

Psychosocial Wellbeing of Older Adults in Malaysia

HalimahAwang, Nurul Diyana Kamarulzaman, Yamunah Devi Apalasy, Alex Tan Ching Lung

Social Wellbeing Research Centre, Universiti Malaya, Malaysia

Abstract

This paper examined the psychosocial wellbeing among older adults in Malaysia using data from the Malaysia Ageing and Retirement Survey carried out in 2018-2019. A total of 2231 individuals aged 60 years and older participated in the study with an average age of 68 years. Psychosocial wellbeing was measured using 17 statements related to both the positive and negative outlook on life as experienced by the respondents. Cronbach's alpha was 0.851. Overall psychosocial wellbeing was found to be positive with a mean score of 67.2 out of the total 85 points and a median of 68. Significant factors associated with high score of psychosocial wellbeing include rural residence, being married, or never married, education level, good self-rated health, ability to perform activities of daily living, financial independence, having monetary support, having a loving family, and caring friends. Initiatives to improve psychosocial wellbeing should emphasize on those that would strengthen family, companionship and social connectedness, financial wellbeing, and independence.

Key words: Older persons, outlook on life, socio-economic, health, social support

Introduction

The rising trend in the number of older persons and its proportion to the total population largely due to declining fertility and mortality rates and increasing life expectancy raises concerns regarding their wellbeing. However, it is important to recognize the different definitions of wellbeing depending on individuals' professional and personal perspectives, experiences and engagement with their families, work, and community which may lead to variations in understanding how wellbeing is related to age and ageing processes.

There are two approaches often referred to in wellbeing research within the behavioural science discipline namely, the subjective wellbeing and the psychological wellbeing. While the former concerns with individuals' pleasure and happiness which is measured by three components: life satisfaction, the presence of positive mood and the absence of negative mood, the latter emphasizes on living the good life which covers six distinctive areas: environmental mastery, personal growth, purpose in life, self-acceptance, positive relation with others and autonomy (Burns, 2016; Kahnemann et al., 1999; Diener, 2000). As such, wellbeing is a multifaceted construct consisting of not only the dimensions of both the subjective and the psychological wellbeing, but it also includes socio-economic and health conditions (Huta and Waterman, 2014; Hugo, 2011; Prilleltensky, 2005).

Recognizing the importance of measuring psychosocial wellbeing in understanding life experiences of older persons, research on this topic has received considerable interest in recent years. For example, Steptoe, Deaton & Stone (2015) posits that psychosocial wellbeing of older adults is an important consideration for economic and health policy because of its association with longer survival. Intervention programs such as Adapted Physical Activity training and Exergaming to improve psychosocial wellbeing in old age has shown positive impact on improving mental health, sociability, emotional function and decreasing loneliness (Fave et al., 2018; Xu et al., 2016). Biographical approach through life story work, group reminiscence therapy has improved the general mental and psychosocial

wellbeing as well as cognitive functions of older adults (Lai et al., 2018; Bohlmeijer et al., 2007; Pinguart & Forstmeiers, 2012; Syed Elias, Neville & Scott, 2015). Other studies examined the effects of social support systems, activities of daily living (ADL) and physical activity on older persons' psychosocial wellbeing (Kadariya, Gautam & Aro, 2019; Na & Streim, 2017; Oluwagberniga, 2016).

Investigating inner happiness among Thai elderly, Gray et al. (2008) found that the happier people are those who can perform activities in daily living on their own and those who perceive that they live in a better social environment. In a study by Ren and Treiman (2015), living independently with spouse only was found to be the preferred living arrangement for better emotional well-being while living in a 2-generation household compromises it. While Ren and Treiman (2015) added that the strain on emotional wellbeing is worsened by the absence of a spouse, which is frequently the result of widowhood, Angner et al. (2009) reported that the lowest-quartile happiness among older adults was associated with poverty and unfavourable subjective health. They elaborated those medical conditions are linked with lower levels of happiness only if daily functioning is disrupted or subjected to social stigma.

