THE EFFECT OF SOCIALIZATION GROUP ACTIVITY THERAPY THROUGH STORYTELLING CARDS ON IMPROVING SOCIAL INTERACTION OF ELDERLY PEOPLE WITH LONELINESS

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ABSTRACT

Indonesia, the number of people aged >60 years is increasing, leading to a high level of elderly dependency due to physical, mental, and social decline. Lack of social interaction can affect the quality of life of the elderly, leaving them isolated and lonely. This changes their role in social interaction in the family and society. This study aims to see the effect of providing socialization group activity therapy through storytelling cards in improving the social interaction of the elderly with loneliness. This research is a quantitative quasi-experiment one-group pretest-posttest with the control group, purposive sampling technique, and dependent t-test statistical test with a research sample of 60 respondents, 30 respondents for the intervention group and 30 respondents for the control group. The inclusion criteria for this study were age> 60 years, independent and cooperative elderly, living in PSTW for 1 month or more, understanding Indonesian (able to communicate well), having good hearing and vision, not suffering from stroke/other chronic diseases, and willing to become research respondents by giving informed consent. The exclusion criteria were the elderly <65 years old, did not live in PSTW, did not understand Indonesian (inability to communicate well), had poor hearing and vision, the elderly were suffering from stroke and other chronic diseases, and refused to be research subjects/respondents. This study used a social interaction questionnaire and a loneliness scale version 3 questionnaire developed by Russell in 1996. Statistically, the average result is 1.83333 from 30 respondents, and the p-value is 0.001. There is an effect of providing socialization group activity therapy through storytelling cards on increasing the social interaction of the elderly with loneliness.

ABSTRAK

Indonesia, jumlah penduduk berusia >60 tahun semakin meningkat, sehingga menyebabkan tingginya tingkat ketergantungan lansia yang diakibatkan oleh penurunan fisik, mental, dan sosial. Kurangnya interaksi sosial dapat mempengaruhi kualitas hidup lansia, sehingga membuat mereka terisolasi dan *loneliness*. Hal ini mengubah peran mereka dalam berinteraksi sosial di keluarga dan Masyarakat. Penelitian ini bertujuan untuk melihat pengaruh pemberian terapi aktivitas kelompok sosialisasi melalui kartu *storytelling* dalam meningkatkan interaksi sosial lansia dengan *loneliness*. Penelitian ini merupakan penelitian kuantitatif *quasy-eksperimen one-group pretest-posttest with control group*, teknik pengambilan sampel purposive sampling dan uji statistika *t-test dependent* dengan sampel penelitian 60 responden, 30 responden untuk kelompok intervensi dan 30 responden untuk kelompok kontrol. Kriteria inklusi penelitian ini yaitu usia >60 tahun, lansia mandiri, dan kooperatif, tinggal di PSTW selama 1 bulan atau lebih, memahami bahasa Indonesia (mampu berkomunikasi dengan baik), memiliki pendengaran dan penglihatan yang baik, tidak sedang menderita penyakit stroke/penyakit kronis lainnnya, dan bersedia menjadi responden penelitian dengan memberikan *informed consent*. Sedangkan kriteria eksklusi yaitu lansia <65 tahun, tidak tinggal menetap di PSTW, tidak memahami bahasa indonesia (ketidakmampuan berkomunikasi dengan baik), memiliki pendengaran dan penglihatan yang kurang baik, lansia sedang menderita penyakit stroke dan penyakit kronis lain, serta menolak menjadi subjek penelitian/responden. Penelitian ini menggunakan kuisioner interaksi sosial dan kuisioner *loneliness scale version* 3 yang dikembangkan oleh Russell tahun 1996. Secara statistik didapatkan hasil rata-rata 1,83333 dari 30 responden, dan nilai *p-value* 0,001. Ada pengaruh pemberian terapi aktivitas kelompok sosialisasi melalui kartu *storytelling* terhadap peningkatan interaksi sosial lansia dengan *loneliness*.

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INTRODUCTION

The number of elderly people worldwide is expected to increase by 1 billion to 2.1 billion by 2050. Based on data from the World Health Organization (2020), it is estimated that the number of individuals aged 80 years and over will triple in 2020. Meanwhile, according to the Badan Pusat Statistik Indonesia (2022), Indonesia's elderly population will reach 11.75% in 2023, up 1.27% from 10.48% in the previous year.

