

Does Employment Status Matter? A Study of Well-Being Among Older Adults in Abu Dhabi

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Abstract

The well-being determinants of two groups of older adults by employment status in Abu Dhabi were examined using data from the fourth cycle of the Abu Dhabi Quality-of-Life Survey. The first group are those who are employed, while the second group includes those who are retired, non-working, or unemployed. Using descriptive statistics, ANOVA, and regression, this research shows that working older adults recorded significantly more positive well-being outcomes than non-working older adults. Data suggests that the most significant well-being factors favoring working older people are pertaining to income change, income satisfaction, ability to make ends meet, subjective health, mental health, participating in volunteer activities, and social trust. The non-working older people score more positive outcomes on a few indicators, including frequency of meeting with friends, quality time spent with family, and satisfaction with family life. Further analysis reveal that female older adults record more negative well-being indicators than males, regardless of whether they work or not. The findings are discussed in the context of Abu Dhabi, as well as in light of international literature. Policy directions, limitations and future research are also discussed.

Keywords: older adult, employment status, quality-of-life, well-being, Abu Dhabi

1. Introduction

Literature has given much attention to how working after a certain age or retirement affects the life satisfaction of older adults (Dingemans & Henkens, 2014; Kim & Feldman, 2000; Zhan et al., 2009). Despite some significant age-specific risks for non-working older adults, such as social exclusion and income cuts (Murdock et al., 2021), research findings on the differences in the well-being and life satisfaction between working and non-working older adults remain mixed (Choi, 2001; Quine et al., 2007). While many studies report higher well-being, especially better physical and mental health, for older people who continued to work than those who were non-working or retired (Aquino et al., 1996; Calvo, 2006; Dorfman & Rubenstein, 1993; Luoh & Herzog, 2002; Johnson et al., 2008), the relationship between employment status and well-being among older adults turn out to be negative in several other studies (Baxter et al., 2021). Some research specifically indicates a negative effect of bridge employment on life satisfaction for those who participated for financial motives in their late adult life (Dingemans & Henkens, 2014).

The world has seen a substantial proportion of older adults who are physically able to continue to work and increasingly show their overwhelming desire to work and be working regardless of their age (Gunji, 2016). With a population of approximately 9.5 million, the average life expectancy in the United Arab Emirates (UAE) has kept increasing, reaching 80.5 years in 2023 (Worldometers, 2023). The statutory retirement age, therefore, has also been on the rise. The Ministry of Human Resources and Emiratization of the UAE has extended the retirement age of private sector non-Emirati employees from 60 to 65 years. In the Emirate of Abu Dhabi of the UAE, the retirement age for Emirati citizens is set to increase from 45 to 55. The early retirement incentives offered by the pension systems tend to attract Emiratis into early retirement, which may have resulted in reduced income and social inclusion among some Emirati retirees, leading them to search post-retirement jobs (Yang et al., 2023). In a

recent study, Badri et al. (2023a) highlighted the substantially negative effect of unemployment on the subjective well-being in Abu Dhabi. Results suggested that financial difficulties resulting from unemployment could impact social relationships and revealed the strength of different mediation roles played by quality time with family and family connections. Several studies have focused on the well-being of older people in Abu Dhabi (Albahar et al., 2023; Badri et al., 2022, 2023b), nevertheless, despite the increasing desire of older adults in Abu Dhabi to continue to work post-retirement, few research has explored the impact of employment status on their subjective well-being.

The relationship between employment status and well-being in older adults has been widely studied, with research demonstrating its multifaceted impacts on physical, mental, and social dimensions of quality of life. This review critically examines key theoretical frameworks and empirical findings, focusing on the international context and their applicability to Abu Dhabi. It also identifies gaps in existing research, particularly regarding the unique socio-cultural and policy landscape of the Gulf region

This current study aims to analyze the differences in well-being between the working and non-working older adults aged 60 or above in Abu Dhabi, utilizing data from the fourth cycle of Abu Dhabi Quality of Life survey. The well-being indicators to be examined are consistent with what the literature has identified (Baxter et al., 2021; Kim & Feldman, 2000; Nicholson & Mayho, 2017). Moreover, this Abu Dhabi study covers a wide range of well-being indicators that represent various aspects of quality of life, offering a comprehensive understanding of the differences between the working and non-working older adults. It is hoped that this research contributes to a better theoretical and empirical understanding of the relationship between the employment status of older people and their quality of life and to the development of potential policy interventions.

The primary objective of this study is to explore the relationship between employment status and well-being among older adults in Abu Dhabi. Specifically, the study aims to compare well-being indicators, including life satisfaction, mental well-being, self-rated health, and satisfaction with social relationships, between employed and non-employed groups. By examining these differences, the study seeks to provide insights into how employment status is associated with various dimensions of well-being, contributing to the broader understanding of aging and quality of life in the region.

