# A CULTURE-CENTERED APPROACH TO ANALYZING THE COMMUNITY-GROUNDED PARTNERSHIP BETWEEN FALLING LINKS AND RURAL HARVEY COUNTY KANSAS

A Thesis by

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The following faculty members have examined the final copy of this thesis for form and content, and recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts with a major in Communication.

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## ABSTRACT

This thesis conducted a secondary analysis of Falling LinKS Stage 1 data using the alternative frame of the culture-centered approach. The secondary analysis assessed 1) what insights the culture-centered approach offered to understanding Stage 1 data from the Falling LinKS initiative 2) to what extent is the culture-centered approach applicable to the context of a community-grounded falls prevention initiative in rural Harvey County, Kansas.

Both deductive and inductive thematic analyses were used for analysis. Concepts from the culture-centered approach were used as the foundation for the deductive thematic analysis. Nine themes and four sub-themes emerged from the secondary analysis. Inductive thematic analysis was used to compare findings from the initial and secondary analyses. The analysis assessed differences and similarities between the two approaches.

The secondary analysis undertaken in this study served to enhance initial findings by applying the alternative frame of the culture-centered approach. Benefits are two-fold, first to ensure that the most effective falls prevention initiative has been developed for Harvey County. Secondly, using the culture-centered approach as the frame for secondary analysis provided the opportunity to examine the efficacy of the approach when applied to a rural context.

This thesis provided Falling LinKS with a more comprehensive understanding of the Harvey County context and guidelines for more appropriate integration of Falling LinKS within the County in ways that are most meaningful and beneficial to older adults. In conjunction, this thesis evaluated the efficacy of the culture-centered approach.

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# INTRODUCTION

Not all Americans benefit from advanced medical technology in the United States; stratification occurs between socioeconomic classes, races or ethnicities and, among other factors, including, whether individuals live in urban or rural areas (Olshansky et al., 2005). The discipline of health communication promotes the importance of communication as an integral component for improving health in individuals, and communities (DPHP, 2000 [1]). *Healthy People 2010* cites the development of community partnerships as one of the most valuable ways to improve health within a community (DPHP, 2000 [2]). Consistent with *Healthy People 2010*, this thesis operates out of a research paradigm that advocates that investigators and community members should work collaboratively to develop change initiatives tailored to meet community needs (Simpson & Seibold, 2008; Barge & Shockley-Zalabak, 2008; Israel et al., 2005) as a way to mitigate stratification.

This thesis, situated within the discipline of health communication, used previously collected data. These data were initially collected and inductively analyzed for findings specific to developing a falls prevention toolkit. The secondary analysis presented in this thesis is original research conducted by the author. As Rubin, Rubin, and Haridakis (2009) point out, researchers on occasion take a second look at data to understand it in a new way. The secondary analysis uses the culture-centered approach to "reconsider and reinterpret" (Rubin et al., 2009, p. 214) data, as the culture-centered approach was not used during the initial analysis. The culture-centered approach was chosen as the frame for analysis for several reasons that are developed throughout the literature review.

In the foundation text, *Communicating Health: A Culture-Centered Approach*, Dutta (2008) explains that the goal of the text is to "lay out the foundations for discussing the culture-

centered approach and to create openings for its discussion in health communication" (p. 3). This study intends to enter the conversation about the culture-centered approach by examining its application to a rural falls prevention initiative. Specifically, this study addresses two overarching questions: 1) What insights does a culture-centered approach offer to understanding Stage 1 data from the Falling LinKS initiative? 2) To what extent is the culture-centered approach applicable to the context of a community-grounded falls prevention initiative in rural Harvey County, Kansas? The overarching questions of this research have been structured to inform each other through an iterative process. This study aims to contribute to the understanding of the culture-centered approach and its uses, and moreover the discipline of health communication.

The relevant literature for this study is reviewed in three segments, 1) the research context from which Falling LinKS emerged, including: a) the current state of health communication research, b) health needs of older adults, c) importance of falls prevention, d) an introduction to the Falling LinKS partnership, e) the dynamics of rural areas, and f) an introduction to Harvey County, Kansas. 2) The theoretical and methodological foundations through which data were collected for Falling LinKS including: a) engaged scholarship, b) community-based participatory research (CBPR), and c) Falling LinKS research methods. 3) The culture-centered approach, with an emphasis on its underlying concepts and basic assumptions, as an alternative frame for analyzing Stage 1 Falling LinKS data.

# CHAPTER 1

# LITERATURE REVIEW

## Research Context

### Current State of Health Communication Research

Health communication is important because it focuses on the two vital aspects of human life, health and the act of communication (Wright, Sparks, O'Hair, 2008). It is defined as "the study and use of communication strategies to inform and influence individual and community decisions that enhance health" (DPHP, 2000 [1] p. 11-3). Communication should be viewed as a vehicle through which we can learn about health and a way to determine what should be done in order to improve health (du Pré, 2010). Some current issues in health communication include the aging population, cultural diversity, and the development of new approaches to health care (Wright et al., 2008), all of which are relevant to this study.

It is apparent that health communication inherently connects practitioners and scholars through efforts to enhance the understanding of current issues (du Pré, 2010). In her text, du Pré (2010) outlines six reasons that health communication is important; among these are an emphasis on interpersonal communication and the ability of health care practitioners and patients to interact with one another. These highlighted factors fall in line with this study in the sense that they focus on communication with individuals both interpersonally and regarding their preferences for receiving information.

Currently, in the health communication discipline, there are two predominant models of health, the biomedical model and biopsychosocial model. The biomedical model can be considered the more traditional conception of health. This model finds that "ill health is a

physical phenomenon that can be explained" (du Pré, 2010, p. 10). Communication from the perspective of this model typically takes a top-down approach where interventions are limited to healthcare providers "transferring their knowledge…and to prescribing a solution" (Schiavo, 2007, p. 55). By simply prescribing solutions, this model fails to take into account variables such as social habits, culture, or psychological state, all of which are directly correlated to individuals' health (Schiavo, 2007). In contrast, the biopsychosocial model recognizes that health is "influenced by people's feelings, their ideas about health, and the events of their lives" (du Pré, 2010, p. 11). Grounded in the biopsychosocial model, the culture-centered approach challenges the traditional model and incorporates context when developing an understanding of health and illness. The culture-centered approach is discussed at length later in this literature review. The next section explores the health needs of older adults.

Health needs of older adults

The categorization of older adults can be subjective. McDaniels (1989) classifies older adults into four groups, young-old (aged 65 – 74), middle-old (aged 75 – 84), old-old (aged 85 – 90), and frail old (over 90 years old). It is generally accepted that older adults are persons aged 65 and older. For the purposes of this study, our definition of older adults was expanded to include persons 60 and older.

The older adult population is growing proportionally due to improved medical care and decreased infant mortality (Wright et al., 2008). Between 2000 and 2005 the older adult population (those 55 and older) increased 13%, four times faster than those under 55 (U.S. Census Bureau, 2005). The U.S. Census Bureau (2006-2008) projects that 18.5 % of the United States population will be 65 years or older by 2025. Additionally, the oldest members of the Baby Boomer generation, the largest generation in the U.S. to date, are reaching older adult

status (U.S. Census Bureau, 2005). By the time the entire baby boomer generation retires in 2029, 1/5 of the population will be retired (Haber, 2007).

It must be noted that older adults are heterogeneous, varying in age, gender, socioeconomic status, ethnicity, and physical ability among other characteristics (Hudson & Moore, 2009). Contrary to popular belief, older adults are generally healthy (Wright et al., 2008; du Pré, 2010; Haber, 2007). In other words, age is not analogous to illness or infirmity. In fact, older adults generally report their health as "good, very good, or excellent" (Haber, 2007, p. 13). However, some older adults have increased needs for "medical care, assisted living, social services, and home care" (du Pré, 2010, p. 17).

Maintaining the health of the older adult population is one of the leading health care issues in the United States today (Haber, 2007; Wright et al., 2008). Older adults are one of the largest consumer groups of health care (Wright et al., 2008), and health communicators must learn about the needs of older adults in order to develop interventions "that can make a positive impact" (Wright et al., 2008, p. 9). Some of the most important age-related issues for older adults include: presbycusis or age-related hearing loss; cognitive decline diseases such as Alzheimer's syndrome or dementia; decline of physical activity / mobility; and polypharmacy, the use of multiple medications to treat multiple illnesses (Wright et al., 2008, p. 294-299).

When seeking health care older adults may face a variety of challenges. For example, many older adults live on fixed incomes, which may limit their ability to handle health care needs (Wright et al., 2008). In health care situations, older adults are subject to traditional stereotypes and may encounter situations of over-accommodation (i.e. talking to the older adults like a child) or under-accommodation (i.e. not engaging in meaningful conversation with the older adult) (Wright et al., 2008).

Haber (2007) reports the importance of injury prevention for older adults. Haber notes that injuries occurring in automobile accidents and falls are the two leading causes of injury. In the current study, the term "to fall" references "any involuntary change from a position of bipedal support (standing, walking, bending, reaching, etc.) to a position of no longer being supported by both feet, accompanied, by (partial or full) contact with the ground or floor'' (Means et al., 2006, p. 1032). The following section further explores the importance of falls prevention.

Importance of falls prevention

Falls prevention is integral to maintaining the health of older adults. The data indicates that one in three older adults fall each year (CDC, 2005; Stevens et al., 2008). Falls can result in minor injuries, such as cuts or bruises, to severe trauma or even death (Sterling et al., 2001). Rubenstein (2006) indicates that falls account for two-thirds of injury-related death in older adults. In Kansas between 2003 and 2007, falls were the foremost cause of injury-related death for older adults accounting for more than 1000 unintentional deaths, 19% of the total number of unintentional deaths in that time period (KDHE, 2009). The Kansas falls mortality rate is approximately 1% higher than the national average of 6.8% (KDHE, 2009).

It must also be noted that falls are costly. Nearly $19.2 billion dollars were spent nationwide in 2000 for medical care associated with falls (Stevens et al., 2008). The creation of falls prevention initiatives could help to alleviate costs (Stevens et al., 2008). Additionally, prevention initiatives serve to eliminate the need for medical care and add to an individual's quality of life. Rogers et al. (2004) state that identification of falls risk factors and appropriate interventions can steeply decrease the chance of an older adult experiencing a fall. These findings were the impetus for creation of the Falling LinKS initiative.

Falling LinKS initiative

Falling LinKS was funded by the United Methodist Health Ministry Fund grant #20080427 (11-28-2008 to 5-2010) and the WSU Graduate School. The WSU Falling LinKS Research Team is comprised of individuals from various disciplines, including communication, exercise science, gerontology, and pharmacology, among others. Team members include: Drs. Teresa Radebaugh (Principal Investigator), Candace Bahner, Deborah Ballard- Reisch, Mr. Michael Epp (Envision), Dr. LaDonna Hale, Mr. Rich Hanley (Harvey County Department on Aging), Ms. Karen Kendrick (Envision), Drs. Michael Rogers and Nicole Rogers. The Falling LinKS research team is supported by WSU Graduate Students: the author, Ms. Ashley Archiopoli, Mr. Bobby Rozzell, Ms. Chigozirim Utah, Ms. Melissa Granville, and Ms. Katie Sue Williams.

The Falling LinKS initiative was grounded in research from the Centers for Disease Control and Prevention (CDC) (2005) and the National Council on Aging (NCOA) (2005) that identifies four areas proven to prevent falls in older adults; engagement in regular physical activity, vision screening and appropriate vision care, the removal of hazards in the home, and a review of medications, primarily identifying drug interactions that may precipitate conditions that lead to falls. Recognizing the primary factors for preventing falls sets the groundwork for the Falling LinKS prevention initiative. The ultimate goal of the Falling LinKS collaboration with Harvey County was to develop a falls prevention toolkit tailored to the community's needs, built upon the above recommendations from the CDC and NCOA (Falling LinKS UMHMF grant, 2008). This process involved six stages of research and development.

