

An Analysis of Socioeconomic Status on the Nursing Home Selection Process

Abstract

In the United States of America, there are approximately 17,000 nursing homes holding a total of nearly 1.6 million current older adult residents. Additionally, it is estimated that a projected 70% of individuals turning age 65 who will need some type of long-term-care services in their lifetimes. However, choosing a nursing home is an immensely overwhelming decision with numerous variables to consider. In this study, 907 elderly participants ages 53 to 88 were surveyed regarding which factors they would rate of most importance in the nursing home selection process. To begin the survey, participants were invited to self-identify their socioeconomic status, and their level of previous experience in the nursing home selection process, along with their age and identifying gender. Following, individuals ranked their top five most important factors in the nursing home selection process out of a given list of fifteen critical factors. At the conclusion of a completed survey, participants were given an informational sheet with facts and statistics to encourage an informed nursing home decision. Survey response results demonstrated all individuals most commonly prioritized cleanliness, pricing, and location more often than any other factor. However, those from low socioeconomic statuses rated pricing lower than individuals from middle and high socioeconomic statuses. Furthermore, individuals with experience in multiple nursing home placements rated cleanliness the highest, as opposed to individuals of no experience or one placement experience rating location as the most important factor. This research is essential in analyzing the importance individuals place on different factors in the nursing home selection process, and providing individuals with the proper resources to encourage an informed, educated decision in the event of selecting a nursing home for oneself or a loved one.

Introduction

Nursing homes, also commonly referred to as assisted living facilities, provide a wide range of health and personal care services to individuals of whom are incapable of, or need help to care for themselves. Nursing homes are able to offer the most extensive care a person can receive outside of a hospital (National Library of Medicine, 2021).

Frequently, they are able to provide long-term care. Long-term care refers to a comprehensive range of medical, personal, and social services coordinated to meet the physical, social, and emotional needs of people who are chronically ill or disabled. Additionally, they are able to offer assistance with custodial care; for example, bathing, getting dressed, eating, as well as 24-hour medical care and supervision (Robinson, 2020). Although services offered vary from facility to facility, nursing homes often provide room and board, monitoring of medication, personal care, 24-hour emergency care, as well as social and recreational activities.

Across the United States, over 48% of individuals after the age of 65 are expected to have to pay out of pocket costs toward long-term care (Benz, 2020). In the nursing home selection process, many individuals turn to Medicare and/or Medicaid for financial assistance. Medicare is a federal program that provides health coverage if you are 65+ or under 65 and have a disability, no matter your income, whereas Medicaid is a state and federal program that provides health coverage if you have a very low income. Both organizations have been established to help United States residents cover medical and health care costs (Medicaid.gov, 2021). Although Medicare and Medicaid are important financial resources to assist in the nursing home selection process, because Medicare often is not able to cover entire cost of a nursing home, and only a limited amount of individuals qualify for Medicaid, residents frequently have to pay significant out of pocket costs, forcing them to deplete private savings, investments, or funds for future generations.

Choosing a long-term care facility in which one will spend a great amount of time is a significant decision in one's life. However, there may be monetary restrictions to individuals coming from specific socioeconomic backgrounds that limit the perspective of feasible nursing homes for placement. There are distinctive age requirements, monthly income, and salary restrictions to qualify for different levels of financial assistance through government run programs, and paying expenses out of pocket are extremely difficult for residents across the nation. With the financial stresses overwhelming the nursing home selection process, individuals from different socioeconomic backgrounds may feel pressured to make a decision focused primarily on money, as opposed to making an informed decision.

Methodology

Willing elderly participants completed a written or computerized format of a student created survey, derived with inspiration from an established Health Services Research paper named "Choosing a Nursing Home: What Do Consumers Want to Know, and Do Preferences Vary across Race/Ethnicity?" The survey was also derived alongside guidance and assistance of multiple medical healthcare professionals with personal experience in the nursing home field. The survey named "The Importance of Certain Factors in the Nursing Home Selection Process" consists of 15 questions regarding important factors in the selection of a nursing home. Each question makes a specific statement regarding a hypothetical nursing home, and the participants were asked to analyze the statement, and to rank its importance in the nursing home selection process. For this survey, participants were invited to rank the top five most important considerations they currently view in the nursing home selection process. Individuals were invited to complete the survey on either format they felt most comfortable: written pen-and-paper, or a computerized Google Form.