Several studies have also been conducted involving older adults in Malaysia. Yadollah Abolfathi et al. (2011) examined sociodemographic factors and found that age, sex, marital status, and household income are significantly associated with older adults' psychological wellbeing. In a study by Kooshlar et al. (2012), co-residence of older persons with adult children has a positive impact on life satisfaction and social support while Kimm et al. (2014) found that loneliness decreases with participation in religious activities and co-residence of older persons with adult children. Another important predictor of life satisfaction is intergenerational transfers between older persons and their adult children (Ng & Hamid, 2013). However, it should be noted that all these studies were conducted among older persons residing in selected areas of Peninsular Malaysia. The Malaysia Ageing and Retirement

Survey (MARS) was the first national scale study focusing on various aspects of older adults' lives and it is the interest of this paper to examine the psychosocial wellbeing and its determining factors using MARS data.

Data and Methods

Data for the study were obtained from the baseline study of MARS Wave-1 conducted in 2018-2019 involving adults aged 40 years and older in every state of the Peninsular Malaysia as well as East Malaysia. MARS Wave-1 questionnaire covers five main components namely background information of the respondents and family members, health and health care utilization, work and employment, income and expenditure, and savings and assets. A total of 5613 respondents participated in MARS Wave-1 which was administered using Computer Assisted Personal Interview (CAPI) with a response rate of 84.0 percent. In this paper, those aged 60 years and older were selected for the analysis which consist of 2231 respondents.

The variable of interest is psychosocial wellbeing, measured by 17 statements, eight positive and nine negative statements related to the outlook on life as experienced by the respondents in the past six months at the time of the study (Table 1). The statements were adapted from the psychosocial and health sections of the Health and Retirement Study (HRS) United States, and the survey on Health, Aging, and Retirement in Thailand (HART), respectively, covering the domains of psychosocial wellbeing which include loneliness, life satisfaction and happiness. Each statement was measured on a five-point Likert scale where 1=Never, 2=Rarely, 3=Sometimes, 4=Often and 5=Always. For purposes of analysis, the response scale for negative statements was inversely converted. A composite score was then calculated using the total score of all 17 statements forming a psychosocial wellbeing indicator. The possible scores range from 17 to 85 points with a higher score indicating better psychosocial wellbeing. The indicator was validated and showed high consistency with a Cronbach's alpha statistic of 0.851.

Table 1: Statements of outlook on life to measure psychosocial wellbeing

No	Positive Outlook on Life	No	Negative Outlook on Life
1	Feel you are part of a group	1	Lack of companionship
2	There are people you feel close to	2	You feel isolated
3	There are people who understand you	3	You feel down/worthless
4	There are people to turn to for help	4	You feel disappointed with life
5	There are people you can talk to	5	You feel lonely
6	You feel in tune with others	6	You experience anxiety/stress
7	You feel satisfied with your life	7	You feel sad/depressed
8	You feel good/happy	8	You have trouble concentrating
		9	You experience boredom/lose interest

Three groups of independent variables were incorporated, namely (1) demographic and socioeconomic characteristics, (2) health status and (3) social support. Respondent's demographic and socioeconomic characteristics include age, gender, marital status, place of residence, education level, employment status, income, and financial independence. Employment status was divided into two categories, working now and those who no longer worked or have never worked which include retirees, homemakers and those unable to work due to disability or sickness. Individuals with at least one source of income are considered as having income. Income in this study is not only confined to salary from work but also includes pension, social insurance benefits, dividends earned from shares and social assistance. Health status was measured by self-reported health, having diagnosed illnesses, and having limitations to perform Activities of Daily Living (ADLs). Respondents with at least one diagnosed illness and difficulty in ADLs are placed in the 'Yes' category of these variables. Social support includes respondents' living arrangement, whether they have living children, status of receiving monetary support from family and perceived relationship with family and friends. The living arrangement variable consisted of three categories namely those who live alone, with their spouse only and with other family members. For perceived relationship with family and friends, respondents were asked to indicate to what extent they agree to the statements, 'I have a loving family' and 'I have caring friends'.