The Falling LinKS team has two sub-teams, one for toolkit development and one to conduct community-grounded research. The community-grounded research team led by Dr.

Deborah Ballard-Reisch, is comprised of graduate students, the author, Ashley Archiopoli, Bobby Rozzell, Chigozirim Utah, Melissa Granville, all from the Elliott School of Communication at Wichita State University, and Rich Hanley, Director of the Harvey County Department on Aging. The community-grounded research team used the theoretical orientation of engaged scholarship (Putnam, 2009; Simpson & Seibold, 2008; Barge & Shockley-Zalabak, 2008) and CBPR methods (Israel et al., 2005; Minkler & Wallerstein, 2008) to help identify the need for and interest in a falls prevention program among Harvey County collaborators. Data collected during Stage 1 of Falling LinKS was initially analyzed for recommendations relevant to toolkit development and presented to the toolkit development team.

The community-grounded team used CBPR methods to collaborate with Harvey County community members in an effort to: gather information on the county context; learn how stakeholders would prefer falls prevention information be disseminated; and most importantly work in partnership with the community to embed the falls prevention program in the county infrastructure. Importantly, this project recognized the challenges in rural health and worked to mitigate disparities that older adults living in rural areas of Kansas may encounter. The following section describes some of the dynamics of rural areas.

### Dynamics of rural areas

Rural and frontier areas make up the majority of the landmass in the United States; approximately 70 million people live in such areas (Graziplene, 2009). In Kansas, nearly 2/3 of the 105 Kansas counties are designated as rural or frontier (Institute for Policy & Social Research, 2009). Health disparities in rural areas are often due to “geographic isolation, socio-economic status, health risk behaviors, and limited job opportunities” (RAC, 2002-2003). The number of hospitals and health care professionals in rural areas is dwindling (Graziplene, 2009).

Many communities experience inadequate, or worse, non-existent health care. Less than 10% of physicians practice in rural areas (RAC, 2002-2003). Additionally, the average age of health care professionals working in rural and frontier areas is over 55 (Graziplene, 2009, p. 10). The following section completes context development by introducing Harvey County.

Harvey County, Kansas

This thesis examined the partnership between Falling LinKS and Harvey County, the pilot County for the Falling LinKS initiative. The partnership for the Falling LinKS project began when Dr. Teresa Radebaugh gave a presentation on the importance of falls prevention for older adults in rural and frontier Kansas. After her presentation, Mr. Rich Hanley, Director of the Harvey County Department on Aging, offered Harvey County as a pilot site for such an initiative. The Harvey County commissioners concurred, as did the research team, and an academic/community partnership (Clements-Nolle et al., 2005) was initiated.

Harvey County's status as a rural Kansas county and its large population of older adults, made it an appropriate site for the partnership. Harvey County is home to approximately 33,675 people (U.S. Census Bureau, 2008). 90.2% of the County population is Caucasian, 9.7% is of Hispanic descent, 1.7% is black or African American, .05% is American Indian, .05% is Asian American (U.S. Census Bureau, 2008). The median age in Harvey County is 39.1 (U.S. Census Bureau, 2008). Approximately 21.7% of the Harvey County population is aged 60 plus, 56% of the 60 plus population is female, while 44% of the 60 plus population is male (U.S. Census Bureau, 2008).

The county, which spans 540 miles, is located in south-central Kansas (Harvey County, 2008) approximately a 30-minute drive from Wichita State University. Seven towns are incorporated in the County: Burrton, Halstead, Hesston, Newton, North Newton, Sedgwick, and

Walton (Harvey County, 2008). The Harvey County Department on Aging is located in the county seat, Newton. The city of Newton is also a stop for the Santa Fe railroad, making railroads a strong industry in the County (Harvey County, 2008). Each incorporated town has a senior citizen center (Harvey County, 2008), where older adults can meet for activities or meals.

Unique to Harvey County is the large population of Mennonites. At one time Harvey County was considered "the center of the largest concentration of Mennonites west of the Mississippi River" (Stucky, 1956, p. 671). Today, there are more than 12 Mennonite churches located in the County (City Data, 2010). The Mennonites have contributed to the County by establishing two post-secondary institutions (Harvey County, 2008), Bethel College, a four-year liberal arts school, founded in 1887 (Bethel College, 2010), and Hesston College, a two-year college developed in 1909 (Hesston College, 2010).

Older adults living in rural Harvey County, Kansas have the same medical, social and financial needs as older adults living in more urban areas, but they have fewer resources. Now that the context for research has been developed, the next section of the literature review further elucidates the theoretical and methodological foundations through which data were collected for Falling LinKS.

## Foundations for Data Collection

### Theoretical orientation of engaged scholarship

The theoretical orientation of engaged scholarship provides an avenue for conducting health communication research outside of the traditional, top-down methods of the biomedical model by enacting the biopsychosocial model. Through engaged scholarship variables such as culture or mental state that affect one's health can be discovered.

Van de Ven (2007) defines engagement as a process that "involves negotiation and collaboration between scholars and collaborators in a learning community" (p. 7). Working together in the learning environment, scholars and practitioners co-produce knowledge by drawing from their varied areas of expertise and working collaboratively (Van de Ven, 2007). The process involves stakeholders throughout knowledge creation and intervention development (Simpson & Seibold, 2008; Barge & Shockley-Zalabak, 2008). Engaged scholarship is more beneficial when it is localized. Simpson and Seibold (2008) conclude, "the best engaged scholarship may or may not be widely disseminated, but it is widely owned by co-creators who believe in its purpose and product" (p. 268). In engaged scholarship a unique type of relationship develops between scholars and stakeholders; this relationship stresses reflexivity, co-learning, and aims to develop practical knowledge and theory (Barge & Shockley-Zalabak, 2008).

Engagement studies are prevalent throughout academic disciplines (Applegate & Moreale, 2001). However as Linda L. Putnam (2009) pointed out in her keynote address at the 7th Aspen Conference on Engaged Communication Scholarship, "we as communication scholars have a unique niche to play in defining, crafting, and enacting engaged scholarship because it cannot occur without communication" (p. 10). At the 2009 National Communication Association (NCA) Conference, a preconference was held to further explore that niche, focusing on development, definition, and the future of engaged organizational communication scholarship.

Among topics discussed were the four faces of engaged scholarship as outlined by Putnam (2009): 1) applied communication research; 2) collaborative learning; 3) activism and social justice; and 4) practical theory. Putnam indicates these faces are distinctly different, but related, and that they are not mutually exclusive. She explains that these faces stand apart from many disciplines because research is conducted collaboratively *with* participants. Each of the

above theoretical faces can be operationalized through various methods that emphasize engagement. The definitions and vocabularies of the four faces are shown in the table below.

**TABLE 1**

| Face of engaged scholarship | Definition | Vocabulary |
|---|---|---|
| Applied Communication Research | Aims to solve real-world problems by applying academic "theory and research" | Relevant, problem-oriented, practical, useable, translation research |
| Collaborative Learning | Emphasizes community participation in a process that is created to "socially construct and understand their worlds" | Co-creation, co-learning, conversation, partnership, community, inter/or multidisciplinary |
| Activism and Social Justice | Works to mitigate the exigencies of inequity and helps to empower the community | Action, change, inequity, moral imperative, advocacy |
| Practical Theory | Builds theory through a generative and reflective process – rooted in communication | Reflexivity, dialogue, transformation, generative theory, situated action |

*TABLE 1.* Putnam (2009) engaged scholarship distinctions.

Data collection in Stage 1 of the Falling LinKS initiative was conducted consistent with the collaborative learning face, which emphasizes the use of communication strategies to build knowledge about a problem within a community. Participation and collaboration from scholars and community members is essential to the research process. With a strong foundation of participation and collaboration, scholars and community members develop interventions to better the quality of life for individuals in the community. The collaborative learning face encompasses CBPR methods the following section discusses those methods.

Community-based participatory research (CBPR) methods

CBPR is also referred to as participatory research, participatory action research, action research, mutual inquiry, or feminist participatory research (Minkler & Wallerstein, 2008).

CBPR places emphasis on finding "local truth" instead of universal truth (Schwab & Syme, 1997). In CBPR, interventions are grounded in the community as opposed to being applied to, or inserted in it (Minkler & Wallerstein, 2008). Israel et al., (2005) summarize the basic principles of CBPR:

- It is participatory
- It is cooperative, engaging community members and investigators in a joint process in which both contribute equally
- It is a co-learning process
- It involves systems development and local community capacity building
- It is an empowering process through which participants can increase control over their lives
- It achieves a balance between research and action (p. 9)

It is evident that the basic principles of the collaborative learning face identified by Putnam (2009) can be operationalized through CBPR methods. They both involve co-learning, partnership, and community. CBPR places emphasis on active participation of community members in the research process; involving members of the community / organizational leaders, and scholars contributing their knowledge about a specific topic of interest (Israel et al., 2005).

Methods for the initial data analysis were developed using the basic principles of CBPR as outlined by Israel et al. (2005). The authors state there are a variety of ways that participatory research can be implemented, they outline nine principles of CBPR that can be used to guide initiatives. It is important to note, however not all principles must be used simultaneously or in all initiatives. This study used the following principles for engaging with Harvey County:

1. Identify the target community as a cultural unit that identifies with one another through "common symbol systems, values, and norms; shared interests; and commitments to mutual needs" (p. 7).
2. Recognize and build on existing infrastructure and community talent
3. Create an environment of collaboration in which all members of the research team share in all parts of the research working together to fill gaps of knowledge
4. Maintain a focus on co-learning, meaning that all members of the research team work together informing one another throughout the research process
5. Participatory research mutually benefits academic research and communities
6. Participatory research recognizes there are a multitude of determinants for one's health including, "biomedical, social, economic, cultural, and physical environmental factors" (p. 8).
7. CBPR should be "cyclical and iterative" (p. 8), meaning collaborators are involved in each step of the participatory research process.
8. Participatory research "disseminates results to all partners and involves them in the wider dissemination of results" (p. 9).
9. Participatory research is characterized by the commitment of the research team to sustain the relationships developed and to carryout participatory research initiatives (p. 7-10).

Each member of the research team has a different role to play in participatory research; individuals contribute their expertise to the overall project. The level of participation is a major consideration for scholars, as they must determine if community stakeholders are minimally involved in the project, or if they should assist in the project development (Wallerstein & Duran, 2006).

Stoecker (2008) outlines three roles that community-based participatory investigators can play including the initiator, the consultant, or the collaborator. Those playing the role of the *initiator* step into a community with a commitment to identify needs for change and facilitate problem solving within the community. While this role is not purely participatory research, it has been proven to be effective in some situations. The role of *consultant* involves the investigator being contracted by the community to conduct research, involving the community in every step of the research process. The final role of *collaborator* is when the investigator's methods are complimented by the community leader's knowledge of the community. Together the two entities work to facilitate change in the community.

The Falling LinKS team played the role of collaborator to co-produce knowledge with Rich Hanley, Harvey County health care providers, community volunteers, and older adults. The next section presents the process through which the Falling LinKS data were collected.

### Falling LinKS community-grounded process

The Falling LinKS project was structured to include collaboration with health care providers, community volunteers, and older adults. The three groups of collaborators were used to generate a comprehensive understanding of the community context. The Falling LinKS community-grounded team recognized that the divisions were not mutually exclusive, i.e. an older adult could also serve the community as a volunteer; acknowledging this overlap leads to greater understanding of the community context.

In line with the basic principles of CBPR (Israel et al., 2005), research within the Falling LinKS project took an iterative approach meaning that researchers continuously probed collaborators for feedback and refined and modified their approaches accordingly. During the research process Mr. Hanley was integral to connecting investigators with the community. Mr.