The administration of the survey was conducted in an anonymous format among elderly men and women, ages ranging from 53 to 88 years from all cultures, races and ethnicities. To begin the survey, participants were asked to self-identify their socioeconomic background on a scale ranging from low, to middle, to high. Following, the survey asked the participant to rank their level of previous experience in the nursing home selection process for themselves or a loved one, ranging from no experience, to one placement, to multiple nursing homes. Additionally, participants were asked their age and identifying gender. These questions served to categorize data and effectively analyze results from separate control groups. Next, once the participant ranks their top five most important considerations, an additional question at the conclusion of the survey invites participants to consent to analysis of their results with their full privacy, and anonymous rights. Participants were asked to print their legal name, or respond with a "Yes, I consent." The completion of the entire survey took approximately 5 to 7 minutes to complete, and stated that all participation is entirely voluntary.

Upon completion of a written survey, each willing participant was provided with a student-created informational sheet (Figure 9) with general information and resources to enhance one's ability to make an informed selection of a nursing home. Upon completion of a Google Forms survey, after submission, participants were prompted to a link to view a pdf of the informational sheet. Sources were cited.

The objective of this experiment was to receive data from a simple random sample of willing participants most likely to have to engage in the nursing home selection process. In order to reach groups of individuals in age groups ranging from approximately 55-88, written surveys were distributed at the Saint Francis Community Center of Long Beach Township. Additionally, computerized forms of the Google Form survey were distributed to members associated with the Brick Township Senior Center, the Community Health Center in Asbury Park, the Neptune Township Department of Senior Services and Senior Center and the Toms River Township Senior Center. These organizations have prominent outlets to the elderly community in Ocean and Monmouth County, New Jersey, and provide a simple random sample of willing participants.

Objective

The purpose of this study is to examine the importance elderly participants from different socioeconomic statuses place upon different factors in the nursing home selection process. Along with analysis of data, this experiment is to raise awareness of critical financial resources to willing participants, and to provide individuals with sufficient resources of facts and statistics on important considerations to encourage informed decisions on potential nursing home selections.

Hypothesis

Among elderly individuals coming from lower-income socioeconomic status, more importance will be placed upon monetary considerations in the nursing home selection process. However, volunteers from wealthier socioeconomic status may place the least amount of significance on specific monetary factors.

Results

Of the 907 elderly participants, 318 individuals (35.1%) self-identified as coming from a low socioeconomic status, 301 individuals (33.2%) self-identified as coming from a middle socioeconomic status, and 288 (31.8%) self-identified as coming from a high socioeconomic status (Figure 1). Furthermore, 492 individuals (54.2%) have no experience in the nursing home selection process, whereas 234 individuals (25.8%) have experience with one placement, and 181 individuals (20.0%) have experience with multiple nursing homes (Figure 2). Within this study, there were 462 male participants (50.9%) and 445 female participants (49.1%). There were 202 individuals (22.3%) from ages 53-64, 404 individuals (44.5%) from ages 65-76, and 301 individuals (33.2%) from ages 77-88 (Figure 3).

Overall, elderly participants rated the top five most important factors in the following order: Location, Pricing, Cleanliness, Activities, and Visitation Policies (Figure 4). However, while comparing socioeconomic statuses, both middle and high ranked Pricing, Location, Cleanliness, Activities and Visitation; whereas the low control group ranked Location, Cleanliness, Pricing, Activities, and Staff Treatment of Residents (Figure 5). Those with no experience ranked Location, Pricing, Cleanliness, Activities, Treatment; participants with one placement ordered Location, Cleanliness, Pricing, Activities, Visitation; and those with experience in multiple placements ranked Cleanliness, Pricing, Location, Activities, Treatment (Figure 6).

Males most highly ranked Cleanliness, Location, Pricing, Recreation, Visitation, whereas women merely switched cleanliness with location. Both age ranges 53 to 64 and 65 to 76 ranked Location, Pricing, Cleanliness, Activities, Visitation, whereas individuals ages 77 to 88 ranked Cleanliness, Pricing, Location, Activities, Visitation (Figure 7). After conducting an ANOVA Single Factor test among the socioeconomic statuses and their rankings of the top 5, the test yielded a p-value of 0.8789. However, when comparing previous experience in the nursing home selection process, the ANOVA Single Factor test yielded a p value less than 0.0001. In conducting a statistical t-test among males and females, there was a p-value of 0.3541.