The analysis began with obtaining the descriptive statistics of all 17 statements of outlook on life and the psychosocial wellbeing score involving 2231 respondents aged 60 and older. Mean scores were then compared within and between independent variables followed by a multiple linear regression on the composite score. Of the total 16 independent variables, half were dichotomous variables, seven were categorical and the remaining variable, age, included as a continuous variable.

Results

Table 2 shows the distribution of responses for the statements of outlook on life. For each of the positive outlook statements, more than half of the respondents indicated Often or Always. The statement with the highest proportion of Often/Always is ‘There are people you feel close to’ (76.9%) followed by ‘You feel in tune with others’ (76.8%) and ‘There are people to turn to for help’ (71.8%). For the negative outlook statements, majority of the respondents indicated Never or Rarely with more than 75 percent Never or Rarely experienced ‘Lack of companionship’, ‘Feeling isolated’ and ‘Feeling down/worthless’. Feeling lonely and experiencing anxiety/stress have the highest proportions of Often or Always responses at 12.7 percent and 12.1 percent, respectively.

Table 2: Percentage distribution of responses for statements of outlook on life

Statement of Positive Outlook on Life	Never	Rarely	Sometimes	Often	Always
Feel you are part of a group	4.4	9.6	15.6	35.4	35.0
There are people you feel close to	2.8	5.3	15.0	39.7	37.2
There are people who understand you	4.1	7.4	17.9	36.7	33.9
There are people to turn to for help	4.6	7.0	16.6	37.5	34.3
There are people you can talk to	5.8	9.7	15.0	36.8	32.6
You feel in tune with others	4.1	7.0	12.1	36.4	40.4
You feel satisfied with your life	2.3	7.4	22.5	38.0	29.7
You feel good/happy	1.8	4.3	28.9	34.9	30.1
Statement of Negative Outlook on Life	Never	Rarely	Sometimes	Often	Always
Lack of companionship	49.1	26.8	13.6	6.3	4.1
You feel isolated	58.4	24.9	12.5	2.8	1.4
You feel down/worthless	51.4	26.5	16.3	4.6	1.3
You feel disappointed with life	42.2	31.1	20.1	4.7	1.8
You feel lonely	35.6	26.9	24.7	8.8	3.9
You experience anxiety/stress	31.1	29.0	27.9	8.4	3.7
You feel sad/depressed	31.6	28.2	29.7	7.1	3.3

You have trouble concentrating	42.3	25.4	22.1	7.3	2.9
You experience boredom/lose interest	38.5	25.3	27.1	5.4	3.7

The composite scores of psychosocial wellbeing ranges from 17 to 85 points with the median 68.0 and mean 67.2. The distribution of the independent variables with their respective means of psychosocial wellbeing measure is shown in Table 3. Age of respondents ranges from 60 to 95 with a mean age of 68.1 years. The proportion of females is higher (54.0%) than that of males (46.0%). More than two-thirds of respondents are currently married, and 61.2 percent reside in urban areas. About 42 percent have up to primary education while 22 percent did not attend any formal schooling. In terms of employment status, 83 percent of the sample are no longer working or have never worked. Slightly more than half have at least one source of income excluding transfers from family members. Majority agree that they are financially independent. With regards to health status, more than half rated their health as good or moderate with nearly 72 percent do not have any diagnosed illness while 93 percent do not have any limitation in ADLs. Respondents who live with other family members constitute the highest proportion (80.3%) followed by those who live with spouse only (14.9%). A high proportion of the respondents have living children and 68 percent reported to have received monetary support from family. For perceived social relationships, 91 percent of the respondents agree that they have a loving family while about 78 percent agree that they have caring friends.

