A Capability Index for the Filipino Elderly Home Care: A Community Based Approach

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Abstract

In the view Aging in Place, the most suitable home care system will be of interest in a community-based approach that meets the basic needs and service requirements that ensured the well-being of senior citizens and/or elderly Filipino. The study focuses only on home care concerns and factors in the Philippine setting, LGU, and family-oriented practices as regards aging and elderly care. It is conducted in Manila City-based communities/barangays and excluded province-based elderly care that is generally home-cantered due to the absence of accessibility and government attention in rural areas. The main objective of the study is to create a capability index in determining the type of elderly care system and to formulate community-based implementation platforms accordingly. MANOVA and Pearson Correlation were effective tools in determining the impact between the current provisions factors and demographic variables involved to form the Capability index in evaluating the current situation of the elderly and their capacities. The study also formulates a community-based platform to determine the type of elderly care system. Through this, areas of weaknesses can be easily identified and facilitate the development of appropriate program measures that a community can consider enhancing the capabilities of the elderly in their reach.

Keywords

Aging in place, elderly care system, capability index, community-based platform

1. Introduction

As the life expectancy of the world keeps on increasing, the population of the older bracket is experiencing growth. The United Nations WPA in 2015 reported that there are 9.62 billion aged 60 globally (Aturaliya, 2019). By 2050, one in six of the people in the world will be over the age of 65 (16%), up from one in 11 in 2019 (19%) one in four living in Europe and Northern America could be aged 65 or over by the year of 2050. Also, the number of populations aged 80 or over is projected to be tripled by the year 2050, from 143 million in 2019 to 426 million (United Nations, 2019) due to declining fertility rates and advancements in medicine and technology that allow the people to live longer (Lunenfeld & Strattorn, 2014). The size and age composition of a population is determined jointly by three demographic processes: fertility, mortality, and migration. (United Nations, 2019) As the fastest change occurring in low- and middle-income countries promote healthy aging and building systems to meet the needs of older adults will be the main concerns in a future where older people have the freedom to be and do what they value (Ghebreyesus, 2017).

Another concern is caring for the older adults because more than 99% of the elderly over the age of 65 have expressed desire and prefer to stay at home as long as possible rather than to be in a community with only adults (McRoy & Tao, 2015). An active living community is proposed to provide interactions with the surrounding community environment, which, first of all, includes the near social environment like family, friends, and neighbors. (Cattan et al., 2016)

Like many countries, the population of Filipinos in the Philippines aged 60 and older increases (Philippine Statistics Authority, 2020) to 9 million out of the total 109 million by the year 2019 based on the latest population data from the

Philippine Statistics Authority (PSA). Pareno mentioned that if the elderly population whose age is over 65 years old has reached seven percent of its entire population, then the country population is considered aging.

According to the study, "Aging in the Philippines: Findings from the 2007 Philippine Study on Aging (PSOA)," the actual living arrangements do not coincide with the perceived best living arrangements. Respondents believe that it would be best for older couples to either live by themselves or to live byc themselves but near one or more children. For those who said the best living arrangements for an older person is to live with a child, this leads to defining home care. (Cruz et al., 2007) According to Peter Wallace, the Philippine government needs to promote medical tourism and retirement for the elderly, where there is genuinely loving care and respect for the elderly, a place where they will feel at home, and where pension can go a long way. Although Article XV, Section 4 of the Philippine Constitution states that the family has to care for its elderly programs of social security, It is natural and a family tradition for Filipinos to set up in the household where the senior citizens or elderly live with their family member or children and rely on them for their daily needs, as this is a Filipino culture and is a shame not to be able to provide for its family member (Andel & Badana, 2018). "Taking care of the elderly is a community responsibility" senior adults, according to the American Association of Retired Persons (AARP), want only the basic needs: health, money, and spirituality. "It is a wish that they have not only for themselves but also their families here in the US and the Philippines," Xenia Montenegro said.

The Philippines' rich culture and traditions from its senior citizens' point of view on aging in place and increase expectations of caregiving for elderly family members (Badana & Andel, 2018). Aging in place refers to a person in their senior years to live in a home of their preference (Hoyt, 2019). Ensuring a high quality of life and maintaining the circumstances as they age, then Aging in place is the right choice a senior has made.

