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## Learning Model for Improving Psychological Well-Being in the Elderly: A Case Study in Surabaya Setting

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### ABSTRACT

This study was a participatory action research (PAR) which aimed to develop learning model for improving psychological well-being (PWB) of the elderly by using the six aspects of PWB according to Ryff and Keyes (1995) that are autonomy, environmental mastery, personal growth, purpose in life, relations with others, and self-acceptance. This research was conducted in Surabaya for two years. In the first year, the participants were 91 elderly people came from 9 villages. Meanwhile, in the second year there were 59 participants in which 16 elderly people, 20 community actors for elderly development, 23 social service officers of Surabaya City Government. Data were collected using questionnaire, observation, in-depth interview as well as focus group discussion (FGD). Results of this research was a learning model for increasing PWB in the elderly. This model consisted of six intervention strategy moduls on autonomy, environmental mastery, personal growth, purpose in life, relations with others, and self-acceptance. The findings of this study could contribute practically for community organizer in assisting elderly group as well as for government in developing programs and policies for the elderly.

**Keywords:** elderly, intervention modul, learning model, psychological well-being.

### INTRODUCTION

Older persons are one of important components in society with different physical, psychological, and emotional condition compared with younger adults (Wandera, Kwagala & Ntozi, 2015; Zammit et al., 2012). Indonesian government's attention towards the elderly population has been increasing in line with the increasing proportion of the elderly population of the total population. The data of Indonesian Population Census in 2010 showed that nowadays Indonesia becomes one of the top five countries with the highest number of elderly people in the world with 18.1 million people or 7.6 percent of Indonesia's population. The elderly population with old of 60 years or older, is expected to increase so that by 2025 year, the number will reach 36 million according to Kementerian Kesehatan Republik Indonesia (The Republic of Indonesia's Health Ministry, 2013). The increasing of elderly population in Indonesia is in line with the growth of the elderly population in the world, which can be seen from the shift in the elderly population from year 2002 to 2025 (projection) as stated in Figure 1 below.

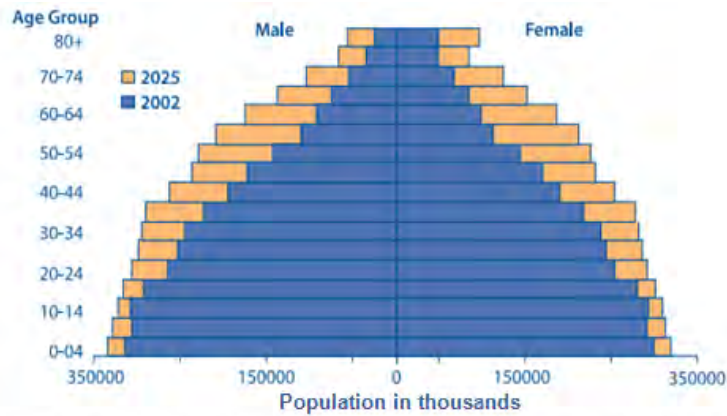


Figure 1. World Population Pyramid in 2002 and 2025 (Source: WHO, 2002:7)

Surabaya as the second largest city in Indonesia as well as the other major cities in this country have a fairly high percentage of the elderly population growth. According to data of Dinas Kependudukan dan Catatan Sipil Kota Surabaya (Surabaya City’s Bureau of Population and Civil Registration), in 2015 the number of elderly population (60 years and above) in Surabaya were 276,346 people or 9.4% of the total population of the city. This city has been become one of the cities with the composition of the number of elderly is quite high, as seen in the Surabaya’s population pyramid in 2015 as shown in Figure 2 below.

