CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

This chapter will describe the sampling method from the senior population of the rural community of Siloam Springs, Arkansas. It will also name the validated survey instrument and questionnaire that will be used to solicit input to determine whether public transportation is needed and/or desired by elder persons in this small city. This research project will be focused on the population of senior citizens, sixty-five years old and older, who live in the city limits of Siloam Springs, Arkansas.

An appropriate convenient random sample will be drawn from this population. Many seniors frequent the local Senior Center, apply for jobs through the Workforce Commission, and may already be employed in one of the local, larger corporations—Gates Rubber, Cobb-Ventris, Simmons Foods, and La-Z-Boy, to name a few. The method for this research project will include the use of a validated survey instrument, in print because most of the people in this age group are uncomfortable using a computer. Surveys may also be administered in person to home-bound senior citizens served by Kind-at-Heart ministries and the Senior Center Meals on Wheels. If a larger sample is needed, then a random sample of the senior class at First Baptist Church, seniors at Grace Episcopal Church, First Methodist Church, First Presbyterian Church, St. Mary’s Catholic Church, and other larger churches in town will be contacted and deduped from any other source of sampling. The local Bridge Club is also a good source of senior citizens.

Problem Statement

Lack of access to public, convenient, accessible, and affordable transportation may adversely affect the flourishing of older persons living in their own home or apartment in Siloam Springs, Arkansas.

Thesis Statement

The research will assess whether the lack of accessible, affordable, and convenient transportation options in Siloam Springs, Arkansas, a rural community, affects the flourishing of the older residents.

Null Hypotheses

Hypothesis 1

H0 There was no statistically significant difference in the flourishing of older people who drive and those who do not.

Hypothesis 2

H0 There was no statistically significant difference in the loneliness (isolation) of older people who drive and those who do not.

Hypothesis 3

H0 There was no statistically significant difference in the shared mobility use between older people who drive and those who do not.

*Operational Definitions*

Older persons: in this study, people aged sixty-five and older. In the course of the research and in the thesaurus, “older persons” was the preferred term. Elderly and senior citizens will be used interchangeably with “older persons.”

Quality of life: in this study, it will refer to the ability of a person to fully participate in the neighborhood and the life of the community in a way that maintains independence, dignity, and freedom of choice.

Flourishing: in this study, it refers to older people who live in their own home or an apartment who enjoy independence and the freedom to choose when to take trips outside the home and where to go. Flourishing is a positive life measure that reveals the respondents’ satisfaction with life and well-being.

Loneliness: in this study, it includes the idea of isolation, invisibility, and the feeling of being cut off or left out of the life of the community.

Transportation: in this study's purposes, all forms of mobility will be incorporated. The focus, however, will be on respondents who do not drive or who would rather not drive.

Power: in this study, power refers to personal dynamic, or the ability to be heard and seen. Power means having a voice in the community that affects planning and projects.

*Assumptions About Methodology*

The assumptions include receiving access to the older people at the Senior Center and through Kind-at-Heart Ministry. If necessary, an advertisement about the survey could be publicized so that those who self-select as eligible would come to a designated location.

*Limitations of the Study*

The study's primary limitation includes the researcher's ability to identify the total elderly population living in their own homes (purchased or rented) or apartments. The U.S. Census of 2020 identifies the number of people sixty-five and over living in Siloam Springs, which has been updated by the 2022 estimate in the Census *Fact-Finder*. However, the demographics are not easily correlated to older adults living in their own or rented homes.

A secondary limitation is the ability of the older people to read and understand the 15 survey questions, respond truthfully and not as they think they ought to respond, and sit long enough to complete the survey. They also need the dexterity to hold a pen or pencil.

Another primary limitation of the study is that it focuses on the older residents of a specific rural community and cannot be generalized to all similar rural communities. However, the study could easily be duplicated in other rural communities which may yield similar results.

*Compliance*

Since the survey activity only assesses current behaviors and attitudes without attempting to change behavior, the IRB should easily approve this study. Participants will be made aware of the scope of the survey and their ability to opt out of the study. Complete confidentiality will be maintained.

*Procedures for Gathering Data*

Population

The estimated 2020 population of people sixty-five years and older is 1,761, or approximately 10.8% (+/-1.9) of the total population estimated at 16,311 (+/-34).

The Sample

The sample size is based on the population of the specific age group. According to the OGS Sample Size Table, the sample would be between 313 and 317 people, or approximately 315. Calculation through the online NBRI calculator, the sample size would be 316. The sample will be sponsored by the Siloam Springs, Arkansas, Area Agency on Aging Senior Center at a time to be determined.

Instrument(s)

*Flourishing Scale*

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009).

New measures of well-being: Flourishing and positive and negative feelings. *Social*

*Indicators Research, 39,* 247-266.

Flourishing is a component of quality of life and exquisitely measures both well-being and happiness. This instrument created by Diener (2010) has been used in a number of studies (Fassih-Ramandi, 2020; Shueng, 2021) and has been validated for reliability.

Data Collection

Data collection will commence as soon as the Omega Graduate School IRB has sent the Letter of Approval. The Office of Human Concern which oversees the Siloam Springs Senior Center will give permission to use the members of the Senior Center for the survey. The local Bridge group, the local churches, and a local Bible study group will also be asked for permission to circulate the survey.

Data collection will be a hybrid of Survey Monkey and paper.

Time Schedule

. The months of collection will be June and July 2023.

*Procedures for Analyzing Data*

The Lickert Scale data will be collected and coded for anonymity of the participants. The responses will be tabulated online and manually and then correlated. The TexasSoft Winks program will be used to test the data for normality and then will be used to run the Mann-Whitney U, Pearson, and Correlation tests, as appropriate to the hypothesis, to test the hypotheses.

***Organization of the Data***

 The data will be organized in an Excel spreadsheet with respondent numbers listed in the rows and the Lickert scale responses named as the column headings in the Raw Data Master.

Analysis of the Data

The data will be analyzed using the appropriate non-parametric statistical test.