Like other Asian cultures, Filipinos value caring for their elderly family members. Filipinos are mostly Catholic, and members of the family are expected to contribute through numerous things (Kimura & Browne, 2009). Some Filipino family members are interested in the caregiving process and often serve multiple roles. It is part of Philippine society and Filipino culture, the commitment of Filipinos when it comes to family caregiving. The concept of caregiving of family members came from Filipinos' core-belief system in religion, mainly in Catholicism. The idea of caregiving of "self-sacrificing" insist in Catholicism (McBride, 2006) where the family caregiver sets aside his or her personal life to provide quality care to the family (Nakonz & Shik, 2009). Religion is an important component of Filipinos and encourages society the view of family caregiving.

In the view "Aging in Place," the question of determining the most suitable home care system was of interest in a community-based approach that has met the basic needs and service requirements that was ensured the well-being of senior citizens and/or elderly Filipino. The study pursued the following objectives: (1) to identify the basic needs and services of the elderly in the Philippines. (2) To assess the current state of elderly home care in the Philippines, specifically in Manila. (3) To create a capability index in determining the type of elderly care system and to formulate community-based implementation platforms accordingly.

The importance of this study was to establish a framework for a community-based home care system implementation in meeting the needs of and services for the elderly Filipino. In general, society and the local government will benefit from the results of this study. The academe, for its part, can use this research as a seminal study for future related endeavors. The study has focused only on home care concerns and factors in the Philippine setting, with consideration of Philippine laws and policies, LGU and community intellects regarding elderly and family-oriented practices as regards to aging and elderly care. The study has conducted using available information and data in Manila City-based communities. The study has excluded province-based elderly care that is generally home-cantered due to the absence of accessibility and government attention in rural areas.

2. Methodology

To determine the most suitable home care system in a community-based approach, this study has guided the following conceptual framework as shown in figure 2.1.1 to guarantee the well-being of an elderly senior citizen in the Philippines.
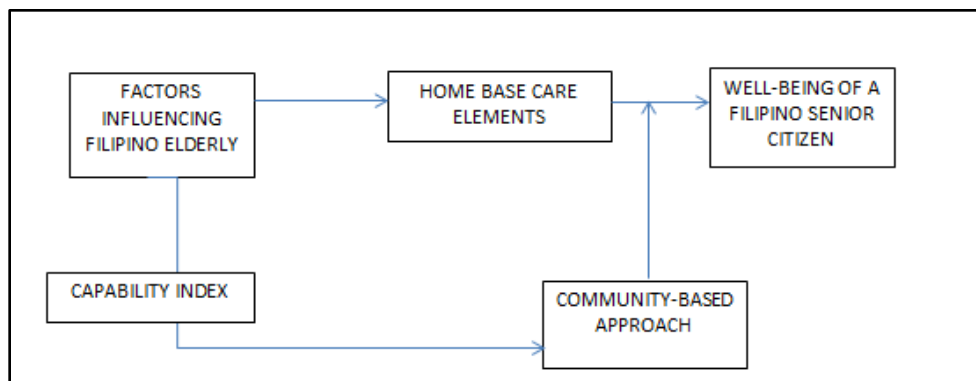
Figure 2.1.1 Conceptual Framework of the Assessment for Filipino Elderly Senior Citizen to achieve its well-being

Figure 2.1.1 shows the factors affecting the Filipino Senior Citizen that have identified what kind of home base care is best suited for the Filipino elderly and their well-being. The study formulated a community-based platform by creating a capability index to determine the type of elderly care system. With the support of the community and the Local Government Unit (LGU), it helped the elderly in the area to get the necessities and services they need. This system has helped the seniors maintain healthy and active lifestyles for as long as possible in the comfort of their homes.

The following factors and sub-factors have determined what lifestyle and comfortability are desired by the elderly to attain their well-being. (1) The economic factor includes its family income and cost of living and also its insurances. (2) Physical factors consist of its physical well-being, the physical presence of the environment, and the accessibility of the elderly to move around and communicate with others. (3) Community factors like social status, religious affiliates, cultural differences, associations, and leisure activities of the elderly in an open environment are some factors in a community for the elderly to live in.

2.1 Target Population and Sampling

The study got a sample size of 600 respondents in the City of Manila. Barangay areas of Manila City are used in the study. Given the study, it covers the urban city of Manila are used. It has utilized the sampling that identified the respondents.

