The Effect of Cultural Value and Religiosity as a Moderator Variable on Anxiety about Aging of Toraja Community

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Abstract

This research aims to determine the relationship between the cultural value of AAS (Anxiety about Aging) and religiosity as a moderator variable. The subjects of this research were Toraja community in the middle age group (40-60 years old) and late adults (60 years old and over) who were still performing the ritual of Ma ‘Nene’ or Ma ‘Ta’ Da’ amounted to 174 research subjects. The instrument used in this research was INDVALS scale (Sihombing, 2014) to measure cultural value ($\alpha = 0.866$), AAS scale (Lasher and Faulkender, 1993) to measure anxiety about aging ($\alpha = 0.82$), and the Religiosity Scale that has been modified and rearranged based on the dimensions of religiosity by Stark & Glock (1968). The method of analysis used was PROCESS method by Andrew F. Hayes, which was used through the SPSS 21.0 for Windows statistical program. The analysis results showed that the significance value ($\rho$) was $0.5687 > \alpha = 0.05$, so the research resulted that religiosity has no effect on the relationship of the variable of cultural value and anxiety about the aging of Toraja community. In addition, the cultural value of the Toraja community was confirmed to play a role in anxiety about aging by 33.7%.

Keywords: Cultural Value, Anxiety about Aging, Religiosity, Toraja Culture.

Introduction

Aging that occurs in human life cannot be avoided. Every human being will experience aging. According to Santrock (2011), late adults or elderly are at the age of 55-65 years...
old. Based on population projection data, there were 23.66 million people or around 9.03% of the total population of Indonesia in 2017 and predicted to increase in the following years (Ministry of Health of the Republic of Indonesia, 2017). In the transition process, especially from adulthood to late adulthood, the changes occur in both physically and psychologically. According to Hurlock (1998), the adult transition to late adulthood is middle adulthood, with the age range of 40 to 60 years old. In this phase, the changes occurring in middle adulthood are both physically and psychologically.

Anxiety about the aging process must be understood as to how anxiety can affect the behavior and interaction that, according to Lasher and Faulkender (1993), is called anxiety about aging. According to Freeman, et al. (2016), that health conditions in the aging process are associated with negative perceptions of aging itself, so it is closely related to mental disorders such as depression and anxiety. The aging process poses a threat to humans (Wisdom et al., 2014), that aging makes a negative perception because it gives suggestions to young people that there is a reduction in beauty and health, so as to remind young people of death again. The identification of anxiety about aging is worry, concern, and anxiety on the ability to pay attention to yourself and health (Saxena & Shukla, 2016). Some individuals have negative anxiety and perception of aging at a low level, but others show a very high level of aging anxiety (Harris & Dollinger, 2003). Individuals who have little frequency in making contact and socializing and are in the late adult period have high anxiety and negative perception of physical appearance that will change along with age (Haris & Dollinger, 2003).

Anxiety about aging, according to Lasher and Faulkender (1993), can be expressed by an individual in several basic dimensions, namely, physical, psychological, social, and transpersonal or spirituality. According to Yun and Lachman (2006), anxiety about aging is anxiety on old age that is affected by culture, gender, and age. Every culture has guidance, so individuals who adhere to it can practice the cultural values in their daily lives. Exploration in anxiety about aging is very interesting because it can see anxiety itself, stereotypes about aging, current health conditions, and long-term thinking about health in
the aging process, both physical and psychological conditions, and most importantly, what is the role of social support in culture.

Individuals from each culture will provide meaning or understanding of cultural value about aging (Fung, 2013). The culture of each individual encourages them to pursue their respective goals in the aging process; hence, socio-emotional aging occurs in various cultures (Fung, 2013). Every culture has a different belief or understanding from other cultures regarding the aging process. For example, Toraja culture in Indonesia, which still viscous with its customs, believes that getting older will get closer to heaven, and when they return to puya (heaven), they will reincarnate to be To Membali Puang (ancestor god) who will guard and provide a blessing to their descendants on earth. Anxiety about aging is affected by the state of culture (Fung, 2013), as the Toraja community still practices death rituals that have been performed from generation to generation because they believe that they must guard the corps of the ancestors who protect them to heaven.

