Aging, Resilience and Vulnerability of Selected Faculty and Staff (55 years old and above) in an Academic Community in the Philippines

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ABSTRACT

Introduction. A demographic shift towards population aging is evident worldwide. This presents challenges particularly to low-income and middle-income countries like the Philippines. Understanding perceptions of aging, resilience, vulnerability, and gender identity will help prepare the health care system and social services in addressing the needs of the Filipino older population.

Objective. To describe gender identity, perceptions of active aging, successful aging, resilience, and vulnerability among faculty and staff (working, retired) in an academic community in the Philippines.

Methods. Survey and focus group discussions were conducted among working and retired faculty and staff aged 55 years old and above.

Results, Analysis, and Discussion. Almost all respondents had the same gender identity as their biological sex. There were differences in the respondents' perceptions of active aging and successful aging and in their sources of strength and worries. Compared with retired respondents more working respondents believed that active aging meant being strong and physically active or being involved in sports. Female respondents thought that being socially active in their community and church was indicative of active aging. In contrast, male respondents equated being physically healthy with active aging. More working respondents and females (than retired and male respondents) thought that successful aging meant participating in community-based activities. In terms of vulnerability, differences were noted in the respondents' sources of strength and worries. In general, retired respondents and female respondents said they got their strength from their grandchildren and from their religion. In contrast, working respondents and male respondents relied on their families for strength. It was also noteworthy that more retired respondents did not have any old agerelated worries compared with working respondents. Female respondents worried about their families while male respondents worried about death. Subjective nuances of being an older working or a retired employee in an academic community surfaced in the FGDs. The importance of context was evident in shaping the informants' perceptions of active aging and frailty, and in their sources of worries and happiness. Overall, this paper adds to the body of knowledge about aging in the Philippines by studying a group of older Filipinos in an academic community. It showed that particular aspects of Filipino culture such as gender roles, religion, and close family ties permeate one's life until he or she reaches old age. The results can help academic communities in policy formulation and program development

Corresponding author: Nina T. Castillo-Carandang, MA, MSc, PhD Department of Clinical Epidemiology College of Medicine University of the Philippines Manila 547 Pedro Gil St., Ermita, Manila 1000 Philippines Email: ntcastillocarandang@up.edu.ph to ensure that their older employees – throughout their life course – can adequately address vulnerability and resiliency needs to achieve active and successful aging.

Key Words: active aging, successful aging, vulnerability, frailty, gender identity, resilience, Philippines

INTRODUCTION

The World Health Organization (WHO)¹ noted a worldwide demographic shift as people aged 60 years old and above are expected to outnumber children 5 years old and below by 2020. People over 60 years old will also increase from 12 percent to 22 percent between 2015 and 2050, and they are expected to be living in low- and middle-income countries. This scenario is already evident in the Philippines. While it is a predominantly young country, 6 percent of the Filipino population are aged 55-64 years old, and 4.6 percent are 65 years and older.² The proportion of senior citizens increased from 7.5 percent of the population in 2015 to 8.2 percent in 2018-2019.³ Thus, the Philippines is said to be on its way to becoming an aging population wherein the proportion of the population 65 years old and over exceeds 8 to 10 percent.

An increase in the number of older persons presents many opportunities and challenges. However, concerns related to aging and the older population remain to be understudied in the Philippines. Previous studies on aging in the Philippines centered on perceptions of aging in general, quality of life, workforce and aging, and family caregiving. National and regional surveys also tackled health, social, and economic factors.^{4,5} Less is known about the perceptions of older Filipinos on active aging, successful aging, gender identity, frailty, vulnerability, and resilience.

The WHO⁶ defined active aging as "the process of optimizing opportunities for health, participation, and security in order to enhance quality of life as people age." They also specified the following determinants of active aging: economic, social, physical, personal, behavioral, and health and social services. Majority of the studies on active aging were in western countries.7 These countries have recognized the need to measure active aging to implement sound policies. Countries in Europe investigated indicators such as employment, participation in society, independent, healthy, and secure living, and capacity and enabling environment. Results showed that older people from Scandinavia and the UK were the most active.8 Despite the dearth of literature on active aging in Asia, Southeast Asian countries (including the Philippines9,10) and Japan collaborated to make policy and systems recommendations and plans for the achievement of active aging through the provision of long-term care, appropriate services, and support for the elderly.¹¹

The concept of successful aging has been more explored than active aging. A comprehensive survey on successful aging in America found that only 11.9 percent of the older population were aging successfully.¹² As a concept, successful aging is said to be interdisciplinary. It must be dissected at the individual, group, and societal levels¹³, and it also varies based on culture. Americans associated successful aging with independence, activity, and agelessness while Indians regarded the concept in relation to interdependence and human transience. The latter also welcomed the notion that successful aging may come with counter-productivity and the need to accept dependence, decline, and death.¹⁴ Mexicans shared this view that successful aging should go hand-in-hand with accepting and adapting to changes in life and health status. In addition to acceptance and adaptation, strong involvement with family, friends, faith in God, achievement of personal goals, and aging in place were characteristics of successful aging.¹⁵

Older people's health status is oftentimes studied along with successful aging.^{16,17,18} In the Philippine Longitudinal Study on Aging¹⁹ (n=1,305 Filipinos 60 years old and above), results showed that successful aging was based on 4 domains, 3 of which were related to the older person's health (active engagement with life, functional health, absence of pain and debilitating conditions, and maintenance of vision and hearing). In the Cebu Longitudinal Health and Nutritional Survey (n=1,568 Filipino women aged 46 to 79), the selfreported health measures were correlated with 4 domain measures of successful aging (physiological, mental health, cognitive, and sociological).20 However, health is not the only variable important to successful aging. A survey of 800 Filipinos aged 60 years old and above revealed that apart from health, one's marital status, educational attainment, socioeconomic class, regular engagement in leisure activities, exercise habits, number of close family members and friends, communication habits, and religious activities were significantly linked to successful aging.²¹ Non-health measures such as cultural orientation particularly collectivism and subjectivity to nature also served as predictors of successful aging.22