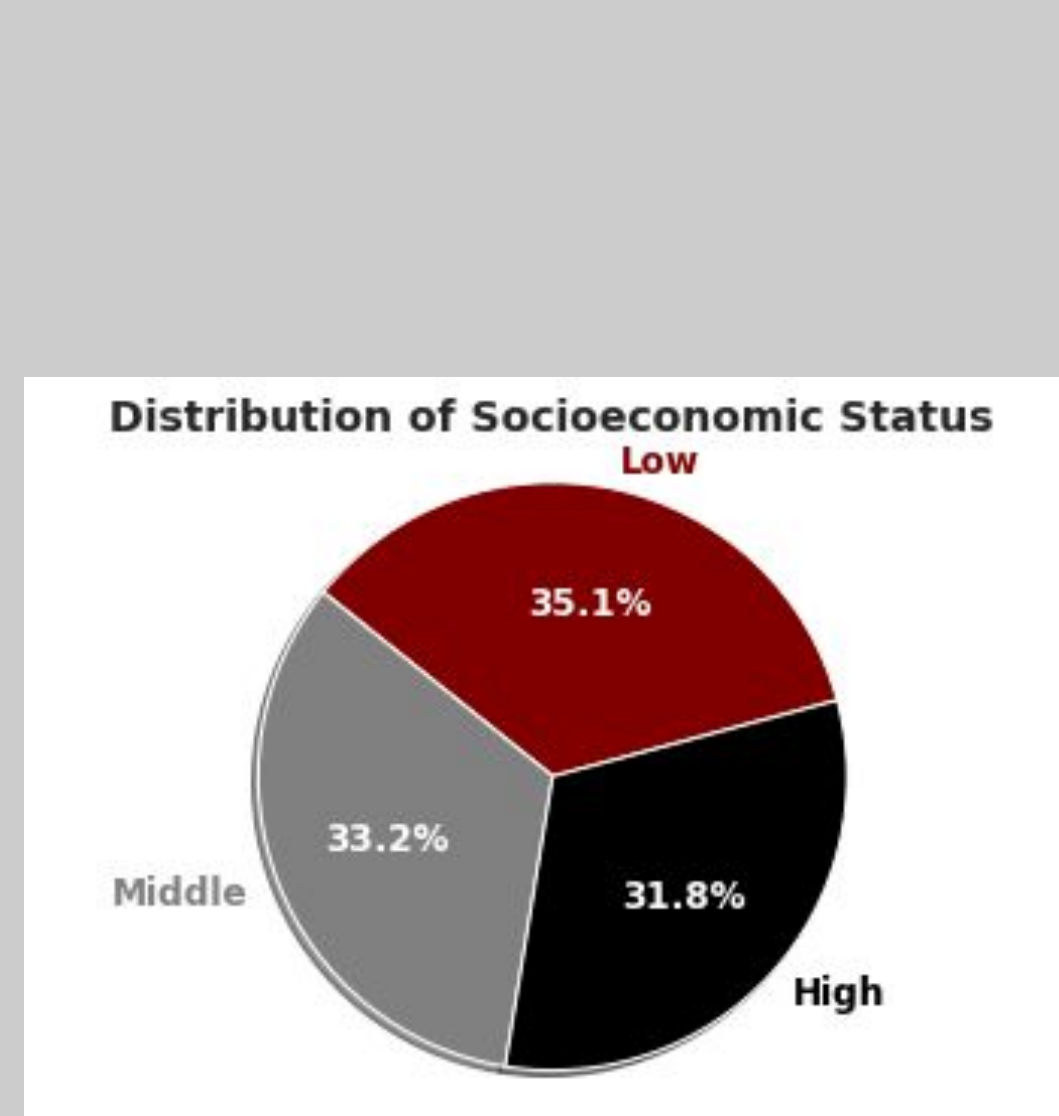


Figure 1: The pie graph shows the distribution of socioeconomic status within elderly participants. Of the 907 elderly participants, 318 individuals (35.1%) self-identified as coming from a low socioeconomic status, 301 individuals (33.2%) self-identified as coming from a middle socioeconomic status, and 288 (31.8%) self-identified as coming from a high socioeconomic status. All graphs were developed through Google Colaboratory with pandas and seaborn packages.