Married respondents reported the highest psychosocial indicator score compared to the other marital status categories. Higher education level is associated with better psychosocial wellbeing where the score increases as level of education increases from no schooling (64.1) to tertiary education level (71.4). Being financially independent is also associated with better psychosocial wellbeing. Respondents with poor self-rated health have lower psychosocial wellbeing compared to those in good and moderate health. The same is observed for those who require help with ADLs, do not have living children and do not

receive monetary support from family with mean scores of 60.6, 63.8 and 66.2, respectively. Psychosocial wellbeing is lowest among those who disagreed with the statements on perceived social relationships. Those who disagreed to having a loving family had mean score of 53.2 and those who disagreed to having caring friends obtained a mean score of 60.9 where these scores are observed to be lower than the first quartile of the psychosocial wellbeing indicator (61.0).

Table 3: Mean score for psychosocial wellbeing indicator across independent variables

Variable	Percent (N=2231)	Mean score	Standard deviation
Age	Mean = 68.1 years		
Sex			
Female	54.0	66.2	10.1
Male	46.0	68.4	9.3
Marital status			
Never married	2.7	66.7	10.7
Married	67.1	68.5	9.2
Widowed/Divorced/Separated	30.2	64.4	10.4
Place of residence			
Urban	61.2	66.7	10.4
Rural	38.8	68.1	8.7
Education level			
No schooling	22.2	64.1	9.8
Primary	41.7	67.0	9.7
Secondary	29.7	68.9	9.5
Tertiary	6.3	71.4	9.0
Employment status			
Working now	16.9	69.1	9.0
No longer working/Never worked	83.1	66.8	9.9
Have source of income			
Yes	58.7	67.8	9.6
No	41.3	66.3	10.0
I am financially independent			
Disagree	21.5	63.3	10.5
Neutral	15.3	64.0	9.0
Agree	63.2	69.4	9.1
Self-reported health			
Good	38.0	69.8	8.7
Moderate	43.4	67.1	9.3
Poor	18.6	62.1	11.0
Diagnosed illness			
Yes	28.4	66.9	10.0
No	71.6	68.1	9.2
Need help with ADL			

Variable	Percent (N=2231)	Mean score	Standard deviation
Yes	6.6	60.6	10.7
No	93.4	67.7	9.6
Living arrangement			
Alone	4.8	65.6	10.3
With other family members	80.3	67.1	9.8
With spouse only	14.9	68.2	9.7
Have living children			
Yes	94.3	67.4	9.6
No	5.7	63.8	11.8
Receive monetary support from family			
Yes	67.6	67.7	9.5
No	32.4	66.2	10.4
I have a loving family			
Disagree	2.2	53.2	15.9
Neutral	6.5	58.5	9.2
Agree	91.3	68.2	9.1
I have caring friends			
Disagree	11.7	60.9	11.5
Neutral	10.2	61.9	9.2
Agree	78.1	68.9	8.9
Total	100.0	67.2	9.82

Multiple linear regression was subsequently performed on the psychosocial wellbeing measure and the result is shown in Table 4.

Marital status, place of residence, education level and being financially independent are demographic and socioeconomic variables which have significant effects on the level of psychosocial wellbeing of older persons. Compared to those who are widowed/divorced/separated, married respondents and those never married have higher psychosocial wellbeing score. Respondents residing in urban areas have lower psychosocial wellbeing than those in rural areas. The size of the negative coefficient decreases as the level of education increases suggesting that psychosocial wellbeing is highest among those with tertiary education and increases with increasing education. Respondents who agreed to being financially independent have better psychosocial wellbeing than those who felt neutral about it. In terms of health factors, respondents who reported good health are better off than those with moderate health while those with poor health are worse off than the group with moderate health. Having limitations in ADLs appear to result in lower psychosocial

wellbeing than without limitations. Within social support variables, having living children and receiving monetary support from family both correspond to better psychosocial wellbeing. For perceived social relationships, those who agree to having a loving family fare better, by about 6 points more than those who felt neutral about the statement while those who disagree to having a loving family have significantly lower psychosocial wellbeing compared to the neutral group. The same is observed for respondents who agree to having caring friends, with about 4 points higher than those with a neutral response to the statement.

