Configure the Personal Space Dimensions on the Elderly's Quality of Life in a Nursing Home

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Keywords : Friendship, interpersonal relationships, elderly, nursing home

Abstract : Living in a residential or home that has more primary territories, can improve the quality of life of the elderly. Good configuration between situational factors, individual and physical differences of space as the dimension of personal space will improve the quality of life of the elderly. The purpose of this study is to analyze the configuration of the dimensions of personal space and the configuration that occurs in the elderly in the nursing home. This research uses a qualitative approach, especially instrumental case study. The methods used to collect the data are in-depth interview techniques and observations on the elderly living in the nursing home. Data analysis was done by using a thematic analysis technique. This research involves 5 people as informants with criteria that they are elderly in the age range 60-75 years old, have good communication ability and have lived in a nursing home more than one year. The results of the research show that friendship is a form of personal space configuration and there are three dimensions that influence the situational dimensions, the dimensions of individual differences, and the physical dimension of space. This study found that the elderly build a friendship by responding to situational factors in the nursing home, overcome individual differences and accept the physical condition of the nursing home as a place of shelter. From this research we suggest developing good interaction and a friendly place to improve the safety, comfort and health of the elderly.

1 INTRODUCTION

Being elderly is the last stage of the aging process (Hurlock, 1999). Elderly is the stage where one must attain integrity (Erikson, 1963). Integrity in this case is how one's whole life has demonstrated a wholeness that has potential and ability (such as authority and honesty). Failure to achieve integrity in the elderly will lead to a desertification condition (Erikson, 1963). Achieving integrity in the elderly (Erikson, 1963) can be interpreted as having fulfilled a developmental task. Havighurst (1984) reveals the developmental tasks of the later adulthood period covering: adjustment to decreased physical strength, life companions, finding relations with peer groups, fulfilling social obligations and citizens, realizing appropriate physical living conditions and preparedness in the face of death (Monk, Knoers, and Hadinto, 1998).

The ability to complete the developmental tasks will improve the welfare of the elderly and this includes the assurance of social, material and spiritual livelihoods without forgetting the elderly's own characteristics (Taurista and Sadewa, 2015). In addition to welfare, healthy elderly qualified refers to the concept of active aging. The WHO states it is the aging process that remains healthy physically, socially and mentally so that they can stay prosperous throughout life and still participate in order to improve their quality of life as a member of society (Ministry of Health, 2016). However, the shifting trend from the extended family to the nuclear family also resulted in the elderly being avoided and considered a burden, making the family living with the elderly choose to entrust them to social institutions such as *nursing homes* (Wardhana, 2007).

To live prosperously, a nursing home is an important institution that accommodates and cares for the elderly, and serves as a family for the elderly in performing the function of mentoring and social welfare development (BPS, 2015). But life in the nursing home also raises problems such as interaction with others (Utami, 2010).

Physical-biological changes in the elderly make them feel inferior or lack confidence if they have to

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interact with their environment (Santrock, 2007) and a personal space approach is chosen because personal space governs how close someone becomes with others (Bell and Fisher, 1996). The personal space is the psychological dynamics of privacy created by overwhelming social and privacy processes that make people feel alienated (Helmi, 1999). The purpose of this study is to obtain a description of the configuration of the dimensions of personal space in the elderly. An in-depth study of how the elderly with various characteristics configure their personal space so as to provide comfort in interacting in the social environment to accomplish developmental tasks in the elderly period is an interesting topic to discuss. Through the nursing home as a situational and physical factor, it is expected to comprehensively explain the form of personal space configuration by the elderly in the nursing home.

1.1 Elderly in UPT Panti Werdha Mojopahit (Nursing home)

Puspitaningsih's research (2014) showed that elderly (40%) in UPT Panti Werdha Mojopahit declare that they are quite satisfied with their situation in the nursing home, gathering with peers and trying to be independent is the usual attitude. Besides, they are not reluctant to help and entertain friends who struggle with difficulties. Although there is no difference in the quality of life between the elderly who don't live in nursing homes and the elderly living in UPT Panti Werdha Mojopahit, Syurandhari, Hargono and Saenun (2015) explain, the physical and psychological perceptions of the environment are differentiating the elderly response to the environment. The facilities provided at UPT Panti Werdha Mojopahit are programs to prevent the elderly from feeling depression due to exile from the environment, helplessness and lack of confidence (Ayuningtyas, Santi, Rizal, and Mawaddah, 2017). A nursing home is not only limited to a building (place) to accommodate elderly but has a deeper meaning as a home (Najjah, 2009). The interpersonal distance caused by situational factors and also the characteristic of individuals will influence the slow adaptation of the elderly in their environment. Disability in adapting to the environment is a risk factor in building personal space. Inability to accept the state of self, and lack of social support become elderly obstacles in adapting (Puspitaningsih, 2014).