Hanley served as the liaison between Falling LinKS and Harvey County, introducing researchers by connecting the Falling LinKS research team with health providers, community volunteers, and older adults in the County.

Falling LinKS data were collected through collaboration with health care providers and community volunteers first. Then additional data were collected through collaboration with older adults. Data were collected from two types of interviews. Research collaboration began with key informant interviews (KIIs), which are one-on-one interviews with individuals who are knowledgeable about a subject the researcher wants to know more about (Clements-Nolle et. al., 2005). KIIs are prepared and lead by the researcher, but expanded on by the key informant through responses to open ended questions. During the KIIs, interviewers audio recorded the proceedings and typed responses into the computer as the interviewee spoke. Within 24 hours of the interview, researchers created an interview data file by reviewing the typed notes and referred to the recording in order to make a comprehensive record of each interview. Once KIIs were completed a summative focus group was held for each to reinforce, validate and further inform the information collected during KIIs.

Focus groups are semi-structured group discussions led by a moderator (Krueger & Casey, 2009). Falling LinKS used roles and procedures for focus groups as outlined by Sacks and Ballard-Reisch (2006). Roles included the *facilitator*, responsible for moderating the discussion, the *recorder*, responsible for taking notes, and audio recording the proceedings, and the *scribe*, responsible for writing key points from the discussion on flipcharts for focus group participants to reference throughout the proceedings. The data file was then completed through a process of collaboration that moved from the recorder, to the scribe, and finally to the facilitator.

Each person checked the data for completeness and expanded as necessary. The final data file was compiled within 24 hours of the event.

Different sets of questions were used for health care provider/community volunteers and older adults. Questions used with health care providers/community volunteers can be found in Appendix A; questions used with older adults are in Appendix B.

Research collaboration with health care providers/community volunteers took place between February 10, 2009 and February 23, 2009. Mr. Hanley and other members of the Falling LinKS team identified health care providers and community volunteers who would be invited to participate in KIIs. Before the interviews took place Mr. Hanley personally informed participants by phone or face-to-face about the project and invited them to take part in an interview. Once individuals agreed to be interviewed, their contact information was disseminated to the graduate students on the community-grounded research team: the author, Ashley Archiopoli, Bobby Rozzell, Chigozirim Utah. Fifteen health care providers and community volunteers agreed to take part in interviews. The interviews asked questions from five broad context areas, with regard to Harvey County: context, need for/interest in a falls prevention program, infrastructure and capacity, dissemination methods, and potential collaborators. Fourteen of the 15, as well as Mr. Hanley, were ultimately interviewed. Once all KIIs were completed the raw interview data files were compiled into one document for analysis. The summative focus group interview was held on June 16, 2009 at Bethel Kidron Inc. in North Newton; ten health care providers/community volunteers attended the event. The focus group asked questions from six broad context areas with regard to Harvey County: context, need for/interest in a falls prevention program, infrastructure and capacity, dissemination methods, and potential collaborators, and health promotions. This concluded research health care providers/community volunteers.

Research collaboration with older adults focused on gaining insight into the opinions of older adults about three broad context areas; perceptions regarding falls prevention, falls prevention initiative, and framing the initiative. The methods used to collect data with health care provider/community volunteers were duplicated when collecting data with older adults. The initial participant list was generated with the help of the health care providers and community volunteers who were previously incorporated as collaborators, Mr. Hanley, and members of the Falling LinKS research team. When collaborating with older adults the Falling LinKS team specifically requested older adults who are well connected in the community or had a unique situation. Approximately 15 older adults were identified for possible participation. Again, they were contacted first by Mr. Hanley, who informed them about the project and invited them to participate. From there, the participant contact information was distributed to the graduate students to schedule interviews. Ultimately 16 interviews were conducted with older adults between July 20, 2009 and August 8, 2009. Once all KIIs were complete, the interview data were compiled into one document and thematically analyzed (Boyatzis, 1998) for initial recommendations. The summative focus group was held on August 17, 2009, at the Hesston Senior Center; nineteen older adults attended the proceedings. The same questions that were used during the KIIs were used for the focus group interviews.

Each community-grounded team member conducted a data driven inductive thematic analysis (Boyatzis, 1998) looking for recommendations specific to the development of the Falling LinKS toolkit. Findings were first generated individually. Then, Dr. Ballard-Reisch and the author, Ashley Archiopoli worked collaboratively to integrate individual findings from all four team members into a draft summary report. Once this was complete, the entire community-grounded team discussed findings until consensus was reached. Data were analyzed using this

process for each round of interviews, first after health care provide/community volunteer KIIs, then after the health care provide/community volunteer focus group, and similarly after the older adult KIIs and summative focus group. Three summary reports were submitted to the Falling LinKS toolkit development team, one after research collaboration with health care provide/community volunteer, one after research collaboration with older adults, and one that combined the findings from both health care provider/community volunteer and older adult data. Now that the procedures for initial data collection and analysis have been outlined, the culture-centered approach, which is the foundation of the secondary data analysis, is discussed.

## Alternative Frame for Analysis

### The culture-centered approach

This alternative frame of analysis was used as a basis for the secondary analysis in order to "reconsider and reinterpret" (Rubin et al., 2009, p. 214) data. The culture-centered approach is a unique frame used for the purposes of this thesis and the secondary analysis. The approach had not been previously applied to Falling LinKS data during any stages of data collection or the initial analysis. The culture-centered approach was selected as the alternative frame because methods identified for data analysis in the approach (Dutta, 2008) are consistent with Falling LinKS Stage 1 data collection. More importantly, use of this frame provides an opportunity for exploring the efficacy of the culture-centered approach.

The culture-centered approach (CCA) focuses on questioning the erasures of marginalized voices in health care, and seeks opportunities to co-construct health narratives with marginalized communities (Dutta, 2008). CCA views culture as the filter through which individuals understand their health and illness. Dutta (2008) states that this approach offers an "entry point for engaging with the culturally situated nature of health communication processes and meaning"

(Dutta, 2008, p. 1). This is done through a two-way communication process of equality and sharing. Researchers using the CCA must engage with target communities in order to develop a full understanding of the structures that dominate their lives, and the stories that are created within them.

Basic characteristics of CCA include: ideals of "power" that favor "the interests of dominant social actors"; "marginalization" which reflects on traditional practices of health communication and how such practices neglect communities that are outside the mainstream; "context" the situation in which health is being experienced; "stories" that are created through experience in dealing with structures, agency, and culture. "Resistance" speaks to the ability of marginalized communities to enact agency and challenge structures (Dutta, 2008, p. 12-13).

CCA examines the dynamic interaction of three concepts: structures, culture, and agency. Each of these concepts plays a role in how communities understand and experience health and illness. Recognizing this, the CCA suggests a critical analysis of each concept in community narratives. The concept of "structure" is the existing capacity and resources within a community, such as health providers and transportation. Structures can be beneficial because current structures support health within a community, or restrictive, in the sense that some resources or services may not be available to the community, or structures don't support health. Additionally, structures can be challenged to bring about change to a community.

Within CCA, the concept of "culture" is the local interpretation of health based on the values, beliefs and practices of the area. Dutta (2008) views culture as a dynamic force that is influenced by tradition, and current trends or structures. Local health culture is produced by individuals' day-to-day health and illness interactions. Finally, the concept of "agency" is the ability of community members to actively pursue participation in change initiatives, either to

challenge or collaborate with existing structures. The figure below, adapted from Dutta (2008) shows how the three elements interact with one another.

**FIGURE 1**

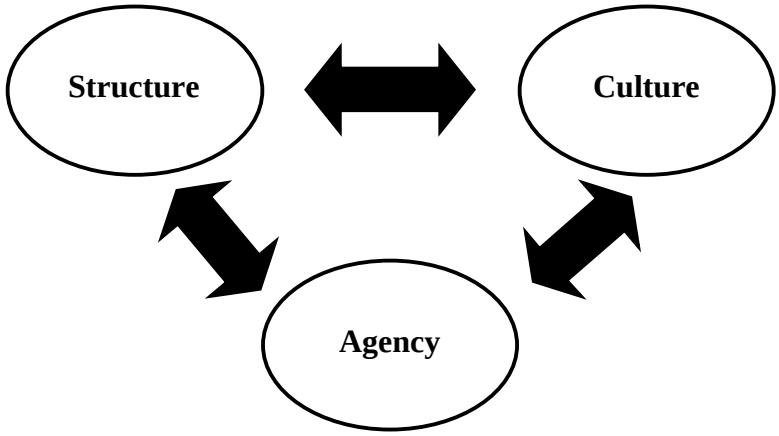


*FIGURE 1*. Dutta (2008) dynamic interaction of structure, culture, and agency.

The three intertwined concepts gather meaning through their interaction with one another. It is the interplay of these concepts: structures, culture, and agency that open spaces for discourse concerning health and illness within communities. Structures provide the background for cultural stories and experiences to be shared, and they are the context within which health culture is conceptualized. Agency is the ability of individuals to act within and change health contexts. It is the interaction of the three concepts that provided the framework for applying CCA to the Harvey County context, and in turn an examination of the efficacy of the culture-centered approach can be conducted.

## RATIONALE

The culture-centered approach (CCA) was used as an alternative frame for secondary analysis in order to assess the following overarching questions: 1) What insights does a culture-centered approach offer to understanding Stage 1 data from the Falling LinKS initiative? 2) To what extent is the culture-centered approach applicable to the context of a community-grounded falls prevention initiative in rural Harvey County, Kansas? The overarching questions were structured to reciprocally inform each other in an iterative process.

The overarching questions are addressed through a series of four research questions. As indicated in the review of the CCA, the three central concepts (structures, culture, and agency) are dynamically intertwined. Understanding that the concepts are interrelated in the culture-centered approach, each research question builds on the prior questions and allow for continuous refinement. CCA provides a framework of structures, culture and agency as a way of learning about a community. The concepts of CCA and the interactions among them, set-up the RQs 1-3, which intend to gather insights about Stage 1 of the Falling LinKS/Harvey County partnership, the first overarching question. The second overarching question was informed by a comparison of the secondary analysis with the initial analysis in RQ4.

## RESEARH QUESTIONS

The first three research questions have been adapted from CCA using elements of the theory. Findings from RQs 1-3 inform the first overarching question. The first research question in this study was designed to examine structures that currently provide services for older adults in Harvey County. As Dutta (2008) explained, structures can both "constrain and enable" (p. 5), this question assesses the extent to which structures in Harvey County constrain or enable older adults with respect to their access to health services.

**RQ1: What structures are currently offering services to meet the health and wellness needs of older adults in Harvey County?**

The second set of research questions examined the concept of culture within CCA, specifically, the health culture of older adults living in Harvey County. The concept of culture in CCA advances that beliefs about health and illness are "embedded in cultural beliefs, values, and practices" (Dutta, 2008, p. 7). The first goal in this set of questions is to understand the overall older adult health culture that has developed, and then more specifically the culture that has developed within the older adult community relating to falls.

**RQ2: What is the older adult health culture in Harvey County?**

**RQ2a: What is the older adult falls culture in Harvey County?**

The third research question analyzed the third concept of CCA, agency. Dutta (2008) explains that agency is "the ability of individuals to enact their choices" (Dutta, 2008, p. 7). This includes what change activities are taking place, active/willing participation, and seeing a need for change. Before bringing in a new form of agency (i.e. Falling LinKS) this question determines the current state of health care and falls agency in the County.

**RQ3: What acts of agency to promote health are currently taking place in the Harvey County older adult community?**

The fourth research question addressed how the findings compare between the secondary analysis and the initial analysis.

**RQ4: How does the secondary analysis compare with the initial analysis of Stage 1 Falling LinKS data?**

# CHAPTER 2

# METHODOLOGY

## Thematic Analysis

This study used thematic analysis (Boyatzis, 1998) to analyze the research questions. Thematic analysis, a qualitative method, provides researchers with a systematic approach to analyzing various forms of data, and enhances the accuracy and understanding of phenomenon (p. 5). There are three approaches to thematic analysis, 1) deductive/theory driven, 2) prior data or research driven, or 3) inductive/data driven. This study used a deductive thematic analysis for the first three research questions, and an inductive thematic analysis for the last research questions.