Table 4: Regression analysis of psychosocial wellbeing

Variable	Coefficient (Standard error)
Age	-0.01 (0.03)
Sex (<i>ref Female</i>)	
Male	-0.125 (0.43)
Marital status (<i>ref Widowed/Divorced/Separated</i>)	
Never married	5.004 (1.50)*
Married	2.012 (0.46)*
Place of residence (<i>ref Rural</i>)	
Urban	-1.476 (0.38)*
Education level (<i>ref Tertiary</i>)	
No schooling	-3.594 (0.88)*
Primary	-2.641 (0.79)*
Secondary	-1.608 (0.79)*
Employment status (<i>ref No longer working/Never worked</i>)	
Working now	0.036 (0.52)
Have source of income (<i>ref No</i>)	
Yes	0.438 (0.39)
I am financially independent (<i>ref Neutral</i>)	
Disagree	0.189 (0.61)
Agree	3.006 (0.53)*
Self-reported health (<i>ref Moderate</i>)	
Good	2.156 (0.41)*
Poor	-2.639 (0.52)*
Diagnosed illness (<i>ref No</i>)	
Yes	0.33 (0.42)
Need help with ADL (<i>ref No</i>)	
Yes	-2.479 (0.78)*
Living arrangement (<i>ref With spouse only</i>)	
Alone	-0.701 (0.95)
With other family members	-0.289 (0.51)
Have living children (<i>ref No</i>)	
Yes	3.100 (1.07)*
Receive monetary support from family (<i>ref No</i>)	

Variable	Coefficient (Standard error)
Yes	1.295 (0.41)*
I have a loving family (<i>ref Neutral</i>)	
Disagree	-5.013 (1.43)*
Agree	5.597 (0.76)*
I have caring friends (<i>ref Neutral</i>)	
Disagree	-0.588 (0.78)
Agree	4.029 (0.62)*
Adjusted R-squared	0.273

*Significant at 1%

Discussion

The analysis on MARS Wave-1 showed that the level of psychosocial wellbeing among respondents aged 60 and older is mid-range to high. A median score of 68 for the indicator suggests that at least 50 percent of respondents reported to have often experience positive outlook and rarely experience negative outlook on life. The study reveals the determinants of psychosocial wellbeing as multidimensional whereby it is influenced by demographic, socioeconomic, health and social support factors.

Being married is found to be significantly associated with higher levels of psychosocial wellbeing compared to those who are widowed/divorced/separated. This is consistent with Ren and Treiman (2015) which explained that the absence of a spouse which is almost always a result of widowhood worsens the strain on emotional well-being further emphasizing the importance of companionship later in life. Respondents who are never married are also associated with better psychosocial wellbeing. A likely explanation is that these individuals have been single all along hence able to live independently and not subject to the grief that comes with losing a partner.

Respondents with higher education and financially independent are better off in their psychosocial wellbeing. Being more educated which often results in higher socioeconomic status allows them to live a secure and comfortable life. Both employment and income factors were not significant predictors. It can be argued that these factors could be represented through education, financial independence, and financial support from family, all of which

were significant predictors in our analysis. In addition, working and having income do not necessarily result in financial independence showing that older persons tend to place importance on not having to rely on other people for their own wellbeing. Within the MARS Wave-1 sample, those who are still working are mostly own-account workers employed in the agriculture, forestry and fishery sector and earning little or irregular income. Hence being employed and having income do not necessarily result in higher socioeconomic status which in turn contribute to better psychosocial wellbeing. In this study psychosocial wellbeing of the urban respondents was found to be significantly lower than their rural counterparts which may be explained by the hectic life, different living environment and social interaction experiences.