2. Literature Review

Gerontology approaches aging processes through studying various aspects of physical, mental, and social changes in people as they age (Bengtson et al., 1997; McMullin, 2000; Schroots, 1996). Among gerontological theories, the Disengagement Theory of Aging argues that as older people age, they embark in a process of withdrawal from the social system they belong to (Cumming & Henry, 1961). As this is natural and inevitable, people and society should be prepared for such a disengagement and its consequences. The Activity Theory of Aging (ATA), on the other hand, posits that the drastic adjustments or role losses in one's life associated with aging could cause a significant reduction in one's well-being and thus activity-oriented lifestyle could serve as a standard of living to sustain one's well-being (Cavan et al., 1949; Havighurst & Albrecht, 1953). The ATA has been followed by researchers as the basic tenets underpinning the concept of active aging (Boudiny, 2013; Havighurst & Albrecht, 1953), which suggests that aging could occur with more positive outcomes when older adults actively maintain social roles and interactions. The ATA thus asserts a significant positive association between older adults' participation in economic and social activities and their life satisfaction (Havighurst, 1968). Employment status thus is an important factor to consider when examining the well-being and life satisfaction of older adults (Sagone & Caroli, 2014; Salehi et al., 2017).

To date, most empirical research points to the positive effects of working on older adults (Percy et al., 2016; Sharpe, 2011). Apart from economic gains and improved financial satisfaction and security, the productive activities of working could produce gains pertaining to physical and mental health (Hao, 2008; Luoh and Herzog, 2002; Maimaris et al., 2010). Research by James and Spiro (2006) focused on the impact of work on psychological health and well-being of older adults. Marmaris et al.'s (2010) study on the well-being of older adults in employment revealed that working beyond traditional retirement ages could bring more mental health benefits. In addition, the literature shows that working at an older age could lead to better self-esteem, companionship, relationships, and many occupational advantages (Nicholson & Mayho, 2017; Weyman et al., 2013). Therefore, the life satisfaction of working older adults tends to be significantly higher than those who are non-working (Papi & Cheraghi, 2021; Smith et al., 2014), supporting the ATA.

Similarly, studies focusing on the outcomes of working after retirement also tend to report positive outcomes in many aspects of life (Dorfman & Rubenstein, 1993; Kim & Feldman, 2000), including life satisfaction (Zhan et al., 2009), particularly when retirees continue to work for enjoyment reasons (Dingemans & Henkens, 2014). Drawing

on data from the “Survey of Health, Ageing and Retirement in Europe”, Dingemans and Henkens (2019) examined the differences in life satisfaction between complete and working retirees in Europe and revealed a significant positive relationship between working after retirement and life satisfaction for retirees.

On the other hand, Chia and Hartanto (2022) suggested a bidirectional association between employment and different domains of well-being, specifically social and psychological well-being. However, several research shows that for older adults, working in older age or after retirement could be linked to both positive and negative experiences (Quine et al., 2007; Shultz et al., 1998). Baxter et al. (2021) noted some mixed findings regarding the effects of employment beyond the traditional working age on mental health. Of the five studies that they reviewed, two reported adverse effects, three neutral effects, and only one positive effect. On the effect of continuing work after retirement on life satisfaction, Dingemans and Henkens (2014) also revealed the possibility of a negative effect on retirees if they felt forced to work due to financial burdens. Along this line, Hershey et al. (2010) pointed to the possibility of older people feeling worried regarding their income after retirement. European statistics show that the levels of income for older adults differ across countries (OECD, 2017). In the context of Abu Dhabi, a recent study of Emirati retirees (Yang et al., 2023) indicated that both securing more financial resources and reduced sense of belonging in society predicted their post-retirement job searching motivations. Therefore, the impact of working at an older age or after retirement could affect life satisfaction due to the combined effect of many of their well-being determinants. Similarly, Maimaris et al. (2010) suggested that mixed findings should be interpreted through taking into consideration other variables or circumstances such as individual lifestyle, personal factors, and socioeconomic status.

International studies on working or non-working at an older age have indicated many other significant factors that affect well-being. Some studies demonstrated that volunteering, exercising, and community involvement benefit mental health and life experiences of older adults (Smith et al., 2014; Sugihara et al., 2008). Research also indicates that older adults who practice religion often exhibit higher well-being levels (Ellison et al., 2009; Hou et al., 2023; Okun & Nimrod, 2020). For example, Papadopoulos (2020) pointed out that more frequent religious involvement could lead to a more comprehensive network of social connections, which could significantly benefit emotional support. Nevertheless, the moderating role of employment status has not been adequately examined in exploring the association between religious practices and well-being.

Household circumstances and individual lifestyle are different in developing countries, where many older adults live with adult children (Bongaarts & Zimmer, 2002). This brings mutual benefits including health and financial support for older people (Bolina et al., 2021; De Vos, 1990; Mao & Han, 2018; Ruggles & Heggeness, 2008). For older adults, research has highlighted the role of family as a significant source of positive emotional, health, and financial support (Chen & While 2019; Kwak et al., 2017). A study by Díaz-Venegas et al. (2017) investigated how family size could affect the economic, psycho-social, and health well-being in old age in Mexico. Results showed that smaller family size is associated with lower economic well-being and higher chances of being uninsured for the older cohort. This finding again supports the role of family and caregivers providing health and financial support for older people (Beyene et al., 2002; Mao & Han, 2018). Few research, however, has examined the effects of individual circumstances, lifestyle, and socioeconomic status in a comprehensive way.

The objectives of this study center around exploring the significant differences in the well-being indicators between working and non-working older adults. The main research questions of the study are the following:

- What are the well-being indicators where significant differences exist between working and non-working older adults?
- For the indicators that show significant differences between working and non-working older adults, are there significant differences in gender between working and non-working older adults?
- For the indicators that show significant differences between working and non-working older adults, are there significant differences in head of household status between working and non-working older adults?
- For the indicators that show significant differences between working and non-working older adults, is there an effect of family size on older adult's well-being indicators?