Toraja community still performs rituals that are held by the generations which are inherited by the ancestors. One of the rituals that describe the form of affection for the spirits of the ancestors who have guarded life on earth is Ma' Nene' ritual. The ritual method includes cleaning the corpse of the ancestors and the graves located at the cliffs of the mountain and holding a thanksgiving ceremony that coincides every year after the harvest season. The indigenous territory that still performs Ma 'Nene' ritual is Baruppu' and Pantalla. Toraja community believes in three powers, namely Puang Matua (God), Deata (deity), and Tomulang Puang (ancestral spirit) (Muklis, Poelinggomang, Kallo, Sulistyono, Thosibo, and Maryam, 1995). Toraja community believes that old age is getting closer to death, so it is closer to "puya" or called as heaven or nirvana. As getting older, Toraja community generally feels closer to the spirit of the ancestors. This belief is a cultural value that has become guidance.

This research used preliminary research by interviewing Toraja customary leaders (PT, SR MA) on May 5, 9, and 17, 2018, regarding the description of traditional ceremonies
implementation in Toraja, especially on Ma' Nene' and Ma' Ta' Da. Toraja has 32 indigenous territories with different customary methods, for example in the indigenous territory of Baruppu' and Pangalla, Ma' Nene' ritual is performed to respect the ancestral spirits, while in the traditional territory of Tallung Penanian including Randan Batu, Tambunan, and Tumbang Datu, Ma' Ta'Da' is performed by providing offerings to the ancestors and cleaning the graves.

Correlation of the cultural value and understanding of the Toraja community regarding old age, which is understood as a form of getting closer to To Membali Puang, the spirits of ancestors who have protected the life on earth is the benchmark of this research. This research examined whether beliefs on aging differ from culture, age, and gender (Yun and Lachman, 2006). Perceptions of the aging of each individual vary by demographics and culture as individual values. Research on aging and culture is more interesting because it has been widely investigated so that it opens the mind of both similarities and differences of aging perception across cultures, gender, and age groups (Yun and Lachman, 2006).

![Diagram](Figure 1. Cultural Value and Religiosity Link on Anxiety About Aging)

Lasher and Faulkender (1993) explained that anxiety about aging is old-age anxiety that must be understood on how anxiety can affect behavior and interaction. Anxiety about aging, according to Lasher and Faulkender (1993), can be expressed by an individual in several basic dimensions, namely, physical, psychological, social, and trans-personal or spirituality. According to Yun and Lachman (2006), anxiety about aging is anxiety on old
age that is affected by culture, gender, and age. Every culture has guidance, so individuals who adhere to it can practice the cultural values in their daily lives.

The viscous Toraja culture on the ceremony to commemorate the spirits of the ancestors is their guideline as a form of loving and respecting the ancestors. Toraja community, who has cultural values such as Kada Tominaa where the community must maintain a loving relationship between family members and caring relationship to all people, are very interesting cultural values to be investigated in terms of its relationship with anxiety about aging. Based on Fung's (2013) research, individuals who are getting older will try to achieve well-being, but the cultural factor remains the barrier. Therefore, the researcher would like to explore further whether the aging process in each individual is affected and constrained by the cultural values adhered to achieve the individual's life goals. Until now, there is no such research that focused on and explored the relationship between Toraja cultural values with anxiety about aging.

In addition, religion becomes a moderator of cultural values and anxiety about aging in the Toraja community. Religion is not equated with culture, and culture does not need to be included in religion (Saroglou & Cohen, 2011). This research aims to determine the relationship of religiosity as a moderator of cultural value and anxiety about aging in the Toraja community, in which according to Saroglou and Cohen (2011) religion in the social dimension that is ascertained to contain cultural elements, such as integration of local traditions and practices. Religion takes place in the national culture, so it can establish how to teach specifically about religion itself and practice faith with divine faith (Sasaki, Kim, &Xu, 2011). This research can support the development of science in examining the aging process which, according to Schuurmans & Balkom (2011), estimates that the percentage of anxiety in the elderly becomes a major problem which varies by 6% - 10%, so that the anxiety intention of aging can be seen and can be overcome in the future especially with cultural values that can continue to be preserved.
Method

Design
This research used a quantitative method to determine the role of religiosity, whether it can be a moderator of the cultural value on anxiety about aging, to reduce the level of anxiety about aging.

