vision for the desired future.

Summary

Systems theory focuses on the natural world, the living systems that lie within, and the common laws governing those systems. Systems and quantum view thinking enable organizations to become learning organizations, better able to engage

individuals in the organization as learners and contributors for handling change, being more responsive, and creating organizational sustainability. The discussion will now look more closely at what this means for organizational leader/follower relationship, effectiveness, and change.

Organizational Leader and Follower Relationship

Conceptual theory

Systems theorists view an organization as a whole, not as individual parts. Therefore learning, growing, and changing are all done as a whole. Organizations embracing systems theory have learned quickly that *people* are the pivotal part of creating a learning organization because only people, in fact, learn (Marquardt, 1996; Senge, 1990, emphasis added). Learning organizations, because of this holistic approach, are able to better manage knowledge, empower people, utilize technology, and expand learning to adapt to their changing environment. The relationship between leaders and followers is then transformed in system thinking. In organizations with empowered professionals, the leadership roles change.

"Managers will need to move from controlling to empowering, from being a commander to being a steward, from acting as a transitional manger to acting as a transformational leader" (Marquardt, 1996, p. 106). This sentiment is concurred by Gamage and Pang, "When a leader empowers others to prove their full potential, it increases the power of the leader, as well as, that of the organization" (2003, p. 219). Conger and Kanungo (1988) suggested that psychological empowerment is important for stimulating and managing change in organizations. Case studies of entrepreneurial organizations found that empowerment and innovative behavior were inextricably

linked to organizational success. The emphasis now between the leader and follower is on the relationship, between and together (Wheatley, 1994). It is not about function or role. The relationship between leader and follower is what matters. Systems theory recognizes that everyone in an organization has influence and everyone's actions are interconnected no matter how large the organization. The interaction between individuals, within an educational organization, is now based on an exchange of energy with a desire to support the other person so as to make the whole organization transform through this shared energy. Energy needs and implies movement. It is in these relationships where transformation will occur.

Wheatley (1994) broadens the field of leadership and organizational research by positing two useful concepts regarding the leader and follower relationship. The first of which is the concept of meaning. Wheatley states "that one of the most potent shapers of behavior in organizations, and in life, is meaning" (Wheatley, 1994, p.134). Leaders who provide guiding images and give voice to employees search for meaning and information will have employees respond with allegiance and energy.

The second powerful concept for educational organizations is the creation of fields. Fields are the qualities of our organizations that we know exist but we can't put a face on, pin down or touch: qualities such as vision, culture, values, and ethics. Because fields permeate all existing spaces it is important to pay attention to the fields you create. As Wheatley explained "space is never empty" (1994, p. 56). If one doesn't fill their organizational space with coherent messages then dissonance is created in the very space of the organization. An intentional creation of a field, done with clarity, coherence and consistency at all levels can be one of the most

instrumental ways an organization can move from one vein of thinking and action to another.

Implications for 4-H

4-H is the Cooperative Extension System's dynamic, research-based, non-formal, educational program and organization for youth, ages 5-19 years. In Oregon, the program engages 150,304 4-H members and 4,872 4-H adult volunteers (Oregon 4-H, 2007).

As an organization, the adult 4-H volunteer role is critical to the success of the 4-H program. Therefore, the leader/follower relationship is critical. To operate as a learning organization, the 4-H YDE would assume the role of empowering volunteers, not controlling. The 4-H YDE would be less of a transitional manager and more of transformational leader. It would also be important for the 4-H YDE to create a "field" which permeates a sense of empowerment across the organization, making sure this "field" reaches all corners of the organization. "Without a coherent, omnipresent field, we cannot expect coherent organizational behavior" (Wheatley, 1994, p. 57). This research study was designed to measure if the learning organization of 4-H is permeating a sense of empowerment. What is the sense of empowerment felt by adult 4-H volunteers in the 4-H program?

Summary

The relationship between leaders and followers is transformed in system thinking. The emphasis now between the leader and follower is on the relationship, between and together. The leader's role changes to that of empowering the followers, of providing meaning to the work, and creating the "fields" of things that matter to the

organization: Qualities such as vision, culture, values, ethics, and the importance of empowered relationships. Empowering adult 4-H volunteers may be an assumed principle of the 4-H program. The research study explored the extent to which the adult 4-H volunteers felt a sense of empowerment.

Organizational Effectiveness

Conceptual theory

Only recently, since the beginning of the 1980's, have organizational scholars recognized that organizational culture has a powerful effect on the performance and long-term effectiveness of organizations. Organizational culture has been an area that managers have sought assistance from scholars in finding ways to improve the effectiveness of their organizations. Schein (1985) provided the most comprehensive review of organizational culture literature. He defined organizational culture as the basic beliefs and assumptions shared by members of a group or organization. Cameron and Quinn (1999) did extensive work in trying to bridge the hard science and soft practice of organizational culture. They developed a competing values framework, a model which defined different types of organizations and the leaders running them. They also developed two assessment tools for conducting research in this area: (a) an organizational culture assessment instrument, and a (b) management skills assessment instrument. Lastly they defined four different types of organizational culture as well as different types of leadership styles respective of each culture, see Table 2.1.

Bass (1990) stated that the clan culture provides the most potential for transformational leadership. This presumption by Bass was tested in research conducted by Masood, Dani, Burns, and Backhouse (2006). Their research study

Table 2.1 Four different types of organizational culture (Cameron and Quinn, 1999)

Organizational Culture	Leadership Style	Orientation	Characteristics	"Glue" of Culture	Long – Term Focus	Success
Adhocracy	Entrepreneurial, visionary, innovative, creative, risk orientated and focused on the future Leaders: Rule breakers	Being on the leading edge of new knowledge, products, and/or services; Readiness for change and meeting new challenges are important; People stick their necks out and take risks	Dynamic, entre-preneurial, and creative workplace	Commitment to experimentation and innovation	Rapid growth and acquiring new resources	Producing unique and original products and services
Clan	Parent figures, team builders, facilitators, nurturers, mentors, and supporters Leaders: Warm and supportive	Environment can best be managed through teamwork and employee development; Organization is in the business of developing a humane work environment; Major task of management is to empower employees and to facilitate their participation, commitment, and loyalty; Customers are best thought of as partners	Family-type organization Places premium on teamwork, participation and consensus	Loyalty and tradition	Individual development with high cohesion and morale	Internal climate and concern for people
Hierarchy	Organizing, controlling, monitoring, administering, coordinating and maintaining efficiency Leaders: Rule rein forcers	Formalized and structured place to work Typically large organizations and government agencies	Procedures govern what people do	Formal rules and policies	Stability, predict-ability and efficiency	Maintaining a smooth running organization
Market	Directing, producing results, negotiating, and motivating others Leaders: Tough and demanding	Focused on external environment instead of internal affairs Clear purpose and an aggressive strategy lead to productivity and profitability	Results orientated workplace	Emphasis on winning	Competitive actions and achieving stretch goals and targets	Market share and penetration

involved 339 followers consisting of 76 leader-subordinate dyads at middle and lower

levels of management at five different sized manufacturing plants in Pakistan. The

organizations of the samples represented government owned and privately owned

businesses as well as locations in both western and eastern parts of Pakistan. All 339

respondents completed the Podsakoff, MacKenzie and Fetter (1990) twenty-three item

transformational leadership questionnaire. The 76 leaders also completed a situational

strength questionnaire and the organizational culture assessment instrument (OCAI)

developed by Cameron and Quinn (1999). The results from this study showed that

transformational leaders prefer to work in adhocractic or clan-type culture – 94.5% of

the transformational leaders showed a preference for a clan culture while only 5.5%

indicated a preference for a hierarchy-market culture. The importance of this study

was that transformational leadership can influence to a great degree how followers

work and are given freedom to work in organizations. It presumed that

transformational leaders create an organization providing more discretion and

capability to the followers to manage their tasks. The movement of discretion and

capability to the followers was also interpreted as empowerment.

Implications for 4-H

According to the descriptions of organizational culture by Cameron and Quinn,

the Extension Service and 4-H organization mostly closely aligns with a clan culture.

Extension often refers to itself as a family. Extension agents, especially 4-H youth

development educators, are often viewed as parent figures, team builders, facilitators,

nurturers, mentors, and supporters. The focus is on the development of individuals

(customers and staff). Major task of management is to empower employees and to

facilitate their participation, commitment, and loyalty. Empowerment is emphasized in the Extension culture.

Teamwork is encouraged across program areas, across states, and across disciplines. Grant funding, recognition, and incentives often use "teamwork" as a measurement of success or criteria (Stories, Outcomes, and Accomplishments Reporting System, 2007). As an organization, Extension is in the business of developing a humane work environment for staff, volunteers, and the public. The emphasis of customers as partners applies in settings of research, service, and teaching. "Extension is the best organization in the world at assembling, supporting and participating in self-managed learning teams of professionals and non-professionals that apply research-based knowledge to address the vital issues of sustainable communities of place" (McGrath, Conway, & Johnson, 2007).

The stated mission of CES is "to enable people to improve their lives and communities through learning partnerships that put knowledge to work" (National Association of State Universities and Land Grant Colleges, 2007). In 2005, the Extension Committee on Organization and Policy (ECOP) appointed a task force to focus on measuring excellence in extension. The task force was charged with: a) identifying the criteria that defines excellence in Extension, b) determining the measures of those criteria, c) delineating the necessary collection methods, and e) determining how to gain acceptance of the criteria and measures by the Extension System (Archer, et al., 2007a).

The task force developed two products, designed to be useful at every level of the extension system: a pocket card and a matrix. The pocket card provided concise

descriptors of what makes Extension unique, what defines excellence for Extension,

and what criteria Extension uses to identify excellence. The construct of

"empowerment" is written right into this pocket card under the descriptors of what

makes Extension Unique:

- Land-grant mission links the university to the people
- Established presence and grassroots involvement in local communities
- Program and funding partnership of local, state, regional and federal entities
- Research-based, lifelong learning
- *Empowerment* of people through education and community-based problem solving (Archer, et.al., 2007b, emphasis added)

In looking at how Extension reflects empowerment, one looks at how Excellence for

Extension is defined:

- Anticipation of and response to critical and emerging issues
- Establishment of partnerships and collaborations
- *Engagement with clientele to plan, implement, and evaluate programs*
- *Utilization of client expertise to facilitate change*
- Educational programs that result in economic, social, and environmental impact
- *Utilization of volunteers as teachers to enhance and extend education* (Archer, et.al., 2007b, emphasis added)

The task force articulated the following seven criteria as the most important for

identifying Excellence in Cooperative Extension (CE):

- CE is a major component of land-grant university outreach/engagement
- Diverse stakeholder input is used to shape programs
- *Clients are satisfied with Cooperative Extension and its programs*
- Quality Extension programs are identified and valued
- Extension programs result in changes in individuals, families, and communities
- Economic impact is derived from Cooperative Extension programs
- Funding is supplied for Cooperative Extension. (Archer, et.al., 2007b, emphasis added)

These elements of Excellence for Extension reflect a learning organization

which values the empowerment construct of "clientele" and "volunteers". These

criteria enable the Extension organization to describe its strengths, differentiate itself from other agencies and organizations, and be accountable for the resources invested in and ways to improve the effectiveness of the entire organization.

Summary

In this researcher's opinion, these findings have great implications for the Extension and 4-H youth development organizations which operate in an organizational clan culture. Research confirms a connection between transformational leadership and clan culture which supports looking at the relationship between transformational leadership and empowerment in the research study.   The empowerment construct has again been articulated as valued by Extension and 4-H, providing merit for studying whether or not empowerment is actually taking place within the organization.

Organizational Change

Conceptual theory

Organizations best able to deal with change have created systems that are able to self-organize (Wheatley, 1994). Self-organization succeeds when the system supports the independent activity of its members by giving them a strong frame of reference. According to Wheatley (pg. 94) "self-reference is what facilitates orderly change in turbulent environments". As a system changes, it does so by referring to itself (frame of reference) so that what ever future form it takes, it ends up being consistent with its already established identity – its values, traditions, aspirations and competencies. When leaders rely on maintaining focus, instead of hands-on control,

they provide the flexibility and responsiveness that organizations need and crave. According to Wheatley, effective leadership is about adhering to simple governing principles - guiding visions, strong values, and organizational beliefs – as well as communicating them, keeping them ever present and clear, and then allowing individuals the opportunity to meander, create and succeed in this environment.

Dealing effectively with change, then, comes down to effectively dealing with information (Marquardt, 1996, Senge, 1990, Wheatley, 1994). If organizations took the time to understand information theory they would not feel trapped by it or destined to control it. Organizations must believe in the free flow of information – the more, the better – and in trusting their employees. Employees who have already created a strong point of self-reference know what to do with information that comes their way. Information finds its way to where it needs to be so the more you have of it the better. Allow the information to flow, so people will be empowered to do their work.

A study done by Allen and Morton (2006) attempted to benchmark and track the leadership practices and skills within seven different types of community groups, according to three characteristics of self-organizations. These characteristics, taken from Wheatley, included: a) self-reference based on organizational identity, b) information flowing freely throughout the organization, and c) interdependent relationships built on trust and connectedness. Their assessment conveyed how these organizations see their current leadership practices and related training needs and suggested that these organizational practices and skill needs are interrelated. This research study, even though it tries to make linkages between leadership practices and organizational skills, needs much more study to explain these linkages.

This researcher disagrees with two of the premises which formed the basis of study within the Allen and Morton article. In their article they described transformational leadership as creating unequal power relations by elevating "the leader" above followers. First of all, the Sandman and Vandenberg (1995) article cited makes no reference to Burns' work and they use it to lay the foundation for questioning transformative leadership theory. Secondly, their stance against transformational leadership style is not built on a clear and informed understanding of either transformational leadership style or of the five disciplines outlined by Senge (1990). In brief, transformational leadership style is not about a dominate-subordinate approach, in fact transformational leadership is based on the importance of the leader and follower relationship not domination. This can be seen by looking at some of the constructs of transformational leadership such as *Intellectual stimulation* which refers to leaders encouraging divergent thinking and creativity from their follower's efforts and *Individualized consideration* which refers to leaders attending to the needs of followers (Atwater & Atwater, 1994). In fact, in transformational leadership, it is seen as "immoral" not to develop others or not allow them to develop to their fullest potential (Yammarino, 1994; Burns, 1970; Bass, 1985). Allen and Morton also overlooked the point that individual skill building is a necessary part of the five disciplines outlined by Peter Senge. These five disciplines or practices can not be learned with out skill building.

Implications for 4-H

As an organization, 4-H needs to use systems thinking in order to deal with just some of the following changes in society: technological change, changing

demographics, increased competition for funding, rate of information generated and access to it, and changing needs of clientele served. As an organization that deals with information exchange, knowledge building, and capacity building, this quote reiterates this need: "Today, systems thinking is needed more than ever because we are becoming overwhelmed by complexity. Perhaps for the first time in our history, humankind has the capacity to create far more information than anyone can absorb, to foster far greater interdependency than anyone can imagine, and to accelerate change far faster than anyone's ability to keep pace" (Senge, 1990, p. 69).

Ladewig and Rohs (2000) and Gruidl and Hustedde (2003) proposed that the Extension Service has steps yet to take to transition from a functional hierarchy to a learning organization. Their assessment is based on findings from research conducted with the 900+ participants in the Southern Extension Leadership Development (SELD) program, since its inception in 1994. All SELD participants completed a Managerial Assessment of Proficiency (MAP) assessing participants' proficiency in 12 competencies, two leadership styles and eight values/drives. Scores were compared with all 62,000 individuals in the MAP database. SELD participants scored below average in the competencies of thinking clearly/analytically (42nd percentile) and listening and organizing (48th percentile). Other competencies, valuable in becoming a learning organization, were only average or slightly above average (50-53rd percentile) including: counseling and discipline, time management and prioritization, and setting goals and standards. For Extension to fully become a learning organization, Ladewig and Rohs recommended more systematic training to develop leadership capacity,

communications proficiency, and team skills as well as ongoing assessment of how well one is utilizing leadership principles required of a learning organization.

Summary

To deal effectively with organizational change, it is important for the 4-H youth development organization to provide a strong frame of reference, to effectively deal with information, and to actively listen and counsel for the adult 4-H volunteer. An independent variable, leadership training, was added to the research study to reflect the organization's method for providing the adult 4-H volunteer with a frame of reference, information flow, and sense of leadership competency from their 4-H YDE.

Section Summary

Systems theory focuses on the natural world, the living systems that lie within, and the common laws governing those systems. Systems theory, emphasizes the value of viewing a system as a whole before examining its parts. When one applies system theory to organizations it invites all participants in the organization to be engaged as learners and active participants, understanding that everyone contributes to the organizations success because one person's actions do affect others in the connected environment of natural systems.

Systems theory therefore impacts one's fundamental thinking which affects organizational leader/follower relationship, organizational effectiveness and organizational change. The emphasis now between the leader and follower is on the relationship, between and together. The leader's role is to empower the followers.

Organizational effectiveness is also connected to empowerment. When everyone in the organization feels empowered, they have increased meaning and

commitment to work which creates greater effectiveness. The empowerment construct was articulated as a valued mission of Extension and 4-H. Research also confirmed a connection between transformational leadership and clan culture, encouraging the examination of the relationship between transformational leadership and empowerment in this research study.

A look at organizational change found that systems theory encouraged organizations to provide a strong frame of reference and to effectively deal with information. The variable, leadership training, was added to the study to measure the relationship of this variable to the adult 4-H volunteer's sense of empowerment.

Leadership Theory

Leadership matters. Leadership has implications in 4-H youth development settings.   This review of the leadership literature explored the major theories and models of leadership, providing particular insight into transformational/transactional leadership theory, and its implications for 4-H youth development settings.

Leadership

To provide a general overview of leadership, this section will include a presentation of the literature around three topics that helped inform this study: (a) leadership defined, (b) leadership learned, and (c) leadership competencies identified.

Leadership – Defined

Many researchers in the field of leadership believe that leadership is grounded in a relationship between leaders and followers (Bass, 1985; Bennis & Nanus, 2003; Burns, 1978, Collins, 2001; Kotter, 1988; Kouzes & Possner, 2002; Rost, 1991; Tichy & Devanna, 1986). As Bennis (2007) remarked "Any person can aspire to lead. But

leadership exists only with the consensus of followers" (p. 3). Kotter (1988) asserted that leadership is a process that directs and mobilizes people and their ideas to enhance overall group productivity. Burns' (1978, p. 425) definition of leadership is, "the reciprocal process of mobilizing, by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers".

Rost (1991) credits Burns for laying the groundwork for what he calls the transition from an "industrial" paradigm, viewing leadership as management, to the "post-industrial" concept of leadership as a dynamic interaction of leaders and followers. As this researcher desired to reflect the interdependent relationship between leader and follower, the definition of leadership provided by Rost (1991), "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes," framed this study (p. 46).

Leadership – Learned

Leadership is not something that individuals are either born with or not, rather it can be learned and developed asserts Bass (1990) who concluded that "transformational leadership can be learned, and it can- - and should be- -the subject of management training and development" (p. 27). Herrington, Bonem, and Furr (2000) concurred with Bass; they said, "One prevalent image is that leadership is a natural ability and that anyone who is not a 'born leader' will never amount to anything as a leader…. Our experience diverges from the conventional wisdom, however, in the implications for those who have to work at leadership. With time and dedicated effort, leadership skills can be learned" (p. 99). According to Kouzes and

Possner (2002), leadership is an observable and learnable set of practices. Individuals, who possess the desire and persistence to lead, may enhance their skills and abilities required for the leadership role.

Leadership Competencies

Within an organization, identifying critical leadership competencies required for effectiveness helps define what skills leaders need (Pernick, 2001). Competencies are defined as the knowledge, skills, and behaviors that lead to outstanding performance (Stone, 2004). Pernick identified three ways that organizations determine critical leadership competencies: (a) use generic leadership competencies found in theory, (b) derive competencies from the organization's mission statement and core values, or (c) build their own competencies. Examples of each of these from the general literature, Extension, and 4-H organizations follow.

Competencies found in theory

A number of researchers have utilized empirical studies to identify the competencies required by leaders (Bennis, 2007; Kanji & Sa, 2001; Kouzes & Possner, 2002; Moore, 2003). According to Bennis (2007) all exemplary leaders have six competencies: "They create a sense of mission, they motivate others to join them on that mission, they create an adaptive social architecture for their follower, they generate trust and optimism, they develop other leaders, and they get results" (Bennis, 2007, p. 5). Research conducted by Kanji and Sa (2001) summarized the following 11 core competency areas as the key leadership competencies for an organization committed to quality and excellence: (a) ethics and principles, (b) communication, (c) customer orientation, (d) organizational change, (e) structures and systems, (f)

measurement, evaluation and reporting, (g) process improvement, (h) team development, (i) developing subordinates, (j) developing partnerships, (k) innovation and continuous learning. Through their study of personal best leadership experiences, cases analyses and survey questionnaires, Kouzes and Possner (2002) uncovered five practices of exemplary leadership: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

Each of these leadership competencies lists expressed the mutual importance of developing other leaders and enabling their followers. This is seen through terms like: enabling others to act, developing subordinates and creating an adaptive architecture for their followers. This indicates the prevalence of empowering others as an important role of a leader.

Competencies derived from organization's mission/values

In 1990, the Extension Service, USDA commissioned the National Impact Study of Leadership Development in Extension (NISLDE) (Michael, Paxson, & Howell, 1991), to describe and assess Extension's leadership development work. As a part of this study, the NISLDE researchers asked staff what the word "leadership" meant to them. Researchers interpreted this list to be 13 broad leadership competencies: (a) solving problem, (b) directing project or activities, (c) forming and working with groups, (d) planning for group action, (e) managing meetings, (f) communicating effectively, (g) developing proficiency in teaching, (h) mobilizing for group action, (i) understanding and developing oneself, (j) understanding financial matters, (k) understanding leadership, (l) understanding society, and (m) understanding social change (Michael, et al., 1991).

For an organization which has their "staff spend on average seven hours per week trying to develop leadership skills among clientele, i.e. 15% of their work time" (Paxson, Howell, Michael & Wong, 1993, p. 4), it is surprising that little emphasis is place on the leadership skills of the professionals (staff) themselves. Many of the competencies in the list imply that Extension staff tend to teach skills associated with a stable social order and know how to do things right (transactional leadership) as opposed to dealing with change and doing the right things (transformational leadership).

An analysis of 4-H YDE leadership style (transactional leadership or transformational leadership), particularly as perceived by the adult 4-H volunteer, provides insight on how this variable contributes to a more complete understanding of the factors related to the adult 4-H volunteer sense of empowerment.

Build own competencies

The effectiveness of the 4-H program experience for youth and volunteers is predicated on the leadership provided by the 4-H professional educator. The 4-H Youth Development profession established its' own set of competencies for 4-H professionals. The competencies identified in the 4-H Professional Research and Knowledge Competencies (4-H PRKC) represent a composite of the knowledge, skills and behaviors demonstrated by outstanding 4-H youth development professionals (National 4-H Professional Development Task Force, 2004). "Since its inception in 1985 and through subsequent updates, the 4-H PRKC has come to be the foundation for the 4-H youth development profession (Stone & Rennekamp, 2004, p. 1). The 4-H PRKC competencies are classified under six main domains: (a) youth development,

(b) youth program development, (c) volunteerism, (d) equity, access and opportunity, (e) partnerships, and (f) organizational systems.

The term "leadership" appears just six times within the twenty-nine page document and it is primarily referencing leadership development for volunteers and youth, not as a competency of the actions of the 4-H youth development professional. The two times it is listed as a competency are: "Models positive behavior and provides *leadership* for others" and "Provides and supports expanded *leadership* opportunities for volunteers" (National 4-H Professional Development Task Force, 2004, p.). Leadership competencies for the 4-H professional educator are implied but not clearly articulated in this document.

This research study intended to add to the research knowledge base in further articulating the role of leadership and leadership competency for the 4-H youth development educator. The relationship between 4-H YDE leadership style and sense of empowerment of the adult 4-H volunteer provided this new insight.

Summary

Essential to the definition of leadership is an understanding of the interdependent relationship between leaders and follower. Leadership is something that people can learn so it is therefore important to consider what effect leadership has on colleagues, clientele, and the organization as a whole and then develop a plan to enhance leadership skills. Leadership competencies articulate the skills individuals needed as a leader within an organization. This research study intended to add to the field by clarifying the effect that leadership has in empowering members within an

organization, specifically the effect of 4-H youth development educators leadership on adult 4-H volunteers.

Leadership Theories

Over the years, literally thousands of studies have been conducted to explain leadership and leadership effectiveness using various approaches and theories. Leadership theories and empirical research is typically classified into one of five approaches: (a) the trait approach, (b) the behavior approach, (c) the power-influence approach, (d) the situational approach, and (e) the integrative approach (Lussier & Achua, 2007; Northouse, 2004; Yukl, 2006). An explanation of each of these theories follows in the next section.

Trait Approach

The focus of leadership scholars from the 1850's until the late 1940's and early 50's was on trait-based leadership (Zaccaro, 2007). From a trait perspective, leadership is perceived as a person's influence on a group of other people. Trait theory research focused on identifying the physical or psychological characteristics of individuals that distinguished the leaders from the followers and the effective leaders from the ineffective leaders. Trait theory research went on hiatus until the 1980's when new research emerged that challenged the rejection of leader trait models. There are a number of recent studies which have linked personal attributes to leader effectiveness providing an empirical foundation to the role that traits have in the prediction of leader effectiveness (Judge, Bono, Ilies & Gehardt, 2002; Zaccaro, 2007). The universal traits that are repeatedly associated with effective leadership include: persistence, tolerance for ambiguity, self-confidence, drive, honesty,

integrity, internal locus of control, achievement motivation, and cognitive ability

(Kirkpatrick & Locke, 1991; Yukl, 2006)

Behavior Approach

Disenchantment with the search for universal traits of leadership led to leader

behavior research in the 1950's and 1960's (Vroom & Jago, 2007). Although

behavioral perspective also centered on leadership as a person's influence on a group,

the influence is thought to be caused by the leader's behavior as opposed to personal

traits. Studies at Iowa, Ohio State, and Michigan attempted to classify leader

behaviors. The Iowa study identified three distinctive styles of decision-making

behavior: authoritarian, democratic, and laissez-faire (Lussier & Achua, 2007). The

Ohio and Michigan studies identified two broad categories of leadership behavior: (a)

consideration or employee orientation and (b) initiating structure or production

orientation (Northouse, 2004). An important revelation from both of these studies was

the finding that the two dimensions are separate and conceptually independent

behaviors. In other words, leaders can be varying degrees of both behavior styles.

The interaction of structure and consideration formed the basis of Blake and

Mouton's "managerial grid" (Yukl, 2006). The nine-grid model proposed that

effective leaders always have a high concern for both people and production.

However, like trait research, the behavior research suffers from the tendency to look

for simple answers to complex questions.

Power-Influence Approach

Yukl (2006) described power-influence research as "an approach that seeks to

explain leadership effectiveness in terms of the amount and type of power possessed

by a leader and how power is exercised" (p. 14). Power-influence approach is routed in the trait and behavior research tradition. The perspective of power is viewed not only from the position of influencing subordinates but also for influencing peers, superiors, and people outside of the organization. A widely accepted conceptualization of power sources is the dichotomy between position power and personal power with different types of power placed within the taxonomy (Lussier & Achua, 2007; Yukl and Falbe, 1991). The potential influence derived from a person's position in an organization is called position power which also includes legitimate power, reward power, coercive power, information power, and ecological power. Personal power, which is not necessarily drawn from a place of position, also includes referent power and expert power.

Situational Approach

Many theorists felt that Trait, Behavior, and Power/Influence Theories were missing a variable called situation (Stogdill, 1974, Yukl, 2006, Lussier & Achua, 2007). From the situational-contingency perspective, leadership is still viewed as influence on others, but the influence is affected by contextual factors or "situational contingencies" (Vandeberg, Thullen, & Fear, 1997). There are a number of situational-contingency theories that have been developed dependent on various leader traits/behaviors with relevant variables in the context. Most prominent are Fiedler's (1967) Contingency Model, Evans (1970) Path-Goal Theory, Vroom and Yetton's (1973) Normative Leadership Theory, and Hershey and Blanchard's (1984) Situational Leadership Theory. The contingencies explored in these leadership theories often distinguished external contingencies from internal contingencies.

External contingencies included strategy, technology, organizational structure, position, stability, tasks, climate strength, social and physical distance, and culture, while internal contingencies included context such as personal qualities of the leaders, experience of followers, personality of followers, gender, motivation, capability, and cultural orientation.

Integrative Approach

An integrative approach looks at more than one leadership variable in its understanding of leadership and leadership effectiveness, such as trait, behavior, and situation variables.   Transformational and charismatic leadership are examples of this integrative approach (Yukl, 2006, Lussier & Achua, 2007). Transformational Leadership Theory is the most frequently researched leadership theory over the last two decades. Research has shown that an integrated approach can bring about greater changes in the subordinate attitude, motivation, and performance (Bass, 1985, Yukl, 2006). There is a focus on collective efficacy, a mutual commitment to shared objectives, and dedication to the development of follower skills.