In thematic analysis there are four major steps:

1. First the researcher immerses her/him self in the data to become familiar with the content and to recognize patterns within the data
2. Second the researcher consistently encodes the data to reflect themes found deductively, inductively or through prior research
3. From there the researcher develops the code that will be used for analyzing the data
4. Finally the researcher finds meaning in the patterns or themes that emerged from the code, and interprets findings (p.11)

Procedures for analysis

Methods for analysis used in this thesis were original work done by the author and independent of the initial analysis. The culture-centered approach was used to create a theory-driven thematic analysis for the first three research questions. In a theory-driven approach to

thematic analysis, the code is developed using "elements of the theory" (Boyatzis, 1998, p. 33). The code was developed using descriptions of structures, culture, and agency (Dutta, 2008). Criterion for each code is discussed in detail later. Health care provide/community volunteer and older adult data were coded four separate times; once for structures, once for health culture, once for falls culture and once for agency. After the first three research questions were answered, an inductive, or data-driven thematic analysis was used to address the last research question. When using the inductive method of thematic analysis, the researcher immerses herself in the data to allow themes to emerge. As stated above the first three research questions, informed the first overarching question, findings RQ4 informed the second overarching question, as outlined below.

Data were organized into four datasets; health care provide/community volunteer KII data, health care provide/community volunteer focus group data, older adult KII data, and older adult focus group data. Each of the four documents was analyzed separately by research question. To make analysis easier, the dataset was printed out four times, each time on a different color of paper to identify how each data set was coded. Analysis began with a preliminary reading and evaluation to gain familiarity with the data. The same three-step deductive thematic analysis was used for RQs 1-3.

**RQ1: What structures are currently offering services to meet the health and wellness needs of older adults in Harvey County?**

**RQ2: What is the older adult health culture in Harvey County?**

**RQ2a: What is the older adult falls culture in Harvey County?**

**RQ3: What acts of agency to promote health are currently taking place in the Harvey County older adult community?**

The first step for RQs 1-3 was to code health care provider/community volunteer and older data according to references to structures, culture and agency. The data were coded for key words, context phrases, actions and statements, and narratives related to the code. Codes used during analysis are as follows:

RQ1 Code – Structures:

- Health care/medical services
- Wellness centers
- Transportation services
- Food/nutrition services
- Housing
- Other services to older adults
- Description of how infrastructure and health care in the County are organized
- Descriptions of how services are delivered
- Descriptions of how information about the services is disseminated/channels of communication

RQ2 Code – Older Adult Health Culture:

- Beliefs about illness
- Beliefs about health
- Values within the culture about health, illness
- Health and practices

RQ2a Code – Older Adults Falls Culture:

- Falls
- Beliefs about falls

- Values within the culture about falls, falling
- Falls practices

RQ3 Code – Agency:

- Current health promotion activities in the community
- Ability of individuals and the community to respond to change
- Individuals' active participation
- Individuals' ability to envision change
- Ability of individuals to enact their choices

After each document was coded separately, the second step for RQs 1-3 was to search findings for appropriate themes and sub-themes, using key words, context phrases, actions and statements, or narratives as support for each theme and subsequent sub-themes. The third step involved collapsing and revising themes as appropriate. After all three steps of analysis were completed findings from RQs 1-3 were re-evaluated and revised as the understanding of the data and Harvey County context deepened. The following research question used a process of inductive thematic analysis.

**RQ4: How does the secondary analysis compare with the initial analysis of Stage 1 Falling LinKS data?**

The final question, RQ4, used a three-step, inductive thematic analysis process. This time, instead of being immersed in the data, the researcher was immersed in the findings, allowing for themes and sub-themes to emerge. The first step was to read and re-read the findings from RQs 1-3, principally examining the effectiveness of the CCA as a frame, in particular, its ability to reveal novel themes. The next step compared findings from the secondary analysis RQs 1-3, with the initial Falling LinKS findings.

# CHAPTER 3

# RESULTS

The purpose of this study was two-fold, first to discover what novel insights the culture-centered approach might offer toward understanding Stage 1 data from the Falling LinKS initiative and second to test the efficacy of the approach when applied to a community-grounded falls prevention initiative in rural Harvey County, Kansas. Two overarching questions were derived from the above purposes 1) What insights does a culture-centered approach offer to understanding Stage 1 data from the Falling LinKS initiative? 2) To what extent is the culture-centered approach applicable to the context of a community-grounded falls prevention initiative in rural Harvey County, Kansas? Four research questions are discussed in turn to inform the overarching questions. Research questions 1-3 were used to inform the first overarching question, and the second overarching question was informed by RQ4. This thesis used a process of thematic analysis, a deductive analysis for RQs 1-3 and an inductive analysis for RQ4. This chapter outlines results in terms of research questions.

The first three research questions adapted the concepts of structures, culture, and agency from the culture-centered approach (Dutta, 2008) as the foundation for a deductive thematic analysis. The code was developed from Dutta's description of each concept. Data, organized into four datasets: health care provide/community volunteer KII data; health care provide/community volunteer focus group data; older adult KII data; and older adult focus group data, were analyzed separately for each research question. Findings were analyzed across datasets. Intersection and diversion of themes among the datasets is discussed below. The first research question is concerned with structures or the existing capacity and resources available to older adults in Harvey County (Dutta, 2008).

Structures can be classified as County infrastructure that provides health and medical services, transportation, housing, and other services to older adults, along with channels of communication (Dutta, 2008). To address the first research question, datasets were coded for key words, context phrases, actions and statements, and narratives related to structures in order to address the following research question:

**RQ1: What structures are currently offering services to meet the health and wellness needs of older adults in Harvey County?**

Data analysis revealed several findings and themes. Three themes were consistent across the datasets. A total of 58 unique structures emerged that were grouped into the following three themes: 1) traditional structures, 2) wellness structures, and 3) media structures.

### Traditional structures

The first theme that emerged was traditional structures. This thesis defines traditional structures as any organization that provides conventional health services to older adults. These include structures such as the Harvey County Health Department, health care practitioners such as doctors, nurses, and medical specialists, Meals on Wheels, The Harvey County Department on Aging, transportation services, long-term care homes, Medicaid/Medicare, and senior centers. All collaborators consistently suggested the same structures; in total 30 unique traditional structures were identified by collaborators. Two sub-themes developed out of this theme including the 1) limitations of traditional structures, and the 2) strengths of traditional structures.

Limitations of traditional structures in Harvey County

There were three limitations of Harvey County structures that emerged from the data, 1) the ability of senior centers to meet the needs of older adults, 2) transportation, and 3) budget limitations.

*Senior Centers.* The first limitation deals with senior centers in Harvey County and their ability to meet the needs of older adults. Many older adult collaborators communicated the sentiment that senior centers are tailored to the needs of sedentary and frail older adults, as opposed to active older adults, and thus, more active or younger older adults perceive them negatively. Older adult collaborators joked about the negative connotation of senior centers using the example of a cartoon where an old man goes into a senior center and says its not for him, "they're all old there." One older adult pointed out that it is a shame that "active" older adults stay out of senior centers, because they could contribute a lot to the centers. A majority of health care provider/community volunteer collaborators suggested senior centers as potential organizations that could support the Falling LinKS initiative – however, only one health care provider/community volunteer disclosed that senior centers might not meet the needs of all older adults.

*Transportation.* The second limitation is transportation. This theme was most evident in health care provider/community volunteer data. The transportation office is limited in the sense that individuals who need transportation to and from locations must first contact the office. As the transportation director stated, "unless they know me and call me, I don't know they need a ride." In other words, the reach of the transportation office is limited. Health care provider and community volunteer collaborators also indicated that Harvey County older adults must get

transportation to larger cities like Wichita or Hutchinson to get services like Lifeline. Individuals without transportation, particularly those with physical limitations can be isolated from County structures, especially social structures, without a ride.

As a health care provider/community volunteer stated, “If they can’t get there, they can’t participate.” An older adult collaborator who is physically disabled attested to this when discussing the falls prevention initiative, “it would be nice to go to the senior center and learn all of this, but I am never able to go to the senior center, because I’m not able to drive,” she continued to explain that the interurban bus (local transportation) can only take her to and from medical appointments.

*Budget limitations.* The third limitation comes in the form of budget and monetary challenges. Specifically health care providers/community volunteers stressed budget cuts that may affect senior centers, transportation, and other older adult services in the County. The same data indicated that lower income older adults are not able to purchase some health amenities that structures provide, such as Lifeline or other in-home technologies. When asked if there are any significant populations that should be taken into account in the initiative, an older adult collaborator stated, “The poor people, the one’s that don’t have very much, and they don’t want to be a burden. They can’t afford a lot of things, and they try to get on without.” This statement expands on the findings from health care provide/community volunteer data.

Strengths of traditional structures in Harvey County

The three limitations of the traditional structures available in Harvey County are balanced by three strengths of traditional structures in the County, 1) the Harvey County Department on Aging, 2) long-term care facilities and 3) Senior Centers.

*Harvey County Department on Aging.* The first strength is the Harvey County Department on Aging, the majority of health care provider/community volunteer collaborators emphasized how important Rich Hanley, and the Department on Aging, are to the County's older adult community. Specifically health care providers/community volunteers explained the department provides, food/grocery services, transportation and disseminates a monthly newsletter, among other services. Additionally, the Department on Aging holds meetings that bring together all the agencies that service older adults in the community. One health care provider/community volunteer summed up Mr. Hanley's work by stating, "Rich, our man in the Department on Aging, is just absolutely super." However, older adult collaborators did not know as much about the Department on Aging as health care provide/community volunteer collaborators, the Department was mentioned twice with no description of their services. When asked who in the community could most effectively lead a falls prevention initiative one older adult stated, "Department on Aging, Rich Hanley, I am not affiliated with the senior center so I don't know how effective that would be".

*Long-term care facilities.* The second strength of traditional structures in Harvey County is the long-term care facilities. A health care provider/community volunteer characterized Harvey County as a "retirement Mecca," another stated, "We have good long-term care facilities. The area has planned well for the future, and for decades to come with a number of local facilities." In total, all collaborators identified seven long-term care homes in the County. Despite the strengths of the long-term care homes older adult collaborators made it clear that they want to stay in their homes as long as possible. One older adult stated, "I already walk very carefully…I do not want anybody to take care of me in case of a fall. I would want to stay in my home and avoiding nursing homes. The providing of home health care is always a concern of

mine, avoiding any injury." Another talked about the importance of being at home by saying, "People, older people like to be at home. There is something very personal about their home, their personal belongings".

*Senior Centers*. The third strength is the senior centers. While these were discussed as limitations, collaborators all recognized their strengths. Senior centers can provide gathering space for older adults, and are a good channel for disseminating information to older adults. Some senior centers in the County run group exercise classes. For example an older adult collaborator explained that the Hesston Senior Center holds a class every Monday-Wednesday-Friday morning, led by a volunteer. Similar programs are used at other senior centers in the County. There are also Nintendo Wii consoles at each center in the County.

## Wellness structures

The second theme that emerged is wellness structures, specifically structures that promote social or physical wellness.

### Social Wellness Structures

Social wellness structures include environments that provide a social outlet that is comfortable or low-risk. These were identified as places where older adults already gather. Collaborators identified social wellness structures when discussing the context areas of infrastructure and collaborators. The data indicated that many older adults use churches as a place to socialize with others who are like them. One health care provider/community volunteer defined Harvey County as "exceptionally devout." An older adult expanded upon these ideas by emphasizing the strength of the churches and Ministerial Alliance in the County. For example,

the Ministerial Alliance was able to gather approximately 2,500 people to join hands and say a prayer for the Newton Medical Center's 10th Anniversary celebration.