Successful aging and active aging have also been studied hand-in-hand with the concept of vulnerability in western countries. Vulnerability is said to be inherent among older people.²³ It is made of complex interactions of risks such as "being exposed to a threat, of a threat materializing, and of lacking the defenses or resources to deal with a threat." Vulnerability among older people is considered as an "undesirable state" and as a "humanitarian concern."24 Moreover, it has been reported that vulnerable older people do not have the needed reserve to cope with their present challenges.²⁵ Despite its occurrence, less is known about the vulnerabilities of older employees in academic settings. A study conducted in 2 Philippine state universities (n= 206 pre-retirees 55 to 64 years old, and retirees 65 years old) revealed that while older employees were generally contented and accepting of the changes inherent with old age, they also experienced stressors in the forms of bereavement, family-related problems, and work-related problems. Despite these, they managed to cope by seeking spiritual guidance, employing cognitive strategies, and relying on existing social support.26

In this study, the researchers adapted Paúl, Ribeiro, and Teixeira's (2012) view that definitions of active aging should recognize subjective as well as objective variables, and the role of psychological variables in order to craft community and individual interventions.²⁷ This recognized the roles of culture in one's perception of aging particularly in the Philippines, where religion and social relations are essential to the quality of life.28 Meanwhile, vulnerability was defined as a state wherein older persons were "capable or having the risk of being physically, mentally, emotionally, and economically harmed or deprived." It was assumed that older persons in the academic community could be rendered vulnerable by the interaction of factors such as personal and behavioral, socioeconomic, and political conditions, and environmental risk. The concept of vulnerability was explored by asking about the gender identity of survey respondents and delving into the sources of sadness, worries, happiness, and strength of the survey respondents and focus group discussion participants. They were also asked about their perceptions of frailty, worries related to old age, and causes of sadness.

To the best of the researchers' knowledge, gender identity has not been studied among Filipinos 55 and above in an academic community. If one's gender identity does not conform with the dominant social norms (usually heteronormativity), gender identity and gender expression present unique stressors and make people more vulnerable than those whose gender identities are consistent with their sexes (cisnormativity).²⁹ Moreover, the WHO⁶ sees gender as an important lens through which active aging should be viewed.

Resilience, as had been proposed by Castillo-Carandang (2019) and adapted for this paper, is a constantly changing process through which Filipino older persons adapt and thrive, and regain a sense of well-being (*kagalingan*) in the face of various challenges and stressors (family and social relationships, health, workplace, finances, among others).³⁰ Thus, it was also deemed important to look into resilience (as a response to potential exposure to vulnerability) by looking into sources of strength and sources of happiness among older employees.

In this study, active aging, successful aging, vulnerability, and resilience were also examined in relation to sex and/ or gender and working status. Similar studies had been done wherein gender differences were found in the social dimensions of active aging. Women participated more in religious activities while men were more active in commute, work, and leisure activities.³¹ A similar study on successful aging also found that women were low in physical functioning while men had low social functioning.³² A comprehensive review of studies on health and well-being in old age shared the same findings. While women worldwide had longer life expectancy, they did not fare as much as men in dimensions related to health, functioning, and subjective well-being as they suffered more from depression, disability, and loneliness.³³ Men also tended to grow old with their spouses and children while females tended to outlive their partners and ended up living alone, with their children, or in a different living arrangement.³⁴ Aside from sex and gender, working status was also considered in this study. Data from longitudinal studies in the US revealed that retirement increased difficulties in mobility, activities of daily living, and illnesses. It also led to a decrease in sound mental health.³⁵ Similar findings were reported in Japan where retirees had deteriorated mental health and functional capacity.³⁶ In contrast, results from the Netherlands Kinship Panel Studies found that retirement did not have an effect on one's connections. However, it changed the nature of relationships and activities with the increase of volunteering and organizational tasks.³⁷

This study was imperative as the University of the Philippines (UP) was a co-party in the 2019 Manila Declaration that seeks to make universities in the ASEAN as centers of health and wellness wherein constituents are nurtured and safe.³⁸ Moreover, the researchers sought to contribute to the body of knowledge about the older Filipino's gender identity and perceptions of active aging, successful aging, vulnerability, and resilience by looking into the definitions attached to these concepts by older employees in an academic community of the UP System.

METHODS

This study (Project 3) was part of 4 projects conducted under the UP's Wellness Initiative for Seniors and Elders (UPWISE) Program. The UP Los Baños (UPLB), the agricultural sciences and natural resources campus, is one of 8 constituent universities of the UP System. It is located around 68 kilometers south of Manila. Survey respondents and focus group discussion (FGD) participants resided in *barangays* (villages) within a 5-7 kilometer radius from the campus in the rurban towns of Los Baños (barangays San Antonio, Batong Malake, Putho Tuntungin, Anos, and Maahas) and Bay (barangays Paciano Rizal, and Masaya) in the province of Laguna.

This paper followed a convergent mixed parallel design wherein both quantitative and qualitative data were given equal weight in the interpretation of the results³⁹. Prospective participants and respondents included employees (working and retired) 55 to 80 years old (at the time the study was conducted). The maximum age cut off was made in anticipation that some prospective respondents might have limitations due to their health status and/or functional capacity. Proponents requested a list of names and last known home addresses of prospective eligible employees (employed and retired) 55 years old and above from the university's human resources and record departments. This list was further checked to account for those who were already known to be deceased or were in poor health or who had already migrated or left/transferred from the study area. Qualitative data were collected through FGDs. Thirtyseven participants joined 8 FGDs. Separate discussions were held with males and females, faculty and staff, and working and retired participants. For the quantitative part, the biostatistician set a 30 percent allowance for potential non-participation. A no replacement approach was made just in case prospective respondents could not be located, were disqualified, or refused to participate. Two hundred and thirty-six (236) out of the 451 randomly selected employees were located and agreed to serve as survey respondents. (In this study, participants refer to those who joined the FGDs while respondents refer to those who answered the survey.) Informed consent was sought from all FGD participants and survey respondents. Survey and FGDs were done in accordance with the approved ethical clearance sought from the UP Manila Review Ethics Board (UP Manila REB code: 2018-140-01).

Qualitative data analysis (QDA) entailed the iterative and collaborative process of reading, reviewing, and reexamining data (recordings, transcripts, and notes) from the FGDs to get a better understanding of the perceptions of active aging and vulnerability among older persons in the UPLB community. Themes were identified from the data after multiple discussions within each FGD team. After 3 joint QDA workshops that involved all of the FGD teams (facilitators, notetakers, and transcribers) and the Project 3 team. Consultations were conducted with community leaders and members before, during, and after data collection to ensure the trustworthiness of the data.