East Jakarta has the highest population, with 300.76 thousand people (27.91%), followed by South Jakarta, with 233.60 thousand people (10.46%) (Badan Pusat Statistik Provinsi DKI Jakarta, 2022). Based on gender, the majority are women, 52.28%, because the life expectancy of women is better than that of men (75.61%: 71.88%) (Badan Pusat Statistik, 2023). The results of the National Socio-Economic Survey (Susenas) in 2022 in the Badan Pusat Statistik (2024) show that 54.52% of the elderly in DKI Jakarta have a junior high school education or below, 16.36% completed junior high school or equivalent, 24.76%, completed elementary school, 10.3%, did not complete elementary school, and 2.97% never attended school. On the other hand, 45.48% of the elderly in DKI Jakarta have a high school education and above, with 27.17% completing high school or equivalent and 18.31% completing college.

The increase in the number of elderly people will affect many aspects of life. One of them is an increase in dependence. This dependency can be caused by physical, mental, and social deterioration experienced by the elderly (Mendoko et al., 2017). Due to the many problems the elderly face, they need care supported by their families. However, families are unable to do so because they feel they do not have the time. Ultimately, the family decides to take the elderly to a retirement home, which can help them recover physically and psychologically and help them interact better with others. But actually, living in a nursing home causes new psychological problems, namely loneliness (Jafar et al., 2014). Elderly people living in nursing homes will feel depressed and uncared for. As a result, self-isolation is their choice to avoid other people (Septina & Priyanto, 2020).

The elderly who do not have social interactions tend to experience loneliness and not have friends with whom to share their thoughts, which ultimately causes the elderly's quality of life to become worse (Oktavianti & Setyowati, 2020). In situations of unhealthy social interaction, the elderly will experience negative impacts on their quality of life, such as feeling isolated, alone, depressed, and eventually experiencing suicidal thoughts or death. The highest suicide mortality rate occurred in 2022 in adults aged 85 years or older (23.02 per 100,000) (American Foundation for Suicide Prevention, 2024). This is supported by research by Nuraini et al (2020), which shows that the elderly often feel bored with their lives. So the thought arises that they must die soon so that they do not trouble their family or others.

Furthermore, this therapy is very effective because, in TAKS, clients will engage with each other, influence, rely on each other, and develop similar ideas (Adi et al., 2022). When there is social contact and communication, TAKS allows social interaction. Communication is a form of interaction between individuals or groups intended to share information (Rahimah & Amaliah, 2021).

Another study by Pambudi et al (2017) examined how socialization group activity therapy (TAKS) affects the social interaction abilities of lonely elderly people. It was found that the results of the social interaction abilities of the elderly were different before and after being given TAKS. The average change value of interaction ability before TAKS was 23.21 (sufficient social interaction ability) and 37.32 after TAKS, each with a p-value of 0.001 (95% CI). However, this study did not use media in conducting TAKS; it only utilized the content of each session in TAKS. So from this, the researcher made a novelty in the form of media for delivering TAKS, namely Storytelling Cards. Anny et al (2020) argue that group activity therapy can stimulate all five senses (sensory) using media such as pictures on cards, videos, and interspersed with singing.

Additionally, storytelling can be defined as a story that delivers educational messages, role models, leadership, or emotional development. In storytelling activities, older adults can tell other older adults about their life experiences, share opinions, and share thoughts (Fina, Amru, 2022).

Therefore, storytelling and group interaction combined are very beneficial for the elderly. This combination can make them more confident to speak and reduce negative thoughts about the feelings of loneliness that the elderly feel (Gabele et al., 2020).

Based on the explanation above, this research is needed to improve the social interaction of the elderly, with one of the causes of its decline being loneliness. Thus, this study aims to see the effect of

socialization group activity therapy through storytelling cards on increasing the social interaction of the elderly with loneliness. This research is expected to provide an overview of how families, educational institutions, social workers in nursing homes, and nurses use storytelling cards to improve the social interaction of the elderly with loneliness through socialization group activity therapy.

METHOD
Types of Research
This study has used a quantitative approach, a quasi-experiment pre-post test with a control group design, where a group is observed and measured before and after receiving therapy, and the results are compared (Adiputra et al., 2021). This research design has two groups: the intervention group and the control group. The purpose of this research design is to determine the symptoms or effects that arise as a result of specific treatments (Abraham & Supriyati, 2022). The dependent variable in this study is the social interaction of the elderly with loneliness, and the independent variable is socialization group activity therapy (TAKS) through storytelling cards. The confounding variables in this study are age, gender, and education level.