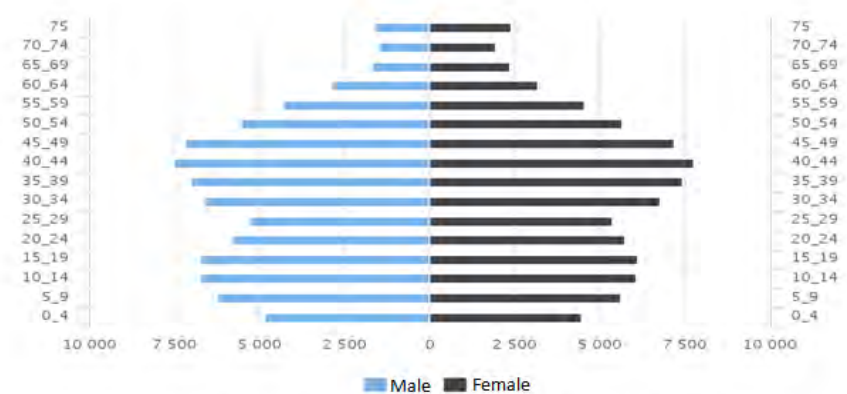


Figure 2. The Surabaya’s Population Pyramids in 2015 (source: Surabaya’s Population Department, 2016)

Various major issues related to elderly residents in the city of Surabaya are: the elderly population increased (9.1% in 2011 to 9.4% in 2015); the number of elderly poor is 11.7% (of the total population of the elderly); urban productivity decreases due to increased load of the city; and facilities and means of socialization for the elderly are still limited. To overcome these problems, the Government of Surabaya has established Komisi Daerah Lansia Surabaya (Surabaya’s Regional Commission for the Elderly) with several programs in 2015, namely: the development of area’s technical implementation unit for elderly, vocational training, providing additional food, medical examination, and gymnastics activity and health competitions for elderly. Those programs to improve the service quality to the elderly are implemented through Surabaya Government’s relevant agencies such as Social Department, and Bapemas (“Badan Pemberdayaan Masyarakat” or Community Development Agency). In addition, the government has established “Karang Werdha” (association for the



elderly) which were spread over the districts and villages in the City of Surabaya. The government of Surabaya has declared Surabaya as a friendly city for the elderly. The process of aging or being elderly is a natural process that accompanied the decline of physical, psychological as well as social interaction with others. Being older means there will be changes during the aging. These changes generally lead to the deterioration of physical and mental health which will ultimately affect the activities of daily life. The changes experienced by the elderly are in physical, social, economic, psychological, and role. These conditions tend to cause problems in health, social and economic (Makai, et al., 2014; Santrock, 2011). Elderly health problems caused by the aging of the body's cells that can decrease the body's immune. Consequently these condition will increase the risk factors of generative diseases and the emergence of psychological disorders, impaired independence, easily hurt, and suffering from degenerative diseases. The health problems commonly experienced by the elderly in Indonesia are pain in joints, hypertension, cataracts, stroke, heart disease, mental emotional disorder, and diabetes mellitus (Indonesian Health Ministry, 2013). According Setiabudhi & Hardywinoto (2005) there were some social problems associated with well-being that arise during the aging. These problems are: 1) the increasing number of the poor elderly, 2) the decreasing of the care quality as well as the healthcare guidance for the elderly, 3) the changing of the value of kinship in the community and society toward individualistic community, 4) the emergence of physical, psychological and social problems in line with the process of growing old that makes the elderly more dependent on others, 5) the decrease of working productivity, 6) the lost of some roles, 7) the death of the spouse, 8) empty nest, and 8) are not considered by family or live in institutions.

Every human being would want to live happily as well as the elderly. The concept of happiness in psychology known as the psychological well-being (PWB). It's means that happiness related to the quality of life, life satisfaction, and well-being of the ideal life both physical and psychological. According to Ryff and Keyes (1995) there were six dimensions of well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. These dimensions of well-being make people lives in a positive direction because people can accept themselves positively, can give and receive in a positive relationship and quality, have the autonomy to make decisions, have the ability to master the environment, have a useful purpose in life, and have a positive personality development, which is based on openness to the improvement and development of life. From the above explanation, we conclude that the process of becoming older is a natural process that accompanied by a deterioration in the physical and psychological conditions and social interaction with others. These conditions potentially impact on the decrease of psychological well-being of the elderly. Theoretically, the design of any interventions, including for PWB increasing for the elderly, need to consider the cultural characteristics. Surabaya as other sociocentric-collectivistic ethnic cultures typically reflects allocentric personality attributes such as interdependence, sociability, family orientation, and concern for others (Marin & Triandis, 1985). Barrio (2000) in his research concluded that in sociocentric cultures should incorporate cultural factors such as family networks and group's capital into community support program. Therefore, this reseach aimed to design a model of interventions to improve the PWB of elderly in Surabaya by using the community-based intervention that can be used as a learning model for improving PWB of the elderly.