In distinguishing the difference between transformational and charismatic leadership, one turns to the summary provided by Yukl (2006):

> "Transformational leaders probably do more things that will empower followers and make them less dependent on the leader, such as delegating significant authority to individuals, developing follower skills and self-confidence, creating self-managed teams, providing direct access to sensitive information, eliminating unnecessary controls and building a strong culture to support empowerment. Charismatic leaders probably do more things that foster an image of extraordinary competence for the leader, such as impression management, information restriction, unconventional behavior and personal risk taking". (p. 271)

An even more integrated approach to leadership theory and practice has been recommended for the future course of leadership research (Avolio, 2007; Hunt & Dodge, 2000; Marion & Uhl-Bien, 2001).

Summary

Thousands of studies have been conducted to explain leadership and leadership effectiveness using one of the following leadership approaches or theories: (a) the trait approach, (b) the behavior approach, (c) the power-influence approach, (d) the situational approach, and (e) the integrative approach. All of these leadership theories, except for the integrative approach, recommend subordinate motivation through some form of economic or psychological transaction between leader and follower. It is the distinction of the concern and development of followers that sets the integrated approach apart. The emphasis on the development of the follower and the building of a strong culture to support the empowerment of followers led this researcher to further investigate and select transformational leadership as a key focus of this study.

Transformational and Transactional Leadership Theory

The last twenty years has seen an emergence of a new leadership paradigm that shifted emphasis from the traditional or transactional models of leadership, toward the study of transformational leadership style. According to Tichy and Devanna (1990), "transformational leaders are not dictators. They are powerful yet sensitive of other people, and ultimately they work toward the empowerment of others"(p. 273). It is because of this notion of empowerment and focus on the interaction between leader and follower that the researcher was drawn to this style of leadership for this study. Transformational and transactional leadership theory provide the best leadership

approach for creating an environment for empowerment which has implications for 4-H youth development settings. The next section will explore transformational and transactional leadership theory in more depth by: (a) describing the theory, (b) explaining how it is distinguished from other theories, and (c) examining its effectiveness, both as a leadership approach as well as the validity of instruments for measuring its effectiveness.

Description

Transformational and transactional leadership theory was introduced by James MacGregor Burns in his 1978 seminal book, *Leadership*. Burns stated that transformational leadership occurs when "one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (p. 20). In Burns view, transformational leadership had certain characteristics. First, transformational leadership is collective, meaning it is focused not just on the leader's needs but on the leader and followers needs. Second, transformational leadership is dissentious and promotes change. It is not about maintaining the status quo. Third, transformational leadership is causative. Change comes from the transformation of values and ideals rather than being reactive or inactive to norms. Fourth, transformational leadership is morally purposeful, seeking to satisfy higher needs rather than just dealing with transactional exchanges. Finally, transformational leadership is elevating. A transformational leader provides challenge and growth for the followers. According to Burns (1978), "The result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents"(p. 4).

Transactional leadership, on the other hand, for Burns, was the process of leaders making exchanges with their followers for things they each valued. These exchanges are often economic or politically based such as bonuses for passing stated quotas or exchanging money for votes in political campaigns. It is usually a reward-based transaction process between leaders and followers. As noted by Conger and Kanungo (1998), to Burns the real difference between transactional leaders and transformational leaders related to what leaders and followers offered each other. Another view is that transactional leadership works to maintain stability within an organization while transformational leadership tries to change the status quo by articulating a vision of what the new organization could be (Lussier & Achua, 2007).

Several modifications to Burns (1978) conceptualizations of transformational and transactional theory were made by Bass (1985). Burns placed transformational and transactional leadership at opposite ends of a leader/follower continuum. Bass on the other hand, proposed that transformational and transactional leadership are separate concepts. He argued that transformational and transactional leaders are both used by the best leaders. Work by Bass further articulated a number of behavioral components within transformational and transactional leadership. In his original formulations of transformational and transactional leadership, Bass (1985) had three dimensions of transformational leadership: idealized influence, intellectual stimulation, and individualized consideration and two dimensions of transactional leadership: contingent reward and passive management by exception.

Several revisions since his original pilot study have now revealed four dimensions of transformational leadership, three dimensions of transactional

leadership, and a non leadership dimension (Bass, 1990). The revised version of the theory is referred to as the Full Range Leadership Model. The four dimensions of transformational leadership often referred to as the four I's, (Bass, 1990) are:

> *Idealized influence* refers to leaders behaving in an admirable manner which engenders their followers to them and has them hold their leader in high regard.

> *Inspirational motivation* refers to leaders motivating and inspiring followers through their strong vision, persuasive language, and optimistic enthusiasm.

> *Intellectual stimulation* refers to leaders challenging assumptions and encouraging divergent thinking and creativity from their follower's efforts.

> *Individualized consideration* refers to leaders attending to the needs of followers.

The three dimensions of transactional leadership are:

> *Contingent reward* refers to the exchange process between leaders and followers. The leader come to an agreement with the follower over what needs to be done and what rewards will be exchanged for the follower doing it.

> *Management by exception – active* refers to the active role leaders play in watching followers closely so that they can quickly take corrective action when the followers make mistakes or violate rules.

Management by exception – passive refers to the passive role leaders take in

penalizing followers after standards have not been made. Each of the

management by exception dimensions uses more negative

reinforcement patterns.

The non leadership dimension is:

Laissez-faire leadership is actually the avoidance or absence of leadership.

Distinction from Other Theories

At the heart of the transformational leadership model is the idea that

transformational leaders motivate their followers to commit to and to realize

performance outcomes beyond their expectations. Bass (1985) argues that three

leadership process are involved in achieving these outcomes: (a) leaders raise

followers' levels of consciousness about the importance and value of outcomes and

the means to achieve them, (b) leaders induce followers to transcend their own self-

interest for the sake of the collective team or organization, and (c) leaders stimulate

followers' desire to address higher-level needs (p. 20). Transactional leadership

differs from transformational leadership in the fact that a transactional leader does not

concern themselves with the individualize needs of followers or their personal

development. Transformational leadership produces greater effects than transactional

leadership. While transactional leadership results in expected outcomes,

transformational leadership result in performance that goes well beyond what is

expected (Bass, 1985; Northouse, 2004; Yukl, 2006). This additive effect of

transformational leadership is illustrated in Figure 2.0.

Figure 2.0   The additive effect of transformational leadership

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Transformational Leadership

| Idealized | + | Inspirational | + | Intellectual | + | Individualized |
| Influence | | Motivation | | Stimulation | | Consideration |

Transactional Leadership

Contingent
Reward
+   Expected   **Performance**
Management-   →→→→   Outcomes   →→→→   **Beyond**
by-Exception   **Expectations**
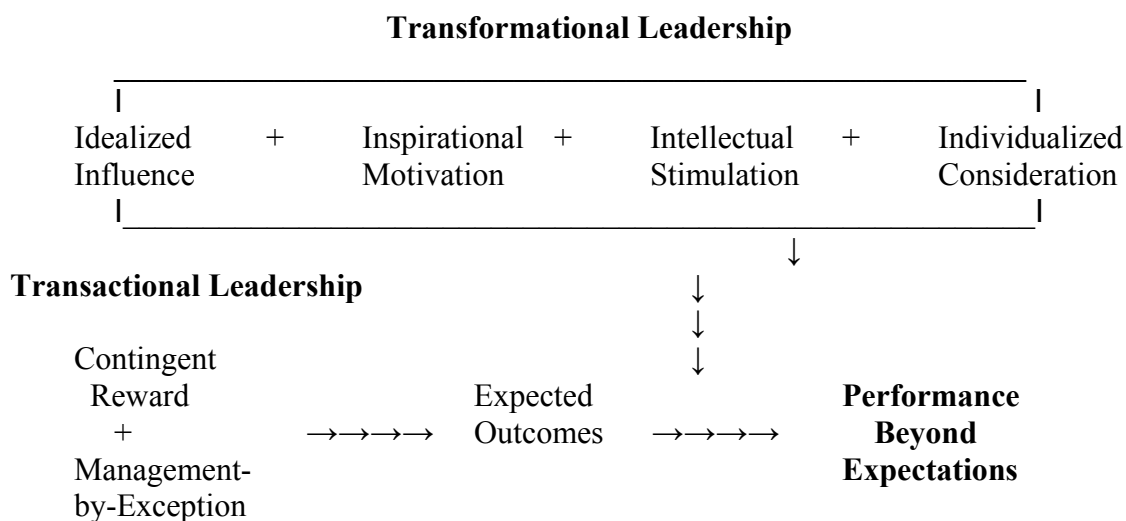
Source: Northouse (2004). *Leadership: Theory and Practice*. Thousand Oaks, CA: Sage Publications, p. 176. Adapted from "The Implications of Transactional and Transformational Leadership for Individual, Team and Organizational Development," by B.M. Bass and B.J. Avolio, 1990a, *Research in Organizational Change and Development*, 4, 231-272.

The effectiveness of transformational leadership and the validity of the

Multifactor Leadership Questionnaire (MLQ) for measuring the transformational and

transactional leadership constructs have been widely studied (Antonakis, Avolio, &

Sivasubramaniam, 2003; Avolio, B. J., Bass, B.M. & Jung, D.I., 1999; Carless, S.,

1998; Den Hartog, D.N., Van Muijen, J.J. & Koopman, P.K., 1997; Judge & Piccolo,

2004; Lowe, Kroeck, & Sivasubramaniam, 1996). This section will highlight the

literature discussing both the effectiveness of this leadership style and the validity of

the MLQ instrument in measuring the transformational and transactional constructs.

Effectiveness of Transformational Leadership

Lowe, Kroeck, and Sivasubramaniam (1996) took on the task of conducting a

meta-analysis of literature which used the MLQ to look at transformational and

transactional leadership constructs and their relationship to leader effectiveness. Transformational leadership was found to reliably and significantly predict work unit effectiveness across the 39 studies they examined. Their results also indicated that "the strength of the relationship between transformational leadership and effectiveness is the same and both lower- and higher- levels of the organization" (p. 420). This would be in opposition to those who viewed transformational leadership as primarily the vision and leadership style of only top managers. The positive effects of transformational leadership behavior has been show across various management levels (e.g., Bass, 1994), work environments (e.g., Bass, Avolio, Jung & Berson, 2003; Kirby, Paradise, & King, 1992), personalities (Judge & Bono, 2004) and national cultures (Chan & Chan, 2005).

Transformational leadership has been empirically linked to a number of positive individual and organizational outcomes such as increased organization innovation (Jung, Chow, & Wu, 2003), employee satisfaction (Podsakoff, MacKenzie, & Fetter, 1990), and overall employee performance (Barling, Weber, & Kelloway, 1996; Bass, Avolio, Jung, & Berson, 2003; Whittington, Goodwin, & Murray, 2004; Yammarino, Spangler, & Dubinsky, 1998)

Transformational leadership behaviors, according to Conger and Kanungo (1988) and Jung, Chow, and Wu (2003) clearly provide empowering effects on followers. While transactional leadership results in expected outcomes, transformational leadership result in performance that goes well beyond what is expected (Bass, 1985; Northouse, 2004). The going beyond what is expected is

related to the collaborative, collective action generated by transformational leadership, which empowers those who participate in the process.

Validity of Transformational Leadership and MLQ Instrument

The construct validity of the MLQ for measuring transformational leadership and transactional leadership constructs was also confirmed through a comprehensive meta-analytic examination of over 626 correlations from 87 sources by Judge and Piccolo (2004). The overall results indicated that transformational leadership has a relatively high validity of $\rho = .44$, with the vast majority of individual correlations included in the meta-analysis being greater than zero (Judge & Piccolo, 2004). Their research concluded, that:

> "The meta-analytic results presented in this study provide the most complete test of the full range of leadership…The results provide important support for the validity of transformational as well as contingent reward and, to some extent, laissez-faire leadership. The validity of transformational leadership, in particular, seems to generalize across many situations, including when it is studied in rigorous settings"(p. 765).

Antonakis, Avolio and Sivasubramaniam (2003) confirmed the validity of the measurement model and factor structure of Bass and Avolio's Multifactor Leadership Questionnaire (MLQ) (Form 5X), specifically taking into account the context in which leadership is observed and evaluated. When testing the nine-factor model, two indices of practical fit were found. The Comparative Fit Index (CFI) value was above .90 and the Root Mean Square Error of Approximation (RMSEA) value was below the upper limit of .08. All results were reported significant at $p < .001$. This confirmed that the current version of the MLQ is a valid and reliable instrument that adequately measures

the nine components comprising the full-range leadership theory of transformational and transactional leadership.

Summary

Thousands of studies have been conducted which highlight the effectiveness of transformational leadership for increasing job satisfaction, employee performance, increased organization innovation, and having empowering effects on employees. The effectiveness of transformational leadership, primarily the validity of the MLQ for measuring the full-range leadership theory of transformational leadership, has been tested again and again, resulting in confirmation of this valid and reliable instrument for measuring the intended constructs. This confirms the decision of the researcher for utilizing this well tested and validated instrument in this research study.

Transformational Leadership and 4-H Youth Development Professionals

In the past twenty years, the Extension Service, like other organizations, has been challenged by the many changes happening in our society (Ladewig & Rohs, 2000; Brown, Birnstihl, & Wheeler, 1996). The leadership philosophies taught in the past are no longer adequate for dealing with the complex problems inherent in the communities and organizations of today (Sandman & Vandenberg, 1995). This concern was echoed by Chester Fehlis (2005) in his call for "visionary leadership" when he states: "Leadership is unquestionably the key factor in determining if Extension will be capable of synthesizing future changes in demographics, science, technology, educational models, and human needs, and then developing a very clear and specific vision for our system"(p. 1).

This growing concern and interest in leadership has led to research studies exploring the relationship of transformational/transactional leadership style and leadership effectiveness with Extension Administrators (Ali, 2005; Brown, et. al. 1996; Moore, 2003; Radhakrishna, Yoder, & Baggett, 1994; Stumpf, 2003) and also specifically within 4-H Youth Development Educators (Sinasky & Bruce, 2006; Stedman & Rudd, 2006; Woodrum & Safrit, 2003).

This next section will highlight these findings by first looking at only those studies relevant to the transformational/transactional leadership style of 4-H YDE and then all studies will be considered in regards to the relationship between various demographics and transformational/transactional leadership style.

Leadership Styles

Two similar descriptive studies were conducted by Sinasky and Bruce (2006) with 4-H YDE in Pennsylvania and Woodrum and Safrit (2003) with 4-H YDE in West Virginia. Both studies sought to analyze the leadership practices of 4-H YDE by having 4-H YDE self-rate themselves using the Multifactor Leadership Questionnaire (Bass & Avolio, 2000), the Leadership Practice Inventory (LPI) (Kouzes & Posner, 1997), and a demographics questionnaire. In addition, Sinasky and Bruce (2006) included the immediate supervisor's observations of their 4-H YDE by having them complete the same instruments.

Both studies reported that participants rated themselves higher in transformational leadership than transactional leadership with the exception of "contingent reward" (a transactional leadership construct). This is in line with findings from Bass (1985) that emphasize that transformational leaders also engage in

transactional leadership behaviors. The Sinasky and Bruce (2006) study found no significant difference between scores of 4-H YDE and supervisors for transactional leadership skills. However, the 4-H YDE s' self ratings of their transformational leadership skills were significantly higher than what their supervisors observed. These studies provided some insight for these individual states and to the profession as a whole regarding the need for additional leadership training for 4-H YDE. These studies brught some merit to including leadership training to the present study. No demographic correlations were made in either study.

In a related study, Sinasky (2005) utilized the 4-H YDE self-ratings on the MLQ and the LPI and compared them with the ratings given by adult 4-H volunteers of the perceived leadership practices of their 4-H YDE. Again, results showed that 4-H YDE's self-ratings of their transformational leadership were higher than what their adult 4-H volunteers perceived.

In a national study, Stedman & Rudd (2006) examined the relationship and predictive power of demographics and volunteer administration leadership competence on leadership style. Their national study utilized the Multifactor Leadership Questionnaire (Bass & Avolio, 2000) a Volunteer Leadership Competency Instrument (VALCI) developed by the researcher (Stedman, 2004) and a demographic instrument. Their findings suggested that two volunteer leadership competencies, namely systems leadership (β =.97) and organizational leadership (β =-.94), has some predictive power for transformational leadership style. (β denotes the estimated standardized regression coefficient.) Since the sample size was small for this national study, n=97, findings need to be considered with some caution.

Summary

Leadership styles have been studied to gain understanding of how leadership can be applied to increasing the overall quality of the 4-H program and to the experiences of the individual volunteer. Studies to this point, have been in line with findings from Bass (1985) that emphasized that transformational leaders also engage in transactional leadership behaviors. There have also been some initial efforts to link volunteer administrative competencies with leadership style. No studies have yet explored the relationship of leadership style to the experience of the volunteer leader. This research study will look specifically at one element of measuring the experience of the adult 4-H volunteer: that of the relationship between 4-H YDE leadership style and adult 4-H volunteer sense of empowerment.

Demographics/Other Factors

Studies related to the impact of demographics on leadership style have been conducted within the Extension Service relevant to leadership style and job satisfaction (Stumpf, 2003), leadership style and leadership skill competency (Moore, 2003), leadership style and attainment of funding (Ali, 2005), and leadership style and volunteer administrative competency (Stedman & Rudd, 2004). Findings relative to demographics will be shared in the following categories: age, gender, tenure or years employed, and educational background.

Gender. No significant relationship between gender and transformational or transactional leadership were found in studies with Extension or 4-H audiences (Stumpf, 2003; Moore, 20003). However, in a meta-analysis of 45 studies conducted Eagly, Johannesen-Schmidt, and Engen (2003), it was found that female leaders were

more transformational than male leaders. The differences between men and women were small but it still indicates support for women's effectiveness in leadership. Parallel results were found by Antonakis, et al. (2003) who also found the female group scoring significantly higher than male group on individualized consideration, a transformational construct. Carless (1998) reported that subordinates reported no differences between men and women in their use of transformational leadership; however, the leaders themselves and the leaders' supervisors reported females to be more transformational than their male counterparts. Due to conflicting reports for this variable and because the variable has not been proposed in research exploring the relationship of transformational/transactional leadership style with empowerment in a professional/volunteer relationship, gender was included as a variable in this study.

Age. In those studies looking at the connection between age and leadership style, no significant findings could link these to variables in research conducted by Moore (2003), Stedman and Rudd (2004), and Stumpf (2006). Age was not used as a variable in corporate organizational studies. Based on these findings, age was not considered as a variable in this research study.

Years Employed/in Role. Stumpf (2003) and Moore (2003) found that years employed was significantly and negatively related to transformational leadership, meaning that the longer Extension professionals held their positions the more favorable perceived transactional leadership behaviors become. Years employed as 4-H YDE and years served as an adult 4-H volunteer were added as variables in this study to explore their relationship with sense of adult 4-H volunteer empowerment.

Educational Background. Moore (2003) was the only Extension or 4-H researcher to include educational background as a variable. Moore found that the leadership construct of Management by Exception (Passive), one of the transactional leadership constructs, was the only construct to show a significant correlation to educational background, which was significant at the highest degree participants held. With little data existing, adding this variable to the research study added more depth on this topic to the field of leadership research.

Leadership Training. Effective leadership trainings can be an important mechanism for strengthening 4-H organizations (Van Horn, Flanagan, & Thomson, 1999). The evaluation of training programs can help us determine if leadership development among adult volunteers makes a difference to individual leaders, the organization, and surrounding communities (Michael, et al., 1990). Results of a study done on the effectiveness of 4-H new leader education, conducted by VanWinkle, Busler, Bowman, and Manoogian (2002) found significant gains in "increased knowledge" and "increase preparedness" in adult 4-H volunteers. In addition, 83% of the new leaders reported on the six month follow-up questionnaire that the training had contributed to their personal growth. Even with a small sample size, the findings gave merit to the impact of leader training on the adult 4-H volunteer experience, which provided additional reason for inclusion of this variable in the research study.

Level of Involvement. Even though there is not a direct linkage to this variable in the research literature, the researcher posits that adult 4-H volunteers who have a higher level of involvement, beyond serving as a 4-H club leader, is related to their sense of empowerment. There are multiple leadership opportunities which demand

more time and result in a closer working relationship with the 4-H YDE and other

adult 4-H volunteers in the program, such as: developmental committee member,

committee officer, fair superintendent, event chair, workshop instructor, and advisory

board member. Including this variable in the research study provided opportunity to

examine the relationship of this variable to the sense of empowerment of adult 4-H

volunteers.

Summary

Demographics have been included in many studies to examine their

relationship to transformational and transactional leadership style. Based on the

literature review and the focus of the intended research, the following variables were

included in this research study: gender, years served in role, educational background,

leadership training, and leadership involvement.

Section Summary

This section has presented the relevant research related to the topics of

leadership, leadership theories and approaches, transformational/transactional

leadership theory, and implications for 4-H youth development settings. The definition

of leadership framing this study emphasizes the interdependent relationship between

leader and follower: "an influence relationship among leaders and followers who

intend real changes that reflect their mutual purposes (Rost, 1991, p.46)". The

relationship between leader and follower within a strong culture for supporting the

empowerment of followers, led to a more in depth analysis of transformational

leadership style and its effectiveness. Based on the literature review, transformational/

transactional leadership style as well as selected demographics (i.e., gender, years

served, educational background, leadership training and leadership involvement) were included in the study to explore their relationship to adult 4-H volunteer sense of empowerment.

Empowerment Theory

A discussion on empowerment is critical for the intended research project. This discussion begins with a theoretical background on empowerment which provides a context for a definition of empowerment. An overview of the literature on the dimensions of psychological empowerment in the workplace and its effects on the leader and follower relationship will then be provided. Finally, the implications for psychological empowerment within 4-H youth development settings, specifically between the 4-H youth development educator and 4-H adult volunteer leader, will be explored.

Theoretical background of empowerment

The origin of empowerment, as a form of theory, is traced back to Freire (1973), the Brazilian humanitarian and educator, when he laid out a plan for liberating the oppressed people of the world through education. The term has become widely used in the last two decades across a number of disciplines within the social sciences. Empowerment as a construct has been studied by many different disciplines such as psychology, community development, education, and studies of social movements and organizations. Since this research study is about measuring the dimensions of psychological empowerment in the educational based organization of 4-H youth development, the next two segments are devoted to an understanding of empowerment within these two disciplines: education and psychology.

Critical Theory and Pedagogy of Empowerment

In education, empowerment is perceived as a means of liberating oppressed people. Many critical pedagogy theorists, such as Paulo Freire, Henry Giroux, and Peter McLaren, championed the cause of empowerment. Their focus has been mainly on the classroom teacher and the need to create a situation of *power with* or empowerment relationships between teacher and student rather than *power over* or domination of teacher with students. Even though their contributions were thirty years apart, Freire (1973) and Parpart, Rai, & Staudt, K. (2003), both presented three progressive steps of empowerment: "conscientizing" or *power within*; "inspiring" or *power with*; and finally "liberating" or *power to*. For Freire, the oppressed can become empowered by learning about social inequality (conscientizing), encouraging others by making them feel confident about achieving social equality (inspiring), and finally liberating them. Parpart, et al. formulated that empowerment must include both individual conscientization (power within) and the ability to work collectively with others (power with) which brings about change (power to).

Conscientization is perceived as the process by which students achieve a deepening awareness of the social realities that are around them and then discover their own capacities to re-create them (Freire, 1973). The deepening awareness comes when students understand how social relationships are manipulated by relations of power and privilege as well as how they can be overcome and transformed through deliberative collective action, serving as the foundation for social justice, equality, and empowerment.

The concepts of *power over* and *power with* are well explained by Kreisberg (1992) in his book *Transforming Power: Domination, Empowerment, and Education.* His definition "*empowerment is a process through which people and/or communities increase their control or mastery of their own lives and the decisions that affect their lives*" (Kreisberg, 1992, p. 19, italicized by author) draws upon writings from Follett (1942) who wrote about industrial organization and administrative management. Follett associated *power over* with domination, where one person or side achieves victory over another. Where as *power with* is described as "jointly developed power," people or sides are developing their capacities and achieving their desires through acting together. It is through this view of *power over* as "coercive" and *power with* as "co-active" that Follett looks at power being the "capacity" developed between people interacting with each other, instead of power being perceived as "domination" of people over others.

Systems theory, developed as an alternative model of inquiry and understanding to the mechanistic view of our world, offers insights into the *power over* and *power with* thinking. At the core of breaking down the old paradigm and the emergence of a new paradigm is the notion of causality. Causality and synergistic interactions stand in stark contrast to interactions of linear cause and effect. Synergistic interactions bring phenomena (people or things) together, interrelating them, creating a new and greater whole from the disparate parts, thereby allowing phenomena to exist in harmony with each other maximizing each other's potential (Katz, 1983/84).

Power with then can be seen as situations in which individuals and groups fulfill their desires by acting together. The possibility for *power with* lies in the reality of

human interconnections within communities. In short, *power with* is empowerment.

Empowerment is jointly developing capacity. "Synergistic interaction" and

"synergistic community" provide a conceptual context with which empowerment can

be described and understood. The concept of synergy and the possibility of an

"expanding whole" allows the conceptualization of an expanding power that

individuals and groups capacities can be maximized within community. The *power*

with concept offers a conceptual matrix, for a key building block in the theory of

empowerment, for more fully understanding and more effectively creating alternatives

to structures and relationship of domination that traverse the educational system and

our society.

Summary

The theory of empowerment resonates with the researcher. It is the practice that

drives the researcher to investigate the question: Do the actions of 4-H youth

development educators create a synergistic interaction where a sense of empowerment

is felt by 4-H adult volunteers? Measuring empowerment levels in 4-H adult

volunteers will provide insight into the actions of 4-H youth development educators

practicing a *power over* or a *power with* interaction.

Psychological Empowerment

Literature on empowerment is most prolific in the field of community

psychology. Psychological empowerment is concerned with how the self-efficacy and

intrinsic motivation of people are influenced by leadership behavior, job

characteristics, organizational structure, and their own needs and values. The concept

of empowerment considers what makes up the core of the word: em*power*ment –

power. The close relationship between these two constructs is due in part because the possibility of empowerment depends on two things concerning power: 1) that power can change, and 2) that power can expand (Page & Czuba, 1999). Power does not exist in isolation nor is it inherent in individuals. Power exists with the context of a relationship between two people or things. Power is energy and as such it needs to be able to flow throughout organizations (Thomas & Velthouse, 1990; Wheatley, 1994). It can't be constricted to functions or levels within an organization or between people. "Power in organizations is the capacity generated by relationships" (Wheatley, 1994, p. 39). So since power is created within relationships, power can change. Power can then expand which provides the possibility of empowerment. Early work conceptualized empowerment as a set of management practices focused on decision-making authority, whereas recent research has provided the conceptual base for a more psychological definition of empowerment in the workplace.

A comprehensive theoretical analysis study by Hur (2006) provided an overarching framework across theories and disciplines for both academics and practitioners in the field of empowerment. Hur found that empowerment had two interrelated aspects that are best summarized as individual empowerment and collective empowerment. Since this research project was concerned only with individual empowerment, it will be the focus of the literature review.

The in-depth analysis by Hur, of more than 72 articles, resulted in the selection of individual empowerment components consistent with those articulated by Thomas and Velthouse (1990) and Spreitzer (1995), which are: meaning, competence, self-determination, and impact.

Definition of Empowerment

Conger and Kanungo (1988) defined empowerment as the motivational concept of self-efficacy. However, Spreitzer (1995) and Thomas and Velthouse (1990) argue that empowerment is multifaceted and its essence can not be captured by a single concept. Page and Czuba (1999) suggest that empowerment is multidimensional, social, and a process.

This research study is primarily focused on the individual person, the 4-H YDE and the 4-H adult volunteer, so the components of individual empowerment, as described by Hur were most applicable. As this researcher also agrees with the multidimensional aspect of empowerment, the definition of empowerment by Thomas and Velthouse guided this research. According to Thomas and Velthouse (as cited in Spreitzer, 1996), psychological empowerment is defined as *"intrinsic motivation manifested in four cognitions reflecting an individual's orientation to his or her work role: meaning, competence, self-determination, and impact"* (p. 1443).

Summary

The psychological dimensions of empowerment form the context of this research study. As the dimensions of empowerment are multifaceted, the research included all four cognitions outlined in the Thomas and Velthouse definition of psychological empowerment.

