

University of Wyoming

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Voices of Wyoming Landscapes: Agricultural Traditions and Living Wisdom

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Abstract

Knowledge of ageing agriculturalists living in rural spaces of the State of Wyoming reveals a people with profound love for their local land and the community space it offers. Wyoming community members who contribute to local agricultural productions dedicate their lives to operating their land. One quarter of Wyoming's land operators are over the age of 65 and continue to dedicate their lives to preserving Wyoming's geographical landscapes. This research sought to capture the agricultural experiences of Wyoming's ageing population. The project established communication with a rapidly ageing demographic in order to continue archiving knowledge and traditions shared by an under-represented population. This collection of information analyzed historical archives and conversations with ageing ranch and farm operators. Land conservation research that seeks to include dialogue of people who currently operate Wyoming lands was a successful outcome of this research. Merging politically focused data with lived experiences on local land resulted in a more complete understanding of traditional wisdom. Results of this research produced an artistic model of previously documented historical photographs, correspondence and articles juxtaposed with local reflections of current agricultural practices in Wyoming. The integrity of action research is captured by representing a sense of place and environmental identity.

Introduction

Adult aging populations are increasing in every part of the world. A 17 percent increase of people over 65 is projected to increase by year 2050 (Gaugler et al., 2016; Gaugler, James, Johnson, Scholz, & Weuve, 2016). Survival of aging Americans is expected to grow dramatically being driven by medical advances. Several studies have expounded upon cultural views of the aging process. The National Institute on Aging supports research involving Longitudinal Studies seeking to identify culture-based environmental risk factors that contribute to age-related disease. How should our society prepare to care for the trajectory of our long-lived lives? Moreover, in rural areas of the mountain-west, aging populations rapidly rise (How to tackle alzheimer's in montana.2016).

Healthcare industries providing services and tools for caring for patients will continually be in demand may continue to face shortages in staff and educational resources. Wyoming has one of the highest proportions of baby boom population while their generation X (ages between 45 and 60) is among the lowest proportions. This age gap puts financial strain on medical services and insurers and family caregivers. Today one in three Americans over the age of 65 dies with one form of Dementia (Gaugler et al., 2016). The Alzheimer's Association reports the prevalence of Alzheimer's Dementia (AD) cases to increase by over 42 percent by year 2015(Gaugler et al., 2016). Research partnerships with elders are often challenging to obtain. Recruiting and maintaining elders as research subjects can be challenging for and consistent research with cognitively ageing patients faces additional challenges (Blair & Minkler, 2009). One major barrier is the unestablished diagnostic and therapeutic criteria for cognitive degenerative diseases, involving AD and other forms of dementia (Gaugler et al., 2016). The

inconsistency in ageing trends, geographic location and prevalence of cognitive decline in rural Wyoming rural areas is not being researched and therefore not understood.

Given the unprecedented numbers of aging Wyomingites committed to working in the agricultural industry and the scarcity of information regarding how their health status has disrupted their environment, an investigation is justified. Wyoming has one of the highest proportions of baby boom population while their generation X (ages between 51 and 6) is among the lowest proportions. Ongoing research at the University of Wyoming study the impact of health among aging ranch and farm workers in the state. The state researcher published 500,000, one quarter of all operators are over the age of 65. Bridging the connection between research supporting the importance maintaining cognitive and physical health to prevent AD progression and maintaining cultural identify with a ranching and farming work place environment is the overarching goal of this study. Wyoming aging agriculturalists will contribute to this research as they contribute their living skills and knowledge behind their passion for agricultural skills.

During initial literature research, using online databases did not prove to be valuable. Universally the findings of risk factors for cognitive aging are reviewed to be insufficient due to limited evidence on any given proposed risk factor (Gaugler et al., 2016). I believe younger adult generations can start preparing for our own adult development by understanding the health and well-being of today's aging population by contributing to scientific research through our interactions with aging community members, especially those vulnerable to progressive AD disease. Committing to care for friends or family member increases awareness of behaviors and cognitive abilities. This commitment to care merits guidance and collaboration. State agencies should seek the opinions and feedback from caregiving family members and providers. Additionally, communication networks with caregivers may help facilitate greater

communication with patients themselves. Founded by the National Center for Advancing Translational Sciences clarifies the process of research translation entails, “turning observations in the laboratory, clinic and community into interventions that improve health of individuals.” Understanding the scale of cognitive and sensory symptoms of cognitive decline among community members requires social interactions with individuals at all stages in their life. During their younger and aging years. To examine this pertinent topic and prepare for non-traditional methods in qualitative ageing research specific to a with a wide range of vocations found in Wyoming. This study the need for participatory action research methods while collecting data specific for community populations in Wyoming.