## METHODS

This research used participatory action research (PAR) in order to develop a learning model for improving PWB of the elderly in Surabaya setting. Through PAR approach the researchers involved with the participants to take collective action for social change (Nelson & Priletsky, 2005). In doing this two years PAR, researchers participated in activities doing by “Karang Werdha” (association for the elderly). In the first year, this study aimed to explore the biopsychosocial experiences and psychosocial-demografic factors that influenced the elderly’s PWB. Researchers participated in 9 selected “Karang Werdha” from different villages in Surabaya that were: Kali Rungkut, Kedung Baruk, Kendangsari, Medokan Ayu, Penjaringan Sari, Rungkut, Rungkut Kidul, Sukolilo Baru, and Tenggilis Mejoyo. Number of participants in this phase were 91 elderly people. Data were collected using questionnaires, observation, and in-depth interview. The data were analyzed using descriptive quantitative and qualitative techniques in order to explore the demografic and biopsychosocial factors that influences to the elderly’s PWB.

Meanwhile, in the second years researched focused on developing intervention model to improve PWB of the elderly. In the second year there were 59 participants in which 16 elderly people, 20 community actors for elderly development, 23 social service officers of Surabaya City Government. In this phase, data were collected using focus group discussion (FGD). The qualitative data were analyzed using thematic analysis to construct the intervention model to improve PWB of the elderly. Thematic analysis is a technique to identify and analyze themes plotted in a phenomenon by encoding inductively (data driven) the raw qualitative data and deductively (theory-driven) based on theory and the results of previous studies (Boyatzis, 1998).

## RESULTS

### Result in the first year

Research findings in the first year were important to be inputs for desaining the intervention model to improve the elderly’s PWB in the second years. The findings were related to participants’ demografic characterstics and biopsychological experiences. The demografic characterstics were shown in Table 1 as follows:

*Table 1. Data of Participants’ Demographic Characteristics*

<b>Demographic Characteristics</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
Sex	Female	55	60.4
	Male	36	39.6
	<b>Total</b>	<b>91</b>	<b>100</b>
Employee status	Employed	66	72.5
	Unemployed	25	27.5
	<b>Total</b>	<b>91</b>	<b>100</b>
Education level	Master	2	2.2
	Undergraduate	15	16.5
	Diploma	6	6.6
	Senior high school	41	45.1
	Junior high school	8	8.8
	Elementry school	19	19.9
	<b>Total</b>	<b>91</b>	<b>100.0</b>

The data in Table 1 showed that based on gender, the respondent of this research consists of female (55 people or 60.4%) and male (36 people or 39.6%). In term of

employee status, most of this research participants were employed (66 people or 72.5%) and others were unemployed (25 people or 27.5%). Based on educational level, majority of this research participants in sequence were senior high school (45.1%), elementary school (19.9%), undergraduate (16.5%), junior high school (8.8%), diploma (6.6%) and master (2.2%).

Furthermore, through the open questionnaire several data on participants biopsychosocial experiences were gathered namely: the presence and type of chronic illness (bio/physical experiences); participants' perception on their happiness (psychological experiences); with whom the participants usually spend their leisure time (social experiences), The result of the data were shown in following table.

Table 2. Data of Participants' Biopsychosocial Experiences

<b>Biopsychosocial Experiences</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
The presence of chronic diseases ( <i>bio/physical experiences</i> )	Yes	70	76.9
	No	21	23.1
	<b>Total</b>	<b>91</b>	<b>100</b>
Type of chronic diseases ( <i>bio/physical experiences</i> )	Dislipidemia/cholesterol	29	24.8
	Hypertention	22	18.8
	Uric acid	19	16.2
	Cardiac disorders	13	11.1
	Gastrointestinal disorders	12	10.3
	Eye disorder	11	9.4
	Diabetes mellitus	11	9.4
	<b>Total</b>	<b>117</b>	<b>100</b>
Perception of happiness ( <i>psychological experiences</i> )	Feel happy	82	90.1
	Feel unhappy	9	9.9
	<b>Total</b>	<b>91</b>	<b>100</b>
With whom the respondents usually spend their leisure time ( <i>social experiences</i> )	Family	82	61.7
	Friends	32	24.1
	Alone	11	8.3
	Others	8	6.0
	<b>Total</b>	<b>133</b>	<b>100</b>

Note: For the type of chronic diseases, participant with chronic diseases could mention more than one chronic disease.