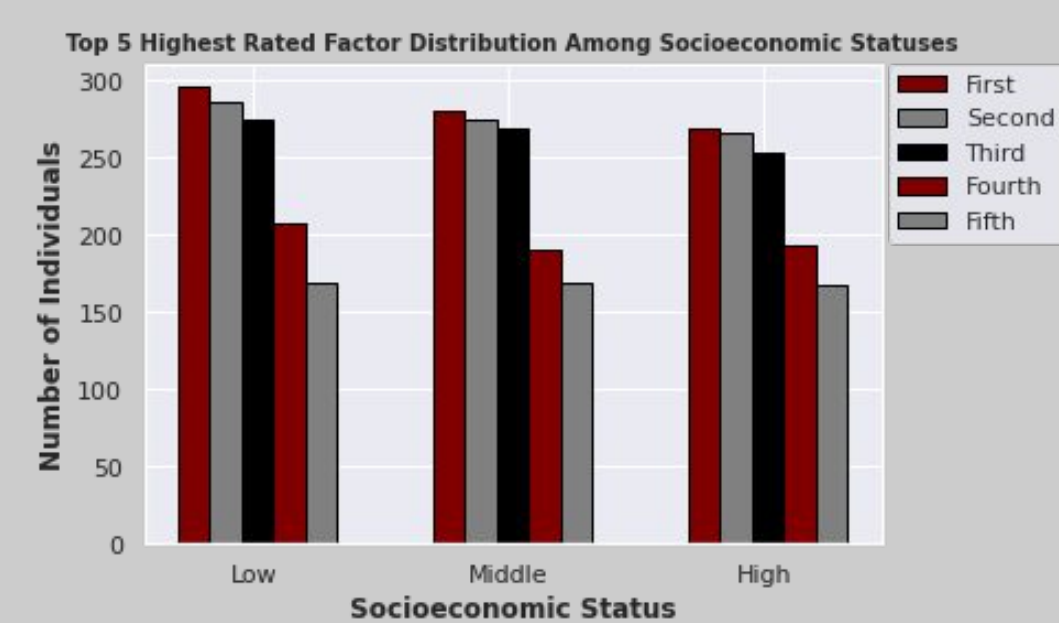


Figure 5: This bar graph provides a side by side comparison of socioeconomic statuses and their top five rankings. Those in low socioeconomic status ranked in order: Location, Cleanliness, Pricing, Activities, Treatment. However, both middle and high socioeconomic status individuals ranked the following top five: Pricing, Location, Cleanliness, Activities, Visitation. All graphs were developed through Google Colaboratory with pandas and seaborn packages.

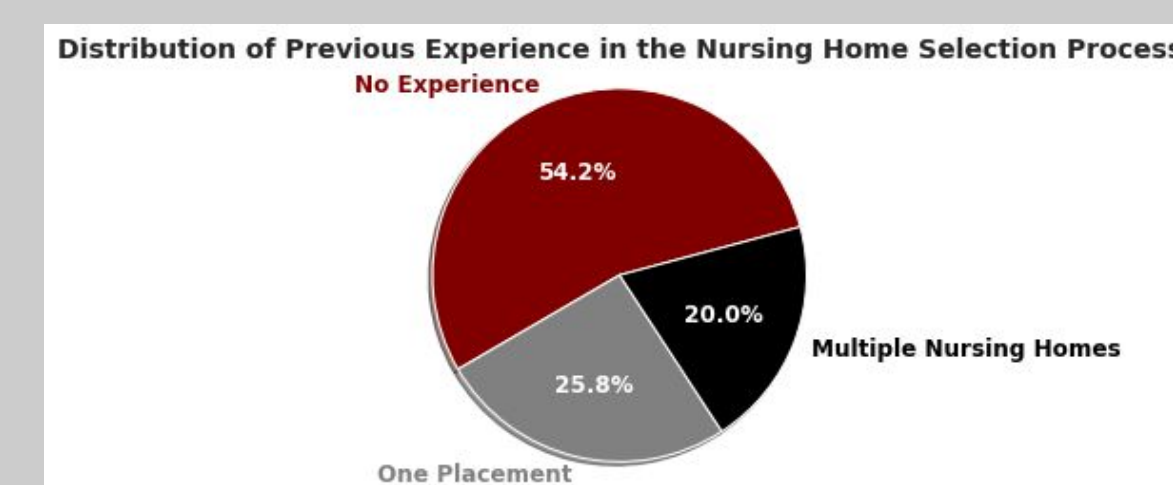


Figure 2: The pie graph demonstrates the distribution of previous experience in the nursing home selection process. Of the 907 participants, 492 individuals (54.2%) have no experience in the nursing home selection process, whereas 234 individuals (25.8%) have experience with one placement, and 181 individuals (20.0%) have experience with multiple nursing homes. All graphs were developed through Google Colaboratory with pandas and seaborn packages.