Place and Time of Research
This study was conducted at Sasana Tresna Budi Mulia 3 South Jakarta as the intervention group and Sasana Tresna Budi Mulia 1 East Jakarta as the control group. It was implemented from March to April 2024.

Population and Sample
The sampling technique used was purposive sampling, which means that the sample is given its judgment among the selected population according to the research topic (Kassiani Nikolopoulou, 2023). The number of samples to determine respondents was taken using the calculation of the Lameshow formula for the hypothesis test of the difference between the two means plus the calculation of the dropout sample. The population in this study were elderly people living in the Tresna Werdha Budi Mulia 3 South Jakarta and Tresna Budi Mulia 1 East Jakarta. The sample calculation results were 60 respondents divided into two groups, namely 30 intervention group respondents and 30 control group respondents.

The population of this study were subjects who met the specified criteria. Inclusion criteria were age> 60 years, independent and cooperative elderly, living in PSTW for 1 month or more, understanding Indonesian (able to communicate well), having good hearing and vision, not suffering from stroke / other chronic diseases, and willing to become research respondents by giving informed consent. Exclusion criteria were elderly <65 years old, did not live permanently in PSTW, did not understand Indonesian (inability to communicate well), had poor hearing and vision, elderly were suffering from stroke and other chronic diseases, and refused to be research subjects/respondents.

Data Collection
Data collection techniques are methods or approaches researchers use to collect the necessary data during research. It aims to obtain reliable materials, information, truth, and information (Adiputra et al., 2021).

Data collection has been carried out using a social interaction questionnaire that the researchers have modified from research (Widodo, 2022) and the Loneliness Scale version 3 questionnaire from the University of California Los Angeles developed (Russell, 1996), as well as 16 cards storytelling media. The social interaction questionnaire contained 19 statements consisting of 16 positive statements and 3 negative statements. The social interaction questionnaire used a Likert scale with the answer options on favorable (positive) items were rated 3 (relevant/yes), 2 (less relevant/sometimes), and 1 (irrelevant/no), then for unfavorable (negative) items were rated 1 (relevant/yes), 2 (less relevant/sometimes), and 3 (irrelevant/no). The overall answer of the research subject had been interpreted in the category of good social interaction score = ≥ 76 - 100, sufficient social interaction = 60 - 75, and less social interaction = < 60. Meanwhile, the loneliness questionnaire contained 20 questions using a Likert scale consisting of answers 1 (never), 2 (rarely), 3 (sometimes), and 4 (often). The measurement results obtained a score of 10-19, no loneliness; 20-40, low loneliness; 41-60, moderate loneliness; 61-80, severe loneliness.

This study has tested the validity and reliability of questionnaires and media. The validity test of the 19-question social interaction questionnaire with the results of the r value> from the r table value of 0.2785 is valid, the range of validity test results between 0.307-0.790, and the results of the Cronbach's alpha reliability test value of 0.871> 0.60 are reliable. The validity test of the 20-question loneliness questionnaire with the results of the calculated r value> from the r table value of 0.2785 is valid, the range of validity test results values is between 0.319-0.629, and the Cronbach's alpha value reliability test results are 0.787> 0.60 reliable. The validity test of the 10-question storytelling card media with the results of the calculated r value> from the r table value of 0.2785 is valid, the range of validity test results values between 0.297-1, and the results of the Cronbach's alpha reliability test value of 0.860> 0.60 are reliable.

In the intervention group, socialization group activity therapy (TAKS) was carried out through storytelling cards, while in the control group, only socialization group activity therapy (TAKS) did not use media.

This study has obtained a certificate of ethical feasibility from the Health Human Resources Development and Empowerment Agency of the Tanjungkarang Health Polytechnic with No.208/KEPK-TJK/II/2024.

Data Analysis and Processing

Univariate data analysis aims to explain/describe the characteristics of each variable studied (Priantoro, 2017). In this study, univariate analysis has been used to describe all variables, such as individual characteristics, level of social interaction, and loneliness. After the characteristics of each variable are known, the analysis continues at the bivariate level to see if there is a meaningful relationship or correlation between the 2 variables (Adiputra et al., 2021).