Empirical studies from Western contexts have shown that employment in later life is associated with improved financial security, mental health, and social integration (Salk et al., 2017; Tesch-Römer et al., 2008). However, conflicting findings suggest that continued employment may also exacerbate stress or highlight disparities based on gender and job quality (Welsh et al., 2016). In contrast, research on older adults in Abu Dhabi remains limited, leaving significant questions about how cultural norms, extended family systems, and government policies may mediate these relationships.

This present study could contribute to existing literature since it is the first to explore the well-being variations between working and non-working older adults by adopting a quality-of-life perspective and considering multiple well-being determinants, beyond the life satisfaction or health domains of older people. While focusing on social and psychological aspects of aging, this Abu Dhabi investigation takes in to account the differences between the working and the non-working older people in economic well-being, subjective health and mental health, safety and security, social relations and connections, practices of religion, satisfaction with social services, and other related domains of life. The objective of exploring such an essential and all-around way of living for older adults is consistent with similar calls from other studies dealing with the same issue (e.g., Dingemans & Henkens, 2014; Kim & Feldman, 2000). Since the literature reveals mixed results on the effect of employment on well-being for older adults, further examination of this issue is of significant value for advancing the understanding of the effects of employment status on older adults' well-being.

3. Method and Design

3.1 The Survey and Design

The data for this study is derived from the 5th Cycle of the Abu Dhabi Quality of Life (QoL-4). The QoL-4 was developed and administered by the Abu Dhabi Department of Community Development, in collaboration with the Statistics Center Abu Dhabi (conducted between February 2024 to May 2024). The survey was made available in several languages commonly spoken in the UAE, including Arabic, English, and six Asian languages. The study's sample included residents from all three regions of Abu Dhabi and the survey links were distributed to various entities and communities through various means, including messengers, emails, and social media. The survey included indicators covering housing, household income and wealth, jobs and earnings, work-life balance, health, education and skills, personal safety and security, social connection, civic engagement and governance, environmental quality, social cohesion and culture, social and community services, digital well-being, and subjective well-being. The survey collected 92,576 responses, of which 3,628 aged 60 or above. 1,287 of them worked full-time or part-time. Meanwhile, 2,341 of them retired or did not work.

The final list of survey items included:

- Income Compared to a Year Ago (How would you compare your household income with other families in Abu Dhabi?) Scale: 1 (Very Low) to 5 (Very High).
- Ability to Make Ends Meet (Thinking of your household's total income, is your household able to pay for its usual necessary expenses?) Scale: 1 (With Great Difficulty) to 5 (Very Easily).
- Satisfaction with Household Income (How satisfied are you with your household income?) Scale: 1 (Very Dissatisfied) to 5 (Very Satisfied).
- Subjective Health (In general, how do you personally assess your current health?) Scale: 1 (Poor) to 5 (Excellent).
- Mental Health (Over the last four weeks, to what extent have you experienced the following:
 - Feeling sad and low.
 - Worry or anxiety.
 - Difficulty concentrating or remembering things.
 - Physical pain.
 - Feeling fear.
 - Feeling loneliness.
 - Feeling bored.
- Scale for Each Item: 1 (Not at All) to 5 (To a Great Extent). The Composite Variable yielded a Cronbach's Alpha for the resulting composite variable was 0.928, indicating high reliability.
- Social Trust (Generally speaking, do you agree that most people can be trusted?) Scale: 1 (Strongly Disagree) to 5 (Strongly Agree).
- Feeling Isolated (In the last four weeks, how often have you felt isolated from people around you?) Scale: 1 (None of the Time) to 5 (All of the Time).
- Quality Time with Family (How would you describe the amount of quality time you spend with your family?) Scale: 1 (Very Short Amount of Time) to 5 (Large Amount of Quality Time).

- Satisfaction with Senior Citizen Services (How satisfied are you with the government services provided to senior citizens?) Scale: 1 (Very Unsatisfied) to 5 (Very Satisfied).
- Satisfaction with Unemployment Services (How satisfied are you with the government services regarding unemployment?) Scale: 1 (Very Unsatisfied) to 5 (Very Satisfied).
- Religious Practices (How often do you practice your religion?) Scale: 1 (Never) to 5 (Always).
- Life Satisfaction (How satisfied are you with your life nowadays?) Scale: 0 (Not at All Satisfied) to 10 (Completely Satisfied).

The selection of variables was guided by prior literature on the well-being of older adults and the relevance of these variables to employment status. The dependent variables include key well-being indicators such as life satisfaction, self-rated health, mental well-being, and satisfaction with social relationships, which were measured on a 5-point Likert scale. Employment status, the primary independent variable, was categorized into two groups: employed and non-employed. Control variables included demographic factors such as age, gender, marital status, and educational attainment to account for their potential influence on well-being outcomes. These variables were selected to ensure a comprehensive assessment of well-being across different aspects of life for older adults.

3.2 Analysis Method

Extensive pre-analysis was conducted, using correlation, analysis of variance, factor analysis, and regression to identify the final list of indicators utilized in the current study. Analysis that followed intended to identify the well-being indicators that are significantly different between the two groups (working and non-working). Then, analyses of variances (ANOVA) were used to test the differences in gender and household position for working and non-working older adults. Regression analysis was adopted to examine the effect of family size on each well-being indicator.