Data in Table 2 showed that majority of the participants, or 76.9% were suffered from health problems with chronic diseases, while others (23.1%) did not have a chronic disease. The chronic diseases that most widely experienced by the participants were dislipidemia (24.8%), hypertention (18.8%), and uric acid (16.2%). Furthermore, it known that majority of the participants (82 or 61.7%) spent their leisure time with their family, then with friends (32 people or 24.1%), alone (11 people or 8.3%) or others (8 or 6%). The perception of the participants happiness revealed that most of the respondents felt happy (82 people or 90.1%) and others felt unhappy (9 people or 9.9%).

Furthermore, through in-depth interview we describe the PWB predictors that affecting the elderly in three categories that were self-acceptance, affection, and achievement then interpreted according to its meaning, appearance, and expectancy. The results were stated in Table 3 below.

Table 3. Summary of The Three Predictors of Elderly's PWB

No	Aspect	Meaning	Appearance	Expectancy
1	Self-acceptance	<ul style="list-style-type: none"> <li>- Welcomed by the family and the society</li> <li>- Feeling be humanized</li> <li>- Welcomed in community activity</li> <li>- Maintaining family ties</li> <li>- Quran recitation in society</li> <li>- Receive funds from child</li> </ul>	<ul style="list-style-type: none"> <li>- Visited frequently by children, grandchildren, relatives and friends</li> <li>- Attention, affection and emotional closeness</li> <li>- Gathering with family, neighbors, friends, and Quran recitation's member in community</li> <li>- Socialization of the elderly people membership every month</li> <li>- Harmony in the household</li> <li>- Improving faith and God-fearing</li> <li>- Money / goods / charter</li> </ul>	<ul style="list-style-type: none"> <li>- Fostering well-being among family members</li> <li>- Living in peace and happiness; having long life, healthy, enthusiastic, qualified life</li> <li>- Receiving much sustenance to improve personal achievement</li> <li>- Having mutual attention and support with others</li> <li>- Being free from loneliness because have many best friends</li> <li>- Can increase fraternity</li> <li>- Being useful</li> <li>- Being closer to God Almighty</li> <li>- Activities of the elderly can be accepted in the community and can motivate the young generation</li> </ul>
2	Affection	<ul style="list-style-type: none"> <li>- Relation parents with children, with neighbors and community members</li> <li>- Compensation to orphanages/ nursing home for elderly</li> <li>- Mutual respect, appreciate and care for one another</li> <li>- Entertainment and the desire</li> <li>- Embracing all people regardless of age</li> </ul>	<ul style="list-style-type: none"> <li>- Gathering and mutual respect</li> <li>- Children being dutiful to parents</li> <li>- Having mutual aid in words as well as deeds</li> <li>- Listening to and paying attention with others</li> <li>- Having physical and psychological happiness, charity</li> <li>- Giving a gift on a person's birthday</li> <li>- Being active in social activities</li> </ul>	<ul style="list-style-type: none"> <li>- Giving affection sincerely</li> <li>- Being loved continuously</li> <li>- Relieving the burden and arouse feelings</li> <li>- Having personal relationship and communication</li> <li>- Experiencing peace in the household</li> <li>- Making the family be famous</li> </ul>
3	Achievement	<ul style="list-style-type: none"> <li>- As the elderly can be a good model</li> <li>- The ultimate achievement</li> <li>- The success in any activity</li> <li>- Becoming the winner of any competition</li> </ul>	<ul style="list-style-type: none"> <li>- Having no troublesome child and can be independent</li> <li>- Can preventing illness</li> <li>- Having trophies, certificates, money and coaching</li> <li>- Becoming championship in the race that followed</li> <li>- Being administrator of elderly organization</li> <li>- Being glad and vigorously</li> <li>- Being devoted parents</li> </ul>	<ul style="list-style-type: none"> <li>- Can live independently</li> <li>- Being free from any deficiencies</li> <li>- Still being active in elderly organization</li> <li>- Being healthy and having long life</li> <li>- Working more optimally</li> <li>- Having a successful child</li> <li>- Can perform activities</li> <li>- Having pious and useful children</li> </ul>

The above table showed that there were a variety of subjective meanings of the elderly about the factors that influenced their PWB.