The analysis in this study has used the dependent t-test statistical test. The test results can be known based on the p-value, which is compared with $\alpha = 0.01$; if the p-value $p < \alpha$ or $p = \alpha$, then H0 is rejected or Ha is accepted so that it can be interpreted that there is a significant relationship between the independent variable and the dependent variable. If the p-value$> \alpha$, then H0 is accepted so that it can be interpreted that there is no relationship between the independent variable and the dependent variable (Notoatmodjo, 2018).

RESULT

Table 1. Respondents' Characteristics

Variable	Intervention Group (PSTW BM3)		Control Group (PSTW BM1)	
	f	%	f	%
1 Age				
65-74	17	56,7	25	83,3
75-84	12	40	3	10,3
>85	1	3,3	2	6,7
Total	30	100	30	100
2 Gender				
Male	15	50	15	50
Female	15	50	15	50
Total	30	100	30	100
3 Education Level				
No School	1	3,3	2	6,7
Elementary	11	36,7	16	53,3
Junior	5	16,7	4	13,3
Senior	7	23,3	8	26,7
College	6	20	0	0
Total	30	100	30	100

The characteristics of respondents in this study consist of age, gender, and education level. Table 1 shows that 30 respondents (100%) of the elderly in the intervention group have an age category of 65-74 years, as many as 17 respondents (56.7%), an age category of 75-84 years, as many as 12 respondents (40%), and an age category of >85 years as many as 1 respondent (3.3%). Based on gender, there are 15 respondents (50%) male and 15 respondents (15%) female. At the education level, it is found that the majority of respondents have elementary school education levels as many as 11 respondents (36.7%), no school as many as 1 respondent (3.3%), junior high school / junior high school as many as 5 respondents (16.7%), high school / senior high school as many as 7 respondents (23.3%), and college as many as 6 respondents (20%).

Table 1 shows that 30 respondents (100%) of the elderly in the control group have an age category of 65-74 years, as many as 25 respondents (83.3%), an age category of 75-84 years, as many as 3 respondents (10.3%), and an age category of >85 years as many as 2 respondents (6.7%). Based on gender, there are equal numbers of men and women. There are 15 male respondents (50%), and 15 female respondents (50%). At the education level, it is found that the majority of respondents have elementary school education levels as many as 16 respondents (53.3%), no school as many as 2 respondents (6.7%), junior high school / junior high school as many as 4 respondents (13.3%), and high school / senior high school as many as 8 respondents (26.7%).

Table 2. Social Interaction Level of Elderly with *Loneliness*

Social Interaction Level	Intervention Group (PSTW BM3)				Control Group (PSTW BM1)			
	Pre-Test		*Post-Test*		*Pre-Test*		*Post-Test*	
	n	%	n	%	n	%	n	%
Good	0	0	26	86,7%	0	0	26	86,7%
Sufficient	1	3,3%	4	13,3%	8	26,7%	4	13,3%
Low	29	96,7%	0	0	22	73,3%	0	0
Total	**30**	**100%**	**30**	**100%**	**30**	**100%**	**30**	**100%**

Loneliness Level	Intervention Group (PSTW BM3)				Control Group (PSTW BM1)			
	Pre-Test		*Post-Test*		*Pre-Test*		*Post-Test*	
	n	%	n	%	n	%	n	%
Good (not *Loneliness*)	0	0	0	0	0	0	0	0
Low	0	0	27	90%	0	0	26	86,7%
Sufficient	2	6,7%	3	10%	3	10,0%	4	13,3%
Moderate	28	93,3%	0	0	27	90,0%	0	0
Total	30	100%	30	100%	30	100%	30	100%

Table 2 shows that in the intervention group, the pre-test level of social interaction with sufficient social interaction is 1 respondent (3.3%) and less social interaction is 29 respondents (96.7%), while for the pre-test elderly with moderate loneliness are 2 respondents (6.7%), and severe loneliness is 28 respondents (93.3%). As for the post-test, good social interaction in 26 respondents (86.7%) and sufficient social interaction with 4 respondents (13.3%), while for the post-test, elderly with low loneliness in 27 respondents (90%) and moderate loneliness in 3 respondents (10%).