Dimensions of Psychological Empowerment

A further understanding of the dimensions of psychological empowerment was gained in the following literature review, including: (a) providing a general description of the four dimensions of empowerment, and (b) measuring the dimensions of

empowerment in the work place. According to Thomas and Velthouse (1990) and

Spreitzer (1995, 2001) the four dimensions (cognitions), which are also illustrated in

Figure 2.1, have the following mind-sets:

Figure 2.1. The four dimensions of an empowered mindset (Spreitzer, 2001)
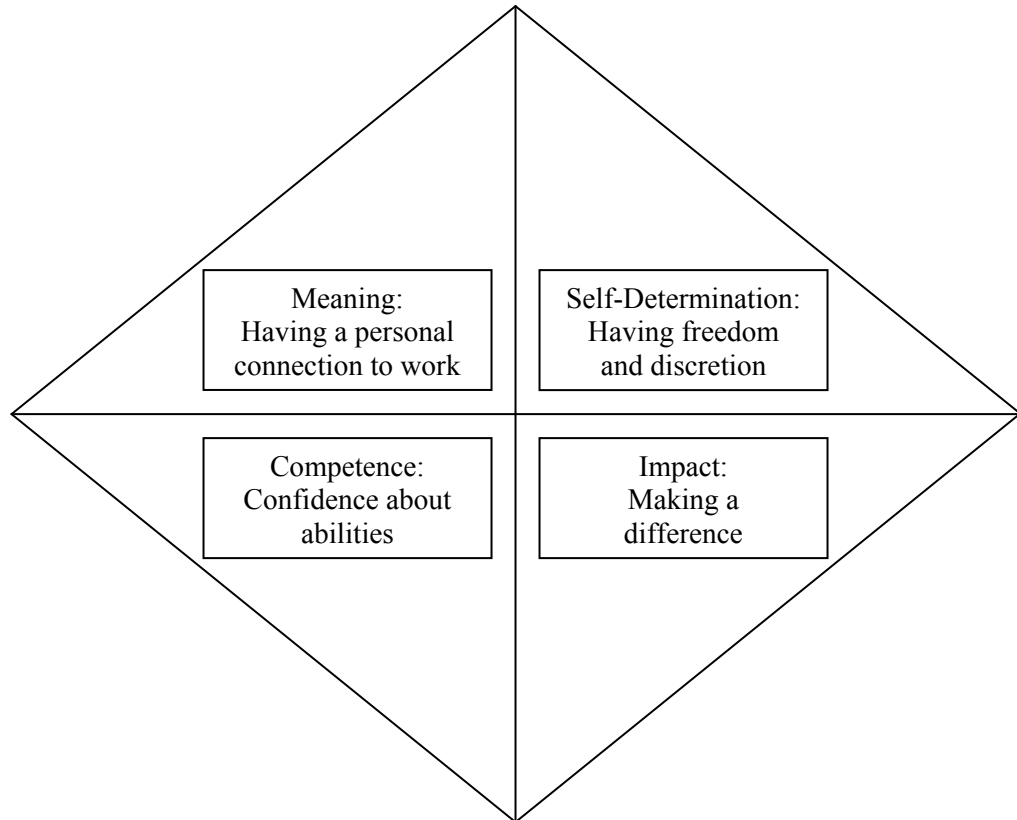
Meaning is the attributed fit between one's work role and one's values, beliefs,

and behavior. It is the degree to which people care about their work and feel that it is

important to them. There is a connection between their value system and their

behavior. Empowered people feel a sense of meaning about their work, whether it is

the activity itself or the outcomes associated with the activities, performing these

activities with greater purpose, passion and energy. "A sense of meaning is the engine

of genuine empowerment" (Spreitzer, 2001, p.16).

Competence is an individual's belief that one possesses the abilities and skills necessary to perform the activities (Gist, 1987). Competence, as described here, has a similar interpretation to self-efficacy as understood by Bandura (1977). Empowered people are confident about their ability to perform their work well. Competence and meaning are two concepts that when interrelated speak to the notion of mastery. A sense of mastery indicates a belief in one's capacity to learn and grow in ways to meet challenges.

Self-determination is the individual's belief that they have autonomy or control over how they accomplish their task. Empowered people are free to choose how to do their work. The sense of self-determination goes beyond delegating to enabling, where individuals feel that they initiate their own choices and decisions (Conger & Kanungo, 1988).

Impact is the perception that one can influence strategic, administrative, or operating outcomes at work or in society to make a difference (Thomas & Velthouse, 1990). Empowered people believe that what they do has impact. They feel like they are active participants in shaping the direction of the larger system in which they are embedded.

Bennis and Nanus (2003) also identified four similar critical dimensions of empowerment, namely: (a) significance, followers feeling that they were making a difference within the organization and in the greater context of the world (sense of impact), (b) competence, followers gaining a sense of mastery and learning on the job (sense of competence), (c) community, followers feeling joined in a common purpose (sense of meaning), and (d) enjoyment, followers gaining enjoyment and fun through

their involvement, energizes people to act individually, in pursuit of organizational

goals (sense of self-determination).

This notion of empowerment assumed that: (a) empowerment is not a

personality trait generalizable across situations but instead it is a set of cognitions

shaped by the work environment (Thomas & Velthouse, 1990), and (b) empowerment

is a continuous variable; people are to be viewed as more or less empowered instead of

either empowered or not empowered (Spreitzer, 1997).

These four cognitive variables or task assessments (Thomas & Velthouse, 1990)

determine intrinsic motivation in workers. These assessments also capture some of the

motivational aspects of current leadership models apply at the individual level of

analysis. "These four task assessments (cognitions) provide a framework for

evaluating the probable effectiveness of empowerment interventions that have not

been based upon explicit motivational assumptions" (Thomas & Velthouse, 1990).

Together, the four dimensions present an active orientation to one's work role that

empowered individuals view as something they shape by their actions, not as

something given to them (Spreitzer, 1995).

Measuring Empowerment

In 1995, Spreitzer developed and validated a multi-dimensional measure of

psychological empowerment in the workplace. Spreitzer labeled this instrument the

Psychological Empowerment Instrument (PEI). Spreitzer, as well as other researchers

in the field, have conducted numerous studies utilizing this instrument to measure

empowerment and its relationship to levels of innovation, effectiveness, job

satisfaction, job strain, making transformational change, and ability to deal with

change (Mishra & Spreitzer, 1998; Spreitzer, 1995; Spreitzer,1996; Spreitzer, DeJanasz & Quinn, 1999; Spreitzer, Kizilos & Nason, 1997).

Validity of Psychological Empowerment and PEI Instrument

The PEI itself has been tested for convergent and discriminant validity of the empowerment measures. Each of the items loaded significantly on its appropriate factor. The Adjusted Goodness-of-Fit (AGFI) and Comparative Fit Index (CFI) both met the .90 criterion (Spreitzer, 1995). The measurement model suggests that each of the four dimensions contributes to an overall construct of empowerment in a second-order factor analysis, with the dimensions not being construct equivalent. The interdependence of each of the dimensions has been confirmed in more recent studies where Spreitzer emphasized that the dimensions are multiplicative rather than additive. Therefore, one cannot remove one of the dimensions when measuring the outcome of empowerment.

Summary

The four dimensions of empowerment: meaning, competence, self-determination, and impact, provide a framework for evaluating the probable interventions of empowerment. The instrument which was created and validated by Spreitzer has shown reliability in assessing the interdependent aspects of the measurement model. The PEI served as a reliable and validated measurement model for use in this research study.

Research on Empowerment

Studies on empowerment were chosen for their relevancy to leaders and followers in 4-H youth development organizational settings. Specific studies

highlighted in the literature review focus on three areas: (a) analyzing the environment, (b) facilitating empowerment, and (c) change-orientated leadership. Each of these three areas are explored in the relevant literature and then their application to 4-H YDE interaction with adult 4-H volunteers is discussed.

Environment and Empowerment

Thomas and Velthouses' (1990) theoretical model of empowerment in the workplace suggested that the organizational environment can have a powerful influence on the four cognitions of empowerment. People must perceive their environment to be liberating rather than constraining in order to feel empowered (Deci, Connell, & Ryan, 1989). The emphasis here is on *perception* not some objective reality. For example, resources may be readily available to assist employees, an objective reality, but if employees are not informed that those resources are available for their use, a perceptual reality, the access to these resources will have little influence on their feelings of empowerment.

Spreitzer (1996) studied the work unit design characteristics of an empowering system focusing on the immediate vicinity of the individual's environment. Within this environment, Spreitzer studied six work unit social structural characteristics that were hypothesized to facilitate empowerment: (1) low role ambiguity, (2) working for a boss with a wide span of control, (3) sociopolitical support, (4) access to information, (5) access to resources, and (6) a participative unit climate.

Role ambiguity happens when an individual is unsure about their role expectations. When individuals don't know the extent of their authority and what is expected of them, they may be hesitant to act (i.e., lack of self determination), thus

feel unable to make a difference (i.e., lack of impact) which may also mean they feel less confident (i.e., lack of competence) about their decisions (Conger & Kanungo, 1988).

Span of control conveys the number of people supervised by one manager. When there is decentralized control it helps employees feel able to make decisions under their domain of responsibility (promoting self-determination); feel like they can contribute to the operations of the organization (promoting impact); and feel like they are trusted and valued (promoting competence and meaning) (Lawler, 1992).

Sociopolitical support means the approval or legitimacy by organizational constituencies. Being a part of support networks and receiving support from managers, increases the social exchange individuals have within the organization enhances a sense of personal power leading to feelings of impact, competence, and self-determination (Gist & Mitchell, 1992; Walton, 1985).

Access to information, allows individuals to see the "big picture," to understand their role within the organization, and to understand the goals/vision of the organization. When organizations make more information available to more people at all levels of the organization, individuals gain feelings of meaning, self-efficacy, and sense of impact (Kanter, 1986; Lawler, 1992; Gist & Mitchell, 1992).

Access to resources, such as funds, materials, space or time, as well as some authority to allocate resources, enhances an individual's sense of self-efficacy and control over environmental contingencies (Lawler, 1992; Gist & Mitchell, 1992; Walton, 1985).

Participative unit climate describes the personality of the organization. Participative climates acknowledge and value the contributions of individuals versus valuing a climate of control, order, and top down command (Lawler, 1992).

Spreitzer's research was done with 393 middle managers from diverse units of *Fortune* 50 organizations. Results of the research found that low role ambiguity, span of control, sociopolitical support, access to information, and participative unit climate were all positively related to empowerment. Access to resources, however, was not found to be related to empowerment. Role ambiguity had the strongest relationship to empowerment, suggesting that organizations that delineate clear goals, tasks, and lines of responsibility improve factors of empowerment in the workplace. Two other factors, controlled for in the regression analysis, were also found to be positively related to empowerment: larger unit size and more education. Larger units provided more meaning for individuals and those with more education were found to be more empowered.

Application to 4-H YDE interaction with adult 4-H volunteer

This research study was designed to replicate Spreitzer's (1996) research focusing on the individual level of empowerment occurring in the immediate vicinity of the individual's work environment. Instead of looking at the 4-H organization as a whole (the statewide program), the unit of study was the "work environment" of the adult 4-H volunteer, which is within their local county program. This research on "work environment" also justified including the variables: (a) size of program and (b) educational background in the current research project to examine their relationship to adult 4-H volunteer sense of empowerment.

To understand more clearly the relationship between an empowering versus a disempowering work environment, articulated by Spreitzer, table 2.2 was created.

Table 2.2 Social structural characteristics and their effects on perceptions in the work environment as empowering or disempowering to individuals.

Social Structural Characteristics	Disempowering	Empowering
Role of ambiguity	Unclear expectations – fear repercussions for decisions	Clear expectations – boundaries for decision authority are clear
Span of control	Narrow span of control - centralized	Wide span of control – decentralized
Sociopolitical support	Lack of support – no network	Mutual support - collaboration
Access to information	Lack of information flowing to everyone	Information reaches all levels of organization
Access to resources	No access or authority to allocate resources	Access to and authority to allocate resources
Participative unit climate	Top down command, control, order and predictability are valued	Individual contribution, creation, and liberation of individuals is valued

What this meant for this research study of 4-H YDE and 4-H adult volunteers?

(1) *Role ambiguity* is about providing individuals with clear role expectations. Individuals need to know their extent of authority and responsibility. In the 4-H program this is communicated to adult 4-H volunteers through leader training. By adding leader training as a variable to the research study this aspect of the work environment could be analyzed.

(2) *Span of control* looks at the number of people supervised by one manager. The vast majority of 4-H YDE have more volunteers than they can supervise. In Oregon the ratio of 4-H YDE to adult 4-H volunteers is 64:1 (Oregon 4-H, 2007). This variable is studied after the data is collected, comparing responses with the ratio of volunteers to 4-H YDE in each county.

(3) *Sociopolitical support* is manifested by individuals seeing themselves as integrated into the key political channels for getting work done within the program. For 4-H adult volunteers, the additional networking and legitimacy comes from involvement beyond leading their club through additional leadership experiences. By including level of involvement as a variable in the study, this "work environment" factor could be analyzed for adult 4-H volunteers.

(4) *Access to information* particularly the goals, strategies, vision, and action plans of the 4-H program provides 4-H adult volunteers with a sense of ownership. Information flow and outlets to information vary greatly across the Oregon 4-H program, from county to county as well as from volunteer to volunteer. With so much inconsistency across the program, this variable was not be included in the study.

(5) Even though *access to resources* was not found to be significant in the Spreitzer

study. In the 4-H program, not all adult 4-H volunteers handle or have decision-

making control over resources. Therefore, this variable was not added to the study.

(6) The *participative unit climate* depicts the personality of the organization, a climate

in which individuals feel valued and acknowledged. As an organization, 4-H portrays

a participate climate through newsletter articles, face-to-face interactions, and public

recognition. Spreitzer assessed this climate measure by utilizing five items from the

competing values model of organization culture (Quinn & Spreitzer, 1991).   This

variable could then be properly assessed in the research study by replicating these

same five questions from Spreitzer.

Summary

Thomas and Velthouse suggest that the organizational environment can have a

powerful influence on the four dimensions of empowerment. Spreitzer, empirically

studied the social structural characteristics of this environment by looking at six items:

(a) role ambiguity, (b) span of control, (c) sociopolitical support, (d) access to

information, (e) access to resources, and (f) participative unit climate. Four of these

characteristics have direct application to the 4-H YDE and adult 4-H volunteer

interaction and were included as variables in the research study. Role ambiguity was

measured with the variable leadership training, span of control was assessed through

the collection of comparison data on ratio of adult 4-H volunteers to 4-H YDE per

county, sociopolitical support was measured with the variable level of involvement,

and participative unit climate was measured with a five item construct developed by

Spreitzer (1996). Two other variables were included in the research study as well.

Larger units were measured with the variable size of program, and education was measured with the variable educational background. Each of these variables added insight into the analysis of adult 4-H volunteer sense of empowerment.

Facilitating Empowerment

Facilitating conditions that strengthen and encourage feelings of empowerment have been suggested by a number of researchers (Arygyris, 1998; Conger, 1989; Forrester, 2000; Randolph, 1995; Spreitzer, 1996, Spreitzer & Quinn, 2001). In the journey of empowerment, Quinn and Spreitzer (1997) emphasized that in order for organizations to make empowerment successful, organizations must address the most fundamental issue in regards to empowerment: "It is nearly impossible for unempowered people to empower others" (p. 47). Empowered people are empowering people. Organizations need to support opportunities for individuals to spend time on empowering themselves while simultaneously focusing on the system.

Spreitzer and Quinn (2001) added that a balanced approach, between mechanistic and organic, provided the best avenue for success for facilitating empowerment. A mechanistic process is what management does to create a context that is more empowering (Randolph, 1995). Managers empower employees if they: a) share information, so people know how they and the organization are doing; b) impose a structure, to ensure accountability through a clear vision, goals, and organizational roles; c) advocate for the development of teams to break down traditional hierarchy; d) provide training and knowledge on how to work collaboratively with tools for problem solving; and e) utilize rewards, for takings risks, initiatives, and more responsibility.

An organic process, encouraged by Quinn and Spreitzer, is similar to the quantum view approach by Wheatley (1994) which focused more on building a mindset that employees have about their role in the organization. It builds on the idea that employees/volunteers must *choose* to be empowered. They must: (a) see themselves as having freedom and discretion (sense of self-determination), (b) feel personally connected to the organization (sense of meaning), (c) feel confident about their abilities (sense of competence), and (d) feel capable of having an impact on the system in which they are embedded (sense of impact).

Genuine empowerment than requires dealing with inherent tensions which come from striking a delicate balance between mechanistic and organic process (Spreitzer & Quinn, 2001). This tension is illustrated in the Figure 2.2. On one hand, the system must balance between openness/trust and guidance/control. Leaders/systems must liberate and give power to individuals but also maintain control and provide guidance and boundaries. On the other hand, the system must balance between vision/challenge and security/support. Leaders/systems must be future looking but also provide a sense of security and support to the people in order to develop confidence and competence.

Application to 4-H YDE interaction with adult 4-H volunteer

The 4-H YDE struggles with the same tension between organic and mechanistic processes in the balance of empowering volunteers and providing structural (rules/guidelines) management of the program. For the 4-H organization, it also articulates an important trickle down effect to make empowerment possible. First, the 4-H youth development educator must feel empowered so they can in turn

Figure 2.2 The creative tensions of the disciplines of empowerment (Spreitzer &

Quinn, 2001, p. 38)
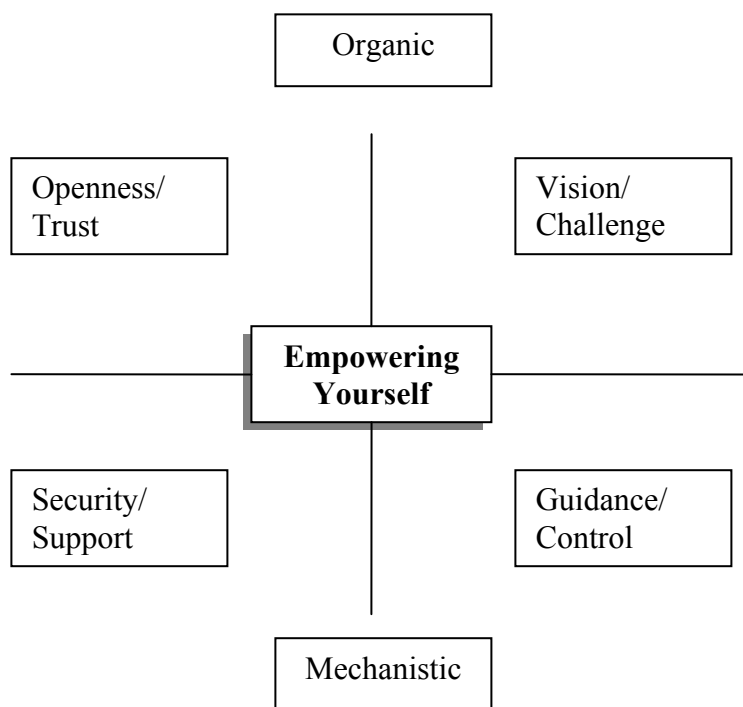
empower the 4-H adult volunteer. The 4-H adult volunteer must feel empowered in

order for them to empower the 4-H youth member. It implies that before 4-H YDE

can create an environment through which others can be empowered, that they must

empower themselves. 4-H YDE must lead by example and begin transforming

themselves. For the researcher, this study provided an eye-opening revelation about

this research study. It stimulated the idea that the analysis of adult 4-H volunteer

sense of empowerment would be incomplete without also knowing the sense of

empowerment of their 4-H YDE. The research study had both the adult 4-H volunteer

AND the 4-H YDE complete the Psychological Empowerment Instrument (PEI).

Summary

To facilitate empowerment within an organization, the research stressed that organizations must first support individuals in empowering themselves before they can empower others or have an empowering system. This provided insight for the research study to have both the adult 4-H volunteer and 4-H YDE complete the PEI to assess if this trickle down effect made a difference for 4-H volunteers.

Empowerment and Leadership

The relationship between psychological empowerment and leadership has been relatively neglected in the literature (Keller & Dansereau, 1995; Spreitzer, Janasz & Quinn, 1999). Keller & Dansereau (1995) point out that the construct of psychological empowerment is a powerful mediating variable that should be studied to assess linkages between transformational leadership and work outcomes. Empowerment of followers is an important aspect of transformational leadership. If leaders have empowered their staff (paid or unpaid) to set goals and determine the strategies to achieve those goals towards the realization of the shared vision, this shows that the followers have taken on the vision for themselves. Leaders and followers have made a commitment to and acted upon a shared vision.

Transformational leadership behaviors, according to Conger and Kanungo (1988) and Jung, Chow, and Wu (2003) clearly provide empowering effects on followers in terms of raising their self-efficacy. Kark, Shamir, and Chen (2003) reported raising followers' self-efficacy, collective self-efficacy, and organization-based self esteem (OBSE) through leaders use of transformational leadership style. The construct of OBSE is described as "the self-perceived value that individuals have

of themselves as organization members acting within an organizational context"

(Kark, Shamir, & Chen, 2003, p. 248).

The study by Spreitzer, et al. (1999), attempts to address the knowledge gap in

the relationship between psychological empowerment and change-orientated

leadership. Change-orientated leadership was interpreted to be those elements of

leadership most focused on making change: innovativeness, upward influence, and

inspiring subordinates. The idea being that for leaders to envision change, they must

first act innovatively, secondly they must gain support for change through upward

influence, and finally they must be able to articulate the vision and inspire

subordinates to make the change happen.   Their study found that supervisors who felt

empowered were seen by their subordinates as more innovative, upward influencing,

and inspiring (Spreitzer, et al. 1999). These results are particularly noteworthy as the

analyses avoided common method variance in that the researchers used supervisory

perceptions of empowerment and subordinate perceptions of leader characteristics.

Another hypothesis studied, which found no support, was that supervisory

empowerment was *not* related to monitoring behaviors. This would support findings

from Bass (1985) that asserts that change-orientated leadership (transformational) and

status-quo orientated behaviors (transactional) are not mutually exclusive, empowered

supervisors seem to exhibit both types of leadership behavior (Spreitzer, et al. 1999).

Application to 4-H YDE interaction with adult 4-H volunteer

Building and maintaining a quality volunteer program, is fundamental to the

success of the 4-H program. The 4-H program depends a great deal on the strength of

its volunteers. Understanding is needed on how the 4-H YDE contributes to or relates

to the individual 4-H volunteer who provide direct delivery of the 4-H program to young people. This understanding can be broadened in looking at how 4-H YDE provides leadership for creating an empowering environment, facilitates empowerment with volunteers, and conducts themselves as a change-orientated, transformational leader. The limitations of the Spreitzer, et al. study, is that it only takes into consideration the change-orientated segments of the transformational leadership constructs instead of analyzing this measurement model in its entirety. The researcher felt that utilizing the entire Multifactor Leadership Questionnaire for measuring transformational/transactional leadership style served the research study needs best.

Summary

Spreitzer, et al. (1999) pointed out that "the empirical study of empowerment and leader behavior is in its infancy" (p. 523). This research study adds to the leadership literature by studying the correlation between the 4-H YDE perceptions of leadership style and empowerment with the 4-H adult volunteer perceptions of leadership style and empowerment. The Spreitzer, et al. (1999) study provides alternative leadership measurements to include in future studies.

Interactions between leader and follower have been addressed within the psychological dimensions of empowerment, particularly in the work place. Attention will now be given to looking at the leader and follower interaction in 4-H youth development settings. The literature regarding this interaction focused on three main themes: (1) volunteer administration competencies of 4-H YDE, (2) competencies of adult volunteers, and (3) relevance to empowering youth. There were no studies related to empowerment of volunteers.

Research on 4-H Youth Development Educator and Adult Volunteer Interaction

Since the inception of the 4-H program, adult volunteers have played an integral role in the program's success (Wessel & Wessel, 1982). 4-H adult volunteers serve in a variety of direct volunteer roles, such as organized club leader, project leader, or teacher. Many also serve in indirect volunteer roles such as board members, committee members, and middle managers. Adult 4-H volunteers often step into these positions on their own accord and at other times the 4-H YDE has asked them to serve in these leadership roles.

Over 640,000 4-H adult volunteers provided leadership for the delivery of the 4-H Youth Development program to over 7 million youth (National 4-H Headquarters, 2007). In Oregon, 4,872 4-H adult volunteers provided direct or indirect delivery of the 4-H program to 150,304 4-H members (Oregon 4-H, 2007). The 4-H youth development program model relies heavily on 4-H volunteer leaders to assist in carrying out the experiential learning activities which engage young people in life skills development. 4-H YDE are encouraged to "empower" the 4-H volunteer to carry out the 4-H mission and increase the capacity to meet the needs of a growing number of young people.

Volunteer Administrative Competencies

Competencies needed in volunteer administrative leadership have been articulated by the National 4-H Professional Development Task Force/ National 4-H Headquarters in the newly revised 4-H PRKC (N4-HPDTF, 2004) and by the Council for Certification in Volunteer Administration (CCVA, 2008). Competencies within in the 4-H PRKC "Volunteerism" category include: (a) personal readiness, (b)

organizational readiness, (c) engagement of volunteers, (d) education of volunteers, and (e) sustainability of volunteers. The CCVA list of competencies for volunteer administrators include: (a) ethics, (b) organizational management, (c) human resource management, (d) accountability, and (e) leadership and advocacy.

Research, however, provided evidence that 4-H youth development educators lack proficiency in the competencies needed to effectively work with volunteers (Boyd, 2004; Sinasky, 2005; Deppe & Culp, 2001; Culp & Kohlhagen, 2004; King & Safrit, 1998). For example, in the descriptive-correlational study done by King and Safrit (1998), 4-H YDE indicated that they were only somewhat competent with each of the nine selected competencies, also indicating that only three competencies were important. Results indicated that if 4-H YDE do not believe competencies to be important, they are likely not to be motivated to become competent in that area.

Stedman and Rudd (2005) examined the relationship between demographics, volunteer administration leadership competence, and leadership style. Their study involved 4-H YDE from the southern region which were originally part of a larger national study. Participants completed a demographics instrument, the Multifactor Leadership Questionnaire (Bass & Avolio, 2000), and the Volunteer Administration Leadership Competency Instrument (Stedman, 2004). The primary intent of their correlation study was to look at the predictive nature of volunteer leadership competencies and demographics for determining leadership style. Their findings revealed that two volunteer leadership competencies in particular, systems leadership and organizational leadership, carry the most predictive ability for transformational leadership (B=.97 and -.94, p<.05 respectively). Systems leadership is identified as

leadership involving the expressed knowledge of one's discipline, and organizational leadership is identified as leadership taking place in the context of the organization.

Summary

Prior research with 4-H YDE illustrated that it is possible to make correlations between transformational leadership and elements similar in nature to a sense of empowerment. Systems leadership and organizational leadership do not exactly articulate the dimensions of empowerment but this research study was designed to make the necessary link.

4-H Volunteer Competencies

Two studies were found related to the topic of competencies needed by the 4-H adult volunteer in delivering 4-H youth development programs of which one also addressed the demographics of volunteers and 4-H YDE.

The descriptive and correlational, national study conducted by Nestor, McKee, and Culp (2006) sought to demographically describe the differences between adult volunteers and 4-H YDE as well as compare the perceived competencies needed by volunteers in delivering 4-H youth development programs. In regards to their highest educational level achieved, 30.43% of the volunteer leaders were high school graduates followed closely by 30.04% receiving a bachelor's degree. Conversely, 75.63% of 4-H YDE held a master's degree with only 13.76% of the volunteers holding this degree. The mean age of 4-H YDE was significantly younger (41.76 years) than that of volunteers (46.33). Adult volunteers reported serving more volunteer organizations (2.18) than did 4-H YDE (1.31). Finally, the study found almost two-thirds of the adult volunteers (61.70%) to be employed full time, with

another one-fifth being employed part time (21.08%). There is some caution in these numbers, however, as the rational for purposefully selecting the twelve states is not known other than trying to get a regional balance. In addition the numbers from the Southern Region, the largest in terms of numbers of 4-H youth and 4-H YDE, may not be representative based on response return rate. However, it is understood that the Southern Region 4-H program utilizes fewer volunteers in its delivery of 4-H.

This study speaks to two variables which coincide with variables already chosen based on studies done by Spreitzer (1996), which are years served and educational background. There are significant differences here between 4-H YDE and adult 4-H volunteer that may provide insight into the levels of empowerment of volunteers. This provides another vote of support for including this variable in the research study.

The purpose of a statewide study conducted by Singletary, Smith, and Evans (2006) was to assess 4-H volunteer leaders' perceptions of the life skills youth learn through 4-H and the specific skills volunteer leaders possess to promote positive youth development of 4-H youth. The study reported that "providing for the physical and psychological safety of 4-H youth" as well as "support for efficacy and mattering" were the critical skills that volunteer leaders felt they possessed to help with the positive youth development of youth (p. 4).

The result of this study must be utilized with caution due to the low response rate (19%) for which only half of that sample were used as they were the volunteer leaders (the rest were parents). However, to see "support for efficacy and mattering" so high on the list lends credibility to the idea of the trickle down effect of

empowerment. If results from the study reveal that 4-H YDE are empowered and 4-H adult volunteers are empowered, then one might conclude that 4-H members are gaining a sense of empowerment.