In a preliminary study conducted by researchers on November 1 to 5, 2017 by using documentation

studies, observations and interviews on residents of UPT Panti Werdha Mojopahit showed that some elderly are neglected. Elderly who were later picked up by nursing home employees to stay at UPT Panti Werdha Mojopahit. Besides being abandoned, some of them are the elderly who come from outside the area who no longer have relatives and siblings. The elderly living in the UPT Panti Werdha Mojopahit have an age range of 60-90 years. Needs that are based on vulnerable elderly age range make the officers prepare several facilities such as a proper dormitory, care, health and environmental maintenance, guidance, motivation and mentoring are also giving skills. The elderly who have not used the facilities provided are usually influenced by their slow adaptation capabilities; therefore, the officers of the nursing home take an interpersonal approach to improve the comfort of the elderly and accelerate their adaptation.

1.2 The Configuration of Personal Space in the Elderly

Configuration is at least understood as a twodimensional relationship, but in its development the complexity of the relationship takes into account other "dimensions" (Hillier and Hanson, 1984). The personal space is the psychological dynamics of privacy created by overwhelming social and privacy processes that make people feel alienated (Helmi, 1999). The personal space governs how closely a person interacts with others depending on the situation (Bell and Fisher, 1996). The personal space is not absolute or fluctuating and moving; it can be said that personal space is a territory that always follows wherever a person is (Sommer, 1969).

There are several dimensions within the personal space that affect the size of individual personal space. According to Bell and Fisher (1996) and Sommer (1996) it has three factors: (1) situational factors, personal space can be enlarged or decreased depending on the situation such as attraction, similarity and type of interaction. (2) the factor of individual differences, the interaction between a person and another person may differ from one to another; this difference is due to culture and race, sex and age. (3) physical factors of the room, the architectural factors of a building will affect the personal space. The sociopetal and sociofugal spaces also include physical factors that affect the size of the personal space. Personal space can be interpreted as the space around the individual that is always taken anywhere and will be disturbed if the space is interfered with (Grifford, 1987). In his study, Hall

(1966) argued that physical distance indicates four types of relationships (intimate, personal, social, public) between communicators. The form of each relationship is (1) intimate: partner/core family, (2) private: friends/extended family, (3) social; acquaintances/colleagues, and (4) public: passersby/strangers.

Viewed from the spatial pattern between children, 5 years old and 6 years old are different. Children aged under 5 years show a variety of spatial patterns and the more mature the greater the interpersonal distance (Aiello, 1987, Hayduk, 1983). Thus, the need for freedom in activities, channeling hobbies, and interacting with people he knows like colleagues and family. Factors of age, education level and marital status in the elderly can affect their level of interaction with the environment. The level of satisfaction will provide comfort to the elderly in building their personal space. Living in dwellings or homes that have more primary territories, can improve the quality of life for the elderly (Utami, 2009).

The decline in physical function and other limitations is not an excuse to keep the elderly away from human function as a social being. The interpersonal distance caused by situational factors as well as the individual characteristics such as culture and race, sex and age will certainly affect the formation of personal space. Disability in adapting to the environment is a risk factor in building personal space. Inability to accept the state of self, and lack of social support become elderly obstacles in adapting (Puspitaningsih, 2014). The Difference in dimensions of individuals in that there are different characteristics between individuals give impact to someone in building their personal space and is no exception in the elderly. The personality of an individual will adjust to the environment, while increasing age will affect their thought (Jamil, 2012).

2 THE RESEARCH METHOD

This study used a qualitative approach with an instrumental case study method. Criteria for participants in this study were elderly in the age range 60-75 years old who still have good communication skills and have lived in a nursing home more than one year. The selection of participants was by snowball technique; that is looking for information from others in a chain. The study involved 5 participants. The methods used to collect the data were in-depth interview techniques

and observations and data analysis used theoretical thematic analysis techniques (Boyatziz, 1998, Fereday and Muir-Cochrane, 2006).