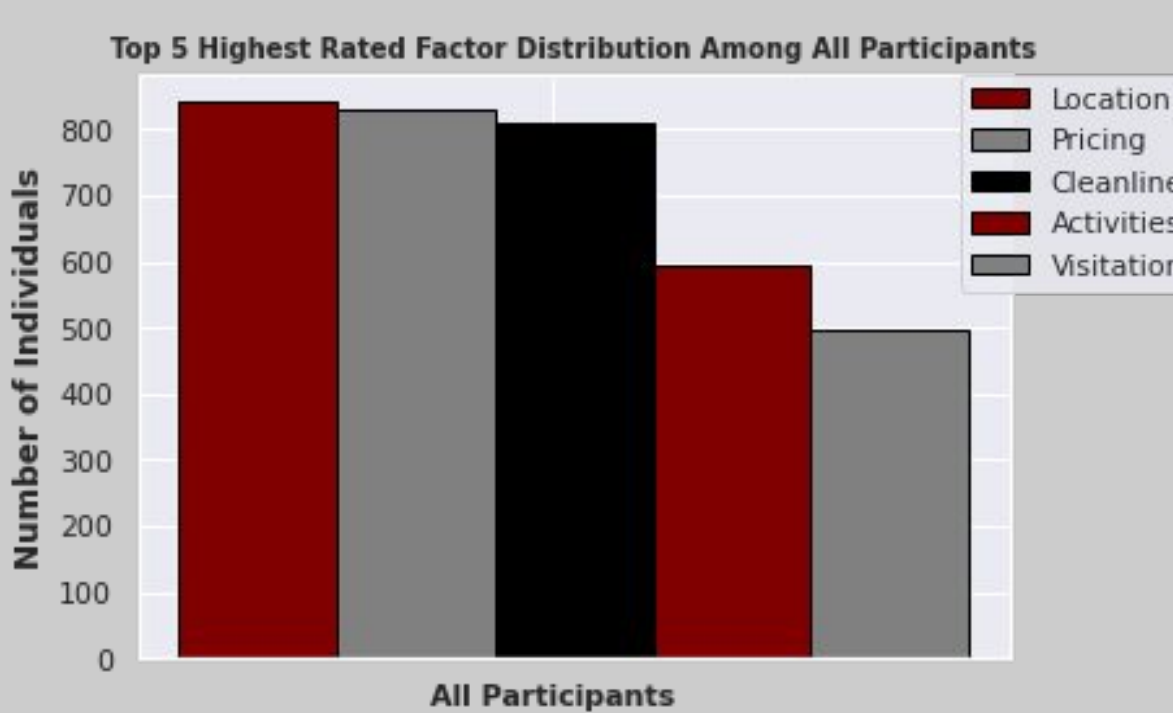


Figure 4: The bar graph exhibits the most commonly ranked factors in the nursing home selection process. Of the 907 participants, 841 individuals placed Location in the top five, 828 individuals placed Pricing in the top five, 811 individuals placed Cleanliness in the top five, 595 individuals placed Activities in the top five, and 495 individuals placed Visitation Policies in the top five. All graphs were developed through Google Colaboratory with pandas and seaborn packages.