Both health care provider/community volunteer and older adult data suggested civic groups such as RSVP – an older adult volunteer program, fraternity and sorority alumni groups, Veterans of Foreign Wars, and game groups, among others, as infrastructures that could support the Falling LinKS initiative by collaborators. Health care provider/community volunteer collaborators also identified places like local spots such as the Water's Edge Restaurant or Drubber's Donuts.

Physical Wellness Structures

Structures that promote physical wellness are also places where older adults gather. Findings in this sub-theme were consistent across all datasets. Examples included, the Newton Recreation Center, which provides an air-conditioned gym, Tai Chi classes taught by Mr. Hanley, and the Silver Sneaker exercise group. In general collaborators spoke positively of the Tai Chi, and found that the classes encourage older adults to be active. Similarly collaborators spoke highly of the Silver Sneakers exercise program for older adults. The Silver Sneakers workout group is lead by trained exercise professionals, and 140 people regularly attend. Data indicated that Silver Sneakers is a free program where older adults can maintain their fitness in a supportive environment. A health care provider/community volunteer also pointed out that Silver Sneakers is successful because it is, "Well organized and well publicized."

Media structures

The third theme that emerged was media structures; this includes the media outlets identified as places where older adults get their information or avenues for communicating with

older adults. Health care provider/community volunteer data indicated that older adults use more traditional sources of media, as opposed to the Internet for information gathering. One health care provider/community volunteer collaborator stated, “Most older adults don’t have email and they tend to rely on traditional means.” Collaborators identified local newspapers that circulate in the County. All collaborators mentioned the *Newton Kansan.* Older adult collaborators added the *Rural Messenger*, *The Prairie Advisor*, and *Active Aging* as places they look for information. One older adult collaborator who self identified as an “avid newspaper reader” stated one place to gather falls prevention information is from the newspaper. In addition to these publications older adults also find information in national sources like *AARP Magazine* and health publications. All collaborators consistently identified public radio and the local Cox Cable channel as places where older adults go for health information and that could be used to communicate with older adults about falls prevention.

The second research question addressed the health and falls culture in Harvey County. Dutta (2008) defines the concept of culture within the culture-centered approach as the local interpretation of health based on the values, beliefs and practices of the area that is produced during individuals’ day-to-day interactions with health and illness. The datasets were coded for key words, context phrases, actions and statements, and narratives related to health culture then falls culture in order to analyze the following research questions.

**RQ2: What is the older adult health culture in Harvey County?**

**RQ2a: What is the older adult falls culture in Harvey County?**

Throughout analysis it was evident that findings from RQ2 and RQ2a overlapped, thus their findings are reported jointly. Three themes consistently emerged from the datasets; these

include 1) beliefs/knowledge about health and falls, 2) want/need for independence, and 3) fear of falling. The following section discusses these three themes.

It is important to understand when discussing older adult health and falls culture that "older adults" don't consider themselves "old." The consensus among collaborators was that no one is old enough to be classified as "old" or that someone else is always older. Additionally, older adult collaborators requested that the term "senior" not be used to describe their age group because the word has a negative connotation.

**Beliefs/knowledge about health and falls**

The first theme that emerged from the data to address RQ2 and RQ2a was beliefs/knowledge about health and falls. Collaborators consistently indicated they believe Harvey County would benefit from a falls prevention initiative. Data also indicated that staying healthy and avoiding falls means an individual can stay in their home longer – an important issue for older adults. Two general stances on older adults and falling emerged from the datasets. The first emerged from all datasets and takes a fatalistic point of view, "I'm (they're) old, I'm (they're) going to fall." A health care provider/community volunteer stated about his 90-year-old mother, "she will fall." Older adults data added, "Falling is part of getting old" and "I don't think I have a friend who has not fallen at least once this year." The second stance, "that won't happen to me!" emerged from older adult data. An older adult explained, "Nobody is old enough, you're not old, I'm not going to fall."

Two sub-themes related to beliefs and knowledge about falls emerged: 1) older adults' habits related to health and falls and 2) causes of falls.

Habits related to health and falls

Collaborators most widely held belief was in the importance of physical activity. Many collaborators talked about the importance of staying active in old age, or at any age. One collaborator pointed out that one must “keep up activity so as not to lose muscle mass.” Data also indicated that collaborators are aware that physical activity, specifically exercises for balance will help prevent falls and maintain agility. Older adults noted that health problems are related to the older adult habit of inactivity. However, older adult data indicated that some older adults are habitually inactive. Lack of exercise and lack of motivation to exercise were discussed throughout older adult data. In short the data indicated that some older adults do not like to exercise or get out of their chair. One older adult stated, when talking about exercise, “they think I’ve been there, done that. I’m tired, why would I want to get up and walk!”

Also related to lack of activity is obesity. This topic arose throughout the older adult data. Older adults found obesity to be a consequence of bad eating habits and unwillingness to be active. One older adult also cited the health problems that obese individuals are more likely to develop such as hypertension, heart attacks, diabetes, and circulation problems. While the theme of obesity and extra weight was consistent throughout older adult data, there was only one mention of overweight older adults in health care provider/community volunteer data. Reduced physical activity was consistently recognized as one of the reasons why older adults fall. A health care provider/community volunteer collaborator stated when speaking about a physical activity program in the County, “they do strengthening exercises, and they are more active and this helps them in falls.”

Causes of falls

In addition to pointing out the importance of physical activity, collaborators indicated the three other main causes of falls. When asked about the causes of falls older adults recognized low or poor vision, as a cause of falls, however health care providers/community volunteers did not. Instead, they described low or poor vision as a communication challenge; noting that materials intended for older adults must meet visual standards for older adults.

Collaborators consistently recognized that medications could contribute to falls. One health care provider/community volunteer stated, “I think a lot of older Americans are on a lot more medication then they were when they were younger, and there is always some side effects with that. One of those things affects your balance.” Other collaborators discussed the importance of speaking with doctors and pharmacists about medications and interaction. Collaborators were also well aware of the need for home safety and correcting potential hazards in the home. Picking up rugs, moving cords, and putting away clutter were provided as examples of home safety. In addition to the above four areas, collaborators cited such things as pets, uneven ground or sidewalk, winter weather and unwillingness to use a cane or walker as others reasons why one might fall.

**Want/need for independence**

The second theme that emerged from RQ2 and RQ2a was the want/need for independence. Throughout the data, the subject of older adults and the want/need for independence was reoccurring. The data revealed that older adults are prideful about health and falls and tend to remain ruggedly independent. Collaborators shared that the theme of independence often keeps older adults from seeking help in regard to their health and avoiding falls. Health care provider/community volunteer data indicated that older adults often have a hard

time admitting that they have a health or falls problem. For example, it is hard for older adults to admit they can no longer do fix-it jobs around the house. Along the same lines, data from the focus group with health care provider/community volunteer collaborators indicated that materials should be made so older adults can both see and hear them. If materials are not accessible at the outset, they can't use them and they will not request accessible materials.

Older adult data revealed that older adults value their independence and ability to make their own decisions. As one older adults stated, "I want to be treated like I have a brain and that I have a process where I can use the information myself to the best of my ability. I detest being talked down to." When talking about how to interest older adults in falls prevention another older adult collaborator spoke about creating materials that are interesting and intellectually stimulating. An older adult explained that even though they live in a long-term care facility they, and many of their friends, are well-educated people.

Also, as stated under the theme of knowledge/beliefs about health and falls older adults have two general stances on falls, the latter stance, "That won't happen to me!" fits within the want/need for independence theme. One older adult collaborator stated, "Nobody thinks that they are going to fall so they are not going to a falls prevention program. They think it is for clumsy people."

Unwillingness to use a cane or walker also fits within the theme of independence. The need for independence with canes and walkers was explained in older adult data. One older adult collaborator gave the example of her sister-in-law's refusal to use a cane or walker in public, "every time we go the Water's Edge to eat she wants me to leave the cane outside the door, and wants to take my arm to go in and she doesn't want people to know that she needs it." Another participant described a woman refusing to use a cane in the airport, "she's in that position that

she don't want to use a cane, and she can hardly walk. And finally her son said you're going to have a cane and you're going to have a wheelchair to get you in and out of the airport. I mean she's just stubborn I guess."

**Fear of falling**

The final theme deals specifically with falls, this is the fear of falling. This theme was most evident in health care provider/community volunteer data. Health care providers and community volunteers indicated falling and breaking a hip is one of older adults' greatest fears. When speaking about the fear of falling one collaborator stated, "Falling is kind of one of those things, if you are afraid of falling it limits your activities, which makes you more likely to fall in the long run. It's a vicious cycle." Another collaborator described how the fear of falling can take away confidence, which in turn makes older adults more unstable. "I think as you get older you know that you are unstable, and that fear creates more." One collaborator discussed her mother's fear of falling, "My mother has passed away and her biggest fear was falling… we kept asking [the doctor] what we could do about this and they didn't know anything, I don't think that's true anymore." There was only one direct mention of the fear of falling in older adult data.

The third research question addressed agency within Harvey County. Dutta (2008) explains that agency is "the ability of individuals to enact their choices" (Dutta, 2008, p. 7). Data was coded for key words, context phrases, actions and statements, and narratives related to what change activities are taking place, active/willing participation in agency, and seeing a need for change to analyze the following research question.

**RQ3: What acts of agency to promote health are currently taking place in the Harvey County older adult community?**

The theme of agency was evident throughout the research process. All collaborators

showed a high interest in the project. This interest was also shown through their collaboration in key informant interviews and focus groups. In total 60 health care providers, community volunteers, and older adults of Harvey County incorporated themselves into the Falling LinKS initiative as research collaborators. Three themes concerned with agency consistently emerged from the data set 1) envisioning a falls prevention initiative, 2) limitations of agency in Harvey County and 3) strengths of agency in Harvey County.

**Envisioning a falls prevention initiative**

The first theme that emerged was envisioning a falls prevention initiative in Harvey County. Harvey County collaborators were easily able to envision change within their county. Collaborators felt that change made at the city level by taking care of sidewalks, making sure that walking areas are well lit, and in general making the city a more comfortable place to be active would be part of a falls prevention initiative. It was also suggested that the falls prevention program should provide devices for older adults that they cannot afford like canes, walkers, or handrails.

Older adult collaborators envisioned creative falls prevention programs. One older adult offered that, “a variety of strategies could be used such as offering accurate information and providing one-on-one information, for others providing a group session at a church or senior center.” Another described creating a buddy system for older adults throughout the County stating, “that is something that volunteers can do in Harvey County if we had a buddy system for everyone over 80 years old who has a buddy-neighbor that lives close and that checks on them every day and to see if they are okay.” Another older adult collaborator was passionate about providing a lecture-demonstration where a stuntman would be brought to Harvey County for a series of lectures to talk about falls prevention and show how one can fall properly. He stated, “I

would like to know how to fall properly to lessen my injury to the utmost. In other words I would like to see the guy or female whoever is giving this lecture to maybe have a mat, a exercise mat, they would fall without the exercise mat first. I was just watching a comedy last night and this guy fell over backwards and he got right back up, how did he do that?! He must know how to fall properly and I would like to learn how to fall properly to lessen my chance of an injury."

Other collaborators were less specific with the type of falls prevention initiative they would like to see. Instead collaborators described the characteristics of a falls prevention initiative they felt would be successful. For example, data indicated that collaborators would like accurate information about falls prevention disseminated, simple or easy tips on falls prevention, and if possible, one-on-one instruction with older adults.