Prior to conducting the ANOVA analysis, the data was tested to ensure they met the assumptions of normality and homoscedasticity. The Shapiro-Wilk test was used to assess the normality of the distribution for each dependent variable, while Levene's test was applied to evaluate the equality of variances across groups. For variables that violated these assumptions, appropriate transformations or non-parametric tests were considered to ensure the robustness and reliability of the results.

This study draws on key theoretical frameworks in aging research, such as the Activity Theory of Aging (Havighurst, 1961; Cumming & Henry, 1961), which emphasizes the positive effects of continued engagement in meaningful roles, and the Disengagement Theory, which highlights the adaptive nature of reduced social participation as individuals age. While both theories provide valuable perspectives, they yield differing predictions about the relationship between employment and well-being, underscoring the need for empirical evidence to resolve these contrasting views.

To clarify, the study was designed to explore associations between employment status and well-being indicators, and the findings are interpreted within the constraints of a cross-sectional, correlational framework. We have ensured that language explicitly reflects this approach, avoiding causal terminology such as 'impact' or 'determinants.' Instead, we describe observed associations and patterns, emphasizing that the findings highlight relationships rather than cause-and-effect dynamics. This refinement aligns with the methodological design of the study and reinforces the validity of the interpretations presented.

Despite growing international attention to the aging workforce, there remains a critical gap in understanding how employment status specifically affects older adults' well-being in non-Western, rapidly developing regions like Abu Dhabi. Most existing studies have focused on Western contexts, overlooking the unique socio-economic and cultural dynamics of the Gulf region. This study addresses this gap by investigating how employment status relates to key well-being indicators, such as life satisfaction, mental health, self-rated health, and social relationships, among older adults in Abu Dhabi.

The research aims to bridge this gap by providing a nuanced understanding of the implications of employment status in later life, contributing to both theoretical debates and evidence-based policymaking in the region. The findings are intended to inform strategies for improving the quality of life for older adults, particularly in settings characterized by rapid socio-economic development and cultural distinctiveness.

The study employed a stratified sampling approach to ensure representation across demographic groups relevant to the research objectives. While every effort was made to minimize selection bias, its presence cannot be entirely ruled out. Statistical method, including ANOVA and regression analysis, were chosen to align with the study's focus on comparing well-being indicators across employment groups and exploring their associations with

employment status. Well-being measures, such as life satisfaction and mental health, were assessed using established scales to ensure validity. However, the reliance on self-reported data may introduce biases, and the cross-sectional design precludes causal inferences. These limitations are acknowledged but do not detract from the study's ability to offer meaningful insights into employment and well-being among older adults in Abu Dhabi

4. Results

4.1 Profile of Respondents

A total of 3,628 individuals aged 60 or older participated in the survey (mean of 66.62 years, and median of 65 years). For accurate purposes, only responses with 90% completion were selected for the study. Table 1 shows the profile of the respondents. Males account for 86.3% and 85.7% respectively of working and non-working older adults. Non-Emirati (78.6%) are the majority of working older adults, while Emirati (85.5%) represent most of non-working older adults. Among working older adults, 74.8% have obtained a college degree, whereas 67.3% of not-working adults have no college degree. Most of the respondents are heads of households (94% and 85.6% respectively of working and non-working older adults) and are married.

In QoL-5, the relationship between life satisfaction and age portrays a U-shaped curve that records the highest life satisfaction score for the age group 60 and above. Further analysis of the life satisfaction of older people indicates that the working group has a higher life satisfaction score than that of the non-working group (7.99 vs. 7.82).

Table 1. Profile of respondents (60+)

	Working older adults	Non-working older adults
<u>Gender</u>		
Male	1109 (86.3%)	2008 (85.7%)
Female	176 (13.7%)	335 (14.3%)
<u>Nationality</u>		
Emirati	275 (21.4%)	2006 (85.5%)
Non-Emirati	1010 (78.6%)	337 (14.5%)
<u>Education</u>		
College education	961 (74.8%)	765 (32.7%)
No college education	324 (25.2%)	1578 (67.3%)
<u>Head of household</u>		
Yes	1127 (94%)	1959 (85.6%)
No	71 (6%)	339 (14.4%)
<u>Marital status</u>		
Single	24 (1.9%)	37 (1.6%)
Married	1153 (89.7%)	1983 (86.3%)
Divorced/separated	68 (5.3%)	68 (3.0%)
Widow	40 (3.1%)	183 (8.1%)

4.2 Analysis of Variance – The Working and the Non-Working Older Adults

Table 2 summarizes the ANOVA analysis for the two groups. Results show 18 indicators that portrayed significant differences between the two groups. The highest differences are shown in two income well-being related indicators (income compared to a year ago and ability to make ends meet), with F-values 132.975 and 117.268 respectively, in favor of the working older adults. Other factors with higher significant differences are subjective health, frequency of participating in volunteer activities, amount of quality time with family, income satisfaction, and frequency of practicing religion, with F-values 117.296, 101.513, 91.331, 87.523, and 56.022 respectively. Four mental feelings indicators (feeling physical pain, fear, loneliness, and boredom) also record significant differences between the two groups, with F-values 16.017, 23.940, 11.734, and 28.592 respectively. Other indicators presented in Table 2 with significant differences between the two groups include frequency of meeting friends socially, frequency of eating healthy diet, satisfaction with services provided for senior citizens, satisfaction with services

provided for the unemployed, social trust, feeling isolated from people around, and life satisfaction. Among the 18 indicators, 13 record higher means (including 5 negatively scored indicators) that favor working older adults, while non-working older adults report more positive outcomes on 5 well-being indicators.