The study took place in barangays to conduct a survey to the senior citizens aged 60 years and above. To achieve the desired target of respondents, we have reached out to local governments and the Office of Senior Citizens Affairs (OSCA) office for more data. Then assessment and evaluation are made from the given data of questionnaires from the elderly to know if the Filipino elderly are still highly capable of things that they can handle or extremely needs of assistance from others. The study has implemented a system that if the elderly has needs of assistance based on the given questionnaire, then recommendations are suggested, and actions are being taken care of by barangay officials for the elderly.

2.2 Research Design

From the questionnaire that the study was created, a 5-point scale from Strongly Disagrees to Strongly Agree at each question to represent the factors needed to achieve the best place in aging and if the elderly is still capable or in need of support. Then the mean of the score in the questionnaire identifies their descriptive equivalent of the elderly if they need support or very capable of their well-being.

The data results of the survey were segmented into a group of factors. These factors will lead to Elderly Home-Based Care preference. Significant Factors are determined from the data that is used to reduce numeral variables into fewer

variables. These Significant Factors are a common score that is put together that are extracted from all variables of the survey.

2.3 Data Analysis

Survey data are processed using descriptive statistics (percentages, measures of central tendency). Meaningful numbers are presented to summarize whole data representing sample size, frequencies, highest and minimum values. (Parahoo, 1997). The number of times a variable appears in the data is counted, and frequencies are identified. Absolute numbers, percentages are used and calculated (addition, subtraction, and multiplication) to find the highest and the lowest results.

Correlations are also drawn between the current status and the demographic information, particularly at home and functional status using the Pearson chi-squared test. It is a statistical test applied to sets of categorical data to evaluate how likely it is that any observed difference between the sets arose by chance. It is used in the following questions that pertain to household relations, health status, community life participation, financial security, and access to program benefits.

MANOVA was used where the relationship is between a dependent variable and one or more independent variables coexist with the factors influencing the elderly and home base care elderly to form a capability index to promote the well-being of the Filipino Elderly.

The capability index is widely used in manufacturing and processing plant. Indices are used mostly by monitoring requirements specified by the customers or by the set standards. The capability index is a numerical summary that compares the current situation of elderly home-based care, and it shows the current situation of the elderly who opted to choose elderly home-based care. It identifies the level of support for the elderly home-based care from the community. This model was used for the community to determine the support needed to achieve the well-being of their elderly citizens, from high needs support to very capable of the elderly in the community.

The results of the surveys and interviews, which are preferred by most Filipino Senior Citizens from the factors they choose, are recommended to the Local Government so that they can exercise the right action to support the elderly in the community. This has achieved their wants and needs and obtains their well-being and their place of aging.

3. Results and Discussion

3.1 Results of the Survey

The first objective of the study was met to identify the basic needs and services of the elderly in which indicate the provisions of the elderly in the survey questionnaire.

In the needs and services for the elderly, the Current Provisions are the things, benefits, or person/s the elderly already has, or the places, programs, or opportunities the elderly recently goes to. While the Must-Have Provisions are the things, benefits, or person/s the elderly should have or must-have. There are no differences in the Must Have Provisions and the Current Provisions from the results of the survey questionnaire for funds or economic factor, physical factor, and community factor of 31-35, 37, 39&10 because they agree on what they currently have with what they should have. However, there is a difference in the community factor of 36, 38, and 311 because they disagree that they recently have this in their life but agrees to have them.

The second objective of the study, to assess the current state of elderly home care in the Philippines, specifically in Manila. The sample size number is (n=600). Based on the demographics for AREA, GENDER, AGE, CIVIL STATUS, NUMBER OF CHILDREN, EMPLOYMENT STATUS, TYPE OF RESIDENCE, COMPANIONSHIP, SOURCE OF FUNDS, INCOME, DECISION MAKING, and PERFORMANCE of the elderly. The area where most of the elderly were given survey questions is in Tondo. There is more than the male elderly than the female with the

most-aged 65-69 years old. Most of the elderly are married, have pensions, live in their own home, lives with their husband/wife, depends on pensions as a source of funds, have an income of 15,000 or less, they still make the decisions for the family, and most of them can still perform an activity without any crutches or assistance.