Health care provider/community volunteer data indicated that the initiative should have positive marketing, one collaborator stated when talking about developing an interest in a falls prevention program, "I think it needs to be presented in a positive way, not a negative." They continued instead of pointing out the things that may happen as one ages, show older adult how fall prevention can improve their quality of life. Health care providers/community volunteers indicated that the falls prevention program should provide incentives for participation such as a free meal. Older adult collaborators expanded on this idea by stating they would like small helpful items such as a first-aid kit. One older adult collaborator described their positive experience at a program, "We received a packet of light bulbs and reflective tape and a light-switch cover that glowed in the dark so you could turn it on in the dark. Seniors love freebies. That would be a way to distribute information and other small safety items could be included, a fridge magnet with emergency contact numbers."

**Limitations of agency in Harvey County**

The second theme that emerged was limitations of agency in Harvey County. Two limitations of agency emerged from the data. The first limitation of agency deals with the want/need for independence limiting self-agency. Health care providers and community volunteers indicated that older adults do not want to admit that they have health problems, or that they might fall. If individuals are not willing to admit that they need help, or that a falls prevention initiative would benefit them, one collaborator stated, “you can have all sort of stuff out there but people need to be willing to see that it applies to them and be willing to participate and/or be aware of what benefits them…and have the gumption to follow through.” This creates a limitation of self-agency, if people are not willing to help themselves, then agency is limited and services cannot be provided. One health care provider/community volunteer collaborator summarized these sentiments by stating, “one challenge in aging and specifically falls prevention is a shift from doctor takes care of my health to I take care of my health.”

Along the same lines, older adult data, indicated that some older adults feel like they already know everything there is to know about falling. For example when talking about what information they would like to receive about falls one older adult collaborator stated, “I don’t know if I would be interested in receiving things that I already know.” Another older adult mocked the idea of receiving information on falls prevention; laughing while stating, “What would the information be? ‘Stop, look and listen?’" A health care provider/community volunteer described this phenomenon by stating, “they know the information, but they don’t practice it.”

The third limitation of agency in the County is the limited funds. Health care provider/community volunteer data indicated that government funds are drying up, which may lead to the closing of senior centers, and limited reach of other services for older adults.

Additionally, collaborators consistently discussed that lower income older adults cannot purchase the tools such as canes or walkers that may prevent their falls.

**Strengths of agency in Harvey County**

The third theme that emerged was the strengths of agency in Harvey County. Currently Harvey County has three predominate strengths of agency. The first major strength of agency that emerged from health care provider/community volunteer data was the "we take care of our own" mentality in Harvey County. A health care provider/community volunteer collaborator spoke about the high number of older adults in the County and characterized the community as one that "pays a lot of attention to their older adults." This is evident through the Harvey County Department on Aging and Mr. Hanley's commitment to older adult agency. The data indicated that the Department on Aging is the cornerstone of older adult agency in the County. Many collaborators offered the services of the Department on Aging and Mr. Hanley as appropriate collaborators and venues for the Falling LinKS project as it moves forward. Mr. Hanley stated in his interview, "the Department on Aging is ready to roll up sleeves – we don't want anyone to fall down." Another collaborator summarized the sentiments about Mr. Hanley's work by stating, "I just can't say enough about the man. He is just phenomenal. I just can't say enough about the man and what he is doing with these old people."

The second strength is the willingness of collaborators to participate in older adult agency. Health care provider/community volunteers were excited about the falls prevention initiative and willing to help. For example collaborators associated with organizations were willing to advertise Falling LinKS through their organization and help in any way possible. Many health care providers/community volunteers offered recommendations for support such as the local hospital, the recreation center, and the Harvey County Department on Aging. Similarly,

older adults were willing to attend Falling LinKS events, spread the word among friends, and involve groups with which they are already active.

The third strength is the high amount of amenities already available for older adults in Harvey County. For example the Newton Recreation Center provides a gym that older adults can use for walking and exercise, the Silver Sneakers program, and Tai Chi. Newton also has a walking path available to all citizens of Harvey County.

Now that findings from the first three research questions have been discussed, the following research question compares the secondary analysis with the initial analysis using a process of inductive thematic analysis.

**RQ4: How does the secondary analysis compare with the initial analysis?**

This research question compared the 15 recommendations from the initial analysis with the nine themes and four sub-themes that emerged during the secondary analysis. A full list of findings from health care provider/community volunteer data and older adult data can be found in Appendix C. Through a process of inductive thematic analysis three themes emerged from RQ4: 1) Findings unique to the initial analysis, 2), similarities between findings of the two analyses, and 3) findings unique to the secondary analysis. The first critical difference between the secondary analysis and the initial analysis was focus. The initial analysis was framed around creation of the Falling LinKS falls prevention toolkit and recommendations for doing so. Whereas the secondary analysis identified themes regarding perceptions of structures, health/falls culture, and agency surrounding health and falls prevention in Harvey County. While the secondary analysis revealed novel themes, it also reinforced findings from the initial analysis. The aforementioned themes are represented in the table below.

**TABLE 2**

| Unique to initial analysis | Similarities between analyses | Unique to secondary analysis |
|---|---|---|
| Falling LinKS must recognize and plan according to the diversity of older adults in Harvey County | Creating an initiative that is positive and is engaging to older adults | Three levels of structures: traditional, wellness, and media structures |
| Multi-level dissemination and recruitment strategies will be necessary to engage diverse segments of the county population | General stance: "I'm not going to fall!" | Themes of want/need for independence |
| Create a dissemination plan that is tailored to the unique needs of Harvey County older adults and health care providers | How older adults deal with low vision: materials need to be tailored to sensory limitations of older adults | Theme of fear of falling |
| Building awareness for the Falling LinKS team in Harvey County | Older adults do not want to fall | Limitations of agency in Harvey County |
| The toolkit should be clean, clear, and concise | Older adults would like information describing how to fall to sustain the least amount of injury to the person | Strengths of agency in Harvey County |
| The toolkit should provide practical solutions that engage older adults visually and kinesthetically | Provide buddy system | General stance: "I'm (they're) old, I (they) will fall" |
| Older adults would respond well project initiative delivered by a charismatic and engaging professional who is already working or living in the community | | |

*TABLE 2. Comparison between analyses*

# CHAPTER 4

# DISCUSSION

The discussion chapter addresses the two overarching questions 1) What insights does a culture-centered approach offer to understanding Stage 1 data from the Falling LinKS initiative? 2) To what extent is the culture-centered approach applicable to the context of a community-grounded falls prevention initiative in rural Harvey County, Kansas? Findings from RQs 1-3 that addressed structures, health and falls culture, and agency in Harvey County respectfully informed both overarching questions. Findings RQ4 addressed the second overarching research question.

## First overarching question

This section addresses the first overarching question, what insights does a culture-centered approach offer to understanding Stage 1 data from the Falling LinKS initiative? The first overarching question is addressed by discussing 1) how findings from the three research questions can benefit the Falling LinKS initiative, and 2) how the concepts of structures, culture, and agency interact in Harvey County. Through the secondary analysis using the culture-centered approach nine themes and four sub-themes emerged 1) traditional structures, a) limitations of traditional structures in Harvey County, b) strengths of traditional structures in Harvey County, 2) wellness structures, 3) media structures 4) beliefs/knowledge about health and falls a) habits related to health and falls, b) causes of falls, 5) want/need for independence, 6) fear of falling, 7) envisioning a falls prevention initiative, 8) limitations of agency in Harvey County, 9) strengths of agency in Harvey County.

Each of these themes contributed to an overall understanding of Stage 1 data. In order to understand how, it is important to revisit the overall purpose of Falling LinKS, which is to develop a falls prevention toolkit tailored to the needs of older adults, healthcare providers and community volunteers in Harvey County, built upon the four areas proven to prevent falls as identified by the CDC and NCOA (Falling LinKS UMHMF grant, 2008). In order to tailor the toolkit to Harvey County a comprehensive understanding of the County and the must be established. The culture-centered approach and its three central concepts, structures, culture, and agency offered a defined frame for analysis. The themes that emerged from each of the research questions revealed novel information about Harvey County, and refined results for the initial analysis. The secondary analysis provides direction for building upon the existing infrastructure, reaching the older adult population, and tailoring the toolkit and initiative to the needs of Harvey County citizens. Each of the themes is discussed below in terms of their benefit to Falling LinKS and the overall understanding of Stage 1 data from Falling LinKS. Most important is that all collaborators recognized that the County would benefit from a falls prevention initiative.

Structures

RQ1 addressed structures: three themes emerged from this analysis, 1) traditional structures, 2) wellness structures, and 3) media structures. Recognizing the three groups of structures, Falling LinKS must work collaboratively with the three-levels of structures that service older adults. As the results outlined, collaborators identified 30 unique structures in the County. Traditional structures should be the first place where Falling LinKS embeds the initiative. This should be simple because many of the collaborators already incorporated into Falling LinKS represented these traditional structures, like the transportation department, Newton Recreation Center, and County Extension Office. Once partnerships with traditional

structures have been established *wellness structures* and *media structures* should be used to enhance the reach of Falling LinKS. This is described in the following two sections. When dealing with traditional structures, the Falling LinKS team must accommodate the limitations of traditional structures, and build upon the strengths of traditional structures.

While senior centers were identified as a limitation because they do not meet the needs of all older adults, they were also identified as a strength because they provide places where older adults can gather for social and physical activities. Thus senior centers will be an integral part of disseminating the Falling LinKS initiative. The differing perspectives on senior centers, between health care providers/community volunteers and older adults, must be addressed. Health care providers/community volunteers were not quite as aware of senior centers' limited audience. Fortunately, speaking with older adults made it clear both that senior centers will be an important dissemination point, but also that they cannot be the only means of dissemination for Falling LinKS.

In order to accommodate for the limitations of senior centers, other structures such as wellness structures must also become central to the Falling LinKS dissemination plan. These include places where more active older adults tend to gather. Such as social wellness structures like civic or church groups or physical wellness structures like Silver Sneakers. Additionally media structures like the *Newton Kansan* or cable channel should be used to reinforce awareness of Falling LinKS for audiences involved with traditional structures along with wellness structures. By using the three-levels of structures Falling LinKS will have more potential to reach a greater segment of its target audience.

The second limitation of structures deals with transportation, this presents a challenge for Falling LinKS. Unfortunately, Falling LinKS cannot provide transportation for individuals to

gain their participation in the falls prevention program. Instead, using the data provided from the secondary analysis, it is evident that again traditional structures will be an integral to the Falling LinKS dissemination plan. Distributing Falling LinKS information and the falls prevention toolkit through traditional structures will ensure that those without transportation to community focused initiative activities can at the least be independently involved with Falling LinKS. The need for a creative program like a buddy system, which was proposed during the theme *envisioning a falls prevention initiative,* would also benefit those without transportation. The third limitation found in Harvey County was budget deficits. While Falling LinKS cannot assist with funding, the initiative should commit itself to be a low to no cost resource for older adults. This may help avoidance overtaxing the county budget and assist older adults who live on fixed incomes (Wright et al., 2008).

In addition to accommodating for limitations, it is also important to build upon strengths. The first strength that emerged from the data was the Harvey County Department on Aging. Specifically health care provider/community volunteers emphasized how important the department on aging and Mr. Hanley are to the County. While Falling LinKS is already partnered with the Harvey County Department on Aging, these findings validate the Falling LinKS community-grounded process of using Mr. Hanley as the liaison between investigators and Harvey County collaborators. Additionally, this reinforces that the Department on Aging must be involved in the research process every step of the way. Data from older adults indicated that older adults are not quite as aware of the Department on Aging, providing clear indication of an opportunity for improved public relations in the way of advertisement and word-of-mouth for the Department.

The second strength identified in Harvey County is the long-term care facilities. As a health care provider/community volunteer put it, Harvey County is a "retirement Mecca," suggesting that the County is well equipped to care for older adults who need more help. Again, the strong infrastructure of long-term care facilities is another traditional structure that will become an integral part of the Falling LinKS dissemination plan.