Descriptive summary measures such as means and proportions were calculated for the quantitative data. The t-test for two means, z-test for two proportions, and the Kolmogorov-Smirnov test for the equality of two distributions were used to explore these differentials since comparisons were done between two groups (working and retired, male and female). It must be noted that in order for the statistical tests to be applied, only response categories with sufficient cases or observations were included.

RESULTS AND DISCUSSIONS

Sociodemographic Characteristics of Respondents

Thirty-seven participants joined the 8 FGDs (16 staff, 21 faculty). The oldest participant was 80 years old (retired, male, faculty) while the youngest participant was 56 years old (working, male, staff). The average age of the male, retired faculty was older (71.8 years) as compared with the female, retired faculty (70 years old).

Two-hundred thirty-six faculty and staff (151 working, 85 retired) participated in the survey. The average age of the survey respondents was 63.4 years old (youngest respondent 56 years old, oldest respondent 80 years old). Working and retired respondents (faculty, staff) had similar sociodemographic characteristics except for civil status, wherein the proportion of married working employees (p<0.05) was significantly higher than the proportion of married retired employees. Majority were Catholic (82%), had post-graduate degrees (49%), and were female (52%). On average, respondents reported having 1-3 children; and 1 child who studied or graduated from UP (Table 1A). Significant differences were found in the highest educational attainment (p<0.01), civil status (p<0.01), and number of children (p<0.01) of male vis-a-vis female respondents. However, there were no significant differences between male and female respondents for other sociodemographic characteristics (age, religion, number of living children, and number of children who studied or worked in UP) (Table 1B).

Gender Identity (Survey Only)

Survey respondents were also asked about their gender identity. All retired respondents reported having gender identities consistent with the sex that they were born with, and were therefore cisgender. In contrast, two biologically male working respondents opted not to answer the question on gender identity, and two biologically female working respondents identified as both male and female, while one biologically female considered her gender identity as a male. All but two working female respondents mentioned having gender identities consistent with their biological sex.

Table 1A. Sociodemographic Characteristics of SurveyRespondents by Employment Status

	Working	Retired	P-Value
	Ave	P-value	
Age	59.5	70.4	0.0000*
Number of Living Children	2.9	3.2	0.2245
Number of Children studied or Graduated in UP	1.2	1.0	0.2245
Number of Children working in UP	1.8	2.5	0.4458
	Proportion		P-Value
	Propo	preion	P-value
Sex (Being Male)	49.67%	45.88%	0.5763
Sex (Being Male) Religion (Being Catholic)	-		
	49.67%	45.88%	0.5763
Religion (Being Catholic) Highest Educational Attainment	49.67% 79.47%	45.88% 85.88%	0.5763 0.2206

Two-tailed test. * Significant at 0.05 alpha level of significance.

Table	1B.	Sociodemographic	Characteristics	of	Survey
Respor	ndent	s by Sex			

	Female	Male	P-Value		
	Ave	P-value			
Age	63.7	63.1	0.4746		
Number of Living Children	2.8	3.2	0.0251*		
Number of Children Studied or Graduated in UP	1.4	0.9	0.0047*		
Number of Children Working in UP	0.3	1.5	0.2573		
	Proportion		P-Value		
Religion (Being Catholic)	79.50%	84.20%	0.3497		
Highest Educational Attainment (College)	96.70%	50.00%	0.0000*		
Civil Status (Being Married)	68.90%	86.80%	0.0009*		
Two-tailed test * Significant at 0.05 alpha level of significance					

Two-tailed test. * Significant at 0.05 alpha level of significance.

Active Aging

Survey respondents were asked if they could give a word or definition to describe the concept of active aging as they understood it. Over a fifth (22%) of respondents considered active aging as being socially active (e.g., being involved in community and church activities). About 15 percent said that active aging was equated to still being able to work or being able to do things that they used to do while around 14 percent answered that they associated physical activity or involvement in sports with active aging. Being healthy (12%),

	% Total (n=236)	Proportion of Working	Proportion of Retired	P-Value
Perceptions of Active Aging ¹				
Socially active (community and church)	22.0	21.20%	23.50%	0.6823
Can do things that they used to do/ can still work	14.8	13.20%	17.60%	0.3606
Physically active/involve in sports	13.6	16.60%	8.20%	0.0353*
Healthy	11.9	12.60%	10.60%	0.6485
Can still exercise	10.6	11.90%	8.20%	0.3748
Strong	7.2	4.60%	11.80%	0.0496*
Perceptions of Successful Aging ²				
Healthy/ Strong	42.8	43.00%	42.40%	0.9287
Financial stability/ independence	23.3	25.80%	18.80%	0.2219
Was able to achieve goals / Prepared	13.6	25.80%	18.80%	0.1749
Happy/ contented	12.3	11.90%	12.90%	0.8221
Can provide for children/family	12.3	13.20%	10.60%	0.5589
Participation in community-based activities	9.7	12.60%	4.70%	0.0496*
Perceptions of Frailty ³				
Weak body/physically weak	25.0	27.80%	20.00%	0.184
Already have disease/ maintenance medications	19.9	19.90%	20.00%	0.9853
Difficulty moving	10.6	9.30%	12.90%	0.3884
Can easily get sick	9.7	9.90%	9.40%	0.9009
Cannot do things on your own/needs assistance/dependent	7.6	7.90%	7.10%	0.8239
Sources of Happiness as Respondents Get Older ⁴				
Family	74.6	73.50%	76.50%	0.6114
Leisure activities	14.4	15.90%	11.80%	0.3894
Friends	14.0	12.60%	16.50%	0.4072
Healthy	7.2	6.00%	8.20%	0.5191
Faith	6.8	6.60%	7.10%	0.8834
Sources of Strength as Respondents Get Older ⁵				
Family	60.6	64.20%	54.10%	0.1275
Religion	34.3	29.8%	42.4%	0.0252*
Sources of Worry as Respondents Get Older ⁶				
None	18.2	13.20%	27.10%	0.0079*
Personal Health	43.6	47.00%	37.60%	0.1621
Getting Sick	78.2	75.40%	84.40%	0.3077
Death	9.3	9.30%	9.40%	0.9798
Physical Weakness	7.6	8.60%	5.90%	0.4532
Finances	5.5	5.30%	5.90%	0.8463
Sources of Sadness as Respondents Get Older ⁷				
None	16.9	17.20%	16.50%	0.8906
Family Related	30.1	27.80%	34.10%	0.311
Distance from Loved Ones	30.6	32.60%	27.60%	0.6516
When someone is sick in the family	25.0	27.90%	20.70%	0.4889
Problem within the family	16.7	14.00%	20.70%	0.4547

Two-tailed test. * Significant at 0.05 alpha level of significance.

