

## The Effect of Family Function on Anxiety Moderated by Life Satisfaction in Elderly

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### ABSTRACT

The purpose of this study was to determine the effect of family function on anxiety in the elderly moderated by life satisfaction. The sample for this study consisted of the subjects of this study were elderly people aged from 60-80 years who lived and lived with their families as many as 62 elderly people. The sampling technique used is population. The scale used is the Family Assessment Device, the Geriatric Anxiety Scale, and the Life Satisfaction Scale given to the study participants. This study uses a quantitative method, the analysis test uses statistical techniques with the MRA test (Moderated Regression Analysis), using SPSS 23. Software assistance The results show that the role of family function on anxiety has a significant negative effect and also the results of this study do not support the moderation model between family function, life satisfaction, and anxiety in the elderly.

**Keywords:** *Family Function, Anxiety, Life Satisfaction*

Aging is a developmental process that will be experienced by each individual. Late adulthood, or known as elderly is a period of development that begins at the age of 60 or 70 years until the time of death. When entering the final stage of adult development, the elderly face a number of problems, including deterioration of health, loss cognitive potential, increased chronic stress, feeling lonely, and anxiety (Santrock, 2012). Anxiety is an emotional state that has a characteristic physiological arousal, an unpleasant feeling of tension and a feeling of worry that complains that something bad is about to happen (Nevid, Spencer, & Beverly, 2005).

Anxiety that is felt by the elderly focuses on feeling worried or afraid if you have to leave your spouse, child, grandchild or family (Bryan, 2003). Research conducted by Bagus, Hendra, & Ardani (2018) shows that the symptoms of anxiety felt by the elderly include having a bad feeling, fear of darkness, fear of crowds, frequent waking up at night, difficulty concentrating, feeling sad, feeling pain in muscles, experience indigestion, shortness of breath, muscle aches, and feel anxious feelings. Anxiety experienced by the elderly is caused

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by retirement or quitting work, physical disorders, illnesses suffered, conflicts or problems in the family, the death of loved ones so that nobody accompanies them in their daily lives, and poor economic status (Sincihu, Daeng, & Yola, 2018).

The impact of anxiety felt by the elderly is sleep quality and poor quality of life. The research conducted by Dariah & Okatiranti (2015) showed that there was a relationship between anxiety and sleep quality in the elderly, with presentations 7.6% of the elderly had mild anxiety, 60.0% had moderate anxiety, 31.8% had severe anxiety, then 54, 6% of elderly people experience poor sleep quality. Based on the degree of anxiety both mild and severe can cause difficulty sleeping from mild to severe (Sincihu et al., 2018).

One of the factors that influence the decrease in anxiety in the elderly is family support, how the family functions fully in the life of the elderly. Based on the perspective of family function, families can be classified as functional and dysfunctional. It is said to be functional when responding with good emotional stability when faced with conflict and criticism, family members maintain harmony, affection and commitment in family relationships because this plays an important role and the key to success in caring for the elderly (Souza et al., 2014). In a dysfunctional family system, family members prioritize personal interests by leaving the family, avoiding obligations in family relationships, blaming their own families in crisis situations, or overly protecting them so that they damage the freedom and privacy of family members (Souza et al., 2014).

Elderly who have harmony in their lives will get emotional support and understanding from their family and social environment that can have an impact to reduce their anxiety, this condition will help the elderly get a positive outlook on what they have achieved in life (Veronika, Kaloeti, & Hartati, 2017). Family function refers to how a family functions as a social system when adapting to a new situation or how family members support one another in daily life (Knipscheer & van Tilburg, 2003).

The results of research conducted by Ayuningtyas & Surty (2013) showed that there was a significant relationship between family support and anxiety levels of elderly home care, as many as 19.23% of elderly received high family support, 53.85% of elderly received sufficient family support and 26.92% of elderly received lack of family support. The highest support given by the elderly home care family is emotional support and appreciation support that serves to increase self-esteem and shape self-confidence when the individual is under pressure. The results of other studies state that social support can reduce anxiety because it has a positive relationship with happiness, the elderly who get social support will feel valuable and their lives will be more peaceful (Hidayah, 2016).

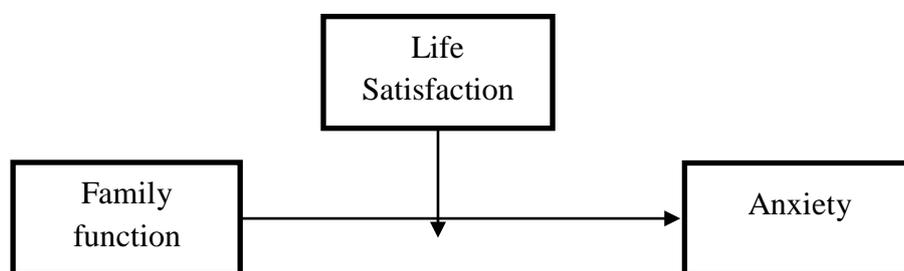
Based on research conducted by Hughes, Hedtke, & Kendall (2008) it was found that anxiety, depression experienced by individuals significantly had a relationship with family function. Chapman & Woodruff-Borden (2009) conducted a study with a sample of early American and European American adult subjects found that family function was significantly related to anxiety symptoms experienced by samples of early European American adults but not in samples of early African American adults. However, the two studies were refuted by Ghamari (2012) who stated that there was no significant relationship between family dysfunction and anxiety.