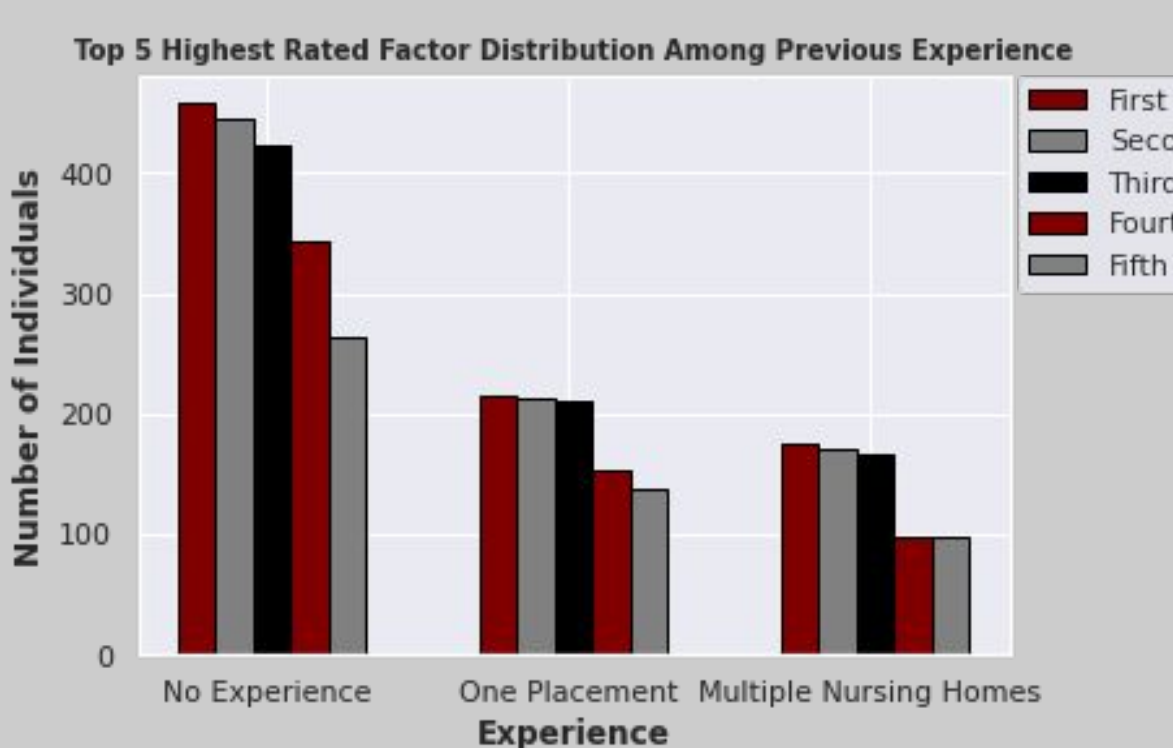


Figure 6: This bar graph provides a side by side comparison of levels of previous experience and their top five rankings. Those with no experience ranked in order: Location, Pricing, Cleanliness, Activities, Treatment. Individuals with one placement ranked the following top five: Location, Cleanliness, Pricing, Activities, Visitation, and those with multiple nursing home placements ranked Cleanliness, Pricing, Location, Activities, then Treatment. All graphs were developed through Google Colaboratory with pandas and seaborn packages.

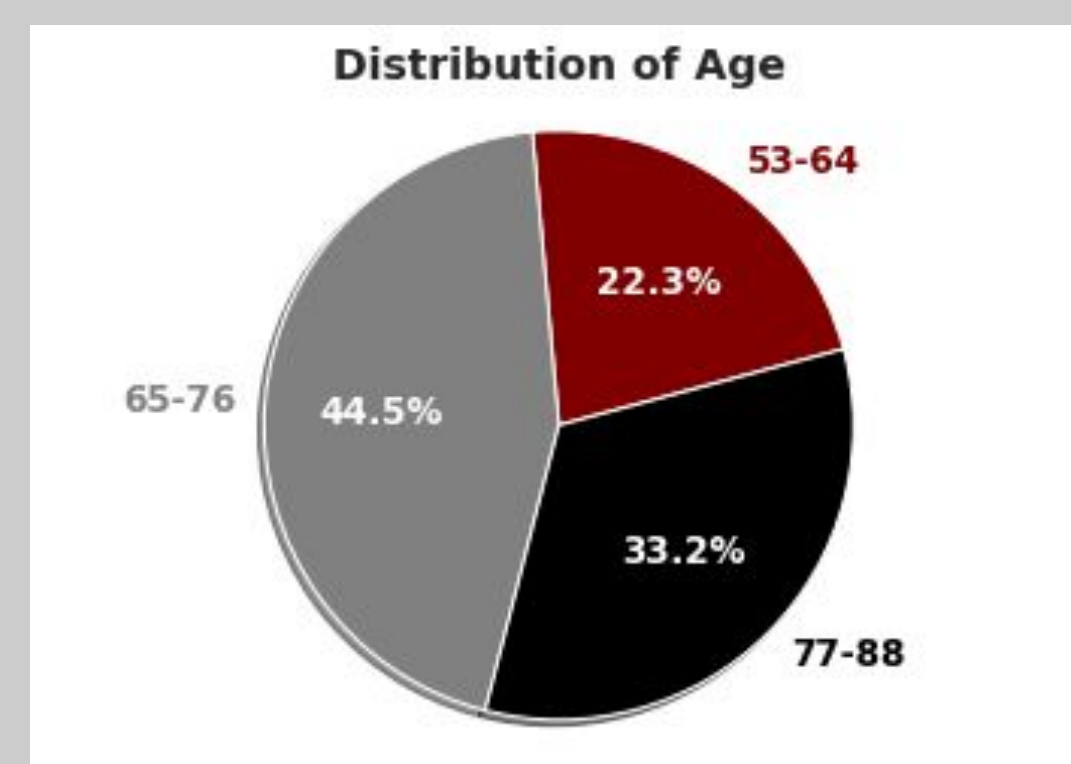


Figure 3: This pie graph demonstrates the distribution of age in the study. There were 202 individuals (22.3%) with ages ranging from 53-64, 404 individuals (44.5%) with ages ranging from 65-76, and 301 individuals (33.2%) with ages ranging from 77-88. All graphs were developed through Google Colaboratory with pandas and seaborn packages.