¹ Maaari po bang magbigay kayo ng salita o depinisyon na sa tingin ninyo ay naglalarawan sa konsepto ng active aging ayon sa inyong pagkakaunawa? (Based on your own understanding, what words or definitions do you think best describe the concept of active aging?)

² Maaari po bang magbigay kayo ng salita o depinisyon na sa tingin ninyo ay naglalarawan sa konsepto ng successful aging ayon sa inyong pagkakaunawa? (Based on your own understanding, what words or definitions do you think best describe the concept of successful aging?)

³ Maaari po bang magbigay kayo ng salita o depinisyon na sa tingin ninyo ay naglalarawan sa konsepto ng frailty ayon sa inyong pagkakaunawa? (Based on your own understanding, what words or definitions do you think best describe the concept of frailty?)

⁴ Sa inyo pong pagtanda, anu-ano po ang nagpapasaya sa inyo? (As you age, what do you think makes you happy?).

⁵ Sa inyong pagtanda, anu-ano po ang mga nagpapatibay ng inyong loob? (As you age, what do you think strengthens you?).

⁶ Sa inyo pong pagtanda, anu-ano po ang nagbibigay pangamba sa inyo? (As you age, what worries you?)

⁷ Sa inyo pong pagtanda, anu-ano po ang nagpapalungkot sa inyo? (As you age, what do you think makes you sad?)

Table 2B. Perceptions of Survey Respondents by Sex

	% Total (n=236)	Proportion of Males	Proportion of Females	P-Value
Perceptions of Active Aging ¹		·		
Socially active (community and church)	22.0	12.30%	31.10%	0.0000*
Can do things that they used to do/can still work	14.8	14.00%	15.60%	0.7400
Physically active/involved in sports	13.6	10.50%	16.40%	0.1900
Healthy	11.0	16.70%	7.40%	0.0300*
Can still exercise	10.6	10.50%	10.70%	0.9700
Strong	7.2	9.60%	4.90%	0.1600
Active in general		9.60%	9.80%	0.9600
Perceptions of Successful Aging ²				
Healthy/ Strong	42.8	21.10%	25.40%	0.4288
Long life	6.8	10.50%	9.00%	0.6959
Participation in community-based activities	9.7	6.10%	18.00%	0.0054*
Happy/ contented	12.3	13.20%	11.50%	0.694
Feel relevant	4.2	12.30%	14.80%	0.5792
Was able to achieve goals / Prepared	13.6	11.40%	7.40%	0.2877
Perceptions of Frailty ³				
Weak body/physically weak	25.0	25.40%	24.60%	0.8800
Weak mind		14.00%	5.70%	0.0300*
Already have disease/ maintenance medications	19.9	16.70%	23.00%	0.2300
Difficulty moving	10.6	8.80%	12.30%	0.3800
Can easily get sick	9.7	10.50%	9.00%	0.7000
Cannot do things on your own/needs assistance/dependent	7.6	7.00%	8.20%	0.7300
Sources of Happiness as Respondents Get Older ⁴				
Family	74.6	76.32%	72.95%	0.553
Leisure activities	14.4	13.16%	15.57%	0.5974
Friends	14.0	10.53%	17.21%	0.1388
Financial stability	7.6	7.02%	8.20%	0.7331
Sources of Strength as Respondents Get Older ⁵				
Family	60.6	64.90%	56.60%	0.1893
Religion	34.3	24.60%	43.40%	0.0023*
Sources of Worry as Respondents Get Older ⁶				
None	18.2	20.20%	16.40%	0.452
Personal Health	43.6	40.40%	46.70%	0.3241
Family	16.1	10.50%	21.30%	0.0243*
Death	9.3	13.20%	5.70%	0.0401*
Physical weakness	7.6	7.90%	7.40%	0.881
Sources of Sadness as Respondents Get Older ⁷				
None	16.9	16.10%	17.60%	0.7494
Becoming sick	79.2	8.00%	7.60%	0.8934
When someone is sick in the family	25.0	8.00%	7.60%	0.8934
Health	10.2	11.60%	9.20%	0.5563
Death	10.2	8.90%	11.80%	0.4802
Family	30.1	26.80%	32.80%	0.3204
Problem within the family	16.7	4.50%	5.90%	0.6274
Financial	12.3	16.10%	8.40%	0.0743
Distance from loved ones	30.6	6.30%	10.90%	0.2067
Being alone	5.9	6.30%	5.90%	0.9068

Two-tailed test. * Significant at 0.05 alpha level of significance.

¹ Maaari po bang magbigay kayo ng salita o depinisyon na sa tingin ninyo ay naglalarawan sa konsepto ng active aging ayon sa inyong pagkakaunawa? (Based on your own understanding, what words or definitions do you think best describe the concept of active aging?)

² Maaari po bang magbigay kayo ng salita o depinisyon na sa tingin ninyo ay naglalarawan sa konsepto ng successful aging ayon sa inyong pagkakaunawa? (Based on your own understanding, what words or definitions do you think best describe the concept of successful aging?)

³ Maaari po bang magbigay kayo ng salita o depinisyon na sa tingin ninyo ay naglalarawan sa konsepto ng frailty ayon sa inyong pagkakaunawa? (Based on your own understanding, what words or definitions do you think best describe the concept of frailty?)

⁴ Sa inyo pong pagtanda, anu-ano po ang nagpapasaya sa inyo? (As you age, what do you think makes you happy?).

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⁶ Sa inyo pong pagtanda, anu-ano po ang nagbibigay pangamba sa inyo? (As you age, what worries you?)