Summary

This study again speaks to the variable of year's served and educational background as variables that can provide insight into the levels of empowerment of volunteers. It also begins to demonstrate the trickle down effect that increasing the sense of empowerment in volunteers can have in empowering 4-H youth.

4-H Volunteer Satisfaction

A study by Arnold and Dolenc (2008) measured Oregon 4-H volunteers perceptions related to their understanding of the 4-H program and the Extension Service, their understanding of their 4-H volunteer role, and their satisfaction with their volunteer role. The three highest ratings of their 4-H volunteer experience were: (a) that their 4-H volunteer experience was valuable (mean 3.58), (b) feeling valued by the youth in their program (mean 3.47), and (c) that 4-H meets the needs of their community (mean 3.47). For this study these findings implied high volunteer satisfaction in these areas and that volunteers have found meaning in their role.

Summary

This study supports the variable of "role ambiguity" discussed earlier by Spreitzer (1996) and Conger and Kanungo (1988). When individuals know the expectations of their role, they are not hesitant to act (self determination), feel able to make a difference (impact), and feel confident about their decisions (competence). This reinforces the aspect of adding the variable leader training to the current study as

it is within the 4-H program leader training that adult 4-H volunteers are provided

expectations of their role in the program. The Arnold and Dolenc study also begin to

imply the meaning that volunteers gain from their involvement in 4-H. The current

research study adds to our understanding of meaning as one important dimension to

the study of empowerment.

Relevance to Empowering Youth

It is important to note that even though this research is focused on the 4-H

adult volunteer, it is certainly important that the concept of empowerment described

here would also extend to the 4-H member. Empowerment is not a synergistic

interaction only between the 4-H youth development educator and the 4-H adult

volunteer. It also occurs between the 4-H youth development educator and the 4-H

member as well as between the 4-H adult volunteer and the 4-H member. It is and

should be viewed as a similar process even if this research does not at this time

include the 4-H member.

The dimensions of psychological empowerment fit very closely with various

frameworks of positive youth development as illustrated in Table 2.3. The similarities

in the cognitive constructs provide a striking reason why measuring the effects of

empowerment of 4-H adult volunteers is critical to the positive youth development of

young people. They fit hand in hand, lending another lever of credibility and

importance in focusing on this research topic.

Table 2.3 Dimensions of individual sense of empowerment compared to some of the frameworks for positive youth development.

Frameworks for Positive Youth Development					
Dimensions of Psychological Empowerment	*Essential Elements[1]*	*America's Promise[2]*	*4-H[3]*	*Circle of Courage[4]*	**Positive Youth Development Outcomes**
Meaning	Belonging	Caring Adult Safe Places	Heart	See themselves as belonging to a whole	Connection
Self-determination	Independence	Effective Education	Head	Take step forward as independent people	Confidence
Competence	Mastery	Healthy Start	Health	Draw on their inherent mastery of life	Competence
Impact	Generosity	Opportunities to Help Others	Hands	Use generosity to contribute their wisdom to community	Caring Character

Definitions to aide in understanding Table 2.3.

4-H Framework: Head represents managing and thinking skills, Heart represents relating and caring skills, Hands represent working and giving skills. Health represents living and being skills.

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[1] http://www.national4-hheadquarters.gov/about/4h_elements.htm
[2] http://www.national4-hheadquarters.gov/library/4h_docs.htm
[3] http://www.americaspromise.org/APA.aspx[3]
4 http://www.reclaiming.com/content/about-circle-of-courage

Essential Elements Framework: Belonging, mastery, independence, and generosity. These are known as the essential elements of 4-H. The essential elements set the context in which positive development occurs.

Positive Youth Development outcomes: Competence refers to the social, academic, cognitive, and vocational capacities of youth. Confidence stems from improving self-esteem, self-concept, self-efficacy, and hope for the future. Connection is the result of building and strengthening relationships with people and institutions. Character refers to the development of self-control, a sense of right and wrong, and respect for cultural and societal norms. Caring and Compassion refer to one's empathy and identification with others.

America's Promise and Circle of Courage: Two additional frameworks for looking at the elements needed by young people.

Summary

Empowerment is not a synergistic interaction only between the 4-H youth development educator and the 4-H adult volunteer. It also occurs between the 4-H youth development educator and the 4-H member as well as between the 4-H adult volunteer and the 4-H member. The research study intended to provide insight into the sense of empowerment of adult 4-H volunteers. This insight provides perfect alignment for what could have great meaning and impact for all 4-H youth development settings.

Section Summary

The *power with* concept offers a conceptual matrix for the theory of empowerment being a "synergistic interaction" which happens in nature.

Psychological empowerment is defined from an individual orientation to one's work as intrinsic motivation manifested in the following four dimensions: meaning, competence, self-determination, and impact.

Literature review insight was provided by Spreitzer, who empirically studied the social structural characteristics of the individual work environment by looking at six items: (a) role ambiguity, (b) span of control, (c) sociopolitical support, (d) access to information, (e) access to resources, and (f) participative unit climate. Four of these characteristics have direct application to the 4-H YDE and adult 4-H volunteer interaction: leadership training (role ambiguity), 4-H YDE/adult 4-H volunteer ratio (span of control), level of involvement (socio-political support), and participative unit climate. In addition, size of program (larger units) and educational background were also found to have significant relationship to empowerment. Each of these variables added insight into the analysis of adult 4-H volunteer sense of empowerment in the research study. Especially enlightening was the recognition of the need for 4-H YDE to also complete the PEI to assess if this trickle down effect of empowerment made a difference for 4-H volunteers.

Research studies articles conducted with 4-H audiences, related to volunteer administrative competencies, volunteer competencies, and volunteer/4-H YDE demographics provided support for including years served and educational background in the research study. Due to its strength in convergent and discriminant validity testing of the four dimensions of empowerment, the Psychological Empowerment Instrument (PEI) developed by Spreitzer (1995) was utilized to measure empowerment in this research study.

Conclusion

Systems theory provided the context for this research study. The 4-H Youth

Development program sits within a large organization called the Cooperative

Extension System. The understanding of the organization is important to understand

the relationships with the people of the organization. Systems thinking is a part of the

Cooperative Extension Systems organization which actively invites all organization

participants (including paid staff and volunteer staff) to be engaged as learners and

active participants, acknowledging that everyone contributes to the organizations

success. This systems thinking affects the organizational leader/follower relationship,

organizational effectiveness, and organizational change. Empowerment is a major

component within organizations embracing systems theory. This provided the core

interest in this research study.

Within this organizational context is a leader/follower relationship. Therefore

considerations of leadership theory and its role within this relationship was critical.

The definition of leadership, that also emphasizes the interdependent relationship

between leader and follower, framed this study: "an influence relationship among

leaders and followers who intend real changes that reflect their mutual purposes"

(Rost, 1991, p.). The relationship between leader and follower within a strong culture

for supporting the empowerment of followers led to a more in depth analysis of

transformational leadership style and its effectiveness. Due to its strength in

convergent and discriminant validity testing of transformational/transactional

leadership style, the Multifactor Leadership Questionnaire (MLQ) developed by Bass

and Avolio (1995) was utilized to measure leadership style and its impact on the empowerment of others.

With empowerment being the focus of this study, a thorough literature review of empowerment theory guided the research design. Psychological empowerment is defined from an individual orientation to one's work as intrinsic motivation manifested in the following four dimensions: meaning, competence, self-determination and impact (Thomas and Velthouse, 1995). Due to its strength in convergent and discriminant validity testing of the four dimensions of empowerment, the Psychological Empowerment Instrument (PEI) developed by Spreitzer (1995) utilized to measure empowerment in the study. In the fullest consideration of the literature, the following statements served as the foundation for this study.

The empowerment construct has again been articulated as a valued mission of Extension and 4-H, the research study explored the extent to which the adult 4-H volunteers felt empowered.

Transformational/ transactional leadership style have well documented and researched ties to empowerment of individuals in organizations, this research study explored the extent to which adult 4-H volunteers felt empowered based on perceptive use of leadership style.

Based on literature review across systems theory, leadership theory, and empowerment theory, a group of selected demographics (i.e., gender, alumni, years served, educational background, leadership training, ratio between leader/follower, organizational climate, and level of involvement) were included in the study to explore their relationship to adult 4-H volunteer sense of empowerment.

CHAPTER 3
METHODS

This study used a combined theoretical framework based on theories of leadership and empowerment embedded in a larger conceptual framework of systems theory. The 4-H program is a part of a large learning organization, called the Cooperative Extension System, and this study analyzes some of the factors within that organization which could affect the adult 4-H volunteer's sense of empowerment.

This chapter outlines the correlational design for this study and the rationale for the chosen approach. This includes a review of the need, purpose, and significance of the study; design method; and methodological limitations. This chapter includes data needed and relevant variables, population, data collection methods, measurement tools, and data analysis procedures.

Need for Study

In Oregon, there are currently 4,872 adult 4-H volunteers working with 150,304 4-H members (Oregon ES237, 2007). This reflects an 18% decrease (1,066 volunteers) since 2003 while during the same time the number of members in club programs increased by 16% and by 38% in school enrichment/special interest programs. The adult 4-H volunteer works directly with the 4-H members in operating a club or afterschool program. The 4-H youth development program model relies heavily on 4-H volunteer leaders to assist in carrying out the experiential learning activities which engage young people in life skills development. Regional and County 4-H Youth Development Educators (4-H YDE) provide direction, supervision, and management of the adult 4-H volunteers and all of the programs offered at the local

level. 4-H YDE are encouraged to "empower" the 4-H volunteer to carry out the 4-H

mission and increase the program's capacity to meet the needs of a growing number of

young people. As adult 4-H volunteers serve as the primary teachers and providers of

the 4-H experience, it is the responsibility of the 4-H youth development educator, as

their immediate mentor/supervisor, to create an environment in which the adult 4-H

volunteers feel empowered.

In order to create an empowering environment, factors related to empowerment

and the leadership required in providing the sense of empowerment need to be

understood. This study examines variables to see which can predict a sense of

empowerment of adult 4-H volunteers.

Purpose of the Study

The purpose of this study was to better understand the relationship between

organizational environment, leadership style, and empowerment of the 4-H Youth

Development Educators (YDE) and the (sense of) empowerment of the adult 4-H

volunteers that the YDE's supervise. With this purpose in mind, the study will address

the following research questions:

- What is the relationship between adult 4-H volunteer sense of

    empowerment and factors such as gender, years in volunteer role, 4-H

    alumni background, educational background, 4-H YDE/volunteer

    leader ratio, organizational structure, leadership training, and level of

    involvement?

- What is the relationship between perceived 4-H YDE transformational or transactional leadership style and the adult 4-H volunteer sense of empowerment?

- What is the nature of the relationship between the sense of empowerment expressed by the 4-H YDE and adult 4-H volunteer sense of empowerment?

Out of these research questions come five null hypotheses to be further investigated:

H1   *In relationship to demographic factors, this study will find that each of the following four variables are positively related to adult 4-H volunteer sense of empowerment: 1) being female, 2) more years as a volunteer, 3) being a 4-H alumni, and 4) a higher degree of education.*

H2   *In relationship to organizational environment factors, this study will find that the following four variables are positively related to adult 4-H volunteer sense of empowerment: 1) smaller 4-H YDE/adult volunteer ratio, 2) positive view of organizational structure, 3) more leader training and 2) a higher level of involvement in the 4-H program.*

H3   *4-H volunteers who perceive their 4-H YDE as using transformational leadership style will be positively related to adult 4-H volunteer sense of empowerment.*

H4   *4-H volunteers who perceive their 4-H YDE as using transactional leadership style will be negatively related to adult 4-H volunteer sense of empowerment.*

H5   *4-H YDE expressing a sense of empowerment will be positively related to adult 4-H volunteer sense of empowerment.*

Significance of Study

Up to this point, research related to 4-H YDE and adult 4-H volunteers has only been conducted to provide analysis of: (a) what leadership styles 4-H YDE use and their perceived or observed abilities in using these styles, (b) what volunteer administrator competencies 4-H YDE should possess and their perceived abilities

regarding these competencies, (c) what competencies adult 4-H volunteers should possess, and (d) the descriptive demographics of 4-H YDE and adult 4-H volunteer populations.

The literature review revealed a paucity of research looking at the relationship *between* the 4-H YDE and the adult 4-H volunteer. Research has not addressed the effectiveness of the leadership style used by the 4-H YDE in working with adult 4-H volunteers and how this predicts or impacts the adult 4-H volunteer's sense of empowerment. Research has also not addressed the relationship between the 4-H YDE's sense of empowerment and the sense of empowerment of adult 4-H volunteers. In addition, there has been no research study which has examined how the organizational environment created by the 4-H YDE affects the sense of empowerment of adult 4-H volunteers.

This study is significant for the following three reasons: (a) the 4-H youth development program is dependent on the adult 4-H volunteer who provides direct delivery of the 4-H program, (b) the 4-H youth development educator is in the best role to empower the adult 4-H volunteer, and (c) the 4-H youth development system has never measured whether or not the adult 4-H volunteer feels a "sense" of empowerment in their role in the 4-H youth development organization.

Six National 4-H Learning Priorities have been identified focusing on the professional developmental needs of 4-H staff (National 4-H Headquarters, 2007). This study provided relevant research insight on two of these priorities: volunteer development for the next generation and building effective organizational systems.

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Research Design Method

The hypotheses outlined in this research study necessitate the use of correlational statistical methods to describe how, and to what extent, these chosen variables are related and have the ability to predict outcomes. The following section describes how correlational design fits this study including the advantages and limitations of this design choice.

Correlational Design

The two primary types of correlational design are explanation and prediction (Creswell, 2008). An explanatory design is used when the researcher is interested in the extent to which two or more variables influence one another. In a prediction design, the researcher identifies variables which will predict an outcome or criterion variable. For this study, a prediction design was used to study which of the independent variables could predict the dependent variable.

Advantages

An advantage of correlational research is the ability for a researcher to determine not only whether a relationship between variables exists, but also the extent of the relationship between them (Gall, Gall & Borg, 2005). The researcher can identify both the direction (negative, positive, uncorrelated, or nonlinear) of the relationship between variables, as well as the strength of the relationship. One such interpretation of relationship strength used in this study is provided by Cohen and Manon (as cited in Creswell, 2007, p.365) which states: .20-.35 slight indicating small relationship, .35-.65 moderate relationship, .66-.85 very good relationship, and .86+ high relationship. Another key advantage of correlational design is that correlational

research makes it possible to analyze the relationship between more than two variables at a time. In these cases, multivariate correlational statistics are typically used. Because of the inaugural nature of this study, a number of variables are being included to determine what relationships exist between the chosen variables. With so many variables being explored, of which many are latent variables, the multivariate correlation statistics analysis used in this study was structural equation modeling. Structural equation modeling is a particularly sophisticated multivariate technique capable of testing complex relationships among the different variables being measured (Gall, Gall, & Borg, 2005).

Limitations

A limitation of correlational design is occurrence of chance findings. When a large number of variables are correlated with each other, sometimes the variables will correlate significantly with each other by chance alone. This occurrence can be reduced from happening with the use of appropriate and sophisticated statistical analysis techniques, but it can not be eliminated all together. Another limitation of a correlational study is the fact that it cannot, in itself, determine causation. A correlational study will determine that some variables are correlated, but not which one causes the other one.

Data Needed and Relevant Variables

The type of data needed for this study was guided by the literature review. What follows is a review of the variables being examined in this study.

Dependent Variables

A dependent variable is "an attribute or characteristic that is dependent on or influenced by the independent variable" (Creswell, 2008, p. 126). The only dependent variable for this study was adult 4-H volunteer sense of empowerment. According to Thomas and Velthouse (as cited in Spreitzer, 1996), psychological empowerment is defined as "intrinsic motivation manifested in four cognitions reflecting an individual's orientation to his or her work role: meaning, competence, self-determination, and impact" (p. 1443). Empowerment is a latent variable. A latent variable allows the empirical data of the observed variables to be used as an estimate of the unmeasured theoretical construct. According to Spreitzer (1995), the latent variable of empowerment, as included in this study, is measured by examining: (a) meaning, (b) competence, (c) self-determination, and (d) impact. In Structural Equation Modeling (SEM) statistical analysis, the dependent variable is often referred to as the outcome or criterion variable.

Independent Variables

An independent variable is "an attribute or characteristic that influences or affects an outcome or dependent variable" (Creswell, 2008, p. 127). In this research study, the independent variables focused on two major areas: environmental/demographic factors and 4-H YDE perceived leadership style. The independent variable is also referred to as the predictor variable, which is the term utilized throughout the rest of this paper. This is especially indicative of SEM which is explaining how each independent variable predicts our dependent variable.

Environmental/Demographic Factors

The following organizational environmental variables examined in this study included: (a) leader training, and (b) level of involvement. The following demographic variables examined in this study included: (a) gender, (b) years in volunteer role, (c) 4-H alumni background, and (d) educational background. These six variables were chosen because they emerged from the literature as having significant or probable relationship to empowerment. Studies supporting the inclusion of these independent variables included management studies related to the: (a) work environment, (b) facilitation of empowerment, and (c) change-orientated leadership or came from current research by 4-H practitioners on: (a) leadership style, (b) competencies, or (c) demographics (Sinasky, M.E., & Bruce, J.A., 2006; Spreitzer, G. M., 1996; Spreitzer, G. M., DeJanasz, S. C. & Quinn, R. E., 1999; Spreitzer, G. M., Kizilos, M. A., & Nason, S. W., 1997; Stedman, N. & Rudd, R., 2005; Stedman, N., & Rudd, R., 2006; Stumpf, M.N., 2003.)

Leadership Style

According to Conger and Kanungo (1988) and Jung, Chow, and Wu (2003), transformational leadership clearly provides empowering effects on followers. Each of the constructs for transformational leadership style, transactional leadership style, and leadership outcomes were included in the model as latent variables. A latent variable is defined as a hypothetical variable formed by combining several related observed variables. According to Bass and Avolio (2004), the latent variable constructs for transformational leadership style include: Idealized influence-attributed, Idealized influence-behavior, Inspirational motivation, Intellectual stimulation, and

Individualized consideration. The latent variable constructs for transactional

leadership style include: Contingent reward, Management by exception – active,

Management by exception – passive, and Laissez-faire leadership. With these

variables in mind, the conceptual framework is illustrated in Figure 3.0.

Figure 3.0. A conceptual framework representing relationships between selected adult 4-H volunteer demographic/environmental factors, 4-H youth development educator leadership style, and adult 4-H volunteer empowerment.

Independent Variables   Dependent Variable

Demographic/Environmental factors
a) Gender
b) Years in volunteer role
c) 4-H Alumni background
d) Educational background
e) Leadership training
f) Level of involvement

Adult 4-H Volunteer
Empowerment

Psychological Empowerment
Instrument
(Spreitzer, 1995)

    Meaning
    Competence
    Self-Determination
    Impact

4-H Youth Development Educator's (YDE)
Leadership Style

Summative Leadership Scores of Multifactor
Leadership Questionnaire (MLQ) 5X   (Bass
& Avolio, 2004)

Transformational Leadership
        Inspirational Motivation
        Intellectual Stimulation
        Individual Consideration
        Idealized Influences (Attributed)
        Idealized Influences (Behavior)
Transactional Leadership
        Contingent Reward
        Management-by-Exception (Active)
        Management-by-Exception (Passive)
        Laissez-Faire

A structural equation model (SEM) was used to analyze the conceptual model (Figure 3.1). The ovals represent latent variables while the rectangles represent observed variables. The arrows go from predictor variables to outcome variables. SEM was used to examine the relationship among environmental/demographic variables, 4-H YDE leadership style, and empowerment. As a statistical technique, SEM allows multivariate analysis of associations between multiple predictors and outcomes including latent variables (Kline, 2005).

Figure 3.1. The analytical model for empowerment of 4-H adult volunteers.
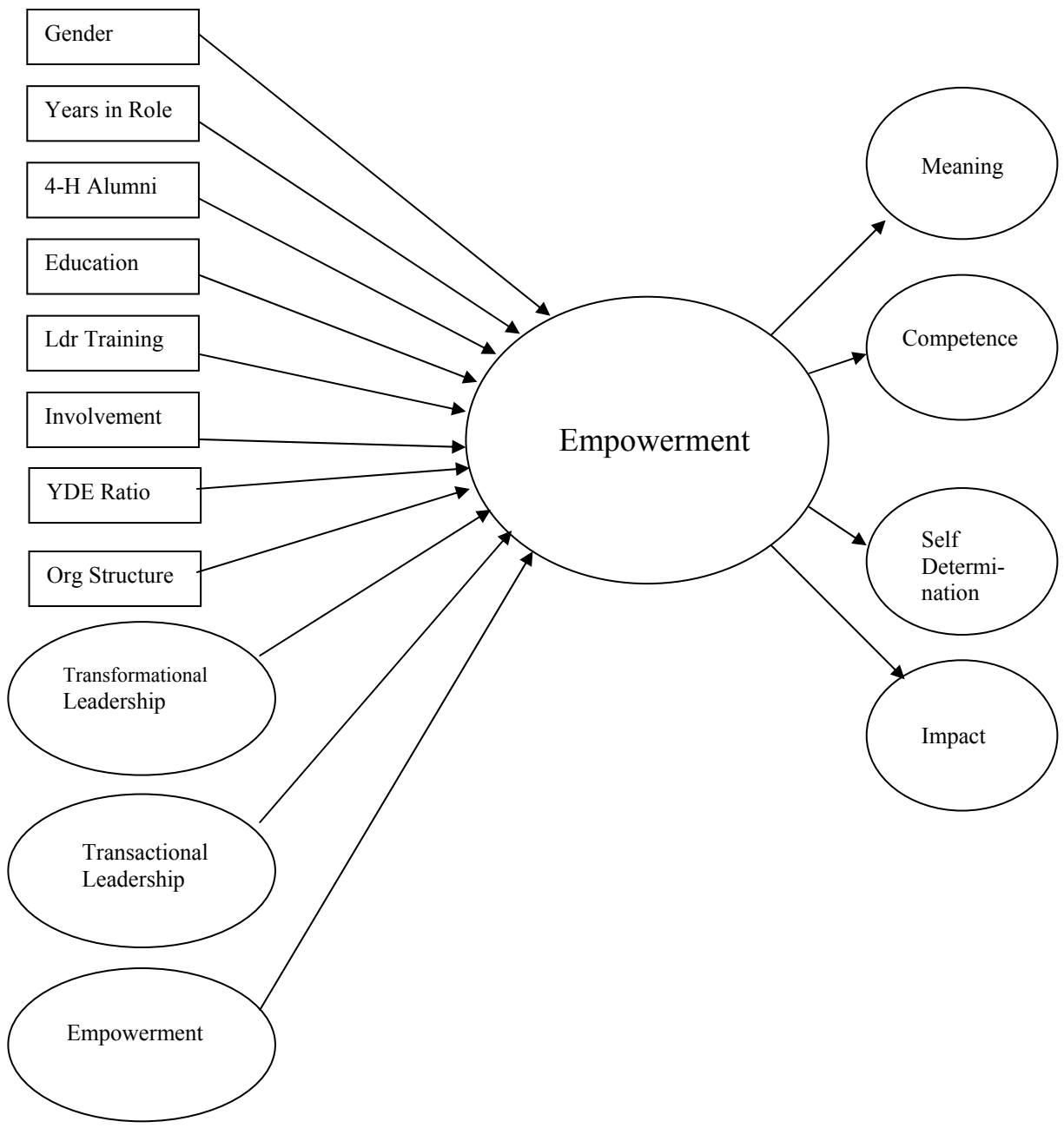
A list of each of the variables, how they were coded, and whether or not they are

independent or dependent variable is described in table 3.0.

Table 3.0   Summary of variables – independent versus dependent and coding

Variable Name	Code	Independent	Dependent
Gender	1 = male 2 = female	**X**	
Years in Volunteer Role	Actual years	**X**	
4-H Alumni Background	1 = yes 2 = no	**X**	
Educational Background	1 = some high school 2 = high school graduate 3 = certification 4 = bachelor's degree 5 = master's degree 6 = doctorate	**X**	
Leadership Training	1 = yes 2 = no	**X**	
Level of Involvement	1 = low involvement 2 = relatively low involvement 3 = moderate involvement 4 = relatively high involvement 5 = high involvement	**X**	
Transformational Leadership Transactional Leadership	Likert scale of 0-4 for each leadership construct item 0 = not at all 1 = once in a while 2 = sometimes 3 = fairly often 4 = frequently if not always	**X**	
Meaning Competence Self-Determination Impact	Likert scale of 1- 7 for each empowerment item 1 = very strongly agree 2 = strongly agree 3 = disagree 4 = neutral 5 = agree 6 = strongly agree 7 = very strongly agree	**X** **For** **4-H YDE**	**X** **For adult** **4-H volunteer**

Population and Sampling Procedures

The subsequent section will specify the population, target population, and the sampling procedures utilized to address the research hypotheses.

Population

The population for this research study is the club adult 4-H volunteer. The club adult 4-H volunteer operates very similarly in the Western, North Central, and North Eastern regions of the United States. The club adult 4-H volunteer works directly with 4-H members, co-leaders, and parents in directing or managing a 4-H club and related activities and events. In the Southern region of the United States, a larger majority of the 4-H programs are delivered within the school system by the 4-H YDE versus the club adult 4-H volunteer. It would have been ideal to conduct a nationwide study of adult 4-H volunteers. However, due to the sheer volume of volunteers and other logistical considerations, such a study will have to be considered for future research.

Target Population

According to Creswell (2008), a target population is "a group of individuals (or a group of organizations) with some common defining characteristic that the researcher can identify and study" (p. 152). In the case of this study, the target population is the Oregon 4-H club adult volunteer enrolled in each respective county in the state as of the 2007-2008 database. The Oregon 4-H ES 237 report showed 4,872 adult 4-H volunteers in the program (Oregon ES237, 2007). A sample was drawn from this target population for the research study.

This study also required the involvement of 4-H Youth Development Educators (YDE) as they have the most direct impact on the 4-H volunteer.

Sampling Procedures

To meet the most rigorous form of sampling in quantitative research, a probability sampling approach was used for this study. To determine the number of participants needed, the study utilized the sampling error formula provided by Fowler's (1988, p. 42) sample size table (as cited in Creswell, 2008). A sampling error formula is "a calculation for determining size of a sample based on the chance (or proportion) that the sample will be evenly divided on a question, sampling error, and a confidence interval" (Creswell, 2008, p. 630). This research project strived for a rigorous confidence interval standard of 95% and a low error rate of 4%. The assumption is that there is a 50/50 chance of volunteers being empowered. Based on Fowler's (1988) table (as cited in Creswell, 2008), the ideal sample size was 500 adult 4-H volunteers.

Each county was asked to provide a complete mailing list of all of the adult 4-H volunteers enrolled in their 4-H program during the 2007-2008 4-H year. Names were provided from 33 of the 36 counties and from our 4-H program on the Warm Springs Indian Reservation. A total of 3,517 volunteer names were provided. A simple random sampling was conducted with this complete list resulting in 503 names. An online sample random generator was utilized resulting in every seventh name being selected. While generating the mailing list for this sample, one county decided not to participate in the study, so the four names from their county were withdrawn from the sample resulting in a sample of 498 names for the research study.

All of the Oregon 4-H Youth Development Educators were included in this study, so no sampling method was needed. A total of 70 YDE were included in study.

Data Collection Process and Non-Response Error

The subsequent section describes the data collection and non-response

procedures followed in this research study.

Data Collection

The data collection process utilized procedures outlined by Dillman (2000) for

conducting research utilizing mail questionnaires. Questionnaires were disseminated

in May of 2008 to the randomly selected 498 adult 4-H volunteers via US Mail along

with a cover letter, a support letter from the state 4-H office, and a self-addressed,

stamped return envelope. This first mailing generated 95 returned surveys and two

returned surveys due to incorrect addresses. Reminder postcards were mailed to non-

respondents two weeks after the initial mailing which generated 60 more returned

surveys. At the four-week mark, one last reminder mailing with a second set of

questionnaires, cover letters, and a return envelope was sent to all non-respondents

generating another 56 returned surveys. A total of 209 surveys were returned for a

42% response rate.

Questionnaires were distributed electronically to the 4-H YDE. An e-mail

message was sent to all 4-H YDE across the state utilizing the broadcast email system.

At the time of this email message there were 70 4-H YDE on the list serve. The e-

message explained the research project and invited their participation. A reminder

email was sent at the two-week mark and again at the four-week mark. The 4-H YDE

were directed to access a suitable website link, i.e. Survey Monkey, to submit their

responses for participant anonymity. This research study received 35 returned email

surveys for a 50% response rate.

Non-Response Error

Since response rates of less than 75% were achieved, the researcher needed to check for non-response error (Ary, Jacobs, & Razavieh, 1996). An "extrapolation method" (Armstrong and Overton, 1977) was used for estimating the response of nonrespondents, based on the concept that participants who respond late are similar to nonrespondents. Two comparison groups of adult 4-H volunteer participants were formed, consisting of the first 30 early respondents and the final 30 late respondents, and then their responses were compared in order to determine if any statistical differences existed (Lindner, Murphy, & Briers, 2001). The t-tests results indicated no significant differences between responses of early and late respondents so the results are generalizable to the target population.