Culture

The secondary analysis revealed the Harvey County interpretation of health and falls based on the values, beliefs and practices (Dutta, 2008). The first, and one of the most important things that Falling LinKS must recognize about the older adult community in Harvey County, is that "older adults" don't consider themselves "old" – there is this perception that someone else is always older. This fact will become salient when presenting falls material to older adults in the County. For example it may be necessary to exchange exclusionary terms like "older adults," for encompassing terms like "adults."

Also revealed through the examination of the health and falls culture within Harvey County were two general stances taken on falls prevention and older adults, "I'm (they're) old, I'm (they're) going to fall" and "that won't happen to me!" Both stances represent common misperceptions or assumptions about falls. In order to combat these, Falling LinKS should develop narratives with well-developed hypothetical examples of situations that precipitate falls. These examples could clarify that advanced age is not equivalent with falling, and/or that falling can happen to anyone. Providing examples should illustrate what it means to fall and give health care providers, community volunteers, and older adults a better understanding of the causes of falls.

Narratives may also be useful when discussing *habits related to falls* and *causes of falls.* These themes revealed that in general collaborators are aware of the four main risk factors for falling. Health care providers/community volunteers did not recognize low vision as a cause of falls, but this may have been an oversight. Narratives could give well-developed examples of how medications or low vision increase the risk of falls. Additionally, sometimes older adults do not want to admit they may have a problem with falls, Falling LinKS must illustrate situations in which people fall, the same well developed narratives discussed above could again be useful here. In order to address the issues of want/need for independence and unwillingness to use a cane or walker, some narratives should be centered on the use of canes and walkers to prevent falls.

The principal lesson learned through analysis of culture is to continue to collaborate with older adults about issues that are directly related to their welfare, respecting the opinions of older adults, and learning how the falls prevention initiative can best service older adults. As one older adult collaborator stated, “I want to be treated like I have a brain and that I have a process where I can use the information myself to the best of my ability. I detest being talked down to.” This is consistent with the ideals of engaged scholarship (Putnam, 2009) and CBPR (Israel et al., 2005), as it is premise of both the theoretical orientation of engaged scholarship and methods of CBPR to work collaboratively with community members in order to create change. Specifically, involving older adults in creating the Falling LinKS initiative follows the maxim that engaged scholarship relationships should stress reflexivity and co-learning (Barge & Shockley-Zalabak, 2008). This would also fall in line with the recommendation of Wright et al. (2008) to engage conversationally with older adults.

Examination of culture also revealed the importance of sensory limitations of older adults. Health care providers/community volunteers advised that materials that meet visual standards at the outset. They indicated that if materials are not presented in an accessible form, older adults will not ask for accessible materials, making it unlikely that initiative information will be adequately disseminated. Thus, to be effective, Falling LinKS must provide materials that meet vision standards for older adults at the outset.

The final theme for RQ2 and RQ2a was the fear of falling. Discovering a fear of falling within the data was no surprise because the facts about falling are simply frightening. The literature review discussed that falls are one of leading causes of injury and death in older adults. This theme mainly emerged from health care provider/community volunteer data, which is a point of discussion in itself. There was only one mention of the fear of falling in the older adult data. It can be derived from that data that the older adults don't necessarily have a fear of falling, instead older adults may view a potential fall as the impetus for entering a care facility. Older adults emphasized that in order to stay at home longer they must avoid falls. Their perspective on falls was communicated, as a pragmatic understanding of what falling would mean to the individual. This presents an interest dichotomy. Regardless of perspective, Falling LinKS must address the above issue, and frame materials in a way that eases concerns about falling.

### Agency

RQ3 examined the current acts of agency, such as participation in change initiatives, within the County. In total 60 health care providers, community volunteers and older adults incorporated themselves into Falling LinKS. Their participation shows a high level of interest in Falling LinKS falls prevention initiative.

While the health care providers, community volunteers, and older adults were able to envision change, Falling LinKS is again limited and cannot fulfill all collaborators' suggestions. However, Falling LinKS should incorporate some of the creative ideas that emerged during collaboration with older adults. Interestingly, only one older adult collaborator suggested the more creative ideas described below. For example Falling LinKS could incorporate a buddy system into the toolkit program that will serve to keep older adults accountable for their participation in the falls prevention program. Or Falling LinKS could complement a materials based format with a lecture-demonstration format. While it may not be feasible to bring in a stunt man like the collaborator suggested, the lecturer could provide demonstrations of how to do balance exercises correctly, examples of home safety perhaps using a home mock-up, or give a visual representation of how medicines should be stored, among other ideas.

However, health care providers/community volunteers from advised that Falling LinKS should employ positive marketing, with an emphasis on how involvement in a falls prevention initiative will add to the quality of life of older adults. Incentives for participation should also be provided, such as a free meal or small take away item like a first aid kit. In addition to creating a falls prevention initiative that fits within collaborator ideals, Falling LinKS should also adapt for the limitations of agency, and utilize the strengths of agency in Harvey County.

Two limitations of agency emerged, want/need for independence limiting self-agency and limited funds. The first theme a want/need for independence might limit self-agency, provides a lesson that Falling LinKS should always be respectful of older adults, and takeaway that some individuals will simply not be interested in taking part in a falls prevention initiative. However, Falling LinKS can provide helpful and interesting information about falls and falls prevention in a novel format. By doing this some older adults who at first limited their self-agency may

develop an interest in Falling LinKS because of the quality of information provided and the unique falls prevention program. The second limitation is again funding. Falling LinKS must commit itself to being a low to no cost resource for avoiding falls.

Three strengths of agency in Harvey County emerged from the data. Falling LinKS can utilize these strengths as the falls prevention initiative moves forward. The first strength is the already high level of older adult agency in the County. The first sign of agency was when Mr. Hanley and Dr. Radebaugh initiated the academic/community partnership (Clements-Nolle et al., 2005) between Falling LinKS and Harvey County. Throughout the research process Mr. Hanley continued to reinforce his and the Department on Aging's commitment to Falling LinKS and preventing falls in the County. Data also reinforced this with statements like, "we take care of our own." Also in favor of Falling LinKS is the commitment of health care provider/community volunteers and older adults to the Falling LinKS initiative. Their commitments are the second and third strengths of agency in Harvey County respectively.

Interaction of CCA concepts in Harvey County

Dutta (2008) explains that the concepts of the culture-centered approach are dynamically intertwined. This section examines the overlap between the three concepts of structures, culture, and agency. Overall there were three areas where results from each concept interacted: 1) want/need for independence, 2) funding, and 3) the Harvey County Department on Aging. The first interaction, want/need for independence, is between the concepts of culture and agency. As findings revealed older adults have a strong desire for independence and sometimes that want/need for independence can limit their ability to enact agency. The second interaction is between structures and agency, findings made it clear that funding can be a significant challenge in both concepts. The concepts of structures and agency also interacted in regards to the Harvey

County Department on Aging. Discussion of both concepts revealed how important the Department is to the County.

Another level of interaction involves differences between data collected during with health care providers/community volunteers and with older adults. Throughout the findings, older adult data expanded findings from health care provider/community volunteer data through real-life narratives. This pattern emerged in six areas. These are shown in the table below.

**TABLE 3**

| Findings from health care provider/community volunteer data | Expansion from older adult data |
|---|---|
| The limitation of transportation | Disabled older adult explained that she was unable to make it to wellness structures because they she does not have transportation. |
| Senior centers | Older adults provided an explanation of the negative stigma attached to senior center, i.e. the cartoon example. |
| Budget limitations of older adults (structures) | Testimony about the older adult situation. One older adult stated about challenges in the County: "The poor people, the one's that don't have very much, and they don't want to be a burden. They can't afford a lot of things, and they try to get on without." |
| Social wellness structures | The power of the church groups in the County. 2,500 people gathered to say a prayer for the Newton Medical Center. |
| Want/need for independence | Provided narrative of friends who refuse to use a cane/walker woman in the airport and woman walking into a local restaurant. |
| Envisioning a falls prevention initiative | Incentives older adult would appreciate such as first aid kits. Quote: "Seniors love freebies" |

*TABLE 3.* Older adult expansion through narrative.

**Second overarching question**

This section addresses the second overarching question, to what extent is the culture-centered approach applicable to the context of a community-grounded falls prevention initiative in rural Harvey County, Kansas? This question was created in order to evaluate the

efficacy of the culture-centered approach and enter the conversation about the culture-centered approach. The second overarching question is addressed by discussing, 1) strengths and 2) weaknesses of the culture-centered approach in this context.

Strengths using the culture-centered approach

This thesis discovered three strengths when applying the culture-centered approach to the community-grounded falls prevention initiative. Results from RQ4 established that the secondary analysis using the culture-centered approach revealed seven novel themes: 1) traditional structures, 2) wellness structures, 3) media structures, 4) want/need for independence, 5) fear of falling, 6) limitations of agency in Harvey County, and 7) strengths of agency in Harvey County. These themes, unique to the secondary analysis, offer more precise recommendations for how Falling LinKS might be integrated into Harvey County. The culture-centered approach is highly iterative, and allows concepts to inform one another increasing the depth and richness of insights.

Additionally, the culture-centered approach allowed for data to emerge that elucidates how the concepts of structures, culture, and agency interact to impact the lives of older adults in Harvey County. Understanding this will allow for more appropriate integration of Falling LinKS in ways that are most meaningful and beneficial to older adults. Additionally, examination of the three concepts created an entry point for engaging in health communication with Harvey County as Dutta (2008) described. The culture-centered approach worked as a fine-tooth comb to reveal themes. This was most evident during the coding process. As the dataset was coded distinctive themes emerged. The culture-centered approach provided a framework for analysis that identified concepts – structures, culture and agency – that are central to building embedded health communication initiatives within communities.

Weaknesses using the culture-centered approach

While the culture-centered approach offered an alternative frame for analysis that illuminated novel themes, this thesis also discovered two weaknesses of the approach. Firstly, as RQ4 developed, there are some themes and recommendations that did not emerge using the culture-centered approach. For example, the recommendations that were toolkit specific like, *the toolkit should be clean, clear, and concise.* Similarly, developing themes out of the three concepts of the culture-centered approach was restrictive. During the coding process several interesting quotes were abandoned because they did not fit within the established framework. Incidentally there were pieces of data that did not fit within either the initial analysis or secondary analysis, and future research might apply a different frame that would allow for these issues to emerge. This develops an argument for creating a process of analysis that uses the framework provided by the culture-centered approach along with a process of inductive analysis that will allow for all salient themes to emerge from data, not just the ones specific to the culture-centered approach.

The second weakness deals with the applicability of the culture-centered approach to this context. Dutta (2008) explained that culture-centered approach examines the erasures of marginalized populations. However, the term marginalized does not accurately describe Harvey County. Additional characteristics of power, dominant social actors, and resistance as defined by Dutta (2008) were not represented in the data. In order to promote behavior change individuals were approached for collaboration in the Falling LinKS research process based on their influence in the County. Thus this study was not able to examine the aforementioned characteristics. However, they could be examined in future research.

# CHAPTER 5

# CONCLUSION

This thesis accomplished two overarching goals: 1) to discover insights the culture-centered approach offered to the understanding Stage 1 data from the Falling LinKS initiative and 2) to learn to what extent the culture-centered approach is applicable to the context of a community-grounded falls prevention initiative in rural Harvey County, Kansas.

The secondary analysis worked to uncover new findings, and also to reinforce/refine initial findings. Findings from both analyses complement each other and will be helpful to Falling LinKS as it continues to embed itself within Harvey County. In addition this thesis has reinforced the benefits of taking a second look at data. However, it is the author's opinion as a member of the Falling LinKS team, and as a communication scholar that the success of this thesis hinged on continued involvement throughout the Falling LinKS research process from conducting key informant and focus group interviews, to initial analysis, followed by my extensive reevaluation of the data during secondary analysis. This task approached by someone without such involvement, may have been less successful.