⁷ Sa inyo pong pagtanda, anu-ano po ang nagpapalungkot sa inyo? (As you age, what do you think makes you sad?)

being able to exercise (11%) and feeling strong (7%) were also mentioned in relation to active aging (Table 2A). Other responses were being happy, having the ability to travel, being *masigla* (vibrant), and showing aggressiveness (ability to actively seek out opportunities). Less than 1 percent said that they had no idea what active aging meant.

The proportions of respondents who believed that being strong (p<0.0496) and being physically active/involved in sports (p<0.0353) were indications of active aging was significantly higher among working than among retired UP employees (Table 2A). Comparisons by sex showed significant differences particularly in the perception of active aging as being socially active (p<0.01) and being healthy (p<0.03), with more females citing the former and more males citing the latter. The proportion of females who believed that being physically active/involved in sports, and having the ability to still do things that they used to as indications of active aging, was higher compared with males. However, the difference was not significant. There was also no significant difference in the proportion of males and females who believed that being strong and being active in general were indicators of active aging (Table 2B).

When asked what Filipino word was equivalent to the concept of "active aging," most FGD participants answered *magilas* (~dynamic, carrying one's self well) and *aktibo* (active). Other words that were mentioned were *makisig* (elegant, handsome), *masigla* (vibrant), *masaya* (happy), and *masipag* (hardworking). Among the FGD participants, the words *aktibo*, *makisig*, and *masigla* were mostly considered by males, faculty, and working participants, while *magilas*, *masipag*, and *masaya* were the common answers of females, faculty members, and retired participants. "Growing old gracefully" (while an English phrase) was a common answer in the female, faculty, working group. In addition, one participant from the same group said that in her view, there was no exact Filipino word equivalent to active aging.

One participant (female, faculty, working) expressed confusion with the term "active aging" ("Active na matanda, kahit tumatanda na, active pa rin? — An active older person, even if aging is still active?) and understood it as equivalent to "mabilis na pagtanda" (growing old faster). There were physical, social, and mental attributes which FGD participants associated with the concept of "active aging". In general, females (more than males), faculty (more than staff), retired (more than working) FGD participants associated the term active aging with the physical and mental aspects of individuals. In contrast, the social aspects of active aging were given more emphasis by staff and working participants.

Most participants equated "being healthy" with being physically active and physically normal (no illness). It also meant that they could do whatever they want, eat whatever they want, and go wherever they want. A few participants also pointed out that "being healthy" meant being free of illnesses. The concept of "being healthy" also covered both mental and social health; and as one FGD participant (female, retired faculty) emphasized it was important to be *"socially healthy"* (i.e., connected with others, socializing, and not just staying at home).

Most FGD participants associated "active aging" with the physical facets of the individual: (1) feeling strong and young; (2) being physically active; (3) being able to do much more things than what they have been doing; (4) being able to do things that they used to do; (5) being able to do physical exercises; (6) being able to do things that they did not have time doing before. A female, working, faculty participant said that active aging meant that: "You are able to go and do activities beyond your regular activities, of someone in your age bracket. Like my batchmate, she is still pole dancing."

On the other hand, some FGD participants associated "active aging" with social attributes such as: (1) capability for *pakikipagkapwa* (relating to other people) (2) capability for *pakikisalamuha* (socializing with others); (3) involvement in community activity; and (4) not being a homebody. Other participants considered the mental aspect of an individual and described the situation as "*kaya ng isip pero hindi kaya ng katawan*" (~the mind is active, but the body is weak) or aging physically but not mentally. "Whatever is active in you, it's something that goes beyond your normal physical body" (female, faculty, working). Other attributes mentioned in relation to active aging were absence of stress, enjoyment of leisure time, happiness, industriousness, and productivity ("I should still have outputs" as shared by a female, working faculty member).

A few male faculty members (currently working) used the term "magilas" (~dynamic, carrying one's self well) and "aktibo" (active) as related to active aging. A male faculty (working) participant remarked that "habang tumatanda, lalong nagiging makamandag" (~As you get older, you become more 'dangerous'/deadly') to which another participant added, "May asim pa!" (~still has sex appeal).

Through the data obtained from the FGD and survey, it can be said that the employees' perception of active aging centered more on healthy living and other physical aspects. It was also evident that women equated active aging more with social activities, whereas men highlighted physical conditions and health. These findings were consistent with previous studies that established differences between men and women as they aged.^{31,32} Given gender roles, women valued social interactions while men focused more on the strength of their bodies. Working employees also cited being physically active and being involved in sports as active aging. This could be an indicator that many of the working employees could still do activities in comparison with retired employees who might or might not have physical challenges.

Successful Aging (Survey Only)

Survey respondents were asked to express their concept of successful aging. Forty-three percent defined successful aging as being strong or healthy. Twenty-three percent associated successful aging with financial stability and independence, while 14 percent said it was about being able to achieve one's goals. The rest of the respondents' concept of successful aging was related to being happy or contented (12%), providing for their children or family (12%) and participating in community-based activities (10%) (Table 2A). Other responses with very few cases included having a long life, feeling relevant, having good relationships with others, and having good family relationships.

Being strong or healthy and having financial stability and independence were common perceptions of successful aging regardless of respondents' employment status. However, the working group considered being able to provide for children or family (13%) as equivalent to successful aging more than the retired group, while a higher percentage in the retired group (19%) considered being able to achieve goals as equivalent to successful aging more than the working group. There were more working respondents who mentioned that successful aging was related to participating in community-based activities more than the retired respondents (13% versus 5%).

Results of the test for two proportions showed that working and retired respondents did not significantly differ in their perceptions of successful aging. An equal proportion of respondents in both groups perceived that being healthy or strong and being financially independent were reflective of successful aging. However, the proportion who perceived participation in community-based activities as indicative of successful aging was significantly higher among working respondents than retired respondents (p<0.05). A significant difference was also noted in the perception of successful aging as one's participation in community-based activities (p<0.01). This perception was more among female respondents. Meanwhile, there was no significant difference in the proportion of males and females who believed that being healthy/strong, being happy/contented, being relevant, and having a long life as indications of successful aging (Table 2B).