3 THE RESULTS OF THE RESEARCH

The results of collecting data on the elderly at Panti Werdha Mojopahit show the forming of personal space configuration in the elderly is about friendship. While factors affecting the form of personal space in the elderly in nursing homes are (1) situational factors, (2) factors of individual differences and (3) physical factors of the room. In interviews and observations researchers found that the elderly in nursing homes have built their own space well and with attention to these three dimensions researchers found some interesting facts.

3.1 Friendship

Being in the same place makes the communication between residents of the nursing home more intense. Differences in a dormitory do not disturb interaction between elderly because almost all the activities carried out are outdoors. Having someone else who can be invited to communicate and tell stories makes the relationship between the elderly become closer. This means the status among the elderly is no longer as someone else, not only as a friend sharing a room or dorm, but a friend to share everything with.

"All who are here already know each other. We are the same here. Old. Why should we pick a friend?" (W1/P1.S.16/11/2017.PWM.B46-50; B51-55)

"No need to select who's your friend or not. We are in the same condition. Abandoned by our family, children and relatives. We are the same" (W2/P5.T.21/11/2017.PWM.B61-65; B66-70)

The various programs run by the nursing home improve the interaction between the elderly for the better. For example, in gymnastics every morning, the elderly with the spirit to follow the activities based on the awareness that other elderly will also be in the same activity, so the atmosphere becomes fun. Afterwards, the elderly do not go directly back to their dorm but communicate with each other about their family or joke with each other. Such proximity gives rise to friendships based on the similarities of fate and conditions. In the end the elderly are able to accept their situation and become more positive. Friendship is a form of personal space configuration based on three supporting factors: situational factors, individual differences factors and physical factors of the room.

3.2 Situational Factors as Contributors to Personal Space Configuration in the Elderly

The configuration of the personal space of the elderly in nursing homes cannot be separated from the situational factors. The elderly responds to situational factors in the presence of attraction and similarity and then distinguish it from the various types of interactions that occur in certain situations. The elderly in the nursing home respond to interest with knowledge of compatibility among other elderly. This compatibility is a response by not choosing in association and not keeping away from other residents of the nursing home.

"Why do we not become friends? We are just old people. Old people must be together" (W2/P1.MR.21/11/2017.PWM.B26-30; B31-35)

With the response to the above being suitable then all types of conflicts that occur in elderly residents of nursing homes tend to be avoided; this is due to maintaining the peace of self in the elderly.

The mismatch between the elderly inhabitants of the nursing home is due to the awareness of the similarity of fate among them that causes their personal space to narrow so that they are comfortable in interacting. To obtain a positive type of interaction as a response to interest based on the suitability and similarity of conditions experienced by elderly residents of the nursing home requires a pleasant activity. UPT Panti Werdha Mojopahit has provided such activities as morning gymnastics, recitation, medical examination, and counselling. Activities that are felt fun are gymnastics and field practice by students. The field practice of students becomes the awaited activity because of the social exchange of the first generation (elderly) towards the second generation (students).

"If there are college students here, I consider them as my own grandchild and if they do their assignment here, I feel happy because they can be invited to chat with us" (W2/P5.T.21/11/2017.PWM.B91-95;B96-100) Thus, the situational factor is a good contributor in widening the personal space of elderly, and elderly in the UPT Panti Werdha Mojopahit have been able to respond to situational factors well.

3.3 Individual Difference Factors as Contributor to Personal Space Configuration in the Elderly

The configuration of the personal space of the elderly in the nursing home cannot be separated from individual differences. The elderly in the nursing home respond to individual difference factors including culture, race, gender and age. In interviews and observations conducted by researchers they found that differences in culture and race, gender and age contributed to the configuration of personal space in the elderly. Fellows coming from the Javanese tribe mean the elderly are not awkward in interacting.

"Yes, we are Javanese. but that does not make us the same. The point is we must have mutual respect for each other" (W1/PIII.SU.16/11/2017.PWM.B71-75)

Besides the factor of Javanese cultural similarity that makes them comfortable in interacting, age and gender act to differentiate as distinguishing factors in how to interact with the elderly. Older people become more respected and closer interactions occur in elderly people of the same age and being of the same sex.

With the existence of cultural similarity, then the interaction that is formed becomes closer thereby widening the personal space in the elderly. While the difference in interaction that occurs due to differences in age and gender does not make the elderly in the nursing homes become mutually distant, but raises mutual respect for each other.