**Result in the second year: desaining learning model**

Based on the results from the first year, we conducted focus group discussions (FGD) by involving three elements who participated significantly so far in desaining the elderly community-based activities. They were the elderly, community actors for elderly development, and social service officers from Surabaya City Government. The FGD focused on desaining learning model based on this research findings in the first year as well as on the participants’s opinions or experiences. The following were the activities or programs that thought to improve the elderly’s PWB. The activities were classified six models according to the six aspects of PWB.

*Table 4a. Activities to Improve the Elderly’s PWB (Program 1-3)*

<b>Program 1: Authonomy</b>	<b>Program 2: Environmental Mastery</b>	<b>Program 3: Personal Growth</b>
<ul style="list-style-type: none"> <li>- Planting medicinal plants</li> <li>- Having skills in recycling</li> <li>- Cultivating catfish</li> <li>- Having personal medical devices such as blood pressure and blood sugar checks</li> <li>- Being a caretaker in elderly organization</li> <li>- Doing self-medication</li> <li>- Participate in course and training</li> </ul>	<ul style="list-style-type: none"> <li>- Doing green and clean community</li> <li>- Community service</li> <li>- Planting medical plants</li> <li>- Recycling bins</li> <li>- Providing information to community member</li> <li>- Doing exercise together</li> <li>- Eradicate mosquito larvae</li> <li>- Doing Quran recitation together</li> </ul>	<ul style="list-style-type: none"> <li>- Following any socialization, seminar</li> <li>- Providing information to community and increasing personal skills</li> <li>- Doing sports</li> <li>- Participate in choir</li> <li>- Creating sewing course</li> <li>- Creating a salable handicraft</li> <li>- Making studio for elderly</li> <li>- Doing the hobby and developing talent</li> <li>- Participate in religious activities</li> </ul>

*Table 4b. Activities to Improve the Elderly’s PWB (program 4-6)*

<b>Program 4: Purpose in Life</b>	<b>Program 5: Relation with Others</b>	<b>Program 6: Self-acceptance</b>
<ul style="list-style-type: none"> <li>- Doing Quran recitation for peace of soul</li> <li>- Doing sports</li> <li>- Providing seminars about the purpose of life</li> <li>- Having recreation together</li> </ul>	<ul style="list-style-type: none"> <li>- Visiting elderly clinic</li> <li>- Having picnic or elderly tour</li> <li>- Fraternal visit</li> <li>- Quran recitation</li> <li>- Visiting the orphanages and homes for the elderly</li> <li>- Visiting the sick</li> <li>- “Arisan”/ regular social gathering</li> <li>- Spiritual activity</li> <li>- Art activity</li> <li>- Being a church or mosque caretaker</li> <li>- Sports</li> <li>- Sharing meals</li> </ul>	<ul style="list-style-type: none"> <li>- Religious activity</li> <li>- Quran recitation</li> <li>- Being a caretaker in elderly organization: “Posyandu”/ elderly clinic</li> <li>- Establish “Karang Werdha” /elderly organization</li> <li>- Being a local/community leader/organizer</li> </ul>

The results on Table 4 showed that there were six group of programs arranged based on the six aspects of PWB: autonomy, environmental mastery, personal growth, purpose in life, relations with others, and self-acceptance. The next step carried out by us as the researchers was developing the design of the six modules that intended as community-based learning model for improving the elderly's PWB. The six modules were: 1) module for improving autonomy, 2) module for improving environmental mastery, 3) module for improving personal growth, 4) modules for improving purpose in life, 5) module for improving relations with others, and 5) module for improving self-acceptance. Before becoming final version modules, each of the modules were tested empirically on the group of elderly who were the participants of this research. In addition, the modules were reviewed by three experts on relevant background. Based on the empirical findings as well as on the experts improvement suggestions, we composed the final version of the six modules as community-based learning model for improving the elderly's PWB.