Respondents
This research involved 174 people (123 middle-aged adults and ten late adults; 104 male and 99 female) as the research subjects. The data collection was purposive sampling technique with subjects who had the characteristics of middle age (age range of 40-60 years old) and late adult (age of 60 years old and over) who were also Torajan and lived in Toraja, as well as still performed Ma' Nene' and Ma' Ta'Da' rituals.

Instruments
Cultural Value. The measuring instrument in this research was INDVALS (Indonesian Values Scale) scale to measure the culture value(e.g., religion is a foundation of people’s behavior, Democracy helps Indonesia become a better nation, Mutual assistance is a foundation of social life). The measurement used a Likert scale of score 1 (Strongly Disagree), 2 (Disagree), 3 (Agree), and 4 (Strongly Agree). INDVALS scale contained 13 items compiled by Sihombing (2014) and was trans-adapted and modified by the researchers, resulting in a Cronbach alpha 0.694. The item consisted of 3 dimensions: harmony, democracy, and religion, in which all items were favorable items.

Anxiety About Aging. The second scale was AAS (Anxiety About Aging Scale) created by Lasher and Faulkender (1993) containing 20 items (e.g., I feel very comfortable when I am around an old person, I believe that I will still be able to do most things for myself when I am old, I have never dreaded the day I would look in the mirror and see gray hairs, I am afraid that there will be no meaning in life when I am old) consisting of 6 unfavorable items with Likert scale of score 1 (Strongly Disagree), 2 (Disagree), 3 (Agree), 4 (Strongly Agree). The
researchers trans-adapted and modified the scale. The Cronbach alpha of AAS is 0.734. AAS factors were fear of old people, psychological concern, physical appearance, and fear of losses.

Religiosity. The next scale was the scale of religiosity, which had 35 items (e.g., *If I has a problem I will make worship and patience as my helper, God will not test his people beyond the capacity of the people, Thanksgiving with citizens is a form of gratitude for the blessings that God has given, I want to learn more about the teachings of religion*) containing favorable and unfavorable items and had been modified by the researcher that has Cronbach alpha 0.929 (high). According to Stark & Glock (1986), the Religiosity Scale has five dimensions, namely: religious belief, religious practice, religious experience, religious knowledge, and religious effect. The measurement used a Likert scale of score 1 (Strongly Disagree), 2 (Disagree), 3 (Agree), and 4 (Strongly Agree).

Data Analysis

This research used a simple linear regression analysis technique and PROCESS technique by Andrew F. Hayes (2013). Simple linear regression analysis was conducted to see the role of independent variables on the dependent variable, while the PROCESS analysis was conducted to see the effect of the moderator variable on the two variables.

Hypothesis

Ha: Religiosity, as a moderator variable, can reduce anxiety about aging with the cultural value of the Toraja community. The higher cultural value, the lower anxiety about the aging of the Toraja community, and the role of religiosity can be strengthened to reduce anxiety about aging.
Results

Demographic Data

The middle-aged adult group in this research amounted to 96 people from a total of 174 research subjects due to productive age is dominated by middle-aged adults who can be used as research subjects.

| Table 1 | Subject Demographic Data |
|---------|--------------------------|
|         | Category | Total | % |
| Age     | Middle adult (40-60 years old) | 96 | 55.2% |
|         | Late adult (60 years old and over) | 78 | 44.8% |
|         | Total | 174 | 100% |
| Gender  | Male | 90 | 51.7% |
|         | Female | 84 | 48.3% |
|         | Total | 174 | 100% |

Table 2

Group Means and Standard Deviations for the Anxiety Cultural Values Variable

| Age | Gender | L | P | Total |
|-----|--------|---|---|------|
| 40-60 |        | 37,13 | 37,20 | 37,17 |
|       | SD = 2,11 | SD = 2,46 | SD = 2,27 | |
|       | N = 52 | N = 44 | N = 96 | |
|       | 36,82 | 36,75 | 36,78 | |
| >60   |        | 36,98 | 36,98 | 36,99 |
|       | SD = 2,31 | SD = 2,64 | SD = 2,47 | |
|       | N = 38 | N = 40 | N = 78 | |
| Total |        | 36,98 | 36,98 | 36,99 |
|       | SD = 2,19 | SD = 2,54 | SD = 2,36 | |
|       | N = 90 | N = 84 | N = 174 | |
Table 3