3.4 Physical Space Factors as Contributor to Personal Space Configuration in the Elderly

The configuration of the personal space of the elderly at the nursing home is inseparable from the physical factors of the room. The elderly in the nursing homes respond to the physical factors of the room in two ways, sociopetal and sociofugal and then distinguish them from different types of interactions. The sociopetal space is responded to easily in the interaction between the elderly and the opposite bed positions. These conditions make the elderly personal space becomes narrowed due to the ease of interaction with their room mate.

"It's okay to be here, friendly and kind. Tikno, my room mate, is kind and I enjoy talking to him. I am not close enough to other women here. Ha ha. If college students are here, we'll talk and share with each other." (W1/PIII.SU.16/11/2017.PWM.B76-80; B81-85)

Sociofugal space is responded to with a form of disappointment to the condition of the home and discomfort with other residents of the nursing home. Some respond by avoiding conflict or not greeting each other but the condition does not last long.

"I strongly avoid conflict because I'm sick of that." (W1/P2.MU.16/11/2017.PWM. B36-40)

From the results that researchers found it was revealed that in situational factors, the elderly respond to the convenience of interaction from the interests and similarities that cause various types of interaction in certain situations. Individual differences such as culture, race, age and gender do not make the elderly personal space narrow but progressively they develop new interactions to expand the personal space itself. Finally, the physical factors of space that are socially divided into sociopetal space and sociofugal space show that the elderly feel comfortable when able to interact quickly and precisely. One that can facilitate fast and precise interaction is the adjacent position. The condition of the nursing home that is not in accordance with what is expected by the elderly is responded to with disappointment but the condition did not last long because the pattern of good interaction among the elderly is able to eliminate the disappointment and ultimately able to widen the personal space within them.

4 **DISCUSSION**

4.1 Friendship as A Form of Personal Space Configuration in the Elderly

The results of the analysis of the elderly at Panti Wedha Mojopahit found that the forming of personal space configuration achieved by the elderly is about friendship. The configuration relation, according to Hall (1966), is the result of the physical distance found in the pattern of elderly interaction in the nursing home. The friendship that occurs in the elderly makes them become more qualified, because peers are aspects of social support that can improve the quality of life for the elderly (Azwan, Harlina, and Karim, 2015). However, personal space is not a physical being, so to know it requires deepening knowledge of the factors that affect personal space.

Healthy aged quality refers to the concept of active aging. The WHO states it is the aging process that remains healthy physically, socially and mentally so that they can stay prosperous throughout life and still participate in order to improve their quality of life as members of society (Ministry of Health, 2016). Referring to these indicators, friendships are important because of loneliness, feeling lost and bored with life, often experienced by the elderly living in the nursing home (Yusuf, Nihayati and Abidin, 2008). This condition will then cause the elderly to withdraw from the social environment and feel increasingly useless with loss of self-esteem, even becoming increasingly depressed.

4.2 Factors that Influence Personal Space Configuration

The situational dimension, the dimensions of individual differences, and the physical dimensions of the room are the elements that make up the personal space of the elderly. This personal space configuration helps the elderly to interact comfortably in the home. In line with Sommer (1969) personal space cannot be seen by the naked eye but the elderly develop it with the attitude and behavior when alone or while interacting with other residents. The results of the interviews with participants show that the situational dimension gives greater influence to the elderly personal space in the nursing home due to attraction. Bell et al. (1996) refers to those with a personality similarity tending to be more interested in each other than individuals who have nothing in common. Despite having a room mate the elderly at the Panti Werdha Mojopahit have a different colleague in the dormitory who they think understands them so that they can both run various activities together. Hall (1966) says that women respond to spatial interest rather than men.

The proximity of the inhabitants of the nursing home involves the sexes, but the elderly man prefers to regulate them, to be more solitary to express his sense of self-reliance. Heshka and Nelson (in Bell, 1996) says that the position of "women with women" will be closer, the elderly women in the nursing home tend to be grouped but as mentioned above, the proximity of elderly residents is not based on sex but on the equation of their condition. The similarities, according to Skorjanc (1991) make the individual a little threat from outside himself. A person interacts at a distance that is closer to the other because they recognize the condition of another individual that is similar to his or her condition. The similarities of fate and background make them close to each other. The emergence of a sense of security and comfort, not being awkward to interact and share grief among them and even deciding to marry is a result of good situational dimensions in building personal space in the elderly.