## DISCUSSION

Getting older means that there will be changes during aging. Those changes generally lead into the decline of physical and psychological health which will ultimately affect the elderly's personal or daily life and social activities. The physical, psychological, and social changes in turn had impacts on the elderly's PWB. Based on the above data as shown in Table 2, it is known that one of the characteristics that accompany the aging in the elderly is declining of physical condition characterized by the appearance of various chronic diseases experienced by several elderly people. The data showed that most of the participants are suffering from several chronic diseases, in which the top three diseases are dislipidemia/cholesterol (24.8%), hypertension (18.8%), and uric acid (16.2%).

The findings of this study are consistent with the profile of health problems nationwide as stated by a study coordinated by the Indonesian Ministry of Health/ Kementerian Kesehatan Republik Indonesia (2013) namely the Basic Health Research (Riset Kesehatan Dasar/Riskesdas) stating dyslipidemia, hypertension, diabetes mellitus as a major health problem in Indonesia, especially for the elderly population. In addition to the seven such disorders, chronic health problems others mentioned by respondents are: low blood, impaired kidney function, hernia, insomnia, joint pain, hearing loss, COPD (chronic obstructive pulmonary disease), prostate, sinusitis, disorders of the womb, calcification of the bone, osteoarthritis, TB (tuberculosis), vertigo, asthma, nervous disorders. The research showed that East Java has the prevalence of diabetes is higher than the national average prevalence. District or city in East Java which have prevalence of diabetes that is higher than the provincial prevalence average that are: Malang, Ngawi, Situbondo, Mojokerto, Magetan, Kediri, Jombang, Pasuruan, Madiun, Sidoarjo, Gresik, City Probolinggo, and Surabaya. RISKESDAS research results showed the prevalence of diabetes increases with age (Kementerian Kesehatan Republik Indonesia, 2013).

The data in Table 2 showed that diabetes mellitus (DM) was one of the chronic diseases that suffered by the elderly (9.4%). The prevalence of DM mostly in the age group 55-64 years and 65-74 years old. Patients who had never attended or not completed the primary school education, and those who only completed primary school education are in a group of patients with the greatest prevalence of DM. DM is a major health problem in many countries in the world and Indonesia was ranked fourth after India, China, and the US with a number of people with diabetes in the world (Wild, et al, 2004).

The changes experienced by the elderly has led to the decline of physical, social, economic, psychological, and roles (Makai, et al., 2014; Santrock, 2011; Schell and Hall, 1982). According Setiabudhi & Hardywinoto (2005) there are some social problems associated with well-being that appear during aging, namely: 1) the greater number of poor elderly, 2) low quality of care and guidance of healthcare for the elderly, 3) changes in the value of kinship in society and a society increasingly individualistic, 4) the onset of physical problems, psychological and social in line with the process of becoming a parent so as to make the elderly more dependent on other people, 5) decrease in work productivity, 6) lost some roles, 7) death of a spouse, 8) empty nest, 8) is not considered a family or live in institutions. These social problems were perceived by several elderly as unhappiness experiences (9.9). Nevertheless, most of them (90.1%) did not disturbed by or perceived the social problems as stressful experiences. In other words, these most of them were happy. Psychological well-being can be interpreted as happiness, in the sense of free from distress, as reflected by the balance of positive and negative affect (Diener & Larsen, 1993).

Many factors affect the PWB that are age, gender, education level and occupation, latabelakang culture (Ryff & Singer, 1996); personality, work, health and physical function (Schmutte & Ryff, 1997); health, physical attractiveness, level of autonomy, the chance of interaction outside the family and living conditions, occupation and employment status, balance between expectations and achievements and thought possessions, emotional adjustment and attitude towards certain period, the realism of the concept of self and role concepts (Hurlock, 1981), religiosity (Ismael & Desmukh, 2012), social support (Calhoun & Accocella, 1990). Data in this research as revealed in Table 2 showed that most of the participants usually spend their leisure time with family (61.7%) or friend (24.1%). This result indicated that the social support from family members and friends became significant factors that influenced the elderly's PWB.