Resultant Sample

Adult 4-H Volunteers

The 209 adult 4-H volunteers who participated in this study were 87% female and 13% male. When asked if they had been involved in 4-H as a member, 57.5% of the respondents identified themselves as 4-H alumni. Eight-seven percent of the participants stated that they had attended a new leader orientation or training session. Table 3.1 indicates the number of years the participants had been involved in their roles as a 4-H volunteer leader.

Table 3.1   Number of years as an adult 4-H volunteer leader

	2008 first year	2-3 years	4-6 years	7-10 years	11-15 years	16-20 years	21+ years
Percent	13.5%	19%	14%	18%	12.5%	9%	14%

Thirty-eight and a half percent of the volunteers described themselves as being

a high school graduate or some high school classes, forty seven percent had a

bachelor's degree or some other form of certification, and fourteen percent had a

master's or doctorate degree. Table 3.2 reports the volunteers' description of their

level of involvement in the 4-H program with over 60% reporting that they had a

relatively high to high involvement in the program.

Table 3.2   Volunteer's description of their involvement in the 4-H program

	Low involvement	Relatively low involvement	Moderate involvement	Relatively high involvement	High involvement
Percent	1%	9%	30%	37%	23%

4-H Youth Development Educators

The 35 YDE who participated in this study were 68% female and 32% male.

When asked if they had been involved in 4-H as a member, 63% identified themselves

as 4-H alumni. Table 3.3 indicates the number of years served as a 4-H YDE.

Table 3.3   Number of years as a 4-H YDE

	Not Reported	2008 1st year	2-3 years	4-6 years	7-10 years	11-15 years	16-20 years	20+
Percent	17%	14%	9%	12%	17%	6%	14%	12%

Forty eight percent of the 4-H YDE described themselves as having a high

direct involvement with volunteers, twenty nine percent reported their direct

involvement as relatively high, and twenty three percent described themselves as

having a moderate direct involvement with volunteers. No 4-H YDE chose either of

the two low level categories. Table 3.4 reports the number of volunteers the 4-H YDE

indicated that they were directly responsible for working with in their county program.

Table 3.4 Current number of volunteers the 4-H YDE is directly responsible

	50 or less	51-100	101-150	More than 150	Did not report
Percent	29%	17%	20%	17%	17%

Measurement Instruments

Two survey instruments were compiled for the purpose of the study. The adult

4-H volunteer questionnaire included three parts: (a) the Multifactor Leadership

Questionnaire (MLQ) rater form survey, (b) Psychological Empowerment Instrument

(PEI), and (c) questions related to selected environmental/demographic factors. The

4-H YDE questionnaire included questions related to selected environmental and

demographic factors.

Validity and Reliability of Instruments

It was important for this research study to use instruments with high reliability

and validity. Reliability refers to the scores from an instrument being stable and

consistent (Creswell, 2008). According to Gall, Borg, and Gall (1996), "the reliability

of a test refers to how much measurement error is present in the scores yielded by the

test" (p. 254). Validity means that the individuals' scores from an instrument make

sense and enable the researcher to draw conclusions from the sample (Creswell, 2008).

There is content validity, criterion validity, and construct validity. Construct validity is

the most complicated form of validity as it uses both statistics and practical

procedures.

In this next section, each of the measures for collecting data on the research

dependent and independent variables are discussed and outlined in detail. In addition,

the reliability and validity of each these measures are presented both from the

perspective of the scale developer and other researchers as well as from this research

study.

Leadership Style - Multifactor Leadership Questionnaire (MLQ)

In order to measure the transformational and transactional leadership style of

4-H Youth Development faculty providing leadership for county 4-H programs, this

research project used the popular and reliable Multifactor Leadership Questionnaire

5X (MLQ, Bass & Avolio, 2000) developed and tested by Bass and Avolio. The MLQ

5X was developed to measure aspects of transformational leadership, transactional

leadership, and non-leadership styles as well as outcomes of leadership, namely extra

effort, effectiveness, and satisfaction.

The MLQ was first developed by Bass (1985) who originally identified 142

items for assessment based on open-ended surveys from 70 senior executives and a

survey of the literature. The instrument has been copyrighted by Bass and Avolio and

is published by Mind Garden, Inc. The MLQ 5X instrument contains 45 statements

that respondents must answer using a 5 level Likert scale. The scale options include:

0 (Not at all); 1 (Once in a while); 2 (Sometimes); 3 (Fairly often); and 4 (Frequently,

if not always). There are four individual statements for each of the nine leadership

construct scales and an additional nine statements related to three outcome variable

scales, for a total of 12 measurement scales. The statements used in the measurement instrument, as well as their related construct, are detailed in Table 3.5. The MLQ 5X has two forms: a leader form and a rater form. The leader form was designed to be completed by an individual to measure her/his self-perceived leadership styles. The rater form was developed to be completed by individuals who are asked to measure the perception of the leadership styles of a designated leader. In this study, the adult 4-H volunteer completed the rater form on their respective 4-H YDE.

The factor structure of MLQ (5X) has been validated by both the discriminatory and confirmatory factor analysis. Bass and Avolio (2000) report reliabilities for each of the leadership constructs ranging from a Cronbach alpha coefficient of .74 to .94 and for each of the outcome variables of leadership ranging from .91 to .94. The Goodness-of-Fit (GFI) and Comparative Fit Index (CFI) both met the .90 criterion for the nine-factor (full range) model (Avolio & Bass, 2008).

For this research study, the Cronbach alpha coefficient report reliabilities for each of the leadership constructs ranged from 0.56 to 0.86 and for each of the outcome variables of leadership ranging from 0.85 to 0.90. The construct with the lowest Cronbach's alpha were "Management-by-Exception – Active (MBEA)", alpha=0.56 and "Idealized Influence – Behavior (IIB)", alpha=0.60.

Table 3.5: Statements from the MLQ 5X short form, item number, and the related leadership style scales

Leadership Style Scales	Item Number	Item Statement
Transformational Constructs		
Idealized Influence (Attributed)	10	Instills pride in others for being associated with him/her.
	18	Goes beyond self-interest for the good of the group.
	21	Acts in ways that builds my respect.
	25	Displays a sense of power and confidence.
Idealized Influence (Behavior)	6	Talks about their most important values and beliefs.
	14	Specifies the importance of having a strong sense of purpose.
	23	Considers the moral and ethical consequences of decisions
	34	Emphasizes the importance of having a collective sense of mission.
Inspirational Motivation	9	Talks optimistically about the future.
	13	Talks enthusiastically about what needs to be accomplished.
	26	Articulates a compelling vision of the future.
	36	Expresses confidence that goals will be achieved.
Intellectual Stimulation	2	Re-examines critical assumptions to question whether they are appropriate.
	8	Seeks differing perspectives when solving problems.
	30	Gets me to look at problems from many different angles.
	32	Suggests new ways of looking at how to complete assignments.
Individual Consideration	15	Spends time teaching and coaching.
	19	Treats me as an individual rather than just as a member of a group.
	29	Considers me as having different needs, abilities, and aspirations from others.
	31	Helps me to develop my strengths.
Transactional Constructs		
Contingent Reward	1	Provides me with assistance in exchange for my efforts.
	11	Discusses in specific terms who is responsible for achieving performance targets.
	16	Makes clear what one can expect to receive when performance goals are achieved.
	35	Expresses satisfaction when I meet expectations
Management-by-Exception (Active)	4	Focuses attention on irregularities, mistakes, exceptions and deviations from standards.
	22	Concentrates his/her full attention on dealing with mistakes, complaints, and failures.
	24	Keeps track of all mistakes.
	27	Directs my attention to failures to meet standards.
Management- by-Exception (Passive)	3	Fails to interfere until problems become serious.
	12	Waits for things to go wrong before taking action.
	17	Shows that he/she is a firm believer in "If it ain't broke don't fix it."
	20	Demonstrates that problems must become chronic before I take action.
Non-Leadership Construct		
Laissez-faire	5	Avoids getting involved when important issues arise.
	7	Is absent when needed.
	28	Avoids making decisions.
	33	Delays responding to urgent questions.

Table 3.5 (continued)   Statements from the MLQ 5X short form, item number, and the related leadership style scales

Leadership Style Outcomes	Item Number	Item Statement
Extra Effort	39	Gets me to do more than they expected to do.
	42	Heightens my desire to succeed.
	44	Increases my willingness to try harder.
Effectiveness	37	Is effective in meeting my job-related needs.
	40	Is effective in representing me to higher authority.
	43	Is effective in meeting organizational requirements.
	45	Leads a group that is effective.
Satisfaction	38	Uses methods of leadership that are satisfying.
	41	Works with me in a satisfactory way.

Empowerment - Psychological Empowerment Instrument (PEI)

Empowerment was measured with the Psychological Empowerment Instrument (PEI) developed by Spreitzer (1995). This scale measures followers' perceptions of empowerment based on the dimensions of meaningfulness, competence, self-determination, and impact. The PEI contains 12 statements that respondents must answer using a 7 point Likert type scale. The scale options include: 1 (very strongly disagree); 2 (strongly disagree); 3 (disagree); 4 (neutral); 5 (agree); 6 (strongly agree); and 7 (very strongly agree). There are three individual statements for each of the four dimensions of empowerment as illustrated in Table 3.6. In this study, the PEI was completed by the adult 4-H volunteer.

The PEI itself has been tested for convergent and discriminant validity of the empowerment measures. Each of the items loaded significantly on its appropriate factor. The Adjusted Goodness-of-Fit (AGFI) and Comparative Fit Index (CFI) both met the .90 criterion (Spreitzer, 1995). The measurement model suggests that each of the four dimensions contributes to an overall construct of empowerment in a second-order factor analysis, with the dimensions not being construct-equivalent. The

interdependence of each of the dimensions has been confirmed in more recent studies

where Spreitzer emphasized that the dimensions are multiplicative rather than

additive. Therefore, one cannot remove one of the dimensions when measuring the

outcome of empowerment.

The Cronbach alpha reliabilities for the four empowerment scales are adequate

(meaning = .87; competence = .81; self-determination = .81, and impact = .88). In the

current study, the Cronbach alpha reliabilities for the four empowerment scales are

also adequate (meaning = 0.92; competence =0.91; self-determination =0.82, and

impact =0.86).

Table 3.6: Statements from the psychological empowerment instrument (PEI)

Construct	Item	Item Statement
Meaning	b.	The work that I do is important to me.
	e.	My job activities are personally meaningful to me.
	j.	The work I do is meaningful to me.
Competence	a.	I am confident about my ability to do my job.
	l.	I am self-assured about my capabilities to perform my work activities.
	i.	I have mastered the skills necessary for my job.
Self-Determination	c.	I have significant autonomy in determining how I do my job.
	g.	I can decide on my own how to go about doing my own work.
	h.	I have considerable opportunity for independence and freedom in how I do my job.
Impact	d.	My impact on what happens in my department is large.
	f.	I have a great deal of control over what happens in my department.
	k.	I have significant influence over what happens in my department.

Environmental/Demographic Variables

The demographic variables examined in this study included: (a) gender, (b)

years in volunteer role, (c) 4-H alumni background, and (d) educational background.

The organizational environmental variables examined in this study included: (a) leader

training, (b) level of involvement, (c) 4-H YDE/volunteer ratio, and (d) organizational

structure. The chart in Table 3.0 shows how each of these variables were measured in the questionnaire. The actual questionnaire is also available to review in Appendix A.

Demographic Variables:

Gender. This variable determined whether or not the adult 4-H volunteer or 4-H YDE was male or female.

Years in volunteer role. This demographic variable determined the number of years the adult 4-H volunteer or 4-H YDE had served in their role.

4-H Alumni background. This variable determined whether or not the adult 4-H volunteers and the 4-H YDE were involved in 4-H as a child.

Educational background. This variable had six categories: 1) some high school, 2) high school graduate, 3) certification, 4) bachelor's degree, 5) master's degree, and 6) doctorate.

Environmental Variables:

Leadership training. This variable determined whether or not the adult 4-H volunteer had or had not attended a new leader orientation or training session.

Level of Involvement. Adult 4-H volunteers were asked to indicate their level of involvement in the 4-H program while 4-H YDE were asked to indicate their level of direct involvement with volunteers. The variable had five categories: 1) low involvement, 2) relatively low involvement, 3) moderate involvement, 4) relatively high involvement, and 5) high involvement.

4-H YDE/volunteer ratio. 4-H YDE participants were asked to provide the number of adult volunteers they were directly responsible for in their program. Their responses provided continuous variable responses from 0 volunteers to 400 volunteers.

Organizational structure. The instrument used to measure organizational structure came from Spreitzer (1990). The instrument gathers opinions on the perceived characteristics of units within an organization.

Data Analysis

Data analysis begins with coding of the data and transferring it from the instruments into a computer file (Pallant, 2007). The raw data was entered and coded into Microsoft Excel. The *Statistical Package for Social Science (SPSS) 15.0* was used for preliminary analysis which included checking data for missing values, transforming data, and running descriptive statistics. The latent analysis dimension of the research was performed using the sophisticated statistical software, *Mplus 5.1* (Muthén & Muthén, 2007). A combination of *SPPS 15.0* and *Mplus 5.1* was used to run the structural equation modeling, including the necessary confirmatory and exploratory factor analysis. The research used both descriptive and inferential statistical methods in answering the research questions.

Structural equation modeling (SEM) is a relatively new and sophisticated, multi-layer, technique which allows the researcher to test various models concerning the interrelationship among a set of variables. It allowed this study to evaluate the importance of each of the independent variables in the model and to test the overall fit of the model for the data (Pallant, 2007, and Creswell, 2008). SEM was used to examine the complex relationship among environmental/demographic variables, leadership style, and empowerment. As a statistical technique, SEM allows multivariate analysis of associations between multiple predictors and outcomes

including latent variables (Kline, 2005). The proposed structural equation model is diagramed in Figure 3.1.

Structural equation models consist of two main components: a measurement model and a structural model. The measurement model assesses the fit of the latent variables. The latent variables are hypothetical variables formed by combining several related measured variables. The structural model assesses how well the hypothesized model fits that data and also estimates the proposed paths or parameters between variables. To be able to evaluate the structural model, multiple goodness-of-fit statistics were reported and interpreted. These include the overall chi-square statistic, comparative fit index (CFI), root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). The chi-square statistic and RMSEA are both "badness-of-fit" index values. The RMSEA is used with this model as it is less sensitive to model misspecification and large sample size, with values of 0.06 or less indicating a good fit (Hu & Bentler, 1999). The SMSR is less sensitive to latent structure misspecification and indicates the fit of the covariance structure of the proposed model, with values of less than 0.08 representing a good fit (Hu & Bentler, 1999). The CFI compares the specified model to a baseline model in which it assumed that none of the variables are correlated, with values of 0.95 or greater being considered a good fit (Hu & Bentler, 1999). A good overall fit is desired as this indicates that the proposed model more closely reproduces the observed correlations or covariances of the data.

Methodological limitations

In the preliminary data analysis stage, it became apparent that there were three variables that were not going to be included further in this research study. The reasons for each of these variables being withdrawn from further analysis in this research study are explained in this section.

Organizational structure. The data collected on organizational structure was too incomplete to include in further analysis. A number of the participants did not complete this portion of the questionnaire or only answered some of the questions, leading this researcher to believe that the instrument itself was not suitable for the target audience. The instrument was designed for the business sector which may have contained words within the instrument that were not clear or familiar enough to volunteers in a non-profit setting to interpret for their response.

4-H YDE/volunteer ratio and 4-H YDE empowerment. During the analysis, it was realized that comparisons could not be made between the 4-H YDE data and the 4-H adult volunteer data. In order to meet validity and reliability requirements in making these comparisons, the data collection process would have needed to collect a large enough subset of volunteers *per* 4-H YDE in each county. With the 4-H adult volunteer data collected through a random sample process, these correlations can not be made. This affects both the variable of 4-H YDE/4-H adult volunteer ratio as well as the variable of 4-H YDE sense of empowerment to 4-H adult volunteer sense of empowerment.

This means the third research question (What is the nature of the relationship between the sense of empowerment expressed by the 4-H YDE and adult 4-H

volunteer sense of empowerment?) and corresponding hypothesis (*H5 4-H YDE*

expressing a sense of empowerment is a positive predictor of adult 4-H volunteer

sense of empowerment) were no longer investigated for the purposes of this research

study. With these variables removed from the study a new analytical model was

created for the data analysis, see Figure 3.2

**Figure 3.2. Analytical model for empowerment of adult 4-H volunteers shown
with variables removed from analysis shown in gray.**
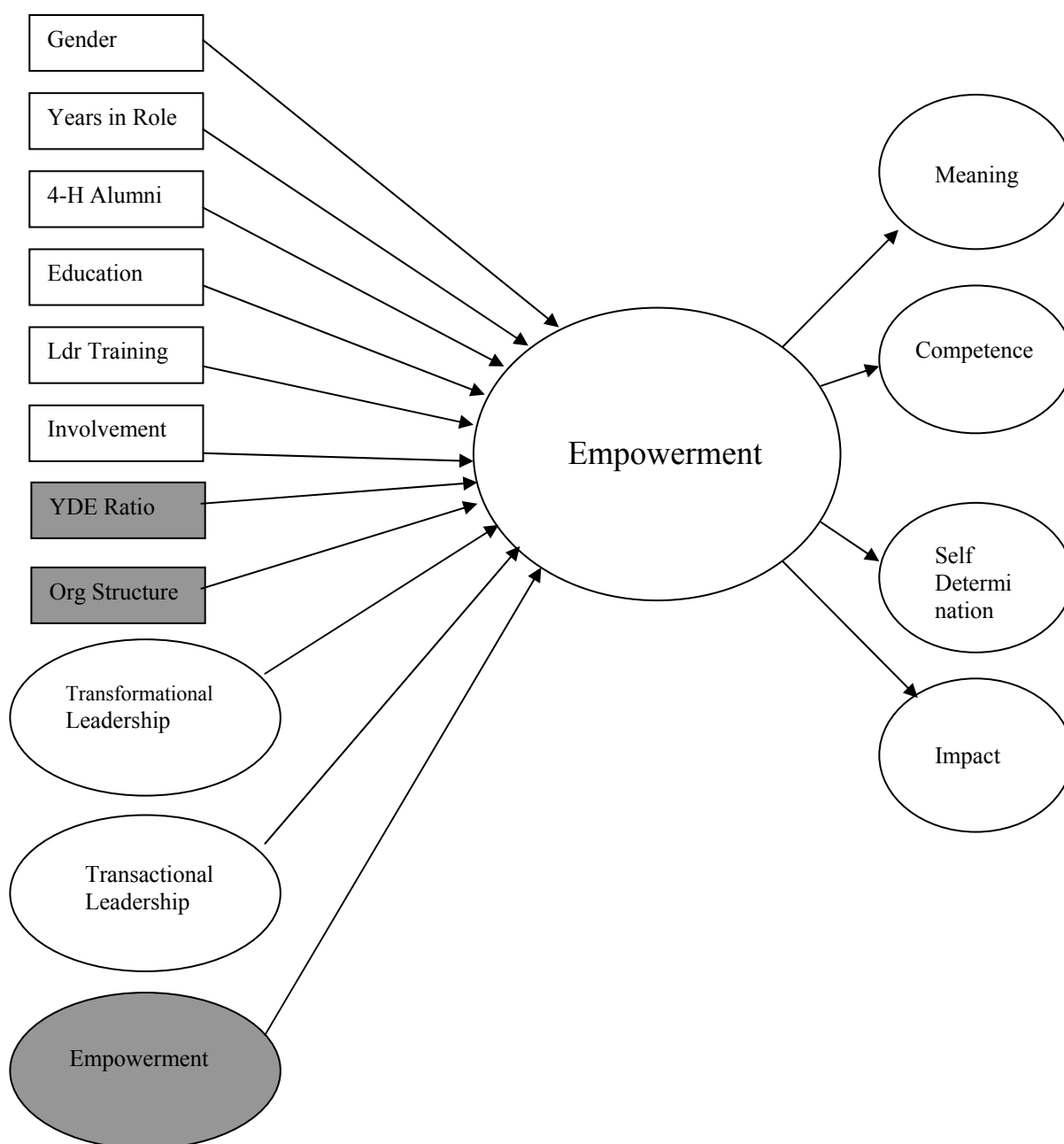
Figure 3.3. Final analytical model for empowerment of adult 4-H volunteers used for analysis.
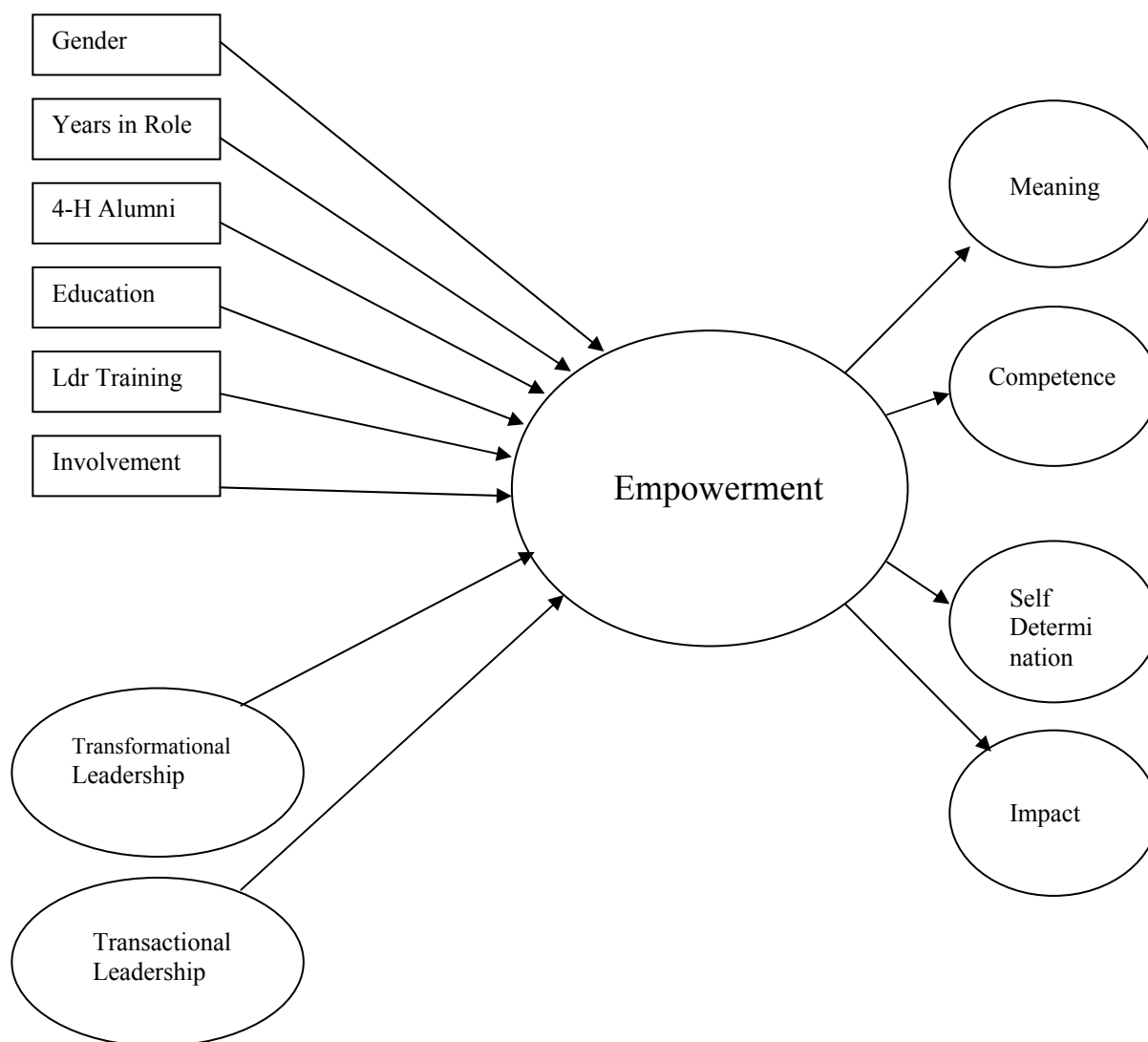
CHAPTER 4
RESULTS

In this section, the results are reported and analyzed according to the major research questions and hypotheses of the study. The first research question studied how environmental and demographic factors relate to an adult 4-H volunteer sense of empowerment. Data are presented analyzing any relationship that may exist between the independent variables of gender, years in volunteer role, 4-H alumni background, educational background, leadership training, and level of involvement and the dependent variable of adult 4-H volunteer sense of empowerment.

The second research question looked at how perceived leadership style, specifically 4-H YDE transformational and transactional leadership style, correlate to the sense of empowerment reported by adult 4-H volunteers. The latent class analysis results are presented by separate leadership style. In the following section, the results will be analyzed and reported under the following headings: Environmental/Demographic Factors, Leadership Style, and the Full Model.

Demographic/Environmental Factors

The first research question of this study was: What is the relationship between adult 4-H volunteer sense of empowerment and factors such as gender, years in volunteer role, alumni background, educational background, leader training, and level of involvement. The two related null hypotheses:

H1   *In relationship to demographic factors, this study will find that each of the following four variables are positively related to adult 4-H volunteer sense of empowerment: 1) being female, 2) more years as a volunteer, 3) being a 4-H alumni, and 4) a higher degree of education.*

H2   *In relationship to organizational environment factors, this study will find that the following two variables are positively related to adult 4-H volunteer sense of empowerment: 1) more leader training and 2) a higher level of involvement in the 4-H program.*

Descriptive Statistics

Descriptive statistics were obtained and analyzed to understand relationship and significance. Means and standard deviations for the demographic/environmental factors that are *continuous* variables (years in role, educational background, and level of involvement) and the four cognitions which make up the Psychological Empowerment Instrument (meaning, competence, self-determination, and impact) were calculated. Pearson Correlation analysis statistics did illustrate some significant relationships between some of the factors (Table 4.1).

Table 4.1 Means, standard deviations, and intercorrelations for demographic and environmental factors and PEI constructs

Variable	M	S.D.		Years	Educ	Involve	Meaning	Comp	Self	Impact
Years	10.66	10.631	Pearson Corr. Sig. (2 tailed) N	1 208	-.005 .945 207	.107 .124 208	.240** .001 206	.349** .000 205	.159* .027 193	.185** .008 205
Education	3.21	1.135	Pearson Corr. Sig. (2 tailed) N		1 208	.056 .419 208	-.092 .186 206	-.083 .238 205	-.045 .538 193	-.016 .822 205
Involvement	3.72	.962	Pearson Corr. Sig. (2 tailed) N			1 209	.228** .001 207	.121 .082 206	-.030 .676 194	.186** .007 206
Meaning	6.25	1.012	Pearson Corr. Sig. (2 tailed) N				1 207	.610** .000 205	.400** .000 193	.431** .000 205
Competence	5.80	.846	Pearson Corr. Sig. (2 tailed) N					1 206	.398** .000 192	.289** .000 204
Self-Determination	5.70	.980	Pearson Corr. Sig. (2 tailed) N						1 194	.662** .000 193
Impact	5.39	1.090	Pearson Corr. Sig. (2 tailed) N							1 206

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

The Pearson Correlation investigation found significant correlations between

Years in volunteer role and each of the four cognitions of psychological

empowerment: meaning (γ = .240**), competence (γ = .349**), self-determination (γ

= .159*), and impact (γ = .185**). This descriptive analysis also found significant

correlations between level of involvement and two of the empowerment cognitions:

meaning (γ = .228**) and impact (γ = .186**). The correlations between each of the

empowerment constructs were significant as they should be, for Spreitzer reminds us

that it is *together* that these cognitions determine the psychological empowerment

construct. It was more important to see how each of these factors/constructs fit within

the structural model, but these descriptive statistics also illustrate the relationships

between factors such as years in role, level of involvement, and empowerment.

Inferential Statistics

Inferential statistics were analyzed to understand relationship and significance.

The demographic factors examined in this study included: (a) gender, (b) years in role,

(c) 4-H alumni background, and (d) educational background.

Gender

There were 209 adult 4-H volunteers in this study with 13% of them male and

87% being female (Table 4.2). In the measurement and structural model of this

correlation study, no statistical significance (p = 0.778) was found between gender and

adult 4-H volunteer sense of empowerment (see summary Table 4.8.)