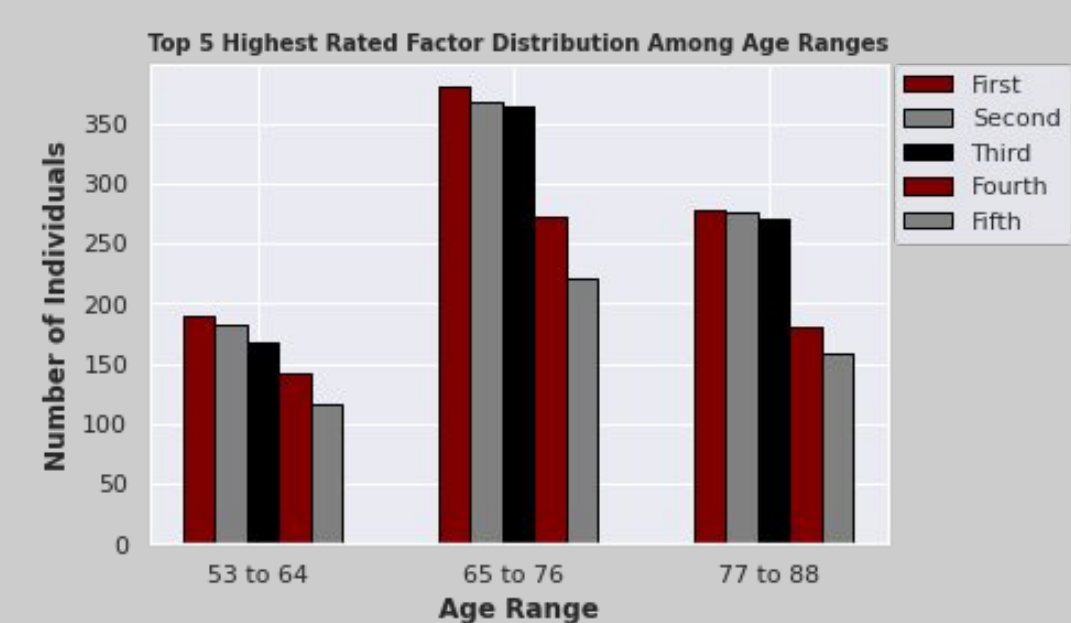
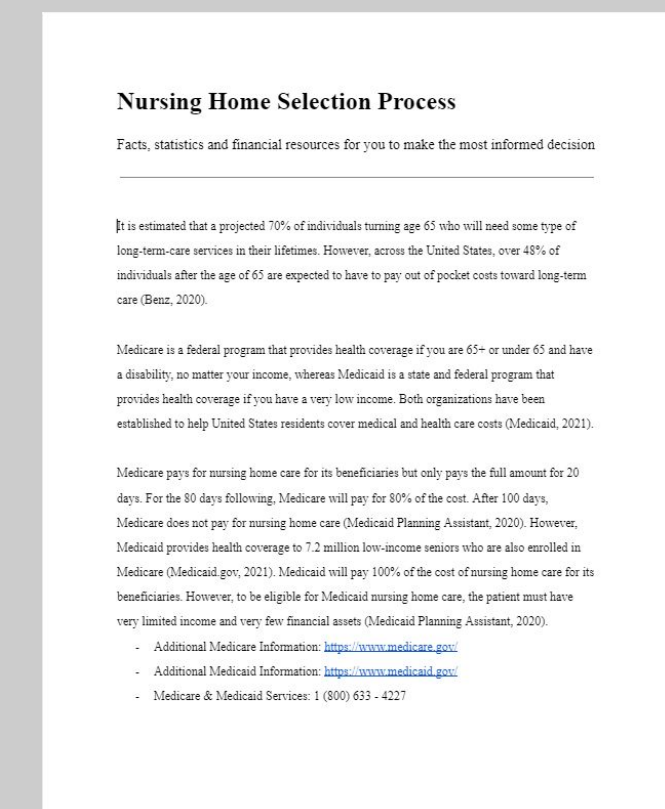


Figure 7: This bar graph provides a comparison of varying age ranges and their top five rankings. Those in age groups 53 to 64 and 65 to 76 ranked in order: Location, Pricing, Cleanliness, Activities, Visitation, whereas participants ages 77 to 88 ranked Cleanliness, Pricing, Location, Activities, Visitation. All graphs were developed through Google Colaboratory with pandas and seaborn packages.