In relation to the aging process, Ericson (1963 in Pudjibudojo, 2008) through the theory of psychosocial stated that the success of the individual in his old age (achieving well-being) very dependent on the way the individual resolve conflicts encountered, either personal such as anxiety and loneliness or social relations with other. Each person's happiness influenced by the relative happiness 3A, or three A's of happiness, namely: acceptance, affection, and achievement. General signs of good adjustment on aging happens to the elderly were: (1) the strong interest and diverse; (2) self-reliance in economic terms, which allows for independent living; (3) do a lot of social relationships with all ages, is not limited to people who are elderly age; (4) the pleasure of working were pleasant and helpful but not costly; (5) participating in community organizations; (6) the ability to maintain a pleasant home without exerting too much physical exertion; (7) the ability to enjoy various activities this time without regretting the past; (8) reduces anxiety about the self and others; (9) enjoyed the activities of the day even though the activity might be repetitive in nature; (10) to accept criticism from others, especially from the younger generation; (11) permissive or forgiving of mistakes, especially about the living conditions and treatment of others (Hurlock, 1981). Meanwhile, unhappiness that characterized by poor adjustment, caused by: (1) the low interest in the environment; (2) low personal role in daily world; (3) withdrawing into a fantasy world; (4) always remembering the past negative experiences; (5) always being anxious, driven by feelings of unemployed; (6) lack of drive in all sectors; (7) stiffness in family relationships; (8) lack of interest in this

present life; (9) being isolated; (10) always complaining or criticizing; (11) refusing to join the activities of elderly people (Hurlock, 1981).

This research data as shown in Table 3 revealed that the participants' relative happiness were influenced by the three A's of happiness: acceptance, affection, and achievement. In relation to self-acceptance, there were several meanings of self-acceptance such as welcomed by the family and the society, feeling be humanized, welcomed in community activity. These meanings of self-acceptance were present or appeared in many activities or things such as visited frequently by children, grandchildren, relatives and friends; attention, affection and emotional closeness with family members or friends. In order to maintain the happiness, the participants had expectancy such as fostering well-being among family members, living in peace and happiness; having long life, healthy, enthusiastic, qualified life.

In relation to the second predictors of happiness, affection was meant by elderly participants as relation their relations with children, with neighbors and community members; compensation to orphanages/nursing home for elderly; mutual respect, appreciate and care for one another. The happiness caused by affection appeared in some way such as gathering and mutual respect; their children being dutiful to them; having mutual aid in words as well as deeds; listening and paying attention with others.

In order to maintain the affectionate happiness, the participants expected being happy by giving affection sincerely; being loved continuously; relieving the burden and arouse feelings. Meanwhile, in relation to achievement as the third predictors of happiness, participants experienced achievements as being a good models for their children; having ultimate achievement; being successful in any activity. The achievement based happiness were appear in having no troublesome child; being independent, being free from illness. The participant would maintenance the happiness by living independently; being free from any deficiencies; being active in elderly organization; or being healthy and having long life.

Bario (2000) in his research concluded that in sociocentric cultures should incorporate cultural factors such as family networks and group's capital into community support program. It meant that all the six aspects in designing intervention programs to improve the elderly's PWB must be consider the characteristics of Surabaya society as sociocentric-collectivistic ethnic cultures. Sociocentric-collectivistic ethnic cultures were attributed several characteristics such as interdependence, sociability, family orientation, and concern for others (Marin & Triandis, 1985).

According to findings in Table 4a, the first aspect of PWB (self-acceptance) could be improve in several community-based activities such as: doing green and clean community; doing community service in planting medicinal plants; recycling bins; providing information to community members; eradicating mosquito larvae); doing Quran recitation together. The same community based-intervention must be done to design intervention on others aspects of PWB that were environmental mastery, personal growth, purpose in life, relations with others, and self-acceptance. Based on this empirical finding in designing learning model to improve the elderly's PWB, this study could contribute practically for community organizer in assisting elderly group as well as for government in developing programs and policies to improving the PWB of the elderly.