Interactions with other residents are well established with the support of fun activities by the nursing home processors. Fisher, Bell, and Baum (1984) revealed the more fun the activities are, the more discouraging the personal space. Keeping distance and avoiding conflicts is often done to keep calm in the home. Anger situations for example, according to Fisher, Bell, and Baum (1984) create a closeness to the goal of retaliation while creating further distances is a form of protection. Interaction with the young generation such as the student practice or children and toddlers as behavior exchange is where elderly provide education based on their life experiences to the young generation while the younger generations provide comfort with their presence for the elderly. This pattern of intergenerational behavioral exchange is often awaited by the elderly. They consider all the younger generations present in the nursing home family instead of their lost family and relatives.

In the dimensions of individual differences, such as Hall's (1966) study, the culture influences individuals in interacting and cultural differences will provide a different learning experience to each individual. In the present study the entire elderly are of the Javanese tribe so that the interaction built does not require excessive self-adjustment. The values andhap ashor typical of Javanese cannot be separated from the interaction between the elderly. They are using Javanese greetings such as "Mas", or "Cak" in older men older than him and "Mbak", or "Ning" in elderly women older than him. Aiello (1987) and Hayduk (1983) said that the greater the age of a person the greater the interpersonal distance, but in the elderly who has lost his relatives the only family he owns is in the Panti Werdha Mojopahit. Therefore, rather than in conflict, each of the residents supports each other and tends to stay away from the conflict.

The third dimension in the personal space is the physical dimension of the room, all the elderly have

accepted the state of themselves and continue to strive to fulfil their developmental tasks in the period of the elderly. One of these developmental tasks according to Havighurst (in Monk, Knoers, and Hadinto, 1998) is to establish good relationships with others in the neighborhood. Interactions that occur in each dorm, especially in each room tend to strengthen because the position of the opposite bed makes it easier for the elderly in interacting. Lawson (2001) says there is a space where it allows for people to face each other so that their personal space shrinks. Ease of interaction because of the location of this facing means the elderly can exchange ideas or interact comfortably. There are elderly people who do not have a room mate so every night they often awaken and are restless. If the officer of the nursing home is not paying close attention, it will disturb the stability of his personal space.

5 CONCLUSION

This study found that the forming of personal space configuration in the elderly is about friendship and there are three dimensions that affect the configuration of elderly personal space; that is situational dimensions, the dimensions of individual differences, and physical dimensions of space. For elderly who have a mutual attraction to each other based on personality, the interpersonal distance becomes shorter. Equal fate makes the elderly feel closer to one another. Similarity realized by the elderly makes them comfortable and safe when they are close to each other. The types of interactions that occur among the elderly vary depending on if the activities undertaken together are considered fun or not. The location of facilities such as bathrooms, fields, kitchens and others that are easy to reach facilitate the elderly in the comfort of interacting with other residents of the nursing home. Despite the conflicts between the elderly and the institutional management, the elderly at Panti Werdha Mojopahit realized that the conflicts were caused by misunderstandings. From this research we suggest developing good interaction and a friendly place to improve the safety, comfort and health of the elderly.

Limitations in this research were the participants. There were several elderly in the UPT Panti Werdha Mojopahit who have special conditions such as disability and clinical illness that have not been mapped by researchers. These conditions can affect the shape of personal space and the way they configure it.