*Group Means and Standard Deviations for the Anxiety Religiosity Variable*

| Age | Gender | Total |
|-----|--------|-------|
|     |        |       |
| L   | P      |       |
| 40-60 | SD = 9,22 | SD =12,13 | SD =11,24 |
| ![Add Table 3 data here] |
| >60   | SD =12,53 | SD =12,13 | SD =12,26 |
| ![Add Table 3 data here] |
| Total | SD =10,99 | SD =12,19 | SD =11,69 |
| ![Add Table 3 data here] |
| N =90 | N =84 | N =174 |

Table 4

*Group Means and Standard Deviations for the Anxiety About Aging Variable*

| Age | Gender | Total |
|-----|--------|-------|
|     |        |       |
| L   | P      |       |
| 40-60 | SD = 2,08 | SD = 1,86 | SD = 1,98 |
| ![Add Table 4 data here] |
| >60   | SD = 2,38 | SD = 2,55 | SD = 2,45 |
| ![Add Table 4 data here] |
| Total | SD = 2,21 | SD = 2,20 | SD = 2,20 |
| ![Add Table 4 data here] |
| N =90 | N =84 | N =174 |

The aspect component of each variable was analyzed so that it is able to determine the mean value of a higher aspect than other aspects. Analysis of each aspect was performed for the variables of religiosity and anxiety about the aging of the Toraja community. Next, the results of calculating the mean value of each aspect will be explained.
Table 5
Religiosity Variable Component Value

| Dimension   | No. Item | Total Subject Score | Mean   | Total Mean |
|-------------|----------|---------------------|--------|------------|
| Religious   | 4        | 619                 | 3,557  | 21,635     |
| Belief      | 8        | 506                 | 2,908  |            |
|             | 14       | 580                 | 3,333  |            |
|             | 15       | 523                 | 3,057  |            |
|             | 26       | 434                 | 2,494  |            |
|             | 28       | 590                 | 3,390  |            |
|             | 29       | 504                 | 2,896  |            |

Table 6
Aspect Component Value of Anxiety About Aging Variable

| Dimension     | No. Item | Total Subject Score | Mean   | Total Mean |
|---------------|----------|---------------------|--------|------------|
| Psychological | 5        | 631                 | 3,626  | 14,722     |
| Concern       | 11       | 683                 | 3,925  |            |
|               | 16       | 567                 | 3,258  |            |
|               | 18       | 681                 | 3,913  |            |

The results in Table 2 show that the aspect having the highest mean than other aspects is religious beliefs with the mean value of 21,635. The high level of religiosity in the Toraja community is viewed from their faith and expectations of the doctrine and theology applied by religion. The highest mean value was also produced by the psychological concern aspect in Table 3 by 14,722. The interpretation that can be explained is that with the high mean value on the psychological concern aspect, it shows high anxiety on psychological problems related to the aging process of Toraja community such as anxiety of having difficulty in getting happiness and satisfaction in old age as well as fear of not being able to have activities to do when they get old.
**Moderator Variable**

This research used a moderator variable that can determine the direction of strength and weakness of the relationship between independent and dependent variables. It can be stated that the measurement on the moderator variable was conducted to test the different effects. The religiosity variable as the moderator variable can have a probability to affect the relationship of cultural value and anxiety about aging. The analysis by using the PROCESS method of Hayes (2013) was used in this research to conduct an analysis that provides the following results.

| Model | Coef | Selenium | t    | P    | LLCI  | ULCI  |
|-------|------|----------|------|------|-------|-------|
| Int_1 | 0.0032 | 0.0057 | 0.5711 | 0.5687 | -0.0080 | 0.0145 |

The information in table 4 shows the analysis results of (cultural value * religiosity), which had a coefficient of 0.0032, and the number of p was 0.5687 (p > 0.05). The analysis results show that religiosity, as a moderator variable, does not affect.