3.2 MANOVA

The third objective of the study is to create a capability index in determining the type of elderly care system and to formulate community-based implementation platforms accordingly. The variables in the demographics were compared to the current provisions for funds, physical factor, and community factor that the elderly are experiencing through MANOVA using Minitab® 17.1.0. In table 3.2.1 shows the p-values and the conclusion generated:

Table 3.2.1 Summary of P-values between demographics and current provisions

Factor	Response	P-value	Conclusion
AREA	Current Provision of Funds	0.15	Area does not affect the Current Provision of Funds.
	Current Physical factors	0	Area directly affects the Current Physical factors.
	Current status in the community	0.075	Area does not affect the Current status in the community.
GENDER	Current Provision of Funds	0.578	Gender does not affect the Current Provision of Funds.
	Current Physical factors	0.002	Gender directly affects the Current Physical factors.
	Current status in the community	0.204	Gender does not affect the Current status in the community.
AGE	Current Provision of Funds	0.045	Aged directly affects the Current Provision of Funds.
	Current Physical factors	0	Age directly affects the Current Physical factors.
	Current status in the community	0.833	Age does not affect the Current status in the community.
CIVIL STATUS	Current Provision of Funds	0	Civil Status directly affects the Current Provision of Funds.
	Current Physical factors	0.907	Civil Status does not affect the Current Physical factors.
	Current status in the community	0.001	Civil Status directly affects the Current status in the community.
NUMBER OF CHILDREN	Current Provision of Funds	0.001	Number of Children directly affects the Current Provision of Funds.
	Current Physical factors	0.433	Number of Children does not affect the Current Physical factors.
	Current status in the community	0.012	Number of Children directly affects the Current status in the community.
EMPLOYMENT STATUS	Current Provision of Funds	0	Employment Status directly affects the Current Provision of Funds.
	Current Physical factors	0.288	Employment Status does not affect the Current Physical factors.
	Current status in the community	0.199	Employment Status does not affect the Current status in the community.
TYPE OF RESIDENCE	Current Provision of Funds	0.056	Type of Residence does not affect the Current Provision of Funds.
	Current Physical factors	0.003	Type of Residence directly affects the Current Physical factors.
	Current status in the community	0.794	Type of Residence does not affect the Current status in the community.
COMPANION	Current Provision of Funds	0	Companion directly affects the Current Provision of Funds.

	Current Physical factors	0.125	Companion does not affect the Current Physical factors.
	Current status in the community	0.044	Companion directly affects the Current status in the community.
SOURCE OF FUND	Current Provision of Funds	0.027	Source of fund directly affects the Current Provision of Funds.
	Current Physical factors	0.002	Source of fund directly affects the Current Physical factors.
	Current status in the community	0.002	Source of fund directly affects the Current status in the community.
INCOME	Current Provision of Funds	0.698	Income does not affect the Current Provision of Funds.
	Current Physical factors	0.011	Income directly affects the Current Physical factors.
	Current status in the community	0.043	Income directly affects the Current status in the community.
DECISION-MAKING	Current Provision of Funds	0.693	Decision-making does not affect the Current Provision of Funds.
	Current Physical factors	0.021	Decision-making directly affects the Current Physical factors.
	Current status in the community	0.044	Decision-making directly affects the Current status in the community.
PERFORMANCE	Current Provision of Funds	0.001	Performance directly affects the Current Physical factors.
	Current Physical factors	0.027	Performance directly affects the Current Physical factors.
	Current status in the community	0.001	Performance directly affects the Current status in the community.

Table 3.2.1 also shows the relationship between the demographics and the current provisions of the elderly using MANOVA. The p-value shows the significance of the AREA, GENDER, AGE, CIVIL STATUS, NUMBER OF CHILDREN, TYPE OF RESIDENCE, COMPANIONSHIP, SOURCE OF FUNDS, INCOME, DECISION-MAKING, and PERFORMANCE affects the Current Provisions for Funds, Physical Factor, and status in the community. If the p-value is lower than 0.05, then the demographics directly affects the current provisions. If the p-value is higher than 0.05, then the demographics do not affect the current provisions.

3.3 Factors Considered in the Capability Index

Since the values are correlated, the p-values per factor with the elements were considered to accept or not accept the factor to be included in the capability index.

Table 3.3.1 shows that out of 3 provisions concerning the demographics, if only one of their p-values is lower than .05, then the factor is not accepted. If two or all three of the provisions about the demographics, with their p-values, are lower than .05, then they are accepted and are part of the factor of the capability index.

Through standardization, there is the transformation of the raw variable scores into z-scores, where the actual value was the score on each variable. In table 3.3.2, it shows that the indicators were converted to a normal scale with an average of 0 and a standard deviation of 1 (Bernard, 2006).