Respondents' perceptions of successful aging shared similar characteristics from both individualist and collectivist societies. They valued independence and physical health which was akin to Americans' emphasis on activity and agelessness.14 Meanwhile, the articulated importance of providing for one's family, achieving one's goals, and participating in community-based activities were also deemed necessary for successful aging by older Mexicans.¹⁵ It was also notable that perhaps as a function of age, a significant number of working respondents were still providing for and sending their children to school. Thus, the capacity to do such was equated with successful aging. Meanwhile, retired employees in academic settings were still capable of rendering services, and some were likely already free from the obligations inherent with raising a family. In this regard, the retired respondents perceived successful aging as achievement of one's goals. The significant difference between working and retired

respondents in community-based activities participation could be attributed to the former's access to such activities as they were still working on campus whereas such participation would require more effort for retired respondents. Similarly, a significant difference between male and female respondents in the same aspect could be traced back to findings that in general, women valued socialization more in aging.

VULNERABILITY AND RESILIENCE

Perceptions of Frailty

The concept of frailty is difficult to define and it may be relative to many people. Thus, in this study, the survey respondents were also asked about their perceptions of frailty. A fourth of the respondents (25%) said that having a weak body or being physically weak was equivalent to the word frailty. Furthermore, a fifth (20%), considered having diseases and taking maintenance medications as being frail, while 11 percent associated frailty with having difficulty in mobility. Others perceived frailty as getting sick easily, being dependent or needing assistance most of the time, being inactive, having a visual impairment, being unproductive, and having financial instability. Two percent of the respondents said they had no idea what frailty meant.

More working respondents (28%) than retired respondents (20%) equated being physically weak or having a weak body with frailty. On the other hand, more retired respondents (13%) than working respondents (9%) associated difficulty in mobility with frailty (Table 2A). However, the comparison of proportions showed that there were no significant differences in the perceptions of working vis-àvis retired respondents. In contrast, a significant difference among male and female respondents was found particularly in their perceptions of frailty. More male respondents cited having a weak mind (p<0.03) as an indicator of frailty. No significant differences were noted in other perceptions of aging such as having a weak body, having diseases, and difficulty moving (Table 2B).

FGD participants and survey respondents had similar responses to what frailty meant. Most of the FGD participants associated the term "frail" with physical weakness, specifically answering: (1) mahinang-mahina (very weak); (2) madaling matumba (stumbles/falls easily); (3) malamya (~soft-spoken); madaling mapagod (gets tired easily); (4) sampay ang katawan (~easily blown by the wind); (5) lupaypay (~languid); (6) baldado (disabled/crippled); (7) lampa (clumsy); and bagsak ang katawan (~weak physique). Some considered "frail" as being sickly, particularly mentioning: (1) malimit magkasakit (gets sick easily); (2) madaling kapitan ng sakit (vulnerable to sickness/disease); (3) sakitin (sickly); (4) maraming sakit (plenty of sicknesses/ diseases); and (5) maputla (pale). Other perceptions of frailty included having mental problems like having dementia (wala sa sarili), being overly sensitive (matampuhin), and "maraming pinagdadaanan" (having a lot of problems/concerns).

Sources of Happiness

The survey respondents were asked what made them happy. Three-fourths of the respondents (75%) mentioned that their family was the source of their happiness. Their spouses, children, and most especially their grandchildren were their primary sources of happiness. For some respondents, they enjoyed taking care of their grandchildren. Other than their family, leisure activities (e.g., going to the mall, traveling, doing their hobbies, gardening, listening to music and to the radio; 14%) and friends (14%) also made them happy (Table 2A). There were no significant differences between the working and retired respondents, and between female and male respondents. Respondents who cited friends as a source of happiness were higher in females (17%) compared with males (11%), but the difference was not significant (Table 2B).

The survey results were similar to the FGD findings. Some of the retired FGD participants shared that their grandchildren brought them happiness. One participant (male, staff, working) shared, "When you get home after getting your pension, your grandchildren will tell you, let us buy this. If you cannot give anything because you do not have money, it will make you sad. It will break your heart." Other participants mentioned watching teleserye, traveling to other places, watching movies in the cinema, doing social activities or hobbies, and having get-togethers with friends as their sources of happiness. "Fishing kung saan saan. Kung saan may lakad ang barkada. Nakakalinis ng isipan. (Fishing anywhere or wherever there is a trip with friends, these can clear my mind.)" Aside from having grandchildren, male participants and retired employees also cited having peace of mind, helping their children, not cooking anymore, and having the feeling of not being in the province (not isolated from urban comy would leave Los Baños. On the other hand, female participants said that the success of their children was also a source of happiness.

Most of the working participants, particularly the staff, said that they derived happiness from their family and the recognition from other people including the students. Meanwhile, for the faculty, happiness came from having good relationships with officemates, having a good environment, and receiving their salary (payday). Most of the male participants relied on their relationships and social interactions as their sources of happiness, while female participants were happy when they would get recognition and compensation.

Sources of Strength (Survey)

One of the most important indicators of a person's resilience is determining his or her source of strength. Respondents (especially 60 years old and above) could experience greater vulnerability as they age and go through the life course. Majority of the survey respondents (61%) mentioned that their families were their source of strength. For some, their strength came specifically from their children and grandchildren. Others said that good familial relationships and the established status of their family were sources of their strength. In addition to their family, their religion (34%) or strong faith in God also gave them strength. They felt secured and able to do things because of their belief and relationship with God. There were more working respondents (64%) than retired respondents (54%) who derived their strength from their family. However, there were more retired respondents (42%) compared with working respondents (30%) who mentioned religion as their source of strength (Table 2A).

Statistical tests showed that there was a significant difference in the sources of strength among working and retired respondents. There was also a higher proportion of retired respondents who gathered strength from their religion compared with working respondents (p<0.03). A significantly higher share of female respondents sourced their strength from religion and religious activities (p<0.01) while no significant difference was found between the sexes in gathering strength from their families (Table 2B).

Sources of Worries

As to the survey respondents' worries in relation to old age, less than one half (44%) of them said they worried about their personal health. Working respondents (47%) were more worried about old age than the retired respondents (38%). Of those who expressed their worries, their top five answers were personal health (44%), family concerns (16%), death (9%), physical weakness (8%), and finances (6%). While there were respondents who expressed their worries, some (18%) claimed that they did not worry about old age at all. It was worthwhile to note that the said response was more common among retired (27%) than working (13%) respondents (Table 2A). The test for two proportions showed that there was a significantly higher share of retired UP employees who did not have any old age-related worry compared with working UP employees (p<0.01). On the other hand, there was no significant difference between the proportions of working and retired employees who were worried about personal health, possible sickness, physical weakness, death, and finances. Comparisons based on sex yielded different results. Significant differences were evident with family (p<0.02) and death (p<0.02) as sources of worries. Females worried more about their families (47%) than males (40%) while males worried more about death (13%) than females (6%). No significant differences were found when it came to worrying about health and physical weakness (Table 2B).