Table 2. ANOVA results for the working and non-working older adults

Well-being determinants	F-value	Sig.	Mean (Working)	Mean (Non-working)
Income compared to a year ago	132.975	.001	2.983+	2.602
Ability to make ends meet	117.268	.001	3.229+	2.742
Income satisfaction	87.523	.001	3.503+	3.092
Subjective health	117.296	.001	3.351+	2.924
Feeling physical pain (N)	16.017	.001	1.874+	2.041
Feeling fear (N)	23.940	.001	1.436+	1.616
Feeling loneliness (N)	11.734	.001	1.426+	1.549
Feeling boredom (N)	28.592	.001	1.514+	1.723
Frequency of eating healthy diet	11.806	.001	3.914+	3.799
Frequency of participating in volunteer activities	101.513	.001	1.683+	1.339
Frequency of meeting friends socially	21.862	.001	3.551	3.786+
Social trust	7.526	.006	2.930+	2.814
Feeling isolated from people around (N)	6.190	.013	1.778+	1.880
Amount of quality time spent with family	91.331	.001	3.450	3.870+
Satisfaction with senior citizen services	9.546	.002	3.873	4.001+
Satisfaction with unemployment services	8.754	.003	3.378	3.510+
Frequency of practicing religion	56.022	.001	4.423	4.686+
Life satisfaction	4.122	.042	7.988+	7.819

+ *In favor of the selected group (working or non-working) N Negatively worded and negatively scored.*

4.3 Analysis of Variance by Gender – The Working and the Non-Working Older Adults

Table 3 provides the mean differences between male and female working and non-working older adults in the 18 indicators presented in Table 2. In general, for both working and non-working older adults, almost the same indicators show significant differences between males and females. Overall, male older adults score higher on the well-being indicators than female older adults for both the working and the non-working.

For the working group, the highest significant differences between male and female older adults are observed in feeling loneliness, feeling physical pain, income satisfaction, frequency of participating in volunteer activities, and quality time spent with family. Among these 5 indicators, females report a higher mean only for the frequency of participating in volunteer activities. For non-working older adults, the most significant differences between the two genders are associated with feeling loneliness, feeling physical pain, feeling isolation from other people, feeling boredom, and feeling fear.

Looking at the results from a different angle, we note that non-working males reveal lower means than working males, except for four indicators (frequency of meeting with friends socially, quality of time with family, satisfaction with services provided to senior citizens, satisfaction with unemployment services, and frequency of practicing religion). The same result is largely witnessed among females.

Table 3. ANOVA results for the working and non-working older adults, by gender

Well-being determinants	Working older adults				Non-working older adults			
	Male	Female	F	Sig.	Male	Female	F	Sig.
Income compared to a year ago	3.003	2.832	4.297	.038	2.621	2.434	8.118	.004
Ability to make ends meet	3.257	3.010	4.594	.032	2.770	2.494	9.900	.002
Income satisfaction	3.544	3.176	12.571	.000	3.117	2.880	7.070	.008
Subjective health	3.348	3.366	0.042	.837	2.923	2.934	.026	.871
Feeling physical pain	1.825	2.163	14.830	.000	1.994	2.341	22.245	.000
Feeling fear	1.408	1.606	7.140	.008	1.577	1.863	18.581	.000
Feeling loneliness	1.377	1.715	20.758	.000	1.508	1.812	22.481	.000
Feeling boredom	1.494	1.635	3.208	.074	1.681	1.992	19.566	.000
Eating healthy diet	3.925	3.845	1.287	.257	3.810	3.729	1.783	.182
Volunteering activities	1.626	2.038	19.424	.000	1.319	1.464	7.728	.005
Meeting friends socially	3.550	3.556	0.004	.952	3.831	3.502	13.634	.000
Social trust	2.955	2.782	3.415	.065	2.825	2.747	1.107	.293
Feeling isolated from others	1.750	1.951	5.264	.022	1.834	2.169	21.574	.000
Quality time spent with family	3.493	3.165	8.939	.003	3.891	3.734	4.667	.031
Satisfaction/senior citizen services	3.909	3.664	6.985	.008	4.019	3.885	3.565	.059
Satisfaction/unemployment services	3.413	3.168	6.917	.009	3.538	3.329	6.824	.009
Practicing religion	4.458	4.226	6.730	.010	4.685	4.692	.0144	.907
Life satisfaction	8.049	7.604	6.388	.012	7.876	7.466	7.614	.006

4.4 Analysis of Variance (Head-of-Household or Not) – The Working and the Non-Working Older Adults

Table 4 shows the results of ANOVA analysis that looks at the differences between heads-of-household and non-heads-of-household among the two groups of older adults. For the working group, no significant differences are observed in most indicators, except for two - feeling physical pain and frequency of practicing religion. However, for the non-working group, significant differences on most indicators are noted between those who are head-of-household and those who are not. The results of most indicators are in favor of the heads-of-household.