Generation of Research Question

This first phase will be completed this semester through a literature review guided by University Librarian and examination of data published for the State of Wyoming. A literature review, discussions with community stake-holders, health care providers and University researchers will access perceived benefits of researching AD prevention particularly in the Laramie community. The study conducted a primary search of literature available to examine the scope of research involving participant’s living and occupational environment. The review will serve as a hypothesis-generating search discover the most current ageing research in the local community of Laramie, Wyoming. More specifically the understanding gained from literature will help determine if research currently consider living conditions and environment during research studies. The conclusion of the literature review will summarize gaps in understanding the skills and abilities of aging individuals in order to attempt to preserve the individual’s identity through their work and environment. Research engaged in studying environment and ecological perspective towards ageing mention positive social interactions with people living

with Alzheimer's Dementia or vulnerable to other cognitive degeneration disorder stimulate their occupational engagement and livelihood (Oswald, Frank and Wahl, Hans-Werner, 2013).

Results of Literature Search

The expected outcome of the first phase is to define the importance of a participatory action research methodology in order to identify partnerships from a community wide network. The second-phase involves recruiting action research participants and working with them towards constructing appropriate methodology for communicating with community members and better define the research question and expand on founded theories of environmental influences during the ageing process.

The initial focus on Wyoming traditions and values will propel the quality of this study by attempting to validate the importance patient centered care. Patient centered care is frequently referenced in current behavioral science research work. This study will first attempt to determine how to form the argument that in order to accomplish understanding of care that focuses on an individual's needs, environmental space including an individual's occupation identity and vocational skills should be emphasized.

Environment and Behavior

The understanding of environmental context among ageing research is undervalued. Behavioral sciences emphasize the social, cultural and historical contexts when collecting information from people's environment (Oswald, Frank and Wahl, Hans-Werner, 2013). Psychological model of human ageing argue the value of contextual components to life. Ageing individuals cope with physiological and neurological changes and therefore must continuously adjust to the environmental space in which they occupy (Oswald, Frank and Wahl, Hans-Werner, 2013). Such theory was introduced during the foundation field of social gerontology in the late

1940's which contributed to the evolution of environmental gerontology in the 1970's (WAHL, 2006). Age-related losses in senses, mobility and cognition lead to vulnerability to environmental demands. The person-environment model was born from these governing concepts which distinguish "older-persons' need in their relationship to both the potential and limits of a given environment" (WAHL, 2006). This study will utilize the value of environmental gerontology and emphasize its potential contributions to understanding the existing character and abilities of ageing adults.

It requires multiple directions and reaping complex meaning when addressing research questions in behavioral science that involves cognitive degenerative diseases in Wyoming ageing population. Furthermore, qualitative methodology using participatory action will show the need for collaboration with community members inside and outside of academic and professional research when addressing biomedical research topics. Furthermore, I believe qualitative methodology that depends on co-researchers will show the need for collaboration with community members outside of professional health research when addressing sociological and human ecological research topics such as environmental interactions in people vulnerable to cognitive decline. This projects first goal was completed by incomplete resolution that alternative data (i.e. beyond published literature) should be reviewed to progress using participatory action based research methods. Alternative sources of literature were used to creatively prepare to interact and generate research through art forms and creative writing. This research merged into a non-traditional methodology of gaining, archiving and creating artistic results that reflects the knowledge presented by human participants during the making and research process. Qualitative research using action based research drove and helped accomplish this objective.

By definition Participatory Action Research (PAR), applies the ideal of empowerment that strives to create the conditions in which participants are involved in decision making that propels research forward (Blair & Minkler, 2009; Zimmerman, Rappaport, & Seidman). Additionally, PAR emphasizes the advantage of co-learning process, in which community participants bi-directionally contribute to the knowledge gained by research while learning the current competencies and skills of the population. Thus, a PAR must first prepare to actively recruit and engage passionate co-researchers.

This research seeks to know if communicating and identifying aging Wyomingites merits growth in the context of culture in Wyoming. In particular, the ability of Wyoming residents to bring a culturally relevant understanding of barriers towards communication about issues facing aging population living in Wyoming. The interpersonal communication can also re-establish the research in a direction most beneficial to the work and the local community member. The participatory approach to this research will seek existing theories and or models of evaluating communication throughout the duration of the first phase of the study. In order to gain relevant information from existing research in context to this research audience, review of literature will conclude with documenting the opinions of community members by personal interactions with them and their environment.

I realize in order to collect accurate data; I need to find co-researchers who are activity engaged in the areas of focus, has had experience in participatory action based research, members of a University network of study area. The expected outcome is to be able to define the importance of developing a community-based participatory research using co-researchers from the local area. Additionally collecting a research *archive* in addition to personal interactions with

people, ageing on Wyoming lands includes other historical and environmental data collected and housed on the University of Wyoming Library campus.

Specific Objectives

Archiving Material

This capstone opens an interdisciplinary need for conversation about envisioning land conservation through living traditional wisdom. A lack of intimacy to the natural world contributes to a lack of intimacy to one another. Therefore, a gap filled by this research archive questions our role in preserving not only a land but the generational knowledge of people living and working on the space. By asking these research questions: What do ranchers do to preserve grasslands and wildlife habitats? What goes unnoticed concerning rancher conservation? This work explores the local environment by focusing on place images and the language used by the participatory ageing Wyoming population.