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Life satisfaction is one of the factors that can reduce anxiety. The concept of life satisfaction is defined as the difference between what is desired and what is owned, namely comparing reality with the ideal thing by assessing satisfaction with the values and expectations of individuals for themselves and the extent to which individuals can live their lives to get satisfaction in life (Saeed, 2016). Given & Range (1990) conducted a study with elderly subjects who lived in nursing homes and the elderly who lived with their families to get results, namely the higher life satisfaction, the anxiety to face death would decrease.

Research conducted by Guney, Kalafat, & Boysan (2010) suggests that life satisfaction has a statistically significant relationship with anxiety and depression and that life satisfaction can be calculated as a moderator variable for mental health studies. Research conducted by Roshani (2012) found that there was a significant negative relationship between life satisfaction and anxiety facing death in the elderly, in other words if life satisfaction increases, the anxiety of facing death in the elderly will decrease. The results of other studies suggest that there is a significant negative relationship between life satisfaction and anxiety (Temitope, 2015; Gultekin & Aricioglu, 2016). Based on the description above, the purpose of this study was to determine the significance of the role of family functions on anxiety in the elderly moderated by life satisfaction

### Research Design



## METHODOLOGY

### Sample

The subjects of this study were elderly people aged from 60-80 years who lived and lived with their families as many as 62 elderly people from Central Sulawesi, South Sulawesi, East Java, Medan, Padang, and Central Java. The sampling technique used is a population where the subject is determined to be a participant is the whole person who has certain characteristics set by the researcher.

### Instruments

Terdapat tiga skala yang digunakan pada penelitian ini,

- 1. Family Assessment Device.** Developed to measure family functions based on the McMaster model by Natan B. Epstein, Lawrence M. Baldwin & Duane S. Bishop. This questionnaire has 12 items rated from 1 to 4 meaning 1 = strongly disagree, 2 = agree, 3 = disagree, strongly disagree = 4. Low scores on FAD show good family function (Chapman & Woodruff-Borden, 2009; Ghamari, 2012). The results of the trial from the factor analysis using SPSS 23.00 obtained the value of KMO. 682 which means the items used are valid and reliable.
- 2. Geriatric Anxiety Scale (GAS).** has excellent internal consistency for total scores among adults living in the community and adult clinical samples. This questionnaire has 25 items that are rated 1 to 4 meaning 0 = never, 1 = always, 2 = often 3 =

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sometimes (Gould et al., 2014; Mueller et al., 2015). The results of the trial obtained values of KMO. 790 which means valid and reliable.

- Life Satisfaction Scale.** This scale has the function of representing a multi-item scale for the overall assessment of life satisfaction as a cognitive assessment process, rather than for measuring specific satisfaction domains (eg health, material wealth). This scale consists of 5 items assessed using a 7-digit likert scale (Arrindell, Heesink, & Feij, 1999). The results of the trial from the factor analysis using SPSS 23.00 obtained the value of KMO. 538 which means the items used are valid and reliable.

### Procedure

This study consisted of three procedures, namely preparation, data retrieval and data analysis. The scale of the research is distributed to the elderly population who lives and lives with their families. Then the data were analyzed using the SPSS 23 for Windows program which would then be explained and drawn based on the results of the analysis

## RESULTS

The test results using statistics show the mean and standard deviation values for each variable. The anxiety variable (Y) has an average value (M = 6.34; SD = 4.98), the family function variable (X) has an average value (M = 15.24; SD = 3.42), and variable life satisfaction has an average value (M = 7.68; SD = 1.54). Results Test for tolerance between variables shows that each variable has a negative and positive relationship. This family function variable is significantly negatively related to anxiety ( $r = -0.35$ ;  $p < 0.05$ ), family function variable and life satisfaction ( $r = 0.51$ ;  $p < 0.05$ ), variable life satisfaction and anxiety ( $r = -0.84$ ;  $p < 0.05$ ). Family function has a negative and significant effect on anxiety (indicated by a regression coefficient of  $-0,509$  and a p value of  $0,005$  ( $p < 0,05$ ) which means that Hypothesis 1 is accepted. This means that the better the family function in the family will reduce anxiety in the elderly.

Table 1. Hypothesis Testing

Variabel Independent	$\beta$	t- hitung	p-value
Constant	14.096	5.131	0.000
Family Function	-0,509	-2.893	0.005

In this hypothesis test the VIF value in the independent variable  $> 10$  shows the assumption that multicollinearity is not fulfilled. life satisfaction as a moderating variable is not significant  $p = 0.296$  which means that the second hypothesis is rejected. This means that life satisfaction cannot moderate the relationship between the family function of anxiety.