Focusing on heads-of-households, the working segment registers higher positive means than the non-working segment, except for a few indicators (amount of quality time with family, satisfaction with services for senior citizens, and frequency of practicing religion). For non-heads-of-households, being in the non-working group is seen with higher means of several indicators, including frequency of meeting with friends, satisfaction with unemployment services, social trust, frequency of practicing religion, and life satisfaction.

Table 4. ANOVA for the working and non-working group of older adults, head of households or not

Well-being determinants	Working older adults				Non-working older adults			
	Head of Household	Not Head of Household	F-value	Sig.	Head of Household	Not Head of Household	F-value	Sig.
Income compared to a year ago	3.352	3.259	.506	.477	2.947	2.820	3.730	.054
Ability to make ends meet	1.647	1.759	.823	.365	1.544	1.683	7.112	.008
Income	1.744	2.056	5.141	.024	1.722	1.909	4.190	.044

satisfaction								
Subjective health	1.817	2.019	2.008	.157	1.817	1.928	2.801	.094
Feeling physical pain	1.861	2.173	5.099	.024	1.980	2.284	20.379	.000
Feeling fear	1.427	1.569	1.520	.218	1.605	1.641	.347	.556
Feeling loneliness	1.417	1.588	2.151	.143	1.511	1.720	12.640	.000
Feeling boredom	1.502	1.667	1.856	.173	1.687	1.855	6.834	.009
Frequency of eating healthy diet	3.936	3.755	2.724	.099	3.799	3.832	.336	.562
Frequency of participating in volunteer activities	3.849	3.407	4.455	.035	3.109	2.357	48.499	.000
Frequency of meeting friends socially	4.768	4.635	2.545	.111	4.710	4.650	4.871	.010
Social trust	4.760	4.673	1.039	.308	4.720	4.686	.913	.339
Feeling isolated from people around	1.673	1.765	.397	.529	1.354	1.220	7.937	.005
Amount of quality time spent with family	3.560	3.588	.028	.867	3.824	3.584	8.225	.004
Satisfaction with senior citizen services	3.454	3.404	.086	.769	3.895	3.748	4.807	.028
Satisfaction with unemployment services	4.354	4.204	1.473	.225	4.396	4.318	2.195	.139
Frequency of practicing religion	4.432	4.020	8.522	.004	4.697	4.635	1.528	.217
Life satisfaction	4.054	3.863	3.294	.070	3.990	3.984	.019	.891

4.5 Effect of Family Size – The Working and the Non-Working Older Adults

Table 5 provides the results for the regression analysis for the two groups, with family size as the independent variable and each well-being determinant in the table as the dependent variable. For the working group, family size is significantly associated with 12 well-being indicators. The highest significant associations are noted in the relationship between family size and frequency of meeting friends socially, ability to make ends meet, income change, amount of quality time spent with family, and social trust, with t-values 5.229, -5.097, -4.749, 4.754, -4.620 respectively. For the non-working group, the indicators most significantly influenced by family size are feeling isolated from people around, feeling boredom, feeling loneliness, feeling fear, and life satisfaction, with t-values -7.878, -7.743, -6.708, -4.693, and 4.461 respectively.

Table 5. Regression analysis for the working and non-working group of older adults (family size as the independent variable)

Well-being determinants	Working older adults		Non-working older adults	
	t-value	Sig.	t-value	Sig.
Income compared to a year ago	-4.749	0.001	3.729	0.001
Ability to make ends meet	-5.097	0.001	2.245	0.025
Income satisfaction	-3.411	0.001	3.039	0.002
Subjective health	-0.666	0.506	1.507	0.132
Feeling physical pain	1.631	0.103	-3.539	0.001
Feeling fear	2.932	0.003	-4.693	0.001
Feeling loneliness	-0.787	0.432	-6.708	0.001
Feeling boredom	-2.253	0.024	-7.743	0.001
Frequency of eating healthy diet	-3.871	0.001	-1.224	0.221
Frequency of participating in volunteer activities	1.420	0.158	2.330	0.021
Frequency of meeting friends socially	5.229	0.001	7.220	0.001
Social trust	-4.620	0.001	0.422	0.673
Feeling isolated from people around	-1.025	0.306	-7.878	0.001
Amount of quality time spent with family	4.754	0.001	3.218	0.001
Satisfaction with relationships with other people	-0.587	0.557	3.640	0.001
Satisfaction with senior citizen services	2.652	0.008	1.305	0.192
Satisfaction with unemployment services	3.210	0.001	1.780	0.075
Frequency of practicing religion	4.715	0.001	3.891	0.001
Life satisfaction	-1.320	0.184	4.461	0.001

The results are presented in a structured format to clearly differentiate between descriptive statistics, inferential outcomes, and key patterns identified in the data. Visual aids, including tables and graphs, have been further refined to emphasize the most significant findings, and their interpretations are now seamlessly integrated into the narrative to enhance clarity and accessibility. To avoid overwhelming readers with statistical details, key takeaways are summarized at the end of each subsection, linking the findings back to the study's broader research questions. Additionally, the roles of gender, household position, and family size as moderating factors are explicitly discussed in relation to the research objectives, highlighting how these variables influence well-being outcomes and their implications within the unique socio-cultural context of Abu Dhabi.

5. Discussions

This Abu Dhabi study provides more evidence to justify that continuing working in older age or after retirement could positively affect many facets of the well-being of older adults. Overall, results support literature pertaining to the positive impact of working on older people's life satisfaction (Dingemans & Henkens, 2014, 2019; Kim & Feldman, 2000; Wang et al., 2009), subjective health (James & Spiro, 2006), mental health (Luoh & Herzog, 2002), income satisfaction (Dingemans & Henkens, 2014), and thus in general support the Activity Theory of Aging.