Similar results as to causes of worries were surfaced in the FGDs. Of the 17 FGD retired participants, 5 of them claimed not to have worries. "Because of my faith, wala (I don't worry)." Most commonly mentioned causes of worries among the 12 participants were being alone, not having someone who could take care of them, not having enough parking spaces, deteriorating health, being sick without medical insurance, and having health concerns. "Ah ako, ang pangamba ko, yung pagka-nagkasakit ka na malubha, tapos wala tayong medical insurance and lalo na sa aming mga widows, nawalang mag-aalalay. So yun yung talagang pinangangambahan (Ah, as for me, I worry about getting sick while not having a medical insurance. [It's difficult] especially for us widows who had no one in charge to support us. That's really what I worry about."

For the working FGD participants, only four of the 20 participants expressed any worries. Male participants mentioned that their worries included being accused of sexual harassment; getting dismissed from work; and managing their finances. "Kadalasan kasi, wala pa yung pera, nagco-compute nayan. Nagbe-breakdown na yan kung san mapupunta yan...Siguro dapat mabago pag manage ng pera. (Most times, even when the salary is not yet there, [the expenses] are already computed. One already has a breakdown as to where the money will be spent... Maybe there is a need to change one's management of finances)." Female participants had no worries because they believed that UPLB provided an enabling environment for working employees especially for women since there was gender equality. Accordingly, platforms for development and progress were provided to everyone. "Wala kasi feeling ko meron naman ng gender equality. Ang babae naeemploy na di tulad ng ano. Siguro hindi naman yung pangamba in terms of sa work. Hindi naman siguro. (I don't have worries because I feel that there is gender equality. Women get employed. I don't think I should worry in terms of work. I don't think so)".

Causes of Sadness (Survey Only)

Survey respondents were also asked about their causes of sadness in relation to old age. The top five mentioned causes of sadness were family (30%); financial situation (12%); death (10%), health (10%), and being alone (6%). The retired respondents had a higher percentage on family (34%, vs 28% for working) and when there is a problem within the family (21%, vs 14% for working). The working respondents on the other hand, got a higher percentage on other causes of sadness: distance from loved ones (33%, vs 28% for retired), and sickness in the family (28%, vs 21% for retired).

Higher proportion of respondents who became sad in terms of their health, financial situation, and being alone or sick were males. More females became sad due to death, family, and distance from loved ones. The differences, however, were not significant. The test for two proportions revealed that a similar share of working and retired UPLB employees believed that sadness in old age could be due to family-related reasons such as distance from loved ones, sickness in the family and problems within the family (Table 2B).

In studying vulnerability and resilience, the role of one's family became evident. They served as the respondents' and informants' source of strength and happiness inasmuch as they were also considered as the primary source of worries and the cause of sadness. Such could be attributed to a collectivist society's close family ties.^{15,28} These findings were consistent with the study conducted in other state universities in the Philippines.²⁶ While there were no significant

differences in sex and working status when it came to sources of happiness and causes of sadness, gender roles were apparent in the respondents' sources of worries. Significant differences were noted as female respondents worried more about their families while male respondents worried more about death. Similarly, female respondents' and retired respondents' emphasis on religion and religious activities as sources of strength, while expected in a predominantly Catholic country, also revealed the former's capacity for social functioning which was considered to be low among their male counterparts.^{31,32} Meanwhile, for the retired respondents, the focus on religion could be a product of the change in their relationships and activities as they stepped out of the university upon retirement.³⁷ Overall, it could be said that while personal and behavioral attributes, socioeconomic and political conditions, and environmental risks could render respondents and informants vulnerable, they displayed their capacity for "kagalingan" by continuously drawing from their sources of strength and happiness.³⁰

CONCLUSIONS

This paper described how the concepts of active aging, successful aging, resilience, and vulnerability were perceived by older working and retired employees in an academic community in the Philippines. The gender identity of almost all respondents corresponded with their biological sex. Quantitative data showed significant differences in perceptions among respondents. In their perceptions of active aging, working respondents believed that the concept was characterized by being strong (p<0.05) and physically active or being involved in sports (p<0.04). Female respondents also believed that being socially active in the community and church was indicative of active aging (p<0.01) and more males cited "being healthy" (p<0.03) when asked for their definitions of the same concept. More working respondents (p<0.05) than retired, and female respondents (p<0.01) than males thought that successful aging meant one's participation in community-based activities.

In terms of resilience and vulnerability, differences were noted in the respondents' sources of strength and worries. More retired respondents said they got their strength from their religion (p<0.03). Likewise, female respondents also drew strength from their religion and religious activities (p<0.01). It was also significant to note that more retired respondents did not have any old age-related worries compared with working respondents (p<0.01). Comparisons based on sex found that female respondents worried more about their family (p<0.02) while male respondents worried more about death (p<0.04).

Moreover, the intricacies and nuances of being an older working or retired employee in an academic community were elicited through the FGDs. The participants' context was important in their perceptions of active aging, frailty, and in their sources of worries and happiness. Active aging was perceived in terms of physical facets, social attributes, and mental attributes while frailty was associated with physical weakness, sickness, and mental problems. Distinctions were observed in the sources of happiness. Retired employees cited the presence of their grandchildren, the help they rendered to their children, the activities they engaged in, their peace of mind, and the ambiance of the province (while not being isolated from urban comforts) as among their sources of happiness. Meanwhile, working employees relied more on external recognition, the help they rendered to students, and the good working relationships in the office. It also surfaced in the FGDs that male participants' happiness depended more on relationships and social interactions, while female participants' happiness was anchored in the recognition of their work and efforts as well as their financial compensation. Similarly, sources of worries also varied depending on employment status. Retired employees worried about being alone, being unhealthy and sick without insurance, and even about not having a convenient and accessible parking space inside the campus. Working employees, especially males, worried about being accused of sexual harassment and being dismissed from work. Managing finances was also considered worrisome. Female working employees said they did not have worries as gender equality was assured and practiced.