![Figure 1. Scatter plot of PROCESS analysis](image-url)
Normality Test

The classic assumption in this research, especially the normality test, was using the Kolmogorov-Smirnov method. The significance of the normality test was $\alpha = 5\%$ ($p > 0.05$). The analysis results of the normality test on the cultural value variable were 0.002 ($p < 0.05$), and the variable anxiety about aging produced a significance of 0.000 ($p < 0.05$).

| Variable       | Kolmogorov-Smirnov | Significance | Research Results          |
|----------------|--------------------|--------------|---------------------------|
| Cultural Value | 1.872              | .002         | Not Distributed Normally  |
| Anxiety About  | 3.476              | .000         | Not Distributed Normally  |

Linearity Test

The linearity test serves to determine the linear relationship between the independent variable and the dependent variable. The significance of linearity was $p > 0.05$ by using an analysis of Deviation for Linearity.

| AAS * INDVALS | Significance | Research Results |
|---------------|--------------|------------------|
| 0             | Sig (Linear) |
**Heteroscedasticity Test**

The use of classical heteroscedasticity assumption tests in regression is important to test the accuracy of data in order to find whether there is a variance dissimilarity on the data used.

![Scatter Plot of Heteroscedasticity](image)

**Simple Linear Regression**

Simple linear regression analysis was performed to test the hypothesis of the cultural value effect (independent variable) on anxiety about aging (dependent variable) of the Toraja community. The results of the hypothesis in this research were p-value of 0.000 (p < 0.05), coefficient beta .0032 then the null hypothesis was rejected, and the calculation of the coefficient $r_{xy}$ was equal to 0.337 by using simple regression. The result of the next analysis was the calculation of effect size, which produced a value of 0.337 and was included in the medium effect category ($r > 0.3$). R square value from the results of simple regression analysis was 0.114, which showed that the role of cultural value had an effect of 11.4% on anxiety about the aging of the Toraja community.
Discussion

The study results show that the effect of cultural value on anxiety about the aging of the Toraja community is significant. The result of this study in line with the results of Yun and Lachman (2006) that studying cultural values and anxiety about aging in South Korean and American cultures. Eastern culture has a more positive perception of aging than western culture (Yun and Lachman, 2006). The research of Yun and Lachman's (2006) compared the aging perceptions of Americans and South Koreans who had urbanized (moved to America) and resulted that eastern culture (South Korea) have higher total anxiety about aging than Americans who are western culture. According to Yun and Lachman (2006), cultural traditions and values have diminished as a result of urbanization. Urbanization has an effect on social and cultural change (Aziz, Hassan, & Saud, 2012). Changes in social or cultural values and culture of an individual result in a shift in cultural values adhered to and practiced in everyday life can affect people's perceptions of the aging process. Cultural values are very important to adhere to and practiced in everyday life, remembering how these values become guidelines in life. Consequently, it will affect the aging process.

Cultural value in the Toraja community explains how the values of the Toraja community’s customs that have been adhered to from generation to generation are very important to be concerned, as well as religiosity, which has the same concept of teachings adopted as guidelines. This research makes religiosity as the moderator variable. Religiosity affects a person to be able to increase strength, comfort, and hope, especially when having health problems and trials during the aging process (Malone & Dadswell, 2018). The role of religiosity can affect how an individual to be more positive through the aging process, including physical and psychological, so as to suppress anxiety in the aging process. Positive perceptions of aging are due to expectations that are believed because religious teachings make individuals feel comfortable. Not only physical and psychological, but religiosity also has a role in social life.
The religious community is very important to support a positive aging process because it helps individuals not to feel alone and isolated (Malone & Dadswell, 2018). Religiosity helps individuals, especially adults, to obtain the meaning of life because they express themselves in real life as well as improve the quality of life (Oliveira & Menezes, 2017). Individual faith in religious teachings makes them feel more alive. The meaning of life has many complementary aspects, one of which is religiosity because it is an important aspect in the late age group life, such as the interaction relationship due to religious activities (Oliveira & Menezes, 2017).