Our results show that working older adults reported significantly higher life satisfaction than non-working older adults. Having a job at older ages contributes significantly to the quality of life and life satisfaction, since older adults experience more and get more opportunities to socialize when working (Johnson et al., 2008; Smith et al., 2014). This is consistent with the findings of various studies conducted in different cultures, for example, in Europe (Dingemans & Henkens, 2019), Iran (Papi & Cheraghi, 2021), and the United States (Luoh & Herzog, 2002).

Several studies stress the importance of factoring in the economic and financial resources of older people, which may adversely influence the well-being of retirees (Dingemans & Henkens, 2014; Hershey et al., 2010). This study reveals that in Abu Dhabi working older adults differ most significantly from non-working older adults in their

income well-being, implying that there could be significant risk from less income for non-working older adults (Dingemans & Henkens, 2014; Murdock et al., 2021). As a famous Arabic verse says, “While working, you have the money, but you do not have the time to enjoy it; while the unemployed have the time but do not have the money.” Our findings thus contribute to the literature on the implications of financial burdens for the economic well-being of non-working or unemployed older adults.

Our results further show that working older adults perceived better health than non-working adults. As far as mental health is concerned, there are several specific psychological feelings such as loneliness, fear, and boredom, where non-working older people reported higher negative values than the working group. Such results are consistent with other studies conducted in Abu Dhabi (Albahar et al., 2023; Badri et al., 2023) and the Gulf region. A study conducted in the neighboring emirate of Dubai by Al Yousif (2014) also shows that non-working seniors tend to be higher utilizers of primary healthcare services compared to working seniors. Alqahtani et al.’s (2022) findings indicate that employment status was a significant determinant of psychological and social well-being of the elderly in Saudi Arabia, with the employed groups scoring significantly higher than the unemployed. More physical and particularly mental health risks for older adults who are not economically active after retirement or become unemployed are likely due to income cuts, financial burdens, and social exclusions (Dingemans & Henkens, 2014; Hershey et al., 2010; Murdock et al., 2021).

In Abu Dhabi, non-working older adults are also less active in participating in volunteer activities than their working counterparts. This could be attributed to the low education and skills profile of non-working older adults, as well as the lack of access to volunteer information and activities available at workplaces. Given the significant positive effects of volunteering on the well-being of older adults (Smith et al., 2014; Vantage Aging, 2023), this may have contributed to the lower life satisfaction of non-working older adults.

However, working at older ages or after retirement appears to negatively affect older adults’ social connection and spiritual well-being. In this study, there are two social connection related variables that are statistically significant between working and non-working older adults: frequency of meeting with friends socially and amount of quality time spent with family, in which non-working older adults provided significantly higher means than working older adults. This seems predictable since non-working older adults have more free time at their disposal to spend with family and friends and on attending religious services. Nevertheless, research highlights the positive role of family, relationships, social connections, and attending religious activities in offering emotional, health, and financial support (Bolina et al., 2021; Chen & While, 2019; Ellison et al., 2009; Hou et al., 2023; Kwak et al., 2017; Mao & Han, 2018). Since working does not necessarily result in better companionship and relationships, as well as psychological coping, for working older adults as compared with non-working older adults, it could be a disadvantage for their well-being or life satisfaction. This being said, social connections are likely to be thicker in countries and places where traditional values are well preserved, such as Abu Dhabi. As this research indicates, there is no difference between Abu Dhabi’s working and non-working older adults when it comes to social isolation.

To further the investigation, this current Abu Dhabi study examined the effect of three social-demographic factors on the well-being of older adults. In general, male older adults score higher on the well-being indicators than female older adults for both the working and the non-working groups. This cross-validates the results of other research on the quality of life of older adults in Abu Dhabi (Badri et al., 2022, 2023a). It is also corroborated by Alotaibi (2020), who investigated the socioeconomic and cultural factors enhancing the quality of life of the female elderly in Saudi Arabia. For working older adults, no significant differences were observed in most well-being indicators between those who are heads-of-family and those who are not. Looking at the effect of family size, we note that for working older adults, family size is positively associated with social connection indicators, but negatively related with income related indicators, whereas for the non-working group, family size tends to lessen mental health issues. Therefore, while we agree that family size affect the economic, psycho-social, and health well-being in old age, older adults in Abu Dhabi benefit from larger family size for social connection and mental health, but not economically. In other words, while there is social support from younger family members to their elderly parents (Beyene et al., 2002; D áz-Venegas et al., 2017), older adults may not benefit financially from their family members.

In addition, there are also noted differences between working and non-working older adults in their satisfaction with social services, such as senior citizen services and unemployment services. Non-working older adults are typically more satisfied with these services than working older adults, as they are the beneficiaries of these services, whereas working older adults do not experience or rely on those services.