Grazing practices finely tailored to the unique land conditions. Due to generations of land operators understanding the evolution of grass species, pest cycles, and irrigation practices work in tandem with geographical features of land (Glick et al., 2014). Place based knowledge contribute to the raw visual beauty of environmental landscape. In Wyoming, local aging land expertise have begun to fade as professional managers begin to dominate rural spaces.

Lucy Lippard has contributed inspiration for this work as an environmental artist and literary writer. Lippard writes. Noting that “more fluid ways” are needed to perceive “the layers that are everywhere, and new ways of calling attention to the passages between old and new,” Lippard in particular resonates with my goals in telling stories or evoking the suggestion of memory in making art (Lippard, 1997). When Lippard says in this chapter that within every person’s life, “histories vie with stories, teachers with elders, received information with lived

experience” and that “memory replaces official history,” it resonates with my thoughts as I approach a concept about which to make art. Her phrase in this discussion of an “emphasis on intimacy” is primary the goal of my work.

The pressure to present academic research is often disconnected from the subject matter. A new direction to the research archive implores an alternative for gaining knowledge with local people and looking outside of institutional knowledge. When Lippard says in this chapter that within every person’s life, “histories vie with stories, teachers with elders, received information with lived experience” and that “memory replaces official history,” it resonates with my thoughts as I approach a concept about which to make art. Her phrase in this discussion of an “emphasis on intimacy” is primary the goal of this work.

The intersections of nature, history and agriculture are part of the foundation of ground on which this research archive and final product stand. The land of a local inhabitant provides an environment that coexists with all species in its place. Therefore, this research project concludes that land-based environment observations allow for better understanding and documenting human traditional knowledge. Through the following design follows to purpose of challenging a research tendency to write knowledge without putting artistic form and voice behind it.

Design

This project incorporates a digitalized visual record of interview experiences, meaning and views in alternative forms. This process allows space for an alternative form of expressing experiences that builds connection to local wisdom.

A series of interviews with aging ranchers who practice skills in grazing patterns, managing water movement of graze lands and a sharing of grass species and wildlife of grasslands. A network of co-researchers were found by networking with representatives in the

College of Agriculture Extension office to contact aging ranchers of the University Community. This lead further networking outside of the University with agriculturalists working on their lands. The Albany County Cattle Women and Farm Bureau Wyoming representatives helped lead research to land based interactions on working lands. The informal interviews will capture the agricultural simultaneously research perspectives on aging among community members and gave the work context in learning the meaning of agriculture in the local area. Ranching is a commodity in Wyoming deeply rooted in individuals who serve to preserve the state's land and natural resources. This alternate "review of literature" stimulated conversation with aging leaders whose passions and livelihoods depend on managing graze lands.

This alternative review captured environmental influences on aging learned through 1) analyzing literature involving work environment and livelihood for Wyoming ageing people and potential behavioral science and ecological researchers 2) incorporating research participants to share their knowledge and agricultural skills in order to capture the environmental conditions unique to Wyoming social and physical landscapes and 3) documenting interactions with people influenced by the effects of aging and its potential challenges for continuing their agricultural work practice.

Making the Work

Blending the disciplines of participatory research and making artistic reflections of the research experience. These reflections will be archived by note taking records during informal interviews with participants. Journals of each participant will be kept and reflections during, after, other related writings and critique from peers will be included.

1. One value of participatory research is to construct research in every step with the participant. The life through sharing stories, emotions and reflections during conversations about their agricultural work and their past and or continuing commitment to their work.
2. The journals of all participants will be analyzed and presented in the form of an photographic and story voice archive format of each individual's agricultural lesson that was shared.
3. These interviews will continue through the process of presenting knowledge through art and continue the evolving archive that depends on direct energy and participation of the ranchers themselves.

The Concluding Work

This work is evolving, live and available for viewing below. This work accomplished attempts to understand a misunderstood ageing population by seeking a cultural knowledge, in context to multi-generational ranches of Wyoming. This research indicates that cultural perspectives of a living observer and steward of land should be invited to participate in conversations concerning land ecology. This work includes local perspectives to examine land issues most prevalent to today's agriculturalists. Gaining this perspective sets a precedence for future collaboration with contributing members of land management in Wyoming. Cross-cultural interconnections between indigenous history on Wyoming land and Euro-American settlers

This artistic and digital archive draws attention to the iconic Wyoming "grass lands" is layered with the vocal expertise of agriculturalists. Land art has potential to include the motivations of human interactions with their environment. Not only does land occupy a physical space but contains a livable space. Humans have power and privilege on earth's space.

Cultivating channels of communication with agriculturalists reveals a holistic awareness of land resources. An agrarian awareness allows us to understand land that is not only owned but also a land that is cared for.

This Capstone Research Project is viewable.

The Artist's Reflection:

<https://www.arcgis.com/apps/Cascade/index.html?appid=fcb760f4d94d4bfebbcbc4e36ca0f8e3>

The Live Archive:

<https://www.arcgis.com/apps/MapJournal/index.html?appid=ece559aca0154988a986158f10597e23>

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