Table 3.3.1 Acceptance of factors to be included in the capability index

Factor	Description	Conclusion
Area	1 out of 3 p-values is < .05	Not Accept
Gender	1 out of 3 p-values is < .05	Not Accept
Age	2 out of 3 p-values are < .05	Accept
Civil Status	2 out of 3 p-values are < .05	Accept
Number of Children	2 out of 3 p-values are < .05	Accept

Employment Status	1 out of 3 p-values is < .05	Not Accept
Type of Residence	2 out of 3 p-values are < .05	Accept
Companion	2 out of 3 p-values are < .05	Accept
Source of Funds	2 out of 3 p-values are < .05	Accept
Income	2 out of 3 p-values are < .05	Accept
Decision-making	2 out of 3 p-values are < .05	Accept
Performance	All of 3 p-values are < .05	Accept

Table 3.3.2 Capability index values

Factors	Normalized Score	
	1	0
Age	69 and below	70 and above
Civil Status	Married	Single
Number of Children	4 and below	5 and above
Type of Residence	Owned	Not Owned
Companion	With companion	Alone
Source of fund	Steady	Not steady
Income	Above P15,000.00	P15,000.00
Decision-making	Yes	No
Performance	Does not need assistance	Needs Assistance

Using Crooks (2009) approach by using equal weight for all factors as assigning weights to the indicators is often subjective, this study used equal weighting (Moore, Vandivere, and Redd, 2006; Saisana and Tarantola, 2002). The capability index is treated as follows:

$$Capability\ Index = Factor\ 1 + Factor\ 2 + Factor\ 3 + Factor\ 4 + Factor\ 5....Factor\ 9$$

Using the range score and scale of the capability index, the sum of the factors is: 1-2 then it is Highly Needs Support, if 3-4 then it Needs Support, if 5 then it is Slightly Capable, if 6-8 then it is Adequately Capable, and if all of the 9 factors are met, then the elderly is Very Capable.

The implemented programs are used by the elderly if the factors are zero, in adding the factors for the capability index scale. These programs served as the community-based approach to achieve the well-being of the elderly. These programs are likely to: provide monthly programs and conduct inspections/visitations to ensure older people are not living alone, create a buddy system in the community that will check on another frequently for Age/Companion, have monthly programs for socialization/Celebrate Senior Citizens week filled with activities, have more relaxation occasions with funds from the barangay/government for Civil Status/Number of Children, have homeownership arrangements for the elderly, provide privileges for senior citizens with no permanent dwelling for Residence, have contractual jobs for able senior citizens in the community, increase funds that are distributed to the elderly for Source of Fund/Income, have more facilities that cater to disabled elderly in communities, have stronger healthcare system and policies, have government allocation for health funds to provide more free medical services as well as medicines for the elderly, have free Semi-Annual check-ups and other medical freebies for the elderly, and have regular accident prevention awareness and seminars for Performance.

4. Conclusion and Recommendation

One of the key factors that the elderly need is an active living community that provide interactions and social environments such as family, friends, and neighbors. There are national laws on the elderly, from accessibility standards to setting up senior citizens' centers, discounts on purchases, and providing pensions. The Philippine government, like any other country, has policies and programs to take care of the elderly and provide them the needs and support.

With the results on the survey, the demographic variables in correlation with the factors in the current provisions, using MANOVA, produces the p-values where if 2 or all of p-values of the factors are below .05, then accept the variables of the demographics and used them as a new factor in the capability index. Then through standardization, indicators were converted into a normal scale of 1 or 0, where the sum of these factors determines the Capability Index Scale of the elderly. Through this, areas of weaknesses can easily be identified and provide community programs to the zero factors to fill up the gap. This facilitates the development of appropriate measures that a community can consider to enhance the capabilities of the elderly in their reach.

In consideration of the foregoing, future research in this area can further consider other factors not included in the scope of this study, such as the cultural, psychological, and mental health factors that can enhance happiness in aging. Also, it is recommended that future research incorporate the following: (1) the index can only assess an individual or at a community level. As the index has its limitations, this can further be studied and explored at a national level and deep-diving into the factors. (2) Other categories of the elderly were not considered in this study. It is recommended to explore these different classes to be included in the index.

The research output in this study was aimed to provide a platform based on the capability index developed based on the significant factors that were built into the model. As such, different communities can include ethnic and endogenous variables to adapt to their local conditions and cultural practices, unique to their system.

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