Table 2. Hypothesis Testing

Variabel Independent	Coefficient	p-value	VIP
Constant	-1,369	0,912	
Family Function (X)	0,276	0,755	25.373
Life Satisfaction	2, 431	0,156	19.110
Moderating	-0,126	0,269	66.715

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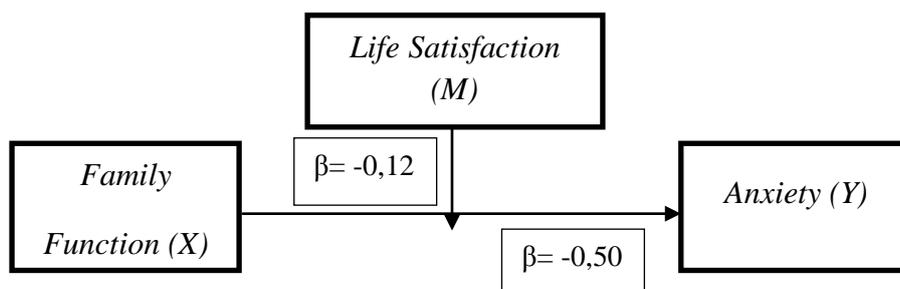


Figure 2. Hypothesis Test Results between Variables

### DISCUSSION

In this study, the results showed that the family function of anxiety had a significant negative effect, which means that if the elderly have good family functions it will reduce the anxiety felt by the elderly. This is supported by research conducted by Wang & Huang (2016) which states that good family function is needed for high-quality home care for the elderly as an important factor related to behavior, mental health, and psychosocial problems experienced by elderly, with the words Other family functions are very important and help as a therapeutic source in helping care for elderly. Ebrahimi, Hosseini, & Rashedi (2018) suggest that in addition to family support, social support can also reduce anxiety in the elderly, one of which is death anxiety, this can affect mental health of elderly so that the quality of life of elderly will increase. Lyberg, Holm, Lassenius, Berggren, & Severinsson (2013) state that family support from mental health perspectives can increase a person's dignity so that the elderly will not deny or ignore their needs and can avoid feelings of worthlessness.

Families are the closest people who take part in providing support in life. Family plays an important role in developing anxiety in a person. Family function refers to how family members respond and perform tasks evenly and cooperate with each other. Relations between generations in the family are the main source of support in dealing with difficult situations, families are the main source of providing emotional support in the lives of the elderly (Kozerska, 2015). It can be said that the absence of family dysfunction can reduce anxiety felt by individuals, especially the elderly. Family functioning not only has a positive impact on the elderly, but families that care for the elderly will feel more close to their families, have caring and support each other and each family member can maintain their own well-being (Mccann, Bamberg, & Mccann, 2015).

Contrary to the hypothesis, the results of this study do not support the moderation model between family function, life satisfaction, and anxiety in the elderly. This happens because there is a significant relationship between predictor variables namely family function and life satisfaction which causes multicollinearity so that life satisfaction cannot moderate the influence between family function and anxiety. Jose (2013) explained that multicollinearity occurs because of the excessive correlation between the two predictor variables.

Multivariable analysis is the most popular approach when investigating the relationship between risk factors and disease. However, the efficiency of multivariable analysis is highly dependent on the correlation structure between predictive variables. Yoo et al., (2014) explained that in explaining collinearity there are three choreal scenarios between predictor variables that must be considered, namely (1) bivariate collinear structure as the simplest case of collinearity (2) multivariate collinear structure in which explanatory variables correlate

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with two other covariates, (3) more realistic scenarios when independent variables can be expressed by various functions including other variables. Vatcheva, Lee, McCormick, & Rahbar (2016) explain the magnitude of changes in regression slope estimation and variance related to the level of collinearity between predictors in the analysis model. Mathematically, estimation of regression coefficients and their variances can be expressed as a function of each predictor's correlation with all other predictors. The greater the correlation between predictors in the analysis model, the greater the changes in slope estimation and standard errors.

### CONCLUSION

Based on the research that has been carried out the results are the role of family function on anxiety has a significant negative effect and also the results of this study do not support the moderation model between family function, life satisfaction, and anxiety in elderly.

The implications of this study are for families that have elderly family members, are expected to maintain and establish good communication in the family because family functions play an important role in the mental health of the elderly, especially in reducing anxiety experienced. These findings can contribute to the direct action of mental health professionals so that they can consider family dynamics in planning actions for the elderly so as to reduce worsening anxiety symptoms in the elderly. Functional families can represent effective support for the elderly with symptoms of anxiety, so that a comfortable environment will ensure the welfare of its members. Dysfunctional families cannot provide care to the elderly and will worsen anxiety symptoms resulting in poor treatment. Then, detailed knowledge of the environment and family dynamics with symptoms of anxiety is needed. This knowledge can be seen from multidisciplinary sciences or perspectives from the fields of medicine, nurses, and psychologists so that families given action are those who do need effective assistance in family relationships and mental health care for the elderly.

For further researchers who want to make improvements in this study, it is expected to conduct further research with other research models by increasing the supporting literature, considering other variables as moderation, and also expected to increase the number of subjects so that the results of research are more diverse.

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### Conflict of Interest

The authors carefully declare this paper to bear not a conflict of interests

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