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### REFERENCES

- Barrio, C. 2000. The cultural relevance of community support programs. *Psychiatric Services*, 51(7), 879-884.
- Boyatzis, R.E. 1998. *Transforming Qualitative Information: Thematic Analysis and Code Development* Sage: Cleveland.
- Calhoun, J.F., & Acocella, J.R. 1990. *Psychology of Adjustment and Human Relationship*, 3<sup>rd</sup> ed. New York: McGraw Hill.
- Diener, Ed., & Larsen, R.J. 1993. The experience of emotional well-being. In Lewis, M. & Haviland, J. M. (Ed). *Handbook of Emotions* (pp. 405-415). New York: Guilford Press.
- Dinas Kependudukan dan Catatan Sipil Kota Surabaya (Surabaya City’s Bureau Agency of Population and Civil Registration). 2016. Penduduk Surabaya Tahun 2015. <http://dispendukcapil.surabaya.go.id/>
- Hurlock, E. B. 1981. *Developmental Psychology: A Life-Span Approach*, 5<sup>th</sup> ed. New Delhi: Tata McGraw-Hill.
- Ismael, Z., & Desmukh, S. 2012. Religiosity and psychological well-being. *International Journal of Business and Social Science*, 3(11), 20-28.
- Kementerian Kesehatan Republik Indonesia (Republic of Indonesia’s Health Ministry) . 2013. *Riset Kesehatan Dasar (Riskesdas) 2013*. Jakarta: Badan Penelitian dan Pengembangan Kesehatan.
- Makai, P., Brouwer, W.B.F., Koopmanschap, M.A., Stolk, E.A., & Nieboer, A.P. 2014. Quality of life instruments for economic evaluations in health and social care for older people: A systematic review. *Social Science & Medicine*, 102(Feb), 83-93.
- Marin, G., & Triandis, H.C. 1985. Allocentricism as an important characteristics of the behavior of Latin American and Hispanics. In R. Diaz-Guerrero (Ed.). *Cross-cultural and National Study of Social Psychology* (pp85-114). Amsterdam: Elsevier Science Publisher B.V.
- Prilleltensky, I., & Nelson, G. 2002. *Doing Psychology Critically: Making a Difference in Diverse Settings*. NY: Palgrave McMillan.

- Pudjibudojo, J.K, (2008). *Mencapai Psychological Well Being pada Lanjut Usia, Tinjauan Psikobiososial*. Surabaya: Universitas Surabaya.
- Ryff, C.D., & Keyes, C.L.M.1995. The structure of human psychological well-being. *Journal of Personality and Social Psychology*, 69(4):719-727.
- Ryff, C.D., & Singer, D. 1993. Psychological well-being: Meaning, measurement, and implications for therapy research. *Psychoterapy and Psychosomatics*, 65(1), 14-23.
- Santrock, J.W. 2011. *Life-Span Development, 13<sup>th</sup> edition*. New York: McGraw-Hill.
- Schmutte, P.S., & Ryff, C.D. 1997. Personality and well-being: Reexamining methods and meanings. *Journal of Personality and Social Psychology*, 73(3), 549-559.
- Setiabudhi, T., & Hardywinoto (2005). *Panduan Gerontology Tinjauan dari Berbagai Aspek*. Jakarta: PT. Gramedia Pustaka Utama.
- Wandera, S.O., Kwagala, B., & Ntozi, J. 2015. Determinants of access to healthcare by older persons in Uganda: a cross-sectional study. *International Journal for Equity in Health*, 14:26.
- WHO. 2002. *Active Ageing: A Policy Framework*. Second United Nations World Assembly on Ageing. Madrid, Spain.
- Wild, S., Roglic, G., Green, A., Sicree, R., & King, H. 2004. Global prevalence of diabetes: Estimates for the year 2000 and projections for 2030. *Diabetes Care*, 27(5):1047-53.
- Zammit, A.R., Starr, J.M., Johnson, W., & Deary, I.J. 2012. Profiles of physical, emotional and psychosocial wellbeing in the Lothian birth cohort 1936. *BMC Geriatrics*, 12:64.