Table 4.2 Gender of adult 4-H volunteer respondents

Gender	Frequency	Percent
Male	27	12.9
Female	182	87.1
Total	209	100

Years in Volunteer Role

In this study, 13.4% were in their first year as a 4-H volunteer leader and 19.1% were in their 2-3 year. Another 13.8% were in their 4-6 years as a volunteer while 18.2% had served 7-10 years. There were 12.6% who been a 4-H volunteer leader for 11-15 years, 9% for 16-20 years, and finally 13.4% stated they had been in a 4-H volunteer for over 21 years. Table 4.3 summarizes the frequency and percentages for the number of years the participants had been involved as a 4-H volunteer leader. The minimum years as a volunteer was less than a year and the maximum years as a volunteer reported was 57 years. Mean was 10.66. The demographic variable of years in volunteer role had a significantly positive relationship ($\beta = 0.021$, $p < 0.05$) to the sense of empowerment of adult 4-H volunteer leaders (see summary Table 4.8.). The data analysis revealed that the more years a volunteer had been in their leadership role, the more they expressed a sense of empowerment. The possible causes and implications of this finding are discussed in the Discussion section.

Table 4.3   Number of years as an adult 4-H volunteer

Years as volunteer leader	*Frequency*	*Percent*
2008 first year	28	13.4
2-3 years	40	19.1
4-6 years	29	13.8
7-10 years	38	18.2
11-15 years	26	12.6
16-20 years	19	9
21+ years	28	13.4
Missing	1	.5
Total	209	100

4-H Alumni Background

There were 57.5% of the respondents who were 4-H alumni compared to 42.5% who were not (Table 4.4). Adult 4-H volunteers who were involved in 4-H as a child were no more apt to experience of sense of empowerment ($p > 0.05$) than those who were not involved in 4-H in their youth (see summary Table 4.8.).

Table 4.4   Adult 4-H volunteer respondents who were 4-H alumni

Alumni	*Frequency*	*Percent*
Yes	119	56.9
No	88	42.1
Missing	2	1.0
Total	209	100

Educational Background

Table 4.5 reports the distribution of volunteers according to their educational background. Of the participants in the study, 37% graduate from high school, over 47% completed a bachelor's degree or other kind of certification program, and 14% completed a master's or doctorate degree. The analysis found no significant relationship ($p > 0.05$) between level of education and sense of empowerment as a 4-H adult volunteer (see summary Table 4.8.).

Table 4.5   Education background of adult 4-H volunteer respondents

Education	*Frequency*	*Percent*
Some High School	3	1.4
High School Graduate	77	36.8
Certification	35	16.7
Bachelor's Degree	64	30.6
Master's Degree	28	13.4
Doctorate Degree	1	.5
Missing	1	.5
Total	209	100

Environmental factors studied included leadership training and level of involvement.

Leadership Training

The respondents were asked to report whether or not they had attended a

leadership training or not as a volunteer (Table 4.6). Even though 87% reported having

attended leadership training versus 13% who had not attended training, there was no

statistically significance between leadership training ($p > 0.05$) and volunteer

empowerment reported (see summary Table 4.8.).

Table 4.6   Adult 4-H volunteer respondents who attended leader training

Leader Training	*Frequency*	*Percent*
Yes	182	87.1
No	27	12.9
Total	209	100

Level of Involvement

The survey instrument asked volunteers to report their level of involvement on

a five point Likert scale. Table 4.7 reports the volunteers' description of their level of

involvement in the 4-H program with over 60% reporting they had a relatively high to

high involvement in the program. However, the results showed no significant

statistical difference ($p > 0.05$) between those who reported a high level of

involvement and those who showed a mid or low level of involvement in the program.

Table 4.7   Level of involvement of adult 4-H volunteer respondents

Level of Involvement	*Frequency*	*Percent*
Low Involvement	3	1.4
Relatively Low Involvement	18	8.6
Moderate Involvement	62	29.7
Relatively High Involvement	78	37.3
High Involvement	48	23
Total	209	100

Section Summary

Demographic/environmental factors and the statistical significance of their

relationship to adult 4-H volunteer sense of empowerment are provided in Table 4.8.

Table 4.8   Summary of demographic/environmental data

Factors	*Estimate (β)*	*S.E.*	*Est./S.E.*	*Two-tailed P-value*
Gender	-0.070	0.247	-0.282	0.778
4-H Alumni	-0.117	0.169	-0.694	0.487
Years in Volunteer Role	0.021	0.008	2.555	0.011*
Educational Background	-0.064	0.078	-0.829	0.407
Leadership Training	0.037	0.249	0.149	0.881
Level of Involvement	0.104	0.085	1.218	0.223

* Correlation is significant at the 0.05 level (2-tailed). S.E. identifies Standard Error.

When reading the table, one can see that on

Leadership Style

The second research question of this study was: What is the relationship

between perceived 4-H YDE transformational or transactional leadership style and the

adult 4-H volunteer sense of empowerment? The two hypotheses being pursued:

H3   *4-H volunteers who perceive their 4-H YDE as using transformational leadership style will be positively related to adult 4-H volunteer sense of empowerment.*

H4   *4-H volunteers who perceive their 4-H YDE as using transactional leadership style will be negatively related to adult 4-H volunteer sense of empowerment.*

To investigate these hypotheses, there were 12 constructs measured through

three latent variables: transformational leadership, transactional leadership, and

leadership outcomes as determined by Bass and Avolio (2004). The latent variable of

transformational leadership was measured through the constructs of: Idealized

Influence – Attributed (IIA); Idealized Influence – Behavior (IIB); Inspirational

Motivation (IM); Intellectual Stimulation (IS); and Individual Consideration (IC). The

latent variable of transactional leadership was measured through the constructs of:

Contingent Reward (CR); Management by Exception – Passive (MBEP); Management

by Exception – Active (MBEA); and Laissez Faire (LF). The confirmatory exploratory

factor analysis (CFA) with the two leadership style factors of transformational

leadership and transactional leadership revealed a modest fit CFI=0.846, TLI=0.838,

RMSEA=0.069, and SRMR=0.083.

To measure psychological empowerment, the research utilized the four latent

variables determined by Spreitzer (1995) which include meaning (EM), self-

determination (ESD), impact (EI), and competence (EC). These four latent variables

make up the four dimensions of empowerment reflected in the Psychological

Empowerment Instrument (PEI). An exploratory factor analysis was performed with

the four factors in the psychological empowerment instrument (PEI). The model fit

for this analysis was excellent, CFI=0.99, TLI=0.97, RMSEA=0.060, and

SRMR=0.013.

Descriptive Statistics

Descriptive statistics were initially obtained and analyzed to understand

relationship and significance. Means and standard deviations for the Multifactor

Leadership Questionnaire (MLQ) and Psychological Empowerment Instrument (PEI)

were calculated (Table 4.9). Mean scores for transformational leadership behaviors

showed IM (Inspirational Motivation) receiving the highest mean score 3.25, while IS

(Intellectual Stimulation) was perceived as the weakest of the transformational

behaviors with a mean of 2.71. Mean scores for transactional leadership behaviors

showed CR (Contingent Reward) with the highest mean score 2.89, while LF (Laissez

Faire) was perceived as the weakest transactional behavior with a mean score of .68.

In Table 4.9, the mean and standard deviation for the MLQ constructs as well as

established MLQ norms are reported. The current study matches closely with MLQ

mean norms reported by Bass and Avolio (2000).

Table 4.9   Leadership styles of 4-H YDE as perceived by 4-H adult volunteers.

Data	Transformational Constructs					Transactional Constructs			
	IIA	**IIB**	**IM**	**IS**	**IC**	**CR**	**MBEA**	**MBEP**	**LF**
Mean	3.01	2.89	3.25	2.71	2.72	2.89	1.51	1.14	.68
N	91	91	91	91	91	79	79	79	79
SD	.913	.686	.787	.762	.946	.922	.809	.907	.806
MLQ norms	2.970	2.750	2.97	2.780	2.830	2.880	1.620	1	0.64

Idealized Influence – Attributed (IIA); Idealized Influence – Behavior (IIB); Inspirational
Motivation (IM); Intellectual Stimulation (IS); and Individual Consideration (IC); Contingent
Reward (CR); Management by Exception – Passive (MBEP); Management by Exception –
Active (MBEA); and Laissez Faire (LF)

Correlations for all of the leadership constructs and empowerment constructs

in the framework of this study are presented in Table 5.0. The results illustrate a high

correlation between transformational leadership and the *impact* dimension of

empowerment. This correlation would indicate that adult 4-H volunteers believe that

what they do have an impact. They feel like they are active participants in shaping the

direction of the larger system in which they are embedded, as explained by Thomas

and Velthouse (1990).

Table 5.0. Means, standard deviations and intercorrelations for leadership style and psychological empowerment constructs

VARIABLE	M	S.D.		IM	IS	IC	IIA	IIB	CR	MBEA	MBEP	LF	MEAN	COMP	SELF	IMPA
Inspirational Motivation (IM)	3.36	.724	Pearson Corr.	1	.685**	.675**	.814**	.612**	.800**	.070	-.466**	-.565**	.098	.022	.171*	.296**
			Sig. (2 tailed)		.000	.000	.000	.000	.000	.503	.000	.000	.229	.786	.041	.000
			N	154	111	124	144	124	113	95	112	136	152	152	144	153
Intellectual Stimulation (IS)	2.79	.754	Pearson Corr.		1	.761**	.709**	.677**	.755**	.205	-.297**	-.423**	.131	-.019	.350**	.318**
			Sig. (2 tailed)			.000	.000	.000	.000	.059	.000	.000	.156	.840	.000	.000
			N		121	109	115	105	106	85	98	112	119	119	112	119
Individualized Consideration (IC)	2.77	.894	Pearson Corr.			1	.731**	.678**	.788**	.082	-.364**	-.369**	.062	-.013	.146	.225**
			Sig. (2 tailed)				.000	.000	.000	.433	.000	.000	.474	.885	.099	.009
			N			137	125	117	112	94	106	130	135	134	128	135
Idealized Influence (Attributed) (IIA)	3.15	.845	Pearson Corr.				1	.678**	.833**	.011	-.507**	-.605**	.125	-.044	.224**	.296**
			Sig. (2 tailed)					.000	.000	.918	.000	.000	.119	.583	.006	.000
			N				160	128	118	97	118	141	158	158	150	159
Idealized Influence (Behavior) (IIB)	2.91	.677	Pearson Corr.					1	.710**	.219*	-.265**	-.375**	.187*	.034	.150	.268**
			Sig. (2 tailed)						.000	.036	.000	.000	.032	.696	.095	.002
			N					133	111	92	106	124	131	131	124	131
Contingent Reward (CR)	2.95	.934	Pearson Corr.						1	.032	-.553**	-.604**	.154	.080	.233*	.285**
			Sig. (2 tailed)							.762	.000	.000	.088	.378	.011	.001
			N						126	90	100	120	124	124	117	124
Management-by-Except (Active) (MBEA)	1.42	.846	Pearson Corr.							1	.318**	.222*	.169	.215*	-.053	-.056
			Sig. (2 tailed)								.003	.027	.097	.034	.616	.585
			N							100	84	99	98	98	93	99
Management-by-Except (Passive) (MBEP)	1.09	.949	Pearson Corr.								1	.769**	.090	.154	-.058	-.196*
			Sig. (2 tailed)									.000	.327	.090	.533	.030
			N								123	116	121	122	116	122
Laissez-Faire (LF)	.62	.792	Pearson Corr.									1	.044	.033	-.231**	-.232**
			Sig. (2 tailed)										.588	.689	.005	.004
			N									156	154	153	144	154
Meaning (MEAN)	6.25	.846	Pearson Corr.										1	.610**	.400**	.431**
			Sig. (2 tailed)											.000	.000	.000
			N										207	205	193	205
Competence (COMP)	5.80	1.012	Pearson Corr.											1	.398**	.289**
			Sig. (2 tailed)												.000	.000
			N											206	192	204
Self-Determination (SELF)	5.70	.980	Pearson Corr.												1	.398**
			Sig. (2 tailed)													.000
			N												194	192
Impact (IMPA)	5.39	1.090	Pearson Corr.													1
			Sig. (2 tailed)													
			N													206

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

Inferential Statistics

Inferential statistics were utilized to understand the direction of the relationship between variables (negative, positive, uncorrelated or nonlinear), the strength of the relationship, as well as the statistical significance of the relationship.

Transformational Leadership Style

Transformational leadership style was found to have a significant positive relationship ($\beta = 0.287$, $p < 0.05$) to the sense of empowerment of adult 4-H volunteer leaders (see Figure 4.0 for illustration of this relationship). This means that 4-H Youth Development Educators who are rated as using transformational leadership are very likely to be empowering adult 4-H volunteers.

Transactional Leadership Style

Transactional leadership style was found to have no significant relationship ($p > 0.05$) to the sense of empowerment of adult 4-H volunteer leaders (see Figure 4.0 for illustration of this relationship).

The analysis then turned to the relationship between transformational leadership style and transactional leadership. In comparing transformational leadership style and transactional leadership style, a very significant negative correlation was found ($\beta = -0.693$, $p < 0.001$). This means that 4-H Youth Development Educators who are rated as using transformational leadership are very likely NOT to use transactional leadership, and/or vice versa, such that 4-H Youth Development Educators who are rated as using transactional leadership are very likely NOT to use transformational leadership. This relationship can be referred to in Figure 4.0 where the path regressions coefficients are presented in the full model.

Full Model

The last step of the analysis was to test the final model with all variables included. The study included 6 independent variables and 7 continuous latent variables, with 57 constructs used to measure the latent variables.

The results yielded by the final model that was tested are presented in a graphical form in Figure 4.0 and in numeric form in Table 5.1. The results are also analyzed within the following paragraphs.

Figure 4.0. Path regression coefficients for the full model of adult 4-H volunteer sense of empowerment
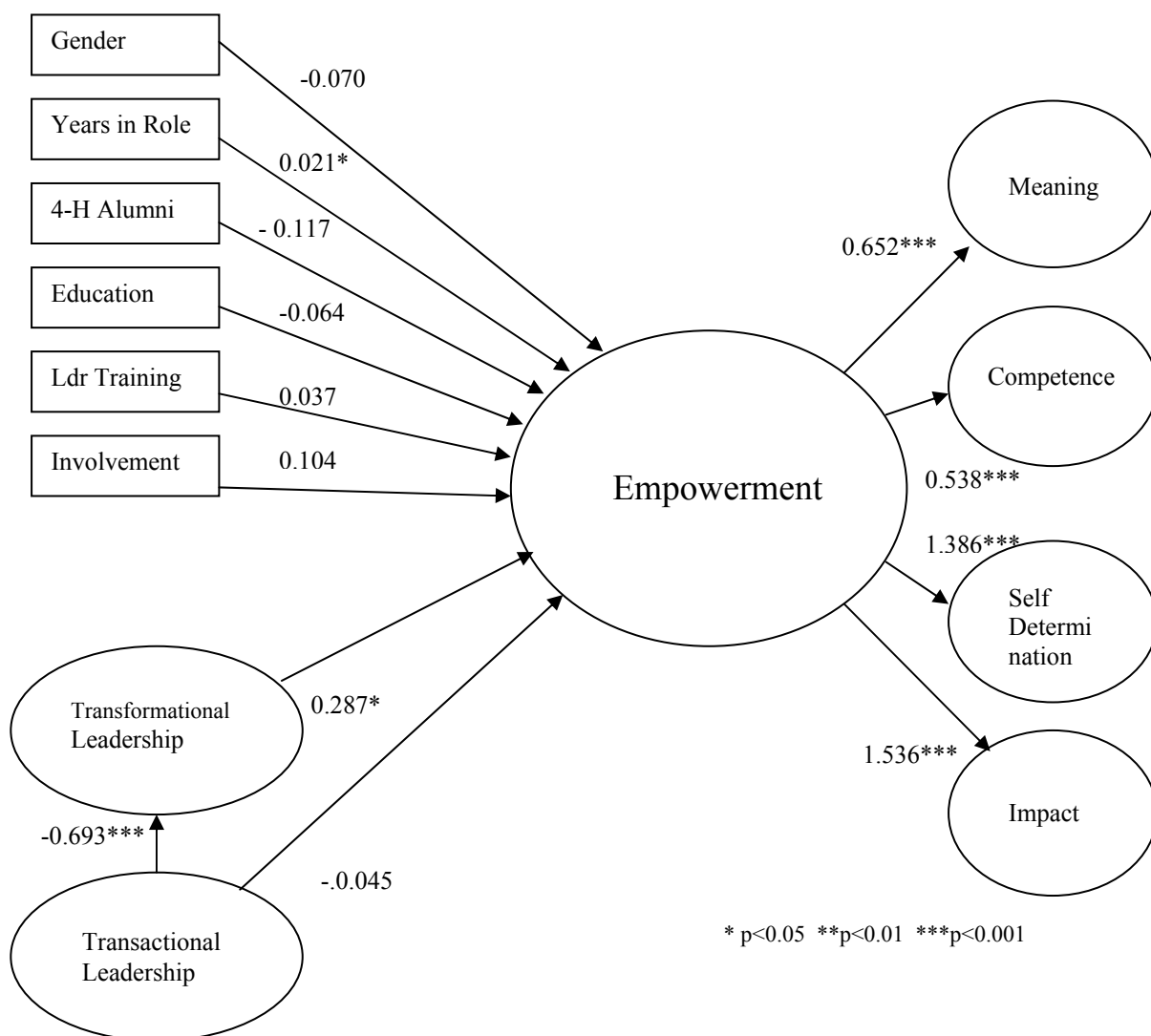
Table 5.1 4-H Volunteer empowerment structural model coefficients, standard errors and p-values

Structural Model	Estimate (coefficient)	S.E.	Standardized Estimate/S.E.	*p-value*
Empowerment on				
Meaning	0.652	0.108	6.034	0.000***
Competence	0.538	0.099	5.443	0.000***
Self determination	1.386	0.244	5.684	0.000***
Impact	1.536	0.301	5.106	0.000***
Empowerment on				
Transactional leadership	-0.045	0.146	-0.307	0.759
Empowerment on				
Transformational leadership	0.287	0.133	2.151	0.031*
Transformational on				
Transactional leadership	-0.693	0.045	-15.516	0.000***
Empowerment on				
Years in volunteer role	0.021	0.008	2.555	0.011*
4-H Alumni	-0.117	0.169	-0.694	0.487
Gender	-0.070	0.247	-0.282	0.778
Education	-0.064	0.078	-0.829	0.407
Training	0.037	0.249	0.149	0.881
Involvement	0.104	0.085	1.218	0.223

* p<0.05 **p<0.01 ***p<0.001

The data in the final model was subjected to tests for model fitness. The CFI was 0.819 and TLI was 0.811 which meets acceptable standards. The RMSEA for the model was 0.062 which also meets acceptable fit standards.

In Figure 4.0, the ovals represent latent variables while the rectangles represent observed variables. The arrows go from predictor variables to outcome variables. The dependent variable, in this case empowerment, is recognized by the uni-directional arrows pointing toward it. The arrows coming out of a latent variable (i.e. empowerment) are the constructs used to measure the latent variable. The

empowerment construct is a 2-level factor analysis with 12 observed indicators creating 4 latent variables (meaning, competence, self-determination, and impact), which in turn, create the one latent variable of empowerment. For cosmetic reasons, Figure 4.0 does not contain the actual 45 observed indicators for the latent variables transformational leadership style and transactional leadership style.

The coefficient numbers near the arrows, in Figure 4.0, represent the betas β standardized regression coefficients. These regression coefficients represent the impact (strength) of one variable on another. The *Mplus* statistical software offers two types of standardized coefficient depending on the nature of the predictor variable. The first one, StdYX, is used when both the predictor and the outcome variable are on a continuous scale. One can interpret this standardized coefficient β as "outcome variable changes β standard deviations when the predictor variable changes one standard deviation" (Muthén & Muthén, p. 15). The second type, StdY, is used when the predictor variable is dichotomous, and therefore does not have a meaningful standard deviation. One would interpret this standard coefficient β as "outcome variable changes β standard deviations when the predictor variable changes from 0 to 1" (Muthén & Muthén, p. 16). In the final model, the StdY standard coefficients were reported on each of the dichotomous predictor variables including gender, 4-H alumni background, and leadership training. The rest of the predictor variables were continuous and therefore the StdYX standard coefficients were reported.

The final model confirms the interdependence of each of the four dimensions of meaning, competence, self-determination, and impact in conveying the multiplicative effect of empowerment.

In support of hypothesis 1 and 2, the predictor variable of years in volunteer role was the only environmental or demographic factor to be significantly and positively related to the adult 4-H volunteer sense of empowerment.

In support of hypothesis 3, transformational leadership style was found to have a significant and positive relationship with adult 4-H volunteer sense of empowerment. There was no support found for hypothesis 4, as the coefficient for transactional leadership style did not achieve significance in claiming either a negative or positive relationship to empowerment.

The final model that was eventually tested and reported here differs from the model initially intended. The main difference between the initial intended model and the final model is that the final model does not contain the variables 4-H YDE empowerment, organizational structure, and 4-H YDE/adult volunteer ratio. As previously reported, in chapter 3, these variables could not be included due to the number of incomplete response from adult 4-H volunteer participants on the organizational instrument and due to the inability to make comparisons between 4-H YDE data and adult 4-H volunteer data. Only adult 4-H volunteer data was used for analysis in this research study.

In conclusion, adult 4-H volunteer sense of empowerment is influenced by the number of years they have been in their volunteer role and the perceived transformational leadership style of their 4-H YDE. Discussion of these results, as well as conclusions, limitations, and implications/recommendations for further study will be presented in the next chapter.

CHAPTER 5
SUMMARY AND DISCUSSION

This chapter is divided into five main parts. The first part gives a brief summary of the research study. The second part presents a discussion/evaluation of each of the research questions/hypothesis. The third part presents the study's conclusions. The fourth part discusses implications for researchers and practitioners drawn from the literature and the study's findings. The last section offers recommendations for future study.

Summary

In the Cooperative Extension System organization, the adult 4-H volunteer role is critical to the success of the 4-H program. Therefore, the relationship *between* the 4-H YDE and the 4-H adult volunteer as well as the *leadership of* the 4-H YDE to the 4-H adult volunteer would be critical. No systematic studies have explored the relationship of leadership style to the experience of the volunteer leader. As the Cooperative Extension System, and the 4-H program within it, continue to deal with great organizational change, it is extremely relevant to look as the leadership provided within the system to address this change. With the need for 4-H Youth Development educators to be transformative leaders in their programs and communities, it seems important to conduct research that can help enlighten both the leadership and 4-H youth development field in this arena. Research has not addressed the effectiveness of the leadership style used by the 4-H YDE in working with adult 4-H volunteers and how this correlates to the adult 4-H volunteer's sense of empowerment.

The aim of this study was to investigate which factors relate strongly to a sense of empowerment of adult 4-H volunteers in 4-H youth development settings. Informed by a careful review of the literature on systems theory, leadership theory, and empowerment theory, this study took into consideration the organizational environment of the 4-H program, the demographic factors of adult 4-H volunteers, and the leadership style of the people who provide supervision and direction to the volunteer, the 4-H Youth Development Educator.

When considering the organizational environment and adult 4-H volunteer demographics which may influence this environment, the literature review directed the intentional inclusion of the following variables in this study: gender, years in volunteer role, 4-H alumni background, educational background, leader training, and level of involvement. The study examined how the perception of 4-H YDE leadership style, particularly transformational and transactional leadership style, related to the sense of empowerment of adult 4-H volunteers.

This research study was conducted as a quantitative study, utilizing structural equation modeling (SEM) to examine the complex interrelationship among the sets of variables in this study: environmental/demographic variables, leadership style, and empowerment. As a statistical technique, SEM allows multivariate analysis of associations between multiple variables and outcomes including the latent variables (leadership style and empowerment). The instruments utilized to capture this data included Bass and Avolio's (2000) Multifactor Leadership Questionnaire (MLQ), Spreitzer's (2005) Psychological Empowerment Instrument (PEI), and questions related to selected environmental/demographic factors.

The target population for the study consisted of Oregon 4-H adult volunteers, for which there were 4,872 reported in the program (Oregon ES237, 2007). For this study, counties were asked to provide a complete mailing list of all of the adult 4-H volunteers enrolled in their 4-H program resulting in 3,517 volunteer names provided from 33 of the 36 Oregon counties. A simple random sample resulted in 503 names, and with one county deciding not to participate, the resultant sample of 498 names were utilized for this research study. This research study received 209 returned surveys for a 42% response rate. Responses were coded and entered into SPSS 15.0 and descriptive statistics were obtained on each variable. SEM was then used to test the independent variables in the model and to test the overall fit of the model for the data.

Discussion

This study will be discussed in relationship to each of the research questions and related hypothesis.

Environmental and Demographics Factors

The first research question of this study was: What is the relationship between adult 4-H volunteer sense of empowerment and factors such as gender, years in volunteer role, 4-H alumni background, educational background, leadership training, and level of involvement?

The two related hypotheses:

H1　　*In relationship to demographic factors, this study will find that each of the following four variables are positively related to adult 4-H volunteer sense of empowerment: 1) being female, 2) more years as a volunteer, 3) being a 4-H alumni, and 4) a higher degree of education.*

H2   *In relationship to organizational environment factors, this study will find that the following two variables are positively related to adult 4-H volunteer sense of empowerment: 1) more leader training and 2) a higher level of involvement in the 4-H program.*

The demographic factors examined in this study included: (a) gender, (b) years in role, (c) 4-H alumni background, and (d) educational background.

Gender

The gender breakdown of participants in this study, 87% female and 13% male, matches very closely (85% and 15% respectively) with a research study conducted in Oregon assessing 4-H volunteer satisfaction, access to technology and development needs (Arnold & Dolenc, 2008). This indicates that the random sample for this study closely reflects the Oregon 4-H adult volunteer population.

In this study, no significant relationship was found between adult 4-H volunteer sense of empowerment and gender. This finding rejects the hypothesis presented in this research study that being female would be positively related to adult 4-H volunteer sense of empowerment. The fact that there was no statistical significance (β= 0.778) between gender and adult 4-H volunteer sense of empowerment is similar to the earlier studies conducted by Moore (2003) and Stumpf (2003) with 4-H and Extension audiences examining relationships between gender and transformational leadership styles. This differs from the meta-analysis by Eagly, Johannesen-Schmidt and Engen (2003) which found that being female related to a slightly higher relationship to transformational leadership than being male.

Years in Volunteer Role

The demographic variable of years in volunteer role had a significant positive relationship ($\beta = 0.011$) to the sense of empowerment of adult 4-H volunteer leaders. The data analysis revealed that the more years a volunteer had been in their leadership role, the more the adult 4-H volunteer expressed a sense of empowerment. Adult 4-H volunteers in this study served from 1-57 years with a mean of 10.66. This finding supports the hypothesis that there is a positive relationship between adult 4-H volunteer sense of empowerment and more years served as a volunteer.

One reason for the significant relationship may align with the reasons the researcher included "level of involvement" as a variable in this study. The more years a volunteer has served in the 4-H program, the more likely the leader has developed a closer working relationship with the 4-H YDE, with other adult 4-H volunteers in the program, and has become more involved and committed to the organization. This closer contact, network, commitment, and involvement could lead to a feeling of empowerment. Although if this were the case, one would think the variable of "level of involvement" would have also shown a significant relationship to empowerment, but no relationship was present in the current study.

For the second and most likely reason for a relationship between years in volunteer role and a sense of empowerment of adult 4-H volunteers, one can look to the four dimensions of empowerment for the answer. The more years a volunteer has served in the 4-H program has probably led to more meaning, competence, self-determination, and impact in their role as a volunteer. Providing continued leadership in the 4-H program for extended years is a sign that these volunteers care deeply about

their volunteer efforts and feel that is important to them so they have assessed a high degree of meaning to their role as a volunteer. As Spreitzer so vividly states, "A sense of meaning is the engine of genuine empowerment" (2001, p.16). Adult 4-H volunteers may have also gained more competence in their abilities and skills as a leader over the years. Empowered people are confident about their ability to perform their work well and feel a greater sense of mastery in their role. The volunteers may have also established a great support network of other resource people to assist them in areas where they may not feel competence.

It is also likely that more years served as a volunteer has led the volunteer to establishing a great deal of self-determination in how they do their work. Making choices and decisions they are comfortable with that are often self-initiated. Finally, the adult 4-H volunteer who chooses to stay involved in the program no doubt feels that their time is being spent in a worthwhile effort, truly making a difference in the lives of others and perhaps in the system that they are embedded in. Empowered people believe that what they do has impact.

Findings by Moore (2003) and Stumpf (2003) reported a significant and negative relationship between years employed and transformational leadership, but their studies looked at 4-H YDE and their transformational leadership versus this study which examined adult 4-H volunteers and their sense of empowerment.

4-H Alumni Background

4-H alumni composed 57.5% of the respondents compared to 42.5% who were not 4-H alumni. Adult 4-H volunteers who were involved in 4-H as a child were no

more apt to experience a sense of empowerment (β=0.487) than those who were not involved in 4-H in their youth.

The findings in this research study rejected the hypothesis that adult 4-H volunteers who had a 4-H alumni background would experience a greater sense of empowerment. This means that adult 4-H volunteers who were involved in the 4-H program as a youth, are no more likely to possess more meaning, competence, self-determination or impact (a sense of empowerment) than adult 4-H volunteers who were never involved as a 4-H member.