Good health and having no physical limitations are found to be important predictors in determining psychosocial wellbeing of older persons. Recognizing that good health is more than just an absence of diseases, this supports Angner et al. (2009) who explained that medical conditions are associated with low levels of happiness only if they disrupt daily functioning or are associated with social stigma. Those with diagnosed health problems might already be fully aware of the risks of their health conditions, have sought out remedies and/or are undergoing the necessary treatment hence not considering it to be detrimental to their wellbeing. Among respondents with a diagnosed illness, the top three common diseases are hypertension, high cholesterol and diabetes where majority reported that the disease does not limit their daily activities. This further emphasizes that with regards to health, psychosocial wellbeing of older persons is impacted only when there is disruption in their ability to be independent in daily functioning.

Our analysis also shows that psychosocial wellbeing comes from having a good social support system. Ng & Hamid (2013) explained that feelings of being wanted and taken care of enhance the life satisfaction of older Malaysians. This supports our findings where older persons who have living children and receive monetary support from family members are

better off in their psychosocial wellbeing. Our results also confirm the 5th Malaysian Population and Family Survey (MPFS) finding that nearly 80% of older adults still depend on their children to provide support especially cash assistance (National Population and Family Development Board, 2016). Perceived social support is found to have the biggest impact on psychosocial wellbeing where respondents who disagreed to having a loving family obtained the lowest mean score and the largest negative coefficient in the regression analysis. The presence of family members in one's life usually implies interdependence and personal attachment in terms of physical care and emotional support. Moreover, family members have traditionally been on the frontlines of caregiving and are expected to continue to be the main carers of older relatives. A positive effect on psychosocial wellbeing is also observed among respondents who reported to have caring friends. This is consistent with Gray et al. (2008) whereby older persons who perceived that they live in a better social environment are found to be happier owed to feeling of security and reliability in time of need. Considering about one-fifth of the respondents live alone or with their spouse only, knowing that they have a reliable social network through family and friends would be beneficial to their wellbeing.

Conclusion

Psychosocial wellbeing is closely linked with general health and wellbeing of individuals, more so among older adults as it relates to their emotional state and feelings. It is an important aspect of older persons' lives in addressing issues of care in old age. In this paper psychosocial wellbeing was measured by 17 statements related to positive and negative outlook of life, where the former focuses more on older adults' connectedness with family, friends, and social circle while the latter relates to personal feelings of dissatisfaction, sadness and disappointments. Overall, the psychosocial wellbeing of MARS respondents can be considered good with half of them having a score of 68 out of the total 85 points. Demographic and socioeconomic factors, health and social support have significant effect on their psychosocial wellbeing. Being married, living in the rural, educated, financially

independent, having good health, able to perform activities of daily living, having children, loving family and caring friends as well as receiving financial support from family positively affect psychosocial wellbeing of older adults. Initiatives to improve psychosocial wellbeing should include those that would strengthen family, companionship, and social connectedness as well as financial independence.

References

- Angner E, Ray MN, Saag KG and Allison JJ. (2009). "Health and Happiness among Older Adults: A Community-based Study." *Journal of Health Psychology* 14, 503-512.
- Bohlmeijer E, Roemer M, Cuijizers P and Smit F. (2007). "The effects of reminiscence on psychological well-being in older adults: A meta-analysis." *Aging and Mental Health* 11, 291-300.
- Burns R. (2016). Psychosocial Well-being. In: Pachana N. (eds) *Encyclopedia of Geropsychology*. Springer, Singapore. DOI: 10.1007/978-981-287-080-3_251-1.
- Diener, E. (2000). "Subjective wellbeing: The science of happiness and a proposal for a national index." *American Psychologist* 55, 34-43.
- Fave AD, Bassi M, Boccaletti ES, Roncaglione C et al. (2018). "Promoting well-being in old age: The psychological benefits of two training programs of Adapted Physical Activity (APA)." *Front Psychology*, 9:828, doi:10.3389/fpsyg.2018.00828.
- Gray RS, Rukumnuaykit P, Kittisuksathit S and Thongthai V. (2008). "Inner Happiness Among Thai Elderly." *Journal of Cross-Cultural Gerontology* 23, 211-224.
- Hugo G. (2011). "Future demographic change and its interactions with migration and climate change." *Global Environmental Change* 21, S21-S33.
- Huta V and Waterman AS. (2014). "Eudaimonia and its distinction from hedonia: Developing a classification and terminology for understanding conceptual and operational definitions." *Journal of Happiness Studies* 15, 1425–1456.