Discussion

The purpose of this experiment was to investigate how elderly individuals rank the importance of certain factors in the nursing home selection process. As demonstrated in Figure 4, all individuals participating in the experiment distinctly placed Cleanliness, Pricing, and Location most often in their top five most important factors, where activities and visitation policies were also ranked in the top five often. However, in comparing socioeconomic statuses, those self-identifying from low socioeconomic statuses placed pricing lower than those from middle and high socioeconomic statuses (Figure 5). This may be attributed to the fact that there are currently several government programs in place, such as Medicaid, that often provide financial assistance to those with low income, whereas there are not as many programs of assistance in place for those earning higher annual salaries (Division of Medical Assistance, 2008). However, the ANOVA Single Factor test conducted yielded a p value of 0.8789, indicating that the null hypothesis cannot be rejected, suggesting there was not a statistically significant difference among ratings of those from different socioeconomic statuses.

Moreover, individuals with no experience and one placement ranked Location at the highest importance, while those with multiple nursing home placements most highly placed Cleanliness (Figure 6). This concern with cleanliness from multiple nursing homes may be due to individuals observing multiple distinct environments, and developing high standards for what the physical aspects of a nursing home should look like. Additionally, there was a strong correlation between increasing age and multiple nursing home placements. Because poor hygiene becomes increasingly dangerous to individuals of older ages, those with multiple placement experiences may be more concerned with cleanliness as it more directly affects their health (Nursing Home Abuse Guide, 2020). The ANOVA Single Factor test conducted yielded a p value less than 0.0001, indicating that the null hypothesis can be rejected. Therefore, there was a statistically significant difference among ratings of those from different previous levels of experience in the nursing home selection process.



Figures 8-10: The Toms River Senior Service Center (left) and the Saint Francis Community Center (right) were able to be utilized in order to distribute paper surveys and to reach elderly individuals in the community to take the computerized format of the survey. Upon completion of each given survey, the informational sheet (middle) was provided to each participant with facts and resources to encourage informed decisions in the nursing home selection process.

Conclusion

In addition to providing elders in the community with resources to encourage informed decisions in the nursing home selection process, the purpose of this study was to observe the importance individuals placed on certain factors in the nursing home selection process. Overall, analyzing the rankings of importance individuals in the community placed on certain factors in the nursing home selection process may be a useful observation to better our society's understanding of the elderly's thought process. Choosing a nursing home for oneself or a loved one is an immense, overwhelming decision that greatly impacts the course of one's life. Providing individuals with information to encourage the most informed decisions in the nursing home selection process is significant to lessening pressure, and allowing for the most enjoyable experience fit for an individual.

Acknowledgements

I would like to thank our research advisor for his guidance throughout my project. I would also like to thank the healthcare professionals that assisted me in the creation of the survey that was able to be administered. Additionally, I would like to thank the senior service centers in the area for allowing me to administer my survey to elderly participants in the community. This survey would not have been possible without the help and participation of all individuals in the community, and I am very grateful for all of their help.

Selected References

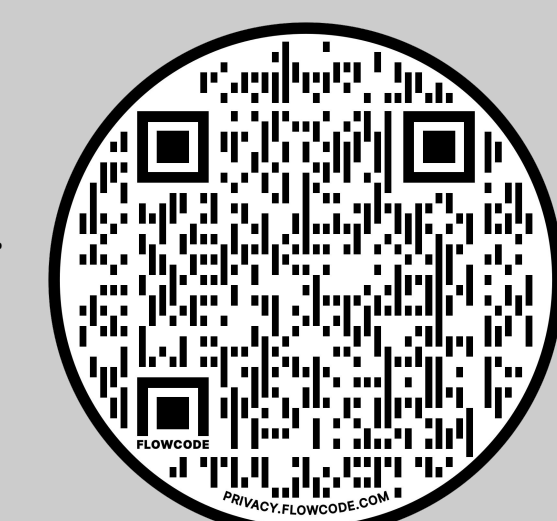
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