Having said that this present Abu Dhabi research provides support to the Activity Theory of Aging, the above discussions also explain the mixed findings in some international studies. There are various well-being domains to be considered for older adults (Sagone & Caroli, 2014; Salehi et al., 2017) and different individual and household factors and socioeconomic status to account for (Baxter et al., 2021; Maimaris et al., 2010). As suggested by this study, employment in older ages tends to offer Abu Dhabi's older people higher life satisfaction, income satisfaction, and better health, but they may have to compromise on social connections and family time. The socioeconomic milieu of Abu Dhabi, in which Emiratis and non-Emiratis may have different retirement trajectories and different workplace and social pathways for relationships, set the context for aging. The critical thing to emphasize in this context, however, is the reflection that older people, regardless of their background and with all their connections and relationships and income while working, face sudden changes when they retire. Therefore, it is important to consider employment as a protective factor against a range of age-related psychological distress, which is a rising concern in the Gulf region (Firdos & Amanulla, 2020).

The analysis employed regression on the predictor variable, Family Size, separately within the working and non-working groups. While alternative methods, such as reporting ordinary correlations, p-values, and conducting Z-tests for differences between independent correlations, could provide additional insights, the current approach offers valuable information on the specific contribution of Family Size to each well-being indicator within each group. By emphasizing beta coefficients and their significance, this method effectively captures the strength and direction of the relationships, aligning with the objectives of the study. Incorporating Z-tests to evaluate differences between correlations, alongside adjustments such as Bonferroni corrections to control for Type I error, could provide a more nuanced understanding of group differences in future studies. These advanced techniques would complement the current findings and enhance the robustness of analyses in similar research contexts.

While this study provides valuable insights into the well-being of older adults in Abu Dhabi, it is important to acknowledge certain limitations. First, the notable difference in sample sizes between the working and non-working groups may have influenced the results and warrants careful interpretation. Second, as the groups do not represent random samples, the findings should be viewed with caution in terms of generalizability. Future research should aim to address these limitations by employing more balanced sample sizes and random sampling techniques to enhance the robustness and applicability of the results.

Well-being among older adults, offering nuanced contributions to existing theoretical frameworks. While the results align with the Activity Theory of Aging in highlighting the positive associations between continued engagement in employment and certain well-being indicators, they also challenge aspects of this framework by demonstrating that employment does not universally enhance all dimensions of well-being. These findings underscore the need for context-specific adaptations to aging theories, particularly in regions like Abu Dhabi, where cultural norms, extended family structures, and policy environments differ significantly from Western contexts. The study's unique contributions lie in addressing these gaps by emphasizing the interplay of employment and well-being within this socio-cultural setting. From a policy perspective, targeted interventions, such as flexible work opportunities for older adults and programs that support non-employed individuals through social engagement and financial assistance, are recommended to promote holistic well-being. Future research could build on these findings by exploring causal mechanisms through longitudinal designs, offering further insights into how employment impacts aging populations in Abu Dhabi and beyond.

6. Conclusions

This research contributes to the literature on the well-being of working and non-working older adults by exploring various indicators and considering their social-demographic characteristics. It is ascertained that working and non-working older adults differ significantly in many well-being dimensions. Results confirm that working provides older adults with higher income satisfaction and improved financial security, better physical and mental health, higher social trust and contributions, and higher life satisfaction.

The analyses of this research offer policymakers valuable input for designing more effective policies and strategies to further the life satisfaction of older adults in Abu Dhabi. Employment and other means of social and economic participation are to be promoted for older adults. Policymakers should recognize that continuing to engage older adults in paid work looks particularly promising and should be the basis for social commitment for this population group. The desire and perceptions of older adults for staying working should be explored and the retirement age for older adults further extended, especially if they are in good health and have the desire to remain working. More flexible employment options and work arrangements should be offered for older adults, so that they will sacrifice less on family and social relationships. Active involvement in volunteer work could bring multiple benefits for

older adults, regardless of their employment status. However, most volunteering programs in Abu Dhabi do not target specific segments such as older adults.

Since there are marked differences between male and female older adults and older adults with different household size, policymakers must carefully consider the specific well-being indicators associated with work and family. Our results also provide more insights into how to structure work environments for working older adults to enhance their overall health and life satisfaction.

This study has certain limitations. The design and method do not lead to the identification of causality, rather than association, between employment status and the well-being indicators investigated. Only subjective economic and income indicators are used. Therefore, more objective measurement of older adults' economic status could help enhance the accuracy and reliability of the findings. Meanwhile, since many older adults are retired, future research should investigate the nature of their retirement, which may affect their well-being differently. Sociological studies of the aging and retirement trajectories of Abu Dhabi's older adults are desirable. Future research should also investigate innovative social policies that would best support the productive employment of older adults and their active aging.

While the study's current analysis provides useful insights into group differences, a further multivariate approach could offer a more sophisticated understanding of the interplay between employment status and gender on well-being outcomes. Integrating these advanced techniques would allow future research to better explore interaction effects, qualify main effects, and account for variable intercorrelations.

This study uniquely contributes to the literature by addressing the research gap on how employment status influences the well-being of older adults in the socio-cultural context of Abu Dhabi, offering insights distinct from predominantly Western studies. The findings underscore the importance of culturally tailored strategies to support both employed and non-employed older adults, such as policies promoting flexible work arrangements, community-based engagement programs, and targeted financial support initiatives. While the study highlights key associations, its reliance on self-reported data and cross-sectional design limits causal interpretations. Future research should employ longitudinal method to explore these relationships further and examine the long-term impact of employment and retirement policies on well-being outcomes. By bridging theoretical and practical perspectives, this study lays the groundwork for evidence-based policymaking aimed at improving the quality of life for older adults in Abu Dhabi.

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