- Kahneman D. (1999). 'Objective Happiness,' in D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology*. Russell Sage Foundation: 3-25.
- Kadariya S, Gautam R and Aro AR. (2019). "Physical activity, mental health and wellbeing among older adults in South and Southeast Asia: A scoping review." *BioMed Research International*. doi.org/10.1155/2019/6752182.
- Kimm JLT, Tey NP and Ng ST. (2014). "Family support and loneliness among older persons in multi-ethnic Malaysia." *The Scientific World Journal*, <http://doi.org/10.1155/2014/654382>.
- Kooshier H, Yahaya N, Hamid TA, Abu Samah A and Sedaghat Jou V. (2012). "Living arrangement and life satisfaction in older Malaysians: The mediating role of social support function." *PLOS ONE*, 7(8): e43125.
- Lai CKY, Igarashi A, Yu CTK. et al. (2018). "Does life story work improve psychological well-being for older adults in the community? A quasi-experimental study." *BMC Geriatric* 18.119, doi.org/10.1186/s12877-018-0797-0.
- Na L and Streim JE. (2017). "Psychosocial well-being associated with activity of daily living stages among community-dwelling older adults." *Gerontology & geriatric Medicine*. <http://doi.org/10.1177/2333721417700011>.
- Ng ST and Hamid TA (2013). "Effects of work participation, intergenerational transfers and savings on life satisfaction of older Malaysians." *Australasian Journal on Ageing* 32, 217-221.
- NPFDB. (2016). *Report on Key Findings of Fifth Malaysian Population and Family Survey (MPFS-5) 2014*. National Population and Family Development Board, Kuala Lumpur.
- Oluwagberniga O. (2016). "Effect of social support systems on the psychosocial well-being of the elder in Old People's Home in Ibadan." *Journal of Gerontology & Geriatric Research*, 5:5, DOI: 10.4172/2167-7182.1000343.

- Pinquart M and Forstmeier S. (2012). "Effects of reminiscence interventions on psychosocial outcomes: A meta-analysis." *Aging and Mental Health* 16, 541-58.
- Prilleltensky I. (2005). "Promoting well-being: Time for a paradigm shift in health and human services." *Scandinavian Journal of Public Health* 33, 53-60.
- Ren Q and Treiman DJ. (2015). "Living Arrangements of the Elderly in China and Consequences for their Emotional Well-being." *Chinese Sociological Review* 47, 255-286, DOI: 10.1080/21620555.2015.1032162.
- Stephoe A, Deaton A and Stone AA. (2015). "Psychological wellbeing, health and ageing." *Lancet*, February:640-648.
- Syed Elias SM, Neville C and Scott T. (2015). "The effectiveness of group reminiscence therapy for loneliness, anxiety and depression in older adults in long-term care: A systematic review." *Geriatric Nursing*, <http://doi.org/10.1016/j.gerinurse.2015.05.004>
- Xu X, Li J, Pham TP, Salmon CT and Thong YL. (2016). "Improving psychosocial well being of older adults through exergaming: The moderating effects of intergenerational communication and age cohorts." *Games Health Journal* 5(6): 389-397.
- Yadollah Abolfathi M, Hamid TA, Ibrahim R and Yahaya N. (2011). "Sociodemographic predictors of elderly's psychological well-being in Malaysia." *Aging and Mental Health* 15(4), 437-45.