Also important to this thesis was analysis of the efficacy of the culture-centered approach to health communication initiatives. It is the author's opinion that CCA is an effective method for analysis that uses an iterative process to examine the three concepts central to understanding communities, and moreover a process for discipline of health communication. As CCA developed, and this thesis reinforced the concepts of structures, culture, and agency within a community determine how individuals experience and understand health. It is likely that future research projects within the discipline of health communication will use these concepts as a basis for understanding the workings of a community. However, as the discussion lined out, both the

initial and secondary analyses revealed unique and valuable findings to Falling LinKS. Specifically the frame used during the initial analysis revealed directions for toolkit development – valuable to the toolkit development sub-team of Falling LinKS. While the CCA frame used during the secondary analysis showed how Falling LinkS might more effectively integrate itself into Harvey County – useful to the community-grounded sub-team of Falling LinKS. Thus, it is important to use methods for analysis that produce the most salient results and insights. This builds an argument for conducting multiple analyses of the same data using unique frames each time.

**Limitations**

While this project was an overall success, there were a few limitations. First because the data was previously collected, data could not be clarified or expanded. For example, if the meaning of a quotation was not clear to the researcher, the researcher was not able to re-interview that person to clarify their statement. Similarly, conduct of key informant interviews and focus groups interviews may have varied throughout data collection due to differing styles between facilitators. Also, the use of network sampling to select the key informants limited the scope of the project, and only allowed for interviews with persons with whom the Falling LinKS team or those they knew, or those who participated were already familiar. Finally the data assessed the perspectives of interviewees at a particular point in time, which may change over time.

**Future research**

The theoretical orientation of engaged scholarship along with CBPR methods understood through the culture-centered approach create a solid framework for conducting research outside

of the traditional biomedical model and transitioning into the biopsychosocial model. This approach should be further explored in future research endeavors. Additional research should assess the influence of power, dominant social actors, and resistance as defined by Dutta (2008). However, it is important to point out that research should not be limited to the culture-centered approach framework. Again reiterating the importance of openness to various methods of analysis, including using a combination of frames for analysis, as appropriate for a given investigation.

Future research for Falling LinKS will include continued collaboration with Harvey County. This may include another evaluation of Harvey County data using another alternative frame to illuminate data abandoned by frames used in the both the initial and secondary analyses. Currently, Falling LinKS is tailoring the Harvey County Falling LinKS toolkit to citizens of Harvey County. Additionally, Falling LinKS is preparing to expand efforts to other Counties in South Central Kansas, with eventual plans to expand statewide.

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**APPENDIXES**

## APPENDIX A

### Health Care Provider Key Informant Interview Questions

**Context questions**

1. What do you see as the greatest challenges facing older adults in Harvey County with respect to avoiding falls?
2. What is the most valuable service that could be offered to older adults to assist them in avoiding falls?
3. Are there any special needs or challenges that come into play in communicating with Harvey County older adults?
4. Are there any future challenges or opportunities facing Harvey County that may have an effect on its older adult population?
5. Are there any significant populations of older adults in Harvey County that we should take into account in this initiative?

**Need for/ interest in a falls prevention program**

6. Do you see a need for a falls prevention program in Harvey County?
7. Do you think older adults in Harvey County would be interested in a falls prevention program?
    a. What could we do to help develop that interest?

**Infrastructure/county capacity**

8. Are there any successful health promotion initiatives for older adults in Harvey County?
    a. Tell me about them.
    b. What made it/them successful?
9. Are there any successful fall prevention initiatives for older adults in Harvey County?
10. What infrastructure is already in place for older adults in Harvey County that could support this initiative?
11. What resources could/would Harvey County be able to dedicate to a falls prevention initiative?

**Dissemination methods**

12. How do you get information to older adults in Harvey County about available programs and services?
13. What do you think would be the most effective way to deliver a falls prevention program to older adults in Harvey County?

**Collaborators**

14. Who would be most appropriate to partner with on this issue?
15. Is there anyone you would recommend we speak with about this initiative?
16. How would you suggest we recruit older adults to participate in focus groups about strategies to prevent falls?
17. Where would you recommend we hold focus groups with older adults on falls prevention?

## Health Care Provider Focus Group Questions

**Context questions**

1. What do you see as the greatest current or future challenges facing older adults in Harvey County with respect to avoiding falls?
2. What is the most valuable service that could be offered to older adults to assist them in avoiding falls?

**Need for/ interest in a falls prevention program**

3. Do you see a need for a falls prevention program in Harvey County?
4. Do you think older adults in Harvey County would be interested in a falls prevention program?
    a. What could we do to help develop that interest?

**Infrastructure/county capacity**

5. What infrastructure is already in place for older adults in Harvey County that could support this initiative?

**Dissemination methods**

6. How do you get information to older adults in Harvey County about available programs and services?
7. What do you think would be the most effective way to deliver a falls prevention program to older adults in Harvey County?
8. Are there any special needs or challenges that come into play in communicating with Harvey County older adults?
9. Significant populations of older adults in Harvey County that we should take into account in this initiative?

**Collaborators**

10. Who would be most appropriate to partner with on this issue?
11. Is there anyone you would recommend we speak with about this initiative?
12. How would you suggest we recruit older adults to participate in focus groups about strategies to prevent falls?
13. Where would you recommend we hold focus groups with older adults on falls prevention?

**Health Promotions**

14. Are there any successful health promotion initiatives for older adults in Harvey County?
15. Are there any successful fall prevention initiatives for older adults in Harvey County?

## APPENDIX B

### Older Adult Key Informant Interview & Focus Group Questions

**Perceptions regarding falls prevention**

1. What do you think causes older adults to fall?
2. Do you see falling as a problem for older adults in Harvey County?
3. Would you personally be interested in avoiding falling as you grow older?
4. What information regarding falls and falls prevention would you be interested in receiving?
5. Are there any significant populations of older adults in Harvey County that we should take into account in this initiative?

**Falls prevention initiative**

6. What would be the characteristics of an initiative to help you avoid falls that would interest you?
7. How would you prefer to participate in an initiative to help you prevent falling? (probe for preferences and locations - home-based, disseminated by community volunteers, with health professionals)
8. Are there any incentives you would find useful in supporting your participation in a falls prevention initiative?
9. Who in your community do you think could most effectively lead a falls prevention initiative?
10. Are there any special needs or challenges that come into play in communicating with Harvey County older adults?

**Framing the initiative**

11. Service providers in HC thought that framing this kind of initiative in a more positive way, like staying healthy longer rather than as a falls prevention initiative might be more successful at getting people involved. What do you think?
12. How would you prefer this kind of initiative be named? What phrases would appeal to you? What phrases would turn you away?
13. Keeping in mind what we've talked about so far and the four areas we've looked at, what could we do to help interest you and/or your friends and neighbors in avoiding falling as you grow older in Harvey County?

## APPENDIX C

**Recommendations from Health care provider/community volunteer data initial analysis**

1. The Falling LinKS team must recognize and plan according to the diversity of older adults in Harvey County.
    *a.* Active older adults, frail older adults, those living in independent or assisted living communities, and those living alone and / or in more "isolated" parts of the county have been identified as important segments of the older adult population in Harvey County.

2. Multi-level dissemination and recruitment strategies will be necessary to engage diverse segments of the county population.
    a. Strategic recruitment that incorporates churches, community centers, senior centers, senior service providers and organizations will be important in accessing a broad cross section of older adults for project initiatives.
    b. Additionally communication preferences vary widely and a multi-method approach to information dissemination will be critical. Strategies will need to range from high touch / low technology techniques including word-of-mouth, posters, fliers, presentations at senior centers, etc. to high technology / low touch techniques including a project website.
    c. Information dissemination and recruitment strategies need also to take into account limitations that may be experienced by some older adults including physical impairments (hearing, vision), lack of technology, and transportation problems.

3. Create a dissemination plan that is tailored to the unique needs of Harvey County older adults *and* service providers.
    a. To be successful and sustainable, Falling LinKS must appeal to both older adults and community collaborators. One strategy would be to create a community advisory board for Falling LinKS that includes service providers and older adults.
    b. Interviewers noted a certain level of "provider apathy" in interviewees. Consequently, strategies may need to be developed to empower providers and create community "ownership" of the initiative.

4. Falling LinKS must focus on creating positive, fun and proactive programs and materials to engage older adults.
    a. Older adults in Harvey County value socially based programs that offer a variety of activities to engage their interests. Free food, programs and other valued incentives will encourage program interest.

5. Building awareness for the Falling LinKS team in the community is a critical component for providers, older adults, and caregivers.

a. The team must establish the credibility of the Falling LinKS project in Harvey County, including team members, the quality of the programs, and commitment to the project.
b. These efforts can be advanced by developing informational materials and brochures as well as the Falling LinKS website

**Recommendations from older adult data initial analysis**

6. One of the most difficult barriers to the success of the Falling LinKS program is the perception that older adults falling is a major problem for "other" older adults but not a personal problem.
    a. Participants viewed a "falls prevention program" as important for those clumsy people who fall, not "us" EVEN if they had fallen (their falls were situational, e.g. "my pet tripped me" rather than "There's something I need to do to prevent falls"). Their falls were caused by something external to them, rather than something they could control.
    b. Falling is not perceived as inevitable by the majority of participants but there was a small minority that took a more fatalistic view of falling. The older the participants, or the older the people they were discussing, the more likely they were to have a more fatalistic tone. This needs to be addressed often and from the beginning.

7. The toolkit should be clean, clear, and concise. Older adults will lose interest if there is too much text. Include pictures to enhance understanding.
    a. Material should not be overly technical, but should offer practical instruction, and also how each tool will directly benefit them.

8. Older adults with low vision and poor hearing must be considered when creating the toolkit. EVERYTHING needs to be tailored to the sensory limitations of older adults. Large groups make it hard for people to hear. Vision problems make it hard for people to see. Color contrasts are critical. Etc.

9. The toolkit should provide practical solutions that engage older adults visually and kinesthetically, such as interesting pictures on how to do certain exercise moves etc.
    a. If possible, create a video / DVD that contains the same information the written toolkit does.

10. The incentives for participating in Falling LinKS are inherent, using the toolkit to improve quality of life and minimizing the need for doctors visits is incentive enough to participate in the program.
    a. The toolkit should emphasize how safe practices will save money because preventing falls helps older avoid visiting the doctor or purchasing unnecessary medical devices.

11. Older adults would respond well to a charismatic and engaging professional who is already working or living in the community who will present the information to the older

adults for the first time. After a professional presents the information to the older adults, we hypothesize that older adults will then accept the information and begin to use it in the ways they see fit, i.e. Hesston and Dr. Rogers exercise program.

12. While appreciating the idea of volunteers leading the program the respondents were consistently drawn to professionals (health care providers, exercise instructors etc.) as a trustworthy dispensers of information and training. Whenever people perceived as experts can be utilized the response is more likely to be positive.

13. We need to offer all alternatives for pursuing a lifestyle that combats falling but we should give every effort to providing buddy systems and groups even for those who, by choice or circumstances, are part of an individual program.
    a. Older adults indicated that group activities, buddy systems and follow-up programs would work well.
    b. Create the toolkit for flexibility, allow older adults to choose what they feel will benefit themselves the most.
    c. Any exercise oriented information should be considered in a variety of settings and a variety of positions, e.g. in a group setting or at home, or from a chair.

14. Even though we want to minimize the negative in our naming approach, we cannot lose sight of the fact that this IS about falls prevention. We don't want to sugar coat it to the extent that the message is lost. Regardless of whether or not they are in denial about what they can, or cannot do, older adults do NOT want to fall.
    a. The naming of the initiative did not draw much attention or discussion except the concern that it not be too negative and that it did not use the words “old,” “senior” or “elderly.” The Falling LinKS name made no rational or emotional connection to the participants.
    b. Whether the community wants to be the ones who names it is still yet to be determined.

15. The toolkit should include information describing how to fall to sustain the least amount of injury to the person.