Educational Background

In this study, the hypothesis that adult 4-H volunteer sense of empowerment would be positively related to a higher degree of education was rejected. The findings reported that 37% of the adult 4-H volunteers graduated from high school, over 47% completed a bachelor's degree or certification program, and 14% completed a master's or doctorate degree. The analysis found no correlation between level of education and the sense of empowerment as a 4-H volunteer (β=0.407).

This differs from research studies conducted by Spreitzer in 1996, which found that the participants with more education were also more likely to be empowered. One reason for this difference may be that the Spreitzer study was conducted within units of *Fortune 50* organizations where one's educational background may have had a stronger connection to their role within the organization. The educational background that an adult 4-H volunteer brings into the 4-H program may not be related to their area of volunteer work or contribute to their understanding of positive youth development. Unlike the business sector, adult 4-H volunteers are not required to have

a specific degree or level of educational background as a prerequisite to working within 4-H youth development settings.

The environmental factors studied included leader training and level of involvement.

Leadership Training

The 87% of adult 4-H volunteers who attended a leader training were no more likely to be empowered than the 13% who had not attended training ($\beta=0.881$). This finding is not consistent with the literature where Spreitzer (1996) reported a strong positive relationship between role ambiguity and empowerment. Role ambiguity, as described by Spreitzer (1996) was about providing individuals with clear role expectations. 4-H leader training is where 4-H YDE have the opportunity to clarify the role of the adult 4-H volunteer. The hypothesis of more leader training being positively related to adult 4-H volunteer sense of empowerment was rejected in this research study.

One reason for the rejected hypothesis, could be that the research study lacked specificity in only inquiring whether or not participants had attended leadership training. A future study might want to focus on the specific components of the leader training, as the content provided and the degree to which it is provided may have more relationship to empowerment than whether or not volunteers attended training. A future study may also want to consider the components of informal trainings such as mentorships and online chat sessions, for volunteers to receive clarity on their role within the organization. Finally, a future study may also want to consider how recently the adult 4-H volunteer attended leadership training as a variable of interest.

Level of Involvement

Over 60% of the adult 4-H volunteers self reported that they had a relatively high to high involvement in the program. However, the results showed no significant statistical difference ($\beta=0.223$) between those who reported a high level of involvement and those who showed a mid or low level of involvement in the program, rejecting the hypothesis that a higher level of involvement in the 4-H program would positively relate to adult 4-H volunteer sense of empowerment. Level of involvement was a variable labeled similarly to the sociopolitical support characteristic identified by Spreitzer (1996). Sociopolitical support for Spreitzer, indicated that individuals felt a part of a network and support system. Spreitzer found sociopolitical support to be positively related to empowerment which is in contrast to the findings in this study.

One reason for this finding may be related to the fact that this variable was self-reported by the volunteer themselves, such that the respondents may have had different interpretation of what involvement in the program. The researcher acknowledges that a more effective process for examining the variable, level of involvement, may be through a qualitative study which could tease out the personal perceptions of the different levels of involvement, how this looks to a volunteer, how and how they feel supported in the organization.

In summary, in reviewing Hypothesis H1 and H2, this research study found that years in role was the only variable which supported the hypothesis of the demographic or environmental variables being positively related to adult 4-H volunteer sense of empowerment.

Leadership Style

The second research question of this study was: What is the relationship

between perceived 4-H YDE transformational or transactional leadership style and the

adult 4-H volunteer sense of empowerment? The two hypotheses being pursued:

H3   *4-H volunteers who perceive their 4-H YDE as using transformational
          leadership style will be positively related to adult 4-H volunteer sense
          of empowerment.*

H4   *4-H volunteers who perceive their 4-H YDE as using transactional
          leadership style will be negatively related to adult 4-H volunteer sense
          of empowerment.*

Transformational Leadership Style

Transformational leadership style was found to have a significantly strong and

positive relationship (β= 0.031) to the sense of empowerment of adult 4-H volunteer

leaders. This means that 4-H Youth Development Educators who were rated as using

transformational leadership are very likely to be empowering adult 4-H volunteers.

This finding supports the third hypothesis (H3) in this research study.

This finding lends support to other research studies looking at the role of

transformational leadership style. Transformational leadership behaviors, according to

Conger and Kanungo (1988) and Jung, Chow, and Wu (2003) clearly provided

empowering effects on followers. Transformational leadership style has also been

found to be positively related to job satisfaction (Stumpf, 2003), leadership skill

competency (Moore, 2003), attainment of funding (Ali, 2005), and volunteer

administrative competency (Stedman & Rudd, 2004).

This research study contributes to the literature by examining, for what appears

to be the first time in research literature, the relationship of transformation leadership

style and empowerment of non-paid staff/volunteers. Most of the prior research on transformational leadership and/or empowerment has been conducted with top level or mid-level managers within an organization, particularly with paid staff. The current study demonstrates the role transformational leadership has for empowering followers within an organization who are non-paid staff/volunteers. This research study indicates that 4-H YDE staff who utilize transformational leadership, has a relationship to adult 4-H volunteer feeling valued in the organization, in order to experience this sense of empowerment. Empowerment of followers is one of the most important aspects of transformational leadership. If leaders have empowered their staff (paid or unpaid) to set goals and determine the strategies to achieve those goals towards the realization of the shared vision, this shows they have taken on the vision for themselves. The followers have made a commitment to and acted upon a shared vision.

Transactional Leadership Style

This research study rejected the fourth hypothesis (H4). Contrary to expectations, transactional leadership style was not found to be related (positively or negatively) to the sense of empowerment of adult 4-H volunteer leaders ($\beta=0.759$). The monitoring, reward-based, status quo behaviors of the transactional leadership style did not relate to whether or not adult 4-H volunteers felt empowered. One reason for this may be that many of the monitoring behaviors used within the 4-H program may be seen as formalized institutional systems within the organization itself, such as rules and guidelines, enrollment processes, awards and recognition systems, and volunteer leader screening/training. These formalized systems may encourage and

reinforce transactional behavior, but they may be perceived as separate from the 4-H YDE's own leadership style.

In part, because of this finding, the researcher also looked at the relationship between transformational leadership style and transactional leadership. In comparing transformational leadership style and transactional leadership style, a significant negative correlation was found (β= -0.693). This means that 4-H Youth Development Educators who were rated as using transformational leadership were also very likely NOT to use transactional leadership, and/or vice versa, such that 4-H Youth Development Educators who were rated as using transactional leadership were very likely NOT to use transformational leadership.

A statistically significant, negative relationship between transformational and transactional leadership style is divergent from the findings supported in the literature. Bass (1985) asserts that transformational and transactional leadership styles are not mutually exclusive and that the best of leaders use behaviors of both styles. The findings by Spreitzer, et al. (1999) lend support to Bass's assertions adding that empowered leaders may be playing multiple or paradoxical roles reflecting both change orientated (transformational) and status quo orientated (transactional) behaviors. Studies by Sinasky and Bruce (2006) and Woodrum and Safrit (2003) reported that participants rated themselves as using both transformational and transactional leadership style (particularly contingent reward).

The findings in this research study suggest that adult 4-H volunteer perceive that 4-H YDE using transformational leadership were likely not to use transactional leadership as well as those 4-H YDE using transactional leadership were likely not to

use transformational leadership. This study would put 4-H YDE transformational and transactional leadership at different ends of the leadership style behavior spectrum supporting Burn's (1978) claims about these leadership styles.

Full Model

The final structural model does not provide causative relationships between the independent predictive variables (environmental/demographic factors and leadership style) with the dependent variable of empowerment. However, we can examine the extent to which data agree or fail to agree with one viable model.

The final model confirms the interdependence of each of the 4 dimensions in conveying the muliplicative effective of empowerment. The data in the present study agree with the relationship of transformational leadership style having a statistically significant effect on the adult 4-H volunteer sense of empowerment. In contrast, the data failed to agree with transactional leadership style having a relationship with adult 4-H volunteer sense of empowerment. A significant finding for this study was the statistically significant negative relationship between transformational and transactional leadership. The 4-H YDE who uses transformational leadership style is very likely not to use transactional leadership style. As this study found transformational leadership to have a significant relationship to empowerment, it then seems appropriate to identify ways in which 4-H YDE could become transformational leaders.

Conclusion

The current study sheds light on the sources and influences that relate to a 4-H volunteer's sense of empowerment. The 4-H youth development model relies heavily on 4-H volunteers in carrying out the experiential learning activities which engage young people in life skills development. Understanding the factors which contribute to the empowerment of volunteers is essential for the success of the 4-H program.

This study found that 4-H volunteers feel a sense of empowerment in their role within the 4-H program. The longer they had been an adult 4-H volunteer in the 4-H club program, the more they felt a sense of empowerment. To have long term value in the program, 4-H YDE need to determine how to influence empowerment in volunteers earlier in their years of service to the program. The study by Arnold and Dolenc (2008) began to imply the meaning that volunteers gain from their involvement in 4-H. With a broader understanding of the role that meaning has as one of the dimensions of psychological empowerment, the 4-H organization can be positioned to assist volunteers in gaining more satisfaction from their role.

Adult 4-H volunteers conveying a sense of empowerment, may partially explain the 4-H programs ability to thrive through change over the past 100 years as we have gone from an agricultural base to arts and technology; from adult led to more youth led; and through various economic and societal changes in our country. The results of this study would indicate that the success of the 4-H program (organizational effectiveness) and the program's ability to thrive (organizational change) rests in part by the transformational leadership style of our 4-H youth development educators to empower our adult 4-H volunteers. When adult 4-H volunteers perceived their 4-H

Youth Development Educators using a transformational leadership style it significantly related to their sense of empowerment.

These findings reinforce earlier research by Spreitzer, et al. (1999) which examined the relationship between psychological empowerment and change-orientated leadership. Change-orientated leadership was interpreted to be those elements of leadership most focused on making change: innovativeness, upward influence and inspiring subordinates. Their study found that supervisors who felt empowered were seen by their subordinates as more innovative, upward influencing and inspiring (Spreitzer, et. al, 1999).

In contrast, the study did not find any correlation between transactional leadership style and empowerment, and in fact found a negative relationship between transactional and transformational leadership style. This is important as it indicates that the monitoring behaviors required in the 4-H YDE work with the adult 4-H volunteer, i.e. requirement and monitoring of needed documentation, behavior, and adherence to rules may not detract from or negatively influence the empowerment or the disempowerment of the adult 4-H volunteer.

The leadership literature reports a clear connection between transformational leadership behaviors and the empowerment of followers (Conger & Kanungo, 1988; & Jung, Chow, and Wu (2003). If leaders have empowered their staff (paid or unpaid) to set goals and determine the strategies to achieve goals towards the realization of the shared vision, it shows that followers (paid or unpaid staff) have taken on the vision for themselves. They have made a commitment to and acted upon a shared vision.

Limitations

As with any scholarly study, there are limitations to the generalizability of this study. The first limitation that must be considered relates to the organization being studied. As this study was conducted with the Cooperative State Research, Education, and Extension System, which is a unique organization in terms of its structure and function, the findings will not be generalizable to other organizations. The Extension organization is unique as it is connected to the Land Grant University in each state across the country, but is also embedded into local communities where staff (both paid on unpaid) work in partnerships with businesses, community members, families, and young people to provide both educational programs and materials as well as conduct empirical and applied research.

A second limitation of this research study is the fact that the study achieved only a 42% response rate. The non-response error was addressed by comparing early respondent with late respondent data. Even though no significant differences were found in the data utilizing this extrapolation method, there was no procedure done to solicit the responses from nonrespondents who did not complete the questionnaire.

A third limitation to be considered is that the research study was limited to only transformational and transactional leadership styles as a measure of leadership behavior. It does not include other leadership behaviors or leadership styles for consideration such as charismatic leadership or use of power-influence approach.

The final limitation which needs to be recognized is that this is not an experimental design research study so the results can not reflect causality, but it can illuminate the predictive power of the tested variables and their relationship.

Implications

Due to the limited fiscal resources and rapid shifts in society, the economy and technology, Cooperative Extension programs and therefore, 4-H programs, are in a state of transition. Now, more than ever, 4-H youth development educational programs and systems need to be engaging, relevant, responsive, and moving forward. This study extends previous research by illuminating the role of transformational leadership and its influence on adult 4-H volunteer empowerment.

For practitioners

For 4-H Youth Development Educator practitioners this research study implies that 4-H Youth Development Educators could use transformational leadership style in order to empower their 4-H volunteers. Transformational leadership is a change oriented leadership style: "Transformational leaders probably do more things that will empower followers and make them less dependent on the leader, such as delegating significant authority to individuals, developing follower skills and self-confidence, creating self-managed teams, providing direct access to sensitive information, eliminating unnecessary controls and building a strong culture to support empowerment" (Yukl, 2006, p. 271).

The empowerment of volunteers is important, as empowerment is connected to organizational effectiveness (Wheatley, 1994). When everyone in the organization feels empowered, they have increased meaning and commitment to work which creates greater effectiveness. Case studies of entrepreneurial organizations found that empowerment and innovative behavior were inextricably linked to organizational success (Conger and Kanungo, 1988). If we want our 4-H programs within the

Extension system to succeed and thrive, it seems imperative that we look at ways to empower our volunteers. Due to the significant connection found in this study between transformational leadership style and empowerment of volunteers, the implications for the system is to assist 4-H YDE in becoming adept at using transformational leadership style or in essence becoming transformational leaders.

The significance of transformational leadership and it relationship to the sense of adult 4-H volunteers, provides direct insight on the six National 4-H Learning Priorities identified for professional developmental needs of 4-H staff (National 4-H Headquarters, 2007), specifically, volunteer development for the next generation and building effective organizational systems. Empowerment of followers is the most important aspect of transformational leadership. If leaders have empowered their staff (paid or unpaid) to set goals and determine the strategies to achieve those goals towards the realization of the shared vision, this shows they have taken on the vision for themselves. They have made a commitment to and acted upon a shared vision.

Based on the researcher's 22 year experience as a 4-H YDE, the Cooperative Extension and National 4-H system could implement strategies to assist 4-H YDE in becoming transformational leaders, better able to: embrace change, elevate followers, and transform relationships and processes needed within the 4-H youth development settings. A range of possible strategies include: (a) building transformational leadership into the core competencies needed for 4-H YDE professionals, (b) creating on-line training modules to assist 4-H YDE gather the knowledge, skills, and practices of transformational behavior, and (c) shifting our paradigm of preparation of 4-H YDE

professionals to include leadership development as something that can be learned and needs to be provided to all professionals not just those in administrative roles.

The finding of the relationship between years in volunteer role and adult 4-H volunteer empowerment needs to be given careful consideration. Discovering that empowerment is correlated to more years in the program should be, at the very least, considered disturbing for the practitioner. For the 4-H program to thrive, strategies need to be taken to have volunteers gain a sense of empowerment much earlier in their years of service.

For researchers

The current study not only contributes to the field of research but it also helps to point to additional gaps in the field which need further study.

To begin with, this is one of the few studies that has focused on the empowerment of *volunteers* in organizational settings where volunteers are part of the organizational structure. Future research could pursue volunteer empowerment: (a) in other organizational settings which rely on volunteers (i.e., Master Gardners™), (b) by type of volunteer service, (i.e., episodic versus year round), and (c) according to generational effects of volunteering. This research would validate the generalizability of this research study with volunteers in other organizational settings.

The question of empowerment could be enhanced by replicating this study on a larger, national scale across the country. Other research studies could validate the findings of this study in other regions across the country, as well as investigate how regional influences of organizational structure, volunteer training, and support to volunteers may influence the adult 4-H volunteers sense of empowerment in 4-H

youth development settings. In addition there are other unanswered questions in light of other factors that may contribute to a sense of empowerment, such as type and content of volunteer leader training, ratio or amount of contact in the leader and follower relationship, and other ways in which the organizational system may provide for transformational leadership to be exercised, via mentoring systems, communication, and/or use of technology.

This quantitative study captured a snapshot of environmental factors such as leadership training and level of involvement of adult 4-H volunteers at a given point of time. Significant value would be added to understanding the relationship between environmental factors and the sense of adult 4-H volunteer empowerment if alternative research methodologies were pursued such as a qualitative study or a longitudinal study which could better capture the ways in which volunteers are involved, the specific training they received, and the type of contact/network they developed with the 4-H YDE or other volunteers.

In order to add to the fields of positive youth development and other volunteer management fields, a future research study could develop an instrument that more appropriately studies the volunteers' environment within the organization. The instrument used in this study was designed for the business sector and resulted in volunteers not knowing how to complete the instrument. This research could provide valuable insight on volunteer perceptions of the organizational environment, their understanding and connection with the organization, how information flows, and how the environment provided affects their desire to be empowered and/or to stay connected with the organization.

To assist with the implementation of professional development strategies around transformational leadership style and empowerment, it is recommended that an experimental research design study be done. The study could involve 4-H YDE in a training module on transformational leadership utilizing the MLQ and PEI as instruments for measuring personal growth compared to those who did not participate in the training module. The outcomes of this study could be beneficial as a professional development tool for the 4-H YDE.

A future research design could complete the correlational study began in this research study, by including 4-H YDE and a large enough subset of adult 4-H volunteers per 4-H YDE to do some correlation studies. Correlations could then be drawn between the 4-H YDE leadership style and the adult 4-H volunteer perceived leadership style of 4-H YDE. Relationships could also be drawn between the 4-H YDE sense of empowerment and the adult 4-H volunteer sense of empowerment. The results of this research study would broaden the theory and its implications for 4-H program organizational success. We could also begin to draw implications for the effect leadership style and empowerment might have with our 4-H youth if both volunteers and 4-H YDE are empowered transformational leaders.

Recommendations

The review of the literature and subsequent findings from the research study, led this researcher to several recommendations for further research. The following were considered to be the most significant.

One recommendation, based on the findings of this study, would be for National 4-H Headquarters, the National 4-H Professional Development Task Force, and other working groups who are entertaining conversations about a set of specific volunteer competencies needed by 4-H YDE, to include competencies which would contribute to adult 4-H volunteer's sense of empowerment within 4-H youth development settings. These competencies would include an understanding of the dimensions of empowerment and how to build them into the organization, as well as strategies for 4-H YDE to become transformational leaders.

With the empowerment construct being articulated as a valued mission of Extension and 4-H, the researcher recommends that the organization embrace the definition of psychological empowerment as presented by Thomas and Velthouse (1990) and Spreitzer (1995) as the guiding and working definition of empowerment. This understanding of genuine empowerment and the dimensions which bring it to life would enhance the 4-H program and organization if brought into practice.

This research study is an inaugural look into the psychological dimension of empowerment in the Cooperative Extension Service and the National 4-H program, in particularly the sense of empowerment for adult 4-H volunteers in 4-H youth development settings. According to Spreitzer, et al. (1999), the empirical study of empowerment and leader behavior is still in its' infancy. In addition to embracing this empowerment construct, additional research in this area will only continue to unfold new understanding of this dimension for the 4-H organization and for Extension. Further research in this area has already been articulated.

This research affirms in a 4-H context, what was found in earlier studies, that transformational leadership style does provide empowering effects on followers (Jung, Chow & Wu, 2003) due to this apparent relationship, transformational leadership could be a valuable addition to the professional development of 4-H YDE and volunteers. A final recommendation is for the organization to adopt specific strategies for professional development on transformational leadership for 4-H YDE.

In summary, as organizations, such as the Cooperative Extension's 4-H program, face more turbulent external environments, transformational leadership takes on an increased significance for organizational effectiveness. Transformational leadership employs a leader/follower relationship where leaders empower everyone in their organization to be system thinkers and connected members in the organization. This research study reports that there is a statistically significant correlation between the perceived use of transformational leadership style and a sense of empowerment in adult 4-H volunteers in youth development settings.

The results of this study can influence national conversations around 4-H youth development educators professional competencies and preparation needed by professionals to express proficiency in those competencies. In practice, the research findings can provide the impetus for professional development training efforts provided for new 4-H youth development professionals and the findings can be internalized personally for those who read the work.

This research study utilized the theoretical frameworks of systems theory, leadership theory, and empowerment theory to bring greater understanding to the roles of 4-H Youth Development Educators and adult 4-H volunteers in 4-H youth

development settings. The study attempted to bridge the gap of knowledge known

about the relationship *between* the 4-H YDE and the 4-H adult volunteer as well as the

leadership of the 4-H YDE to the 4-H adult volunteer. An increased understanding of

the factors that contribute to adult 4-H volunteer sense of empowerment can only

enhance 4-H youth development programs when these factors are put into practice.

BIBLIOGRAPHY

Ali, R. (2005). *An analysis of the degree of transformational leadership exhibited by administrators of 1862 and 1890 cooperative extension programs in states with both systems as a predictor for the attainment of state match in federal fiscal year 2004.* Unpublished doctoral dissertation, Marshall University, West Virginia.

Allen, B. L. & Morton, L. W. (2006). Generating self-organization capacity: Leadership practices and training needs in non-profits. *Journal of Extension*, 44(6), Article 6FEA6. Retrieved February 22, 2008, from http://www.joe.org/joe/2006december/a6.php

America's Promise Alliance. (1997). *The five promises.* Retrieved February 26, 2008 from: http://www.americaspromise.org/About-the-Alliance/Five-Promises.aspx

Antonakis, J., Avolio, B. J.& Sivasubramaniam, N. (2003). Context and leadership: an examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *Leadership Quarterly,* 14, 261-295.

Archer, T. M., Warner, P. D., Miller, W., Clark, C. D., James, S., Cummings, S., et al. (2007a). Can we define and measure excellence in Extension? *Journal of Extension,* 45(1), Article 1COM1. Retrieved February 22, 2008, from http://www.joe.org/joe/2007february/comm1p.shtml

Archer, T. M., Warner, P.D., Miller, W., Clark, C.D., James, S., Cummings, S., et al. (2007b). Excellence in Extension: Two products for definition and measurement. *Journal of Extension*, 45(1), Article 1TOT1. Retrieved February 22, 2008, from http://www.joe.org/joe/2007february/tt1p.shtml

Argyris, C. (1998). Empowerment: The emperor's new clothes. *Harvard Business Review*, May-June, 98-105.

Armstrong, J. S. & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, XIV (August 1977), 396-402.

Arnold, M. E. & Dolenc, B. (2008). *Oregon 4-H volunteer study: Satisfaction, access to technology, and volunteer development needs.* Corvallis, OR: 4-H Youth Development Education, Oregon State University.

Ary, D., Jacobs, L., & Razavieh, A. (1996). *Introduction to research in education.* (5th ed.). Ft. Worth, TX: Holt, Rinehart, and Winston, Inc.

Astroth, K. A., Garza, P., & Taylor, B. (2004). Getting down to business: Defining competencies for entry-level youth workers. *New Directions for Youth Development,* 104, 25-37.

Atwater E. & Atwater, D. C. (1994). Organizational transformation: Strategies for change and improvement. In Bass & Avolio (Ed.), *Improving organizational effectiveness through transformational leadership* (pp 146-172). Thousand Oaks, CA: Sage Publications, Inc.

Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. *American Psychologist*, 62(1), 25-33.

Avolio, B. J., & Bass, B. M. (2008). *Multifactor Leadership Questionnaire Manual and Sampler Set.* (3rd ed.). Redwood City, CA: Mindgarden, Inc.

Avolio, B. J., Bass, B. M. & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology, 72,* 441-462.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.

Barling, J., Weber, T. & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81, 827-832.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: The Free Press.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics, 18*, 19-31.

Bass, B.M. (1990). *Bass and Stogdill's handbook of leadership: Theory, research and management applications* (3rd ed.). New York, NY. Free Press.

Bass, B. M., & Avolio, B. J. (1990). *Transformational leadership development: Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Consulting Psychologists Press.

Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.

Bass, B. M., & Avolio, B. J. (2000). *Multifactor leadership questionnaire (form 5x).* Redwood City, CA: Mind Garden, Inc.

Bass, B. M., Avolio, B. J., Jung, D., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology,* 88(2), 207-218.

Bennis, W. (2007). The challenges of leadership in a modern world. *American Psychologist,* 62(1), 2-5.

Bennis, W. & Nanus, B. (2003). *Leaders: Strategies for taking charge*. (2nd ed.). New York: Harper Collins.

Boyd B. (2004). Extension agents as administrators of volunteers: Competencies needed for the future. *Journal of Extension,* 42(2). Article 2FEA4. Retrieved April 10, 2007, from http://www.joe.org/joe/2004april/a4.php

Brown W., Birnstihl, E., & Wheeler, D. (1996). Leading without authority: An examination of the impact of transformational leadership cooperative extension work groups and teams. *Journal of Extension,* 34(5), Article 5FEA3. Retrieved April 10, 2007, from http://www.joe.org/joe/1996october/a3.php

Burns, J. M. (1978). *Leadership*. New York: Harper & Row.

Cameron, K. S. & Quinn, R. E. (1999). *Diagnosing and changing organizational culture.* Reading, MA. Addison-Wesley Longman Publishers.

Carless, S. (1998). Assessing the discriminant validity of transformational leader behavior as measured by the MLQ. *Journal of Occupational & Organizational Psychology*, 71, 353-358.

Chan, A. T. & Chan, E. H. (2005). Impact of perceived leadership styles on work outcomes: Case of building professionals. *Journal of Construction Engineering and Management,* 131(4), 413-422.

Collins, J. (2001). *Good to great*. New York: Harper Collins.

Conger, J. A. (1999). Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *Leadership Quarterly,* 10(2), 145-179.

Conger, J. & Kanungo, R. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13(3), 471-482.

Council for Certification in Volunteer Administration. (2008). *Body of Knowledge in Volunteer Administration.* Retrieved September 10, 2008, from http://www.cvacert.org/certification.htm

Council of 1890 Presidents/Chancellors. (2000). *1890 Land Grant System – A Strategic Plan.* Washington, D. C.: National Association of State Universities and Land Grant Colleges.

Creswell, J. W. (2008). *Educational research: Planning, conducting and evaluating quantitative and qualitative research.* Upper Saddle River, NJ: Pearson Education, Inc.

Culp III, K. & Kohlhagen, B. (2004). Kentucky 4-H agents' perceptions of their levels of competence and frequency of use of volunteer administration function. *The Journal of Agricultural Education*, 45(2), 1-13.

Culp III, K. McKee, R., & Nestor, P. (2007). Identifying volunteer core competencies: Regional differences. *Journal of Extension*, 45(6), Article 6FEA3. Retrieved February 8, 2008, from http://www.joe.org/joe/2007december/a3.php

Daughtry, L. H. & Finch, C. R. (1997). Effective leadership of vocational administrators as a function of gender and leadership style. *Journal of Vocational Education Research*, 22(3), 173-86.

Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74, 580-590.

Den Hartog, D. N., Van Muijen, J. J. & Koopman, P. K. (1997). Transactional versus transformational leadership: An analysis of the MLQ. *Journal of Occupational and Organizational Psychology*, 70, 19-34.

Deppe, C. A. & Culp III, K. (2001). Ohio 4-H agents' perception of the level of importance and frequency of use of the eighteen components of the GEMS model of volunteer administration. *The Journal of Agricultural Education*, 42(4), 33-43.

Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York: John Wiley & Sons, Inc.

Eagly, A. H., Johannesen-Schmidt, M. C. & van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin*, 129(4), 569-591.

Evans, M. G. (1970). The effects of supervisory behavior on the path-goal relationship. *Organizational Behavior and Human Performance,* 5, 277-298.

Fehlis C. (2005). A call for visionary leadership. *Journal of Extension,* 43(1), Article
    1COM1. Retrieved May 11, 2007, from
    http://www.joe.org/joe/2005february/comm1.php

Fiedler, F. E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.

Follett, M. P. (1942). *Dynamic administration*. New York: Harper and Brothers.

Forrester, R. (2000). Empowerment: Rejuvenating a potent idea. *Academy of
    Management Executive*, 14(3), 67-80.

Freire, P. (1973). *Education for critical consciousness*. New York: Continuum
    Publishing Company.

Fullan, M. (2005). *Leadership & sustainability: System thinkers in action.* Thousand
    Oaks, CA: Corwin Press.

Gall, J. P., Gall, M. D., & Borg, W. R. (2005). *Applying educational research: A
    practical guide*. (5th ed.). Boston, MA: Pearson Education, Inc.

Gamage, D. T. & Pang, N. S. (2003). *Leadership and management in education:
    Developing essential skills and competencies*. Sha Tin, N.T., Hong Kong. The
    Chinese University of Hong Kong. The Chinese University Press.

Gist, M. E. (1987). Self-efficacy: Implications for organizational behavior and human
    resource management. *Academy of Management Review*, 12, 472-485.

Gist, M. E. & Mitchell, T. N. (1992). Self-efficacy: A theoretical analysis of its
    determinants and malleability. *Academy of Management Review*, 17, 183-211.

Gruidl, J. & Hustedde, R. (2003). Evaluation of capacity-building programs: A
    learning organization approach. *Journal of Extension,* 41(5), Article 5FEA1.
    Retrieved February 22, 2008, from http://www.joe.org/joe/2003october/a1.php

Haines, S. G. (1998). *The manager's pocket guide to systems thinking and learning*. Amherst, MA. HRD Press.