Religiosity, as a moderator variable in this research, does not have an effect on anxiety about the aging of the Toraja community. Based on Saroglou (2011), cultural elements such as cognition, emotion, self-concept, morality, personality, and social behavior shape religion and the experience of individuals in relation to their daily religious practices. The Toraja culture forms a cultural element in each of its societies based on the first religion embraced by their ancestors, Aluk Todolo, which is a belief in the ancestral deity of the Toraja people. The fundamentals of the Toraja people regarding Aluk Todolo, which later became a cultural value, made universal religion (such as the major Protestant or Catholic Christians in the Toraja community) to have no effect on anxiety about aging. The Toraja community also believes in the cultural elements in Aluk Todolo that after death, there will be life incarnated into a god and guarding relatives from heaven. Saroglou (2011) states that insofar as this cultural influence is universal so that people can see the extent to which the religion whose universal eel runs and functions in the same way as cultural values. An explanation of religiosity role in the aging process is not in line with these research results.

Cultural value is a variable that can affect anxiety about the aging of the Toraja community. The Toraja community believes that the more they experience the aging process, the more they will believe and understand that they will be closer to be the guardian deity of relatives or family, namely To Membali Puang (Sitonda, 2013). The aging period of the Toraja community continues to be occupied, both the traditional ceremonies in family and
rituals held by neighbors are performed to preserve the ancestral beliefs that Toraja community must maintain a loving relationship among families and even among communities. Toraja community holds firmly the cultural values inherited by their ancestors so that Toraja community still performs traditional rituals to date. The rituals are not only performed in certain regions, but throughout Toraja.

Toraja community believes that old age means getting closer to death, so it is closer to "puya" or called as heaven or nirvana. As getting older, the Toraja community generally feels closer to the spirit of their ancestors and believes that they will reincarnate to be gods who will guard their relatives from heaven. This belief is a cultural value that has become a guideline (Tandilinting, 1981). The belief of the Toraja community regarding the old age shapes their perception that when you get older, there is nothing to worry about because there is still after-life. In this research, cultural value contributes to anxiety about the aging of the Toraja community, while religiosity does not.

Each aspect of each variable has a varied mean score. The religiosity variable had the highest component scores on the religious belief aspect (M = 21,635). The high level of religiosity in the Toraja community is largely affected by expectations of certain ideological views and beliefs, as well as acknowledgment of these doctrines. The variable of anxiety about aging had the highest mean score on the psychological concern aspect (M = 14,722). Toraja community's anxiety on the aging process is largely affected by anxiety on psychological problems, anxiety to find the satisfaction of life, personal control problems, personal flexibility, self-esteem, and even psychological disorders.

It needs to mention here that this study has a limitation. The scale of cultural value used in this study was adapted from Sihombing (2014) that measure the influence of Indonesian cultural values on marketing and consumer behavior context. Whereas in this study, the scale intent to explore the Toraja cultures. This might have implications for the result of this study. The Toraja people who were the subjects in the middle adult age group and late adults did not understand the standard grammar listed on the questionnaire; then,
researchers needed to read directly to the subjects without changing the understanding of each item. The researchers did not use face validity cause the data retrieval method is interviewing the subjects. The limitation of the subjects is reading ability, so the researchers were reading each scale to the subjects. Age is a matter of this data retrieval method. Vision ability of the subjects (age between 40 and over 60) made a problem in the ability of middle-aged and older adults to process information from the questionnaire properly. The AAS scale (Anxiety About Aging) can be analyzed on each factor (subscale) to get more specific data, but the researchers conducted the overall analysis using the total score. Total score analysis was used for regression analysis, while factor analysis was used to examine the correlation between factors.

Conclusion

The results of this study are that there is no effect of religiosity on the relationship between cultural value variables and anxiety about the aging of the Toraja community. An explanation of religiosity role in the aging process is not in line with these research results. Cultural value is a variable that can affect anxiety about the aging of the Toraja community. The belief of the Toraja community is that the more they experience the aging process, the more they will believe and understand that they will be closer to be the guardian deity of relatives or family, namely To Membali Puang (Sitonda, 2013). The aging period of the Toraja community continues to be occupied, both the traditional ceremonies in family and rituals held by neighbors are performed to preserve the ancestral beliefs that Toraja community must maintain a loving relationship among families and even among communities. Toraja community holds firmly the cultural values inherited by their ancestors so that the Toraja community still performs traditional rituals to date. The rituals are not only performed in certain regions, but throughout Toraja.
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