REFERENCES

- Aiello, J.R., 1987. Human Spatial Behavior. In D. Stokols and I. Altman (Eds.), Handbook of Environmental Psychology. New York: John Willey and Sons
- Altman, I., 1975. *Environmental and Social Behavior*. CA. Monterey: Brooks/Cole
- Ayuningtyas D., Santi J.A., Rizal A., and Mawaddah N., 2017. Efektifitas Laughing Therapy dan Relaksasi Otot terhadap Stres Lansia di Panti Werdha Majapahit. Medica Majapahit. Vol 9. No. 2, September 2017
- Azwan, Harlina, and Karim D., 2015. Hubungan Dukungan Sosial Teman Sebaya dengan Kualitas Hidup Lansia di Pantis Sosial Tresna Werdha. JOM Vo. 02 No. 2 Oktober 2015
- Bell P. A. and Fisher J.D., 1996. *Environmental Psychology (4th ed.)*. USA : Harcourt Brace Collage Publisher
- Boyatzis, R. E., 1998. Transforming Qualitative Iinformation: Thematic analysis and code development. London: SAGE Publication.
- Erikson, E., 1963. Childhood and Society. New York; Nortoon
- Fereday, J., and Muir-Cochrane, E., 2006. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. International journal of qualitative methods, 5(1), 80-92.
- Fisher, J.D, Bell P.A., and Baum, A., 1984. *Environmental Psychology*. New York : Holt Rinehart, dan Watson.
- Grifford, R., 1987. *Environmental Psychology : Principle and Practice*. Boston : Allyn and Bacon, Inc.
- Hall, E. T., 1966. The Hidden Dimension. New York : Doubleday
- Hayduk L.A., 1983. Personal Space: Where We Now Stand. Psychological Bulletin, Vol. 94 No.2
- Havighurst, R. J., 1984. Perkembangan Manusia dan Pendidikan. Bandung: CV. Jemmars.
- Hillier, B. and Hanson, J., 1984. The Social Logic of Space. Cambridge : Cambridge University
- Helmi A.F., 1999. Beberapa Teori Psikologi Lingkungan. Buletin Psikologi, Vol. 07 No. 2 Desember 1999
- Hurlock, E. B., 1999. Psikologi Perkembangan : Suatu Pendekatan Sepanjang Ruang Kehidupan. Edisi 5. Jakarta : Erlangga
- Jamil, M., 2012. Kepuasan Interaksi Sosial Lansia Dengan Tipe Kepribadian. Malang: Jurnal Vol. 3 No. 2 Keperawatan UMM

- Kementrian Kesehatan RI, 2016. InfoDATIN, Situasi Lanjut Usia (Lansia) di Indonesia. Jakarta: Pusat Data dan Informasi Kemkes RI
- Laurens, J.M., 2004. Arsitektur dan Perilaku Manusia. Jakarta: Grasindo Gramedia Widiasarana Indonesia
- Lawson, B., 2001. *The Language of Space*. Oxford: Architectural Press
- Monk, Knoers, and Hadinto., 1998. *Psikologi Perkembangan.* Yogyakarta: Gadjah Mada University Press
- Najjah D. P., 2009. Konsep Home Pada Panti Sosial Tresna Werdha (Studi Kasus : PSTW Budi Mulia 01 Cipayung dan PSTW Karya Ria Pembangungan Cibubur). Jakarta: Jurnal Teknik Arsitektur Universitas Indonesia
- Pusat Data dan Informasi Situasi Lanjut Usia (Lansia) Di Indonesia. Jakarta: Kementerian Kesehatan RI
- Puspitaningsih, D., 2014. Adaptasi Diri Pada Lansia Di Panti Werdha Mojopahit : Mojokerto. Mojokerto : Jurnal Hospital Majapahit Vol. 6
- Santrock, J.W., 2007. Perkembangan Anak Jilid 1 Edisi Kesebelas. Jakarta: PT. Erlangga
- Skorjanc, A.D., 1991. Differences in Interpersonal Distence among Nonoffenders as a Function of Percieved Violence of Offenders. Journal Department of Sociology. Canada: University of Alberta
- Sommer R., 1969. *Personal Space : The Behavioral Basic Design*. Englewood Cliffs, New Jersey: Prantice-Hall, Inc.
- Statistik Penduduk Lanjut Usia., 2015. Jakarta: Badan Pusat Statistik
- Syurandhari D. H., Hargono R., and Saenun., 2015. Kualitas Hidup Lansia Panti dan Non Panti di Kabupaten Mojokerto. Medica Majapahit. Vol 7. No. 2, September 2015
- Taurista E. and Sadewo F.X., 2015. Praktik Petugas Dalam Meningkatkan Kesejahteraan Dan Kenyamanan Lanjut Usia Di Panti Werdha Mojopahit, Kota Mojokerto. Surabaya: Jurnal Paradigma Vol. 3 No. 2 Thn. 2015
- Utami, L. T., 2010. Jurnal : Pemenuhan Kebutuhan Teritori Lansia Pada Rumah Tinggal Keluarga Multigenerasi. Jakarta: Jurnal Teknik Arsitektur Universitas Indonesia
- Wardhana M., 2007. Logika Konfigurasi Ruang dan Aspek Psikologis Ruang Bagi Lansia Jurnal Rekayasa Perencanaan, Vol.4, No 1, Oktober 2007
- Yusuf A., Nihayati H.E., and Abidin Z., 2008. Terapi Kognitif Menurunkan Tingkat Depresi Lansia. Jurnal Ners Vol. 03. No. 02 tahun 2008