Herrington. J., Bonem, M., & Furr, J. (2000). *Leading congregational change*. San Francisco: Jossey Bass.

Hershey, P. & Blanchard, K. H. (1984). *The management of organizational behavior*. (4th ed.). Englewood Cliffs, NJ: Prentice Hall.

Hu, L. & Bentler, P. J. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structure Equation Modeling*, 6(1), 1-55.

Huebner, A. J. (1998). Examining "empowerment": A how-to guide for the youth development professional. *Journal of Extension*, 36(6), Article 6FEA1.Retrieved February 22, 2008, from http://www.joe.org/joe/1998december/a1.php

Hunt, J. G. & Dodge, G. E. (2000). Leadership déjà vu all over again. *Leadership Quarterly*, 11, 435-458.

Hur, M. H. (2006). Empowerment in terms of theoretical perspectives: Exploring a typology of the process and components across disciplines. *Journal of Community Psychology,* 34(5), 523-540.

Jantsch, E. (1980). *The self-organizing universe*. Oxford, Pergamon Press.

Jarvis, S. V., Shear, L., & Hughes, D. M. (1997). Community youth development: Learning the new story. *Child Welfare*, 75(5). 719-741.

Judge, T. A. & Bono, J. E. (2004). Personality and transformational and transactional Leadership: A meta-analysis. *Journal of Applied Psychology*, 89(5), 901-910.

Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and

  leadership: A qualitative and quantitative review. *Journal of Applied*

  Psychology, 87, 765-780.

Judge, T. A. & Piccolo, R. F. (2004). Transformational and transactional leadership:

  A meta-analytic test of their relative validity. *Journal of Applied Psychology,*

  89(5), 755-768.

Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in

  enhancing organizational innovation: Hypothesis and some preliminary

  findings. *The Leadership Quarterly,* 14, 525-544.

Kanji, G. K. & Sa, P. M. (2001). Measuring leadership excellence. *Total Quality*

  Management, 12(6), 701-718.

Katz, R. (1983/84). Empowerment and synergy: Expanding the community's healing

  resources. *Prevention in Human Services* (Special Issue on Empowerment), 3

  (2/3), 201-225.

Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational

  leadership: Empowerment and dependency. *Journal of Applied Psychology,*

  88(2), 246-255.

Keller, T. & Dansereau, F. (1995). Leadership and empowerment: A social exchange

  perspective. *Human Relations*, 48(2), 127-146.

King, J. & Safrit, R. D. (1998). Extension agents' perceptions of volunteer

  management. *Journal of Extension*, 36(3), Article 3FEA2. Retrieved January 7,

  2008, from http://www.joe.org/joe/1998june/a2.php

Kirby, P. C.; Paradise, L. V. & King, M. I. (1992). Extraordinary leaders in education: understanding transformational leadership. *Journal of Educational Research*, 85(5), 303-311.

Kirkpatrick, S. A. & Locke, E. A. (1991). Leadership: Do traits matter. *Academy of Management Executive*, 5, 48-60.

Kline, R. B. (2005). *Principles and practices of structural equation modeling* (2nd ed.). New York: The Guilford Press.

Konczak, L. J.; Stelly, D. J., & Trusty, M. L. (2000). Defining and measuring empowering leader behavior: Development of an upward feedback instrument. *Educational and Psychological Measurement*, 60, 301-315.

Kotter, J. P. (1998). *The leadership factor*. New York, NY: Free Press.

Kouzes, J. M., & Posner, B. Z. (1997). *Leadership practices inventory: Participants workbook* (2nd ed.). San Francisco, CA: Jossey-Bass.

Kouzes, J. M., & Posner, B. Z. (2002). *The leadership challenge* (3rd ed.). San Francisco, CA: Jossey-Bass.

Kreisberg, S. (1992). *Transforming power: Domination, empowerment, and education.* Albany, NY: State University of New York Press.

Ladewig, H. & Rohs, R. R. (2000). Southern Extension leadership development: Leadership development for a learning organization. *Journal of Extension,* 38(3), Article 3FEA2. Retrieved May 5, 2007, from http://www.joe.org/joe/2000june/a2.php

Lawler, E. E. (1992). *The ultimate advantage*. San Francisco, CA: Jossey-Bass.

Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth.* Thousand Oaks, CA: Sage Publications.

Lincoln, Y. & Guba, E. (2003). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.). *The landscape of qualitative research: Theories and issues* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Lindner, J. R., Murphy, T. H., & Briers, G. (2001). Handling nonresponse in social science research. *Journal of Agricultural Education*, 42(4), 43-53.

Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly,* 7(3), 385-425.

Lussier, R. N. & Achua, C. F. (2007). *Leadership: Theory, application, & skill development* (3rd ed.). Mason, OH: Thomson South-Western.

Marguardt, M. J. (1996). *Building the learning organization: A systems approach to quantum improvement and global success*. New York, NY. McGraw Hill.

Marion, R. & Uhl-Bien, M. (2001). Leadership in complex organizations. *Leadership Quarterly,* 12, 389-418.

Masood, S. A., Dani, S. S., Burns, N. D. & Blackhouse, C.J. (2006). Transformational leadership and organizational culture: The situational strength perspective. *Proceedings of the Institution of Mechanical Engineers – Part B – Engineering Manufacture,* 220, 941-949.

McGrath, D. M., Conway, F. D., & Johnson, S. (2007). The extension hedgehog. *Journal of Extension*. 45(2), Article 2FEA1. Retrieved February 2, 2008 from http://www.joe.org/joe/2007april/a1.php

Michael, J., Paxson, M., & Howell, R. (1991). *An assessment of Extensions' leadership development work.* Washington, D.C.: Extension Service – U.S. Department of Agriculture.

Mishra, A. K. & Spreitzer, G. M. (1998). Explaining how survivors respond to downsizing: The roles of trust, empowerment, justice, and work design. *Academy of Management Review,* 23(3), 567-588.

Moore, L. L. (2003). *Leadership in the cooperative extension system: An examination of leadership styles and skills of state directors and administrators.* Unpublished doctoral dissertation, University of Florida, Florida.

Muthén, L. K. & Muthén, B. O., (2007). *Mplus 5 user's guide* (5th ed.). Los Angeles, CA: Muthén & Muthén.

National 4-H Headquarters. (2007). *4-H youth development framework.* Retrieved April 12, 2007 from http://www.national4-hheadquarters.gov/library/4HYD_framework.pdf

National 4-H Headquarters. (2007). *4-H fact sheet.* Retrieved on April 12, 2007 from: http://www.national4-hheadquarters.gov/library/4hhq_onesheet.pdf

National 4-H Headquarters.(2007). *National 4-H learning priorities 2007-2012 Fall 2007 Update*. Retrieved on March 12, 2008 from http://www.national4-hheadquarters.gov/library/4hhq_onesheet.pdf

National 4-H Professional Development Task Force. (2004). *4-H professional research, knowledge, and competency model (4-H PRKC)*. Retrieved March 12, 2008 from http://www.national4-hheadquarters.gov/comm/PKRC_overview.pdf

National Association of State Universities and Land Grant Colleges (2007). Retrieved February 22, 2008, from http://www.nasulgc.org/NetCommunity/Page.aspx

Nestor, P., McKee, R., & Culp III, K. (2006). Core competencies for 4-H volunteer leaders differentiated by occupation, level of education, and college major: Implications for leadership education. *Journal of Leadership Education*, 5(1), 61-77.

Northouse, P.G. (2004). *Leadership: Theory & practice*. (3rd ed). Thousand Oaks, CA: Sage.

Oregon ES237. (2007). Patti Craven, State 4-H Office Coordinator.

Oregon 4-H. (2007). *Statistics: Who we are.* Retrieved February 22, 2008, from http://oregon4h.oregonstate.edu/statistics.htm

Page, N., & Czuba, C. E. (1999). Empowerment: What is it? *Journal of Extension,* 37(5), Article 5COM1. Retrieved February 8, 2008, from http://www.joe.org/joe/1999october/comm1.php

Pallant, J. (2007). *SPSS Survival Guide*. (3rd Ed.) New York, NY: Open Univeristy Press.

Parpart, J. L., Rai, S. M., & Staudt, K. (2003). *Rethinking empowerment: Gender and development in global/local world.* New York, NY: Routledge.

Paxson, M., Howell, R., Michael, J., & Wong, S. (1993). Leadership development in Extension. *Journal of Extension,* 31(1), Article 1RIB2. Retrieved May 11, 2007, from http://www.joe.org/joe/1993spring/rb2.php

Pernick, R. (2001). Creating a leadership development program: Nine essential tasks. *Public Personnel Management*, 30(4), 429-444.

Podsakoff, P. M., MacKenzie, S. B., & Fetter, R. (1990). Transformational leaders' behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly,* 1(2), 107-142.

Quinn, R. E. & Spreitzer, G. M. (1997). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics*, Autumn, 37-48.

Radhakrishna, R., Yoder, E. &. Baggett, C.(1994). Leadership effectiveness of county Extension Directors. *Journal of Extension,* 32(2), Article 2RIB2. Retrieved May 11, 2007, from http://www.joe.org/joe/1994august/rb2.php

Randolph, W. A. (1995). Navigating the journey to empowerment. *Organizational Dynamics*, Spring, 19-32.

Reclaiming Youth International. (1990). *The circle of courage philosophy.* Retrieved February 26, 2008, from: http://www.reclaiming.com/content/about-circle-of-courage

Rost, J.C. (1991). *Leadership for the twenty-first century.* New York: Praeger.

Sandmann, L. &. Vandeberg, L (1995). A framework for 21st century leadership. *Journal of Extension,* 33(6), Article 6FEA1. Retrieved May 11, 2007, from http://www.joe.org/joe/1995december/a1.php

Schein, E. H. (1985). *Organizational culture and leadership*. San Francisco, CA. Jossey-Bass Publishers, Inc.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization.* New York, NY: Double Day publishing.

Scott, W. R. (2003). *Organizations: Rational, natural, and open systems* (5th ed.). Upper Saddle River, NJ: Prentice Hill.

Singletary, L., Smith, M. & Evans, W. P. (2006). Self-perceived 4-H leader competencies and their relation to the skills youth learn through 4-H youth development programs. *Journal of Extension,* 44(4), Article 4RIB2. Retrieved March 9, 2008, from http://www.joe.org/joe/2006august/rb2.php

Sinasky, M. E. (2005). *Volunteer perceptions of leadership practices of Penn State University Cooperative Extension educators with an appointment in 4-H and youth development.* Thesis (M.Ed.). Pennsylvania State University,

Sinasky, M. E., & Bruce, J. A. (2006). Supervisors' and 4-H youth development educators' perceptions of the leadership practices employed by educators. *Journal of Extension,* 44(3), Article 3FEA6. Retrieved April 10, 2007, from http://www.joe.org/joe/2006june/a6.php

Stories, Outcomes, and Accomplishments Reporting System (SOARS) (2007). Retrieved March 12, 2008 from http://extension.oregonstate.edu/internal/soars

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal,* 38(5), 1442-1465.

Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal*, 39(2), 483-504.

Spreitzer, G. M. & Quinn, R. E. (2001). *A company of leaders: Five disciplines for unleashing the power in your workforce.* San Francisco, CA. Jossey-Bass.

Spreitzer, G. M., DeJanasz, S. C.; & Quinn, R. E. (1999). Empowered to lead: The role of psychological empowerment in leadership. *Journal of Organizational Behavior*, 20, 511-526.

Spreitzer, G. M., Kizilos, M. A., Nason, S. W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain. *Journal of Management,* 23(5), 679-704.

Stedman, N. (2004). *Leadership, volunteer administration, and 4-H: Leadership styles and volunteer administrative competence of 4-H state volunteer specialists and county faculty.* Unpublished doctoral dissertation. The University of Florida, Gainesville, FL.

Stedman, N. & Rudd, R. (2004). Volunteer administration: Theoretical dimensions of the discipline. *Journal of Leadership Education,* 4(1). Retrieved March 9, 2007 from http://www.leadershipeducators.org.

Stedman, N. & Rudd, R. (2005). Volunteer administration leadership proficiency and leadership styles: Perceptions of southern region 4-H county faculty. *Journal of Leadership Education*, 4(2). Retrieved March 9, 2007 from http://www.leadershipeducators.org.

Stedman, N., & Rudd, R. (2006). Leadership styles and volunteer administration competence: Perceptions of 4-H county faculty in the United States. *Journal of Extension,* 44(1). Article 1RIB6. Retrieved February 7, 2007, from http://www.joe.org/joe/2006february/rb6.php

Stogdill, R. M. (1974). *Handbook of leadership: A survey of the literature.* New York: Free Press.

Stone, B. & Coppernoll, S. (2004). You, extension and success: A competency-based professional development system. *Journal of Extension*, 42(2), Article 2IAW1. Retrieved March 26, 2008, from http://www.joe.org/joe/2004april/iw1.php

Stone, B. & Rennekamp, R. (2004). *New foundations for the 4-H youth development profession: 4-H professional research, knowledge, and competencies study,* 2004. Conducted in cooperation with the National 4-H Professional Development Task Force. National 4-H Headquarters, CSREES, USDA.

Stumpf, M. N. (2003). *The relationship of perceived leadership styles of North Carolina County Extension Directors' to job satisfaction of county extension professionals.* Unpublished doctoral dissertation, North Carolina State University, Raleigh, North Carolina.

Thomas, K. & Velthouse, B. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review*, 15(4), 666-681.

Tichy, N. M. & Devanna, M. A. (1986). *The transformational leader.* New York: John Wiley.

Tucker, B. A. & Russell, R. F. (2004). The influence of the transformational leader. *Journal of Leadership and Organizational Studies,* 10(4), 103-111.

Van Horn, B. E., Flanagan, C. A. & Thomson, J. S. (1999). Changes and challenges in 4-H (Part 2). *Journal of Extension*, 37(1), Article 1COM1. Retrieved March 9, 2008, from http://www.joe.org/joe/1999february/comm1.php

Van Winkle, R., Busler, S., Bowman, S. R., & Manoogian, M. (2002). Adult volunteer development: Addressing the effectiveness of training new 4-H leaders. *Journal of Extension,* 40(6), Article 6FEA4. Retrieved March 9, 2008, from http://www.joe.org/joe/2002december/a4.php

Vandeberg, L., Thullen, M., & Fear, F. (1997). *Community leadership development: Implications for Extension.* Extension Committee on Organization and Policy/Community Resource Development – Public Affairs Subcommittee: National Extension Task Force on Community Leadership.

Vroom, V. H. & Yetton, P.W. (1973). *Leadership and decision-making.* New York: Wiley.

Vroom, V. H. & Jago, A G. (2007). The role of the situation in leadership. *American Psychologist*, 62(1), 17-24.

Walton, R. (1985). From control to commitment in the workplace. *Harvard Business Review*, 63(2), 77-84.

Wessel, T. & Wessel, M. (1982). *4-H: An American idea 1900-1980.* Washington, D. C.: National 4-H Council.

Wheatley. M. (1994). *Leadership and the new science: Learning about organization from an orderly universe.* San Francisco, CA. Berret-Koehler Publishers, Inc.

Whittington, J. L., Goodwin, V., L., & Murray, B. (2004). Transformational leadership, goal difficulty, and job design: Independent and interactive effects on employee outcomes. *The Leadership Quarterly*, 15, 593-606.

Woodrum, W., & Safrit, D. R. (2003). Leadership practices of West Virginia University extension agents working with the 4-H youth development program. *Journal of Extension*, 41(3), Article 3RIB3. Retrieved March 9, 2007, from http://www.joe.org/joe/2003june/rb3.php

Yammarino, F. J. (1994). Indirect leadership: Transformational leadership at a distance. In Bass & Avolio (Ed.), *Improving organizational effectiveness through transformational leadership* (pp. 26-47). Thousand Oaks, CA: Sage Publications, Inc.

Yammarino F. J., Spangler & Dubinskiy. (1998). Transformational leadership and multiple levels of analysis. *Human Relations*, 43(10), 975-995.

Yukl, G. A. (2006). *Leadership in organizations* (6th ed). New Jersey: Pearson Prentice Hall.

Yukl, G. A. & Falbe, C. M. (1991). The importance of different power sources in downward and lateral relations. *Journal of Applied Psychology,* 76, 416-423.

Zaccaro, S. (2007). Trait-based perspectives of leadership. *American Psychologist*, 62(1), 6-16.

APPENDIX A

Oregon State UNIVERSITY OSU Extension Service

Dear adult 4-H volunteer:

As an adult 4-H volunteer leader, you play a critical role in the success of the 4-H program. We are interested in investigating the degree to which the 4-H program is providing you the environment and the leadership for you to be most effective. Information is needed in regards to how empowered you feel in your role as a volunteer and your perception of the leadership style of your 4-H youth development educator. This information, when collected, will provide valuable insight on this topic for 4-H youth development educators and state 4-H staff here in Oregon and across the nation.

I am doing this study as a part of the requirement to receive a doctorate in Teacher Leadership at OSU. I would appreciate it if you would take about 20 minutes to respond to the enclosed questionnaire and return it in the envelope provided. Your responses will be added together with others and recorded as a group. When the results of this project are published your identity will not be made public. **Your participation in this study is voluntary and you may refuse to complete the questionnaire or answer any question(s) for any reason.** Only a small sample of adult 4-H volunteers across the state will receive the questionnaire, so your participation is important to this study.

The answers you provide will be kept confidential to the extent permitted by law. Special precautions have been established to protect the confidentiality of your responses. The number on your questionnaire will be removed once it has been received. (The number is used to contact those who have not returned their questionnaire, so those who have responded are not burdened with additional mailings.) If you do not want to participate in this study and do not wish to be contacted further, please return the uncompleted survey in the enclosed envelope. Your questionnaire will be destroyed once your responses have been tallied. There are no foreseeable risks to you as a participant in this project; nor are there any direct benefits. However, your participation is extremely valued.

If you have any questions about the survey, please contact me at (503) 373-3774 or by email at pamela.olsen@oregonstate.edu If you prefer, you may contact Dr. Michael Dalton, principle investigator, at 541- or by email at michael.dalton@oregonstate.edu If you have questions about your rights as a participant in this research project, please contact the Oregon State University Institutional Review Board (IRB) Human Protections Administrator at (541) 737-4933 or by email at IRB@oregonstate.edu.

Thank you for your help. We appreciate your cooperation.

Sincerely,

Pamela Olsen   Michael Dalton
PhD Student Researcher   Principal Investigator

INFORMED CONSENT DOCUMENT

Project Title: Adult 4-H Volunteer Empowerment in 4-H Youth Development Settings
Principal Investigator: Michael Dalton, College of Education, Teacher & Counselor Education
Co-Investigator(s):   Pamela Olsen, College of Education, Teacher & Counselor Education

WHAT IS THE PURPOSE OF THIS STUDY?

You are being invited to take part in a research study designed to better understand the factors
which influence the sense of empowerment of adult 4-H volunteers in 4-H youth development
settings. This study will specifically look at factors such as the environment of the 4-H program as
well as the leadership style of the 4-H youth development educators who oversee these programs.
Results of this study will inform practices in the Oregon 4-H program and will also be shared in
presentations at professional meetings and in professional journal articles. We are studying this
because the degree to which adult 4-H volunteers feel empowered in the organization provides a
direct relationship to the overall effectiveness of the 4-H program.

WHAT IS THE PURPOSE OF THIS FORM?

This consent form gives you the information you will need to help you decide whether to be in the study
or not. Please read the form carefully. You may ask any questions about the research, the possible risks
and benefits, your rights as a volunteer, and anything else that is not clear. When all of your questions
have been answered, you can decide if you want to be in this study or not.

WHY AM I BEING INVITED TO TAKE PART IN THIS STUDY?

You are being invited to take part in this study because you are a trained adult 4-H volunteer leader
enrolled in the Oregon 4-H program.

WHAT WILL HAPPEN DURING THIS STUDY AND HOW LONG WILL IT TAKE?

You are being asked to complete a questionnaire made up of different instruments and survey questions.
This is being sent to your home mailing address provided by your county 4-H program. After
completing the questionnaire, we would like you to mail back the questionnaire in the stamped, self-
addressed return envelope. If you agree to take part in this study, your involvement will last for
approximately 20 minutes.

WHAT ARE THE RISKS OF THIS STUDY?

There are no foreseeable risks associated with your participation in this research study. The instruments
are coded to allow for sending additional requests to

WHAT ARE THE BENEFITS OF THIS STUDY?

We do not know if you will benefit from being in this study. However, we hope that, in the future, other people might benefit from this study because the results from this study will be shared through state and national presentations and journal articles.

WILL I BE PAID FOR PARTICIPATING?

You will not be paid for being in this research study.

WHO WILL SEE THE INFORMATION I GIVE?

The information you provide during this research study will be kept confidential to the extent permitted by law. To help protect your confidentiality, we will use only identification code numbers on the data forms. Once data is collected, lists connecting addresses to identification codes will be destroyed. Your identity is no longer connected to this study and therefore can not be made public when the results of this study are shared. All information related to this research study is maintained in a locked filing cabinet and/or in password-protected computer files.

DO I HAVE A CHOICE TO BE IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. If you decide not to take part in this study, your decision will have no effect on the quality of service you receive from or level of your involvement in the Oregon 4-H program.

You will not be treated differently if you decide to stop taking part in the study. As you complete the questionnaire, you are free to skip any questions that you would prefer not to answer.

WHAT IF I HAVE QUESTIONS?

If you have any questions about this research project, please contact: Principle Investigator Michael Dalton, 541-737-8577 at michael.dalton@oregonstate.edu or Pamela Olsen, Co-Investigator, 503-373-3774 at pamela.olsen@oregonstate.edu

If you have questions about your rights as a participant, please contact the Oregon State University Institutional Review Board (IRB) Human Protections Administrator, at (541) 737-4933 or by email at IRB@oregonstate.edu.

Dear Adult 4-H Volunteer:

Please complete each of the three instruments attached as well as the few background questions.
Your assistance with this research project is very valuable and appreciated!

Psychological Empowerment Instrument Spreitzer, 1995
Using the following scale, please indicate the extent to which you agree or disagree that each statement describes how you see yourself in relation to your workplace (county 4-H program). In interpreting the words on this instrument, consider: "**Job**" is your role as an adult 4-H volunteer "**Department**" is your 4-H club or 4-H committee

1 = Very strongly disagree 2 = Strongly disagree 3 = Disagree	4 = Neutral	5 = Agree 6 = Strongly agree 7 = Very Strongly agree

a.	I am confident about my ability to do my job.	1	2	3	4	5	6	7
b.	The work that I do is important to me.	1	2	3	4	5	6	7
c.	I have significant autonomy in determining how I do my job.	1	2	3	4	5	6	7
d.	My impact on what happens in my department is large.	1	2	3	4	5	6	7
e.	My job activities are personally meaningful to me.	1	2	3	4	5	6	7
f.	I have a great deal of control over what happens in my department.	1	2	3	4	5	6	7
g.	I can decide on my own how to go about doing my own work.	1	2	3	4	5	6	7
h.	I have considerable opportunity for independence and freedom in how I do my job.	1	2	3	4	5	6	7
i.	I have mastered the skills necessary for my job.	1	2	3	4	5	6	7
j.	The work I do is meaningful to me.	1	2	3	4	5	6	7
k.	I have significant influence over what happens in my department.	1	2	3	4	5	6	7
l.	I am self-assured about my capabilities to perform my work activities.	1	2	3	4	5	6	7

Unit Structure and Roles   Spreitzer, 1996

Here we would like you to describe the characteristics of your unit, with "**unit**" being the county 4-H program. Please indicate the number which most closely describes your unit. Circle only one number.

1. Goals are well defined   1 2 3 4 5   Goals are not very well
   for total unit   defined for the total unit

2. Lines of authority   1 2 3 4 5   Lines of authority
   are precisely defined   are not precisely defined

3. Communications on job related   1 2 3 4 5   Communication on job related
    matters are predominantly   matters go in both vertical and
    up and down in the organization   horizontal direction

4. Most tasks performed at the lower   1 2 3 4 5   Most tasks performed at lower
   levels of the total unit are well defined   levels of the total unit are not
                                                                            well defined

5. Routine solutions exist   1 2 3 4 5   New solutions must be
   to perform many tasks   continuously found for each job

6. It is relatively easy to predict in   1 2 3 4 5   It's difficult to predict in advanc
   advance how each job is to be performed   how each job is to be performed

Multifactor Leadership Questionnaire Rater Form   Bass and Avolio, 2004

This questionnaire is used to describe the leadership style of the 4-H Youth Development Educator you work most closely with in your county. Answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure of do not know the answer, leave the answer blank.** Please answer the questionnaire anonymously.

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits the person you are describing. Use the following rating scale:

Not at all 0	Once in a while 1	Sometimes 2	Fairly often 3	Frequently, if not always 4

The Person I am rating…

1	Provides me with assistance in exchange for my efforts	0	1	2	3	4
2	Re-examines critical assumptions to question whether or not they are appropriate.	0	1	2	3	4
3	Fails to interfere until problems become serious.	0	1	2	3	4
4	Focuses attention on irregularities, mistakes, exceptions, and deviations from standards.	0	1	2	3	4
5	Avoids getting involved when important issues arise.	0	1	2	3	4
6	Talks about his/her most important values and beliefs.	0	1	2	3	4
7	Is absent when needed.	0	1	2	3	4
8	Seeks differing perspectives when solving problems.	0	1	2	3	4
9	Talks optimistically about the future.	0	1	2	3	4
10	Instills pride in me for being associated with him/her.	0	1	2	3	4
11	Discusses in specific terms who is responsible for achieving performance targets.	0	1	2	3	4
12	Waits for things to go wrong before taking action.	0	1	2	3	4
13	Talks enthusiastically about what needs to be accomplished.	0	1	2	3	4
14	Specifies the importance of having a strong sense of purpose	0	1	2	3	4
15	Spends time teaching and coaching.	0	1	2	3	4
16	Makes clear what one can expect to receive when performance goals are achieved.	0	1	2	3	4
17	Show that he/she is a firm believer in "If it ain't broke, don't fix it.	0	1	2	3	4
18	Goes beyond self-interest for the good of the group.	0	1	2	3	4
19	Treats me as an individual rather than just as a member of the group.	0	1	2	3	4
20	Demonstrates that problems must become chronic before taking action.	0	1	2	3	4
21	Acts in ways that build my respect.	0	1	2	3	4
22	Concentrates his/her full attention on dealing with mistakes, complaints, and failures.	0	1	2	3	4
23	Considers the moral and ethical consequences of decisions.	0	1	2	3	4
24	Keeps track of all mistakes.	0	1	2	3	4
25	Displays a sense of power and confidence.	0	1	2	3	4
26	Articulates a compelling vision of the future.	0	1	2	3	4
27	Directs my attention toward failures to meet standards.	0	1	2	3	4
28	Avoids making decisions.	0	1	2	3	4

		Not at all 0	Once in a while 1	Sometimes 2	Fairly often 3	Frequently, if not always 4					
29	Considers me as having different needs, abilities, and aspirations from others.					0	1	2	3	4
30	Gets me to look at problems from many different angles.					0	1	2	3	4
31	Helps me to develop my strengths.					0	1	2	3	4
32	Suggests new ways of looking at how to complete assignments.					0	1	2	3	4
33	Delays responding to urgent questions.					0	1	2	3	4
34	Emphasizes the importance of having a collective sense of mission.					0	1	2	3	4
35	Expresses satisfaction when I meet expectations.					0	1	2	3	4
36	Expresses confidence that goals will be achieved.					0	1	2	3	4
37	Is effective in meeting my job-related needs.					0	1	2	3	4
38	Uses methods of leadership that are satisfying.					0	1	2	3	4
39	Gets me to do more than I expected to do.					0	1	2	3	4
40	Is effective in representing me to higher authority.					0	1	2	3	4
41	Works with me in a satisfactory way.					0	1	2	3	4
42	Heightens my desire to succeed.					0	1	2	3	4
43	Is effective in meeting organizational requirements					0	1	2	3	4
44	Increases my willingness to try harder.					0	1	2	3	4
45	Leads a group that is effective.					0	1	2	3	4

Background information:

1. How long have you been a 4-H volunteer leader? _____ (years)

2. What county are you currently serving in as a 4-H volunteer leader? _____

3. Were you involved in 4-H as a member?   ❑ yes   ❑ no

4. What is your gender? ❑ male   ❑ female

5. What level of education have you achieved? Please check one:
   ❑ some high school   ❑ high school graduate   ❑ certification
   ❑ bachelor's degree   ❑ master's degree   ❑ doctorate

6. Have you attended a new leader orientation or training session?   ❑ yes   ❑ no

7. Please indicate the number which most closely describes your involvement with your 4-H program:
(please circle only one number)

1	2	3	4	5
Low involvement	Relatively low involvement	Moderate involvement	Relatively high involvement	High involvement

Thank you for your assistance!

Please return completed survey in the enclosed self-addressed, stamped envelope.