The perceptions of active aging from survey respondents and FGD participants were only limited to personal, behavioral, and social factors. Economic, physical environment, and health and social services factors were not cited unlike in the WHO⁶ definition. On the other hand, the respondents' perceptions of successful aging recognized both independence and interdependence. Similar to the Americans¹⁴, successful aging for the respondents meant being able to carry out activities to support one's self and loved ones. In contrast with the Indians'14 view that successful aging could be accompanied by negative consequences (such as dependence on others, decline, death), the survey respondents forwarded a more positive view of successful aging. They shared more similarities with the Mexicans¹⁵ in their emphasis on the achievement of one's goals and involvement with significant others, communities, and church activities. In terms of worries, sources of sadness, and sources of strength, the study results were akin to that of the survey conducted in two Philippine state universities.²⁶ Concerns in relation to family, work, and health were cited. Reliance on one's family and religion as sources of strength was also mentioned.

Overall, this paper adds to the body of knowledge about aging in the Philippines by studying a particular group of older Filipinos. The complexity and subjectivity of concepts (such as active aging, successful aging, vulnerability, and resilience) as embedded in the context of an academic community were determined using a survey and FGDs. Notions of vulnerability and resilience were investigated side-by-side. Thus, the researchers were gathered insights into what could put older employees at risk. At the same time, they also elicited from older employees their sources of strength and happiness that could help them cope with the inherent concerns of old age. Personal and behavioral factors (particularly those related to one's physical health and fitness) and social factors must be given importance as these were critical to the older employees' sense of active and successful aging, their improved resilience, and their reduced vulnerability. In almost all the concepts in this study, gender roles were evident as female respondents and informants still took on tasks and were preoccupied with concerns traditionally assigned to women. Aside from gender roles, the predominance of Catholicism in the country expectedly permeated the outlook and practices of respondents and informants even in old age. Filipino values, particularly close family ties and reliance on social relations, also surfaced.

These results can be used to create policies, plans, and programs/interventions such as the active dissemination of information about social health concerns and the increase of resources, funds, and personnel for the sustenance and expansion of existing elderly development program. The results can also serve as a basis to explore the feasibility of establishing an Assisted Living Facility inside the campus for older employees and those who need assistance. All of these will help ensure that older working and retired employees will achieve active and successful aging throughout their life course. At the same time, concerns about old age-related vulnerability will be addressed, and resilience will be fostered.

Acronyms

FGD (focus group discussion). UP (University of the Philippines). UPLB (University of the Philippines Los Baños). UPWISE (University of the Philippines Wellness Initiative for Seniors and Elders Program). WHO (World Health Organization).

Acknowledgments

Thank you to the working and retired UPLB faculty and staff (administrative, REPS) who participated in the survey and focus group discussions.

The administrative support of the following is acknowledged: Officials of the Municipality of Los Baños (Barangays San Antonio, Batong Malake, Putho Tuntungin, Anos, Maahas) and the Municipality of Bay (Barangays Paciano Rizal, Masaya) in the Province of Laguna; UPWISE Program Management (Dr. Shelley Ann F. de la Vega, Ms. Angely P. Garcia, Dr. Mylene Rose Z. Benigno-Escalante); Collaborating Institutions in UPLB (Chancellor Fernando C. Sanchez, Jr., Vice Chancellor for Academic Affairs – Dr. Portia G. Lapitan, Director of Alumni Relations – Dr. Sue Liza C. Saguiguit; Human Resource Development Office; College of Human Ecology (Dean Raden G. Piadozo and the staff of the Dean's Office; the faculty and staff of the Department of Social Development Services; and Department of Human and Family Development Studies), College of Arts and Sciences (Dean Felino P. Lansigan; the faculty and staff of the Department of Social Sciences).

We are grateful for the guidance and assistance of Dr. Eva Maria C. Cutiongco-dela Paz and Dr. Marie Carmela M. Lapitan of the National Institutes of Health, University of the Philippines Manila; and Dr. Carla B. Dimalanta and the EIDR Monitoring Team.

UPWISE Project 1 (Diliman) Team (Dr. Nimfa B. Ogena, Ms. Felipe Jacala-Ramos) generously shared their insights, and their data collection tools (survey questionnaire, FGD questions) and technical report with the Project 3 team. UPWISE Project 4 (UPLB) Team (Dr. Teri Mari P. Laude, Dr. Renato V. Torres, Dr. Eleanor E. Merca, Dr. Godfrey Josef R. Torres) collaborated with Project 3 for the design and conduct of UPWISE activities in UPLB.

Implementation of the study was done by the UPWISE Project 3 Team (Dr. Nina T. Castillo-Carandang (Project Leader), Prof. Girlie Nora A. Abrigo, Dr. Emilia S. Visco (Study Leaders), Dr. Michelle C. Merca, Ms. Alexandra E. Tamis, Ms. Frances Coleen C. Aquino (Project Associates); Survey Interviewers (Mr. Jaylord P. Larosa, Mr. John Michael Platon, Ms. Richelle Joy Jacob, Ms. Christina Ragot, Ms. Rocel M. Penamora, Mr. Crisangelo D. Pagulayan); FGD Facilitators (Prof. Francis Mark Dioscoro R. Felizar, Prof. Gillian D. Consignado, Dr. Irene R. Tanzo, Prof. Rowena P. de Guzman); FGD Transcribers and Notetakers (Ms. Daniella K. de Peralta, Ms. Diana A. Torio, Ms. Xyla Charisse S. Alinsod, Ms. Sunshine Therese S. Alcantara, Ms. Eunice A. del Rosario, Ms. Clarice C. Palumbarit, Ms. Joanne Carla A. Gonzales, Ms. Jaira H. Loberiano); Data Program Consultant (Mr. Leo Angelo L. Ocampo); Data Encoders (Ms. Bea Isabel F. Hernandez, Ms. Eunice E. Sulibet); Statisticians (Prof. Olivia T. Sison, Prof. Michael Dominic C. Del Mundo); Writer-Editor (Prof. Louise Antonette S. Villanueva).

Statement of Authorship

All authors participated in data collection and analysis, and approved the final version submitted.

Author Disclosure

All authors declared no conflicts of interest.

Funding Source

This research project was funded by the Emerging Interdisciplinary Research Program of the Office of the Vice President for Academic Affairs, University of the Philippines System.

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