Table 2 found in the control group a description of the pre-test level of social interaction with sufficient social interaction with as many as 8 respondents (26.7%) and less social interaction with as many as 22 respondents (73.3%), while for the pre-test the elderly with moderate loneliness are 3 respondents (10%), and severe loneliness are 27 respondents (90%). For the post-test, good social interaction 26 respondents (86.7%), and sufficient social interaction 4 respondents (13.3%), while for the post-test, the elderly with low loneliness 26 respondents (86.7%), and moderate loneliness 4 respondents (13.3%).

**Table. 3 The Difference Score between the Social Interaction Level of the Elderly
and the *Loneliness Pre-test* and *Post-test* of Intervention Group**

Variable	Intervention Group (PSTW BM3)				p-value
	Pre-Test		*Post-Test*		
	Mean	*Std. Deviation*	*Mean*	*Std. Deviation*	
Social Interaction	1,0333	0,18257	2,8667	0,34575	0,001

Table 3 shows that the average value of the level of social interaction of the elderly with loneliness before socialization group activity therapy through storytelling cards is 1.0333 with a standard deviation of 0.18257, and after being given socialization group activity therapy through storytelling cards, is 2.8667 with a standard deviation of 0.34575. The mean value and standard deviation value show an increase in the social interaction of the elderly with loneliness by 3.9000 with a p-value of 0.001, meaning that there is an effect of differences in the level of social interaction of the elderly with loneliness pre-test and post-test giving socialization group activity therapy (TAKS) through storytelling cards in the intervention group.

**Table. 4 The Difference Score between the Social Interaction Level of the Elderly
and the *Loneliness Pre-test* and *Post-test* of Control Group**

Variable	Control Group (PSTW BM1)				p-value
	Pre-Test		*Post-Test*		
	Mean	*Std. Deviation*	*Mean*	*Std. Deviation*	
Social Interaction	1,2667	0,44978	2,8667	0,34575	0,001

Table 4 shows that the average value of the level of social interaction of the elderly with loneliness before socialization group activity therapy is 1.2667, with a standard deviation of 0.44978. After being given socialization group activity therapy, it is 2.8667 with a standard deviation of 0.34575. The mean value and standard deviation value show an increase in the social interaction of the elderly with loneliness after being given socialization group activity therapy of 4.1334 with a p-value of 0.001, meaning that there is an effect of differences in the level of social interaction of the elderly with loneliness pre-test and post-test giving socialization group activity therapy in the control group.

Table. 5 *Sample T-Test* of Intervention Group

Variable	*Mean*	*n*	Sig. (2 tailed)	*Std. Deviation*	**Result**
Social Interaction	1,83333	30	0,001	0,37905	*p-value* <0.05 H0 is rejected There is effect

Table 5 shows the results of calculating the level of social interaction of the elderly with loneliness in the intervention group with an average result of 1.83333 with 30 respondents, a standard deviation of 0.37905, and a p-value of 0.001 < α 0.05 H0 is rejected. This shows that socialization group activity therapy using storytelling cards affects the level of social interaction of the elderly with loneliness.

Table. 6 *Sample T-Test* of Control Group

Variable	*Mean*	*n*	Sig. (2 tailed)	*Std. Deviation*	**Result**
Social Interaction	1,60000	30	0,001	0,67466	*p-value* <0.05 H0 is rejected There is effect

Table 6 shows the results of the calculation of the level of social interaction of the elderly with loneliness in the control group with an average result of 1.60000 with 30 respondents, a standard deviation of 0.12318, and a p-value of $0.001 < α$ 0.05 H0 is rejected. This shows that socialization group activity therapy affects the level of social interaction of the elderly with loneliness.

DISCUSSION
Characteristics of Elderly Respondents with Decreased Social Interaction Elderly with Loneliness
Age

Entering old age, there are several physical problems due to mental and social changes that can result in the deterioration of their social roles; the elderly gradually distance themselves from their interactions with the local community. As a result, their quality of life and social interactions are affected (Dian Eka Putri, 2021). In addition, a lack of social interaction can lead to feelings of loneliness (Hindriyastuti & Safitri, 2022). This is also due to the fact that older people in this age range (65-74 years) are still able to collaborate when spoken to. So morbidity increases with age, which can impact the elderly socially (Dwi et al., 2024).

Gender

This research is strengthened by Darmayanti & Eliza, Cynthia (2022), which states that gender is associated with the quality of life of the elderly because men and women have different roles and access to different resources, thus causing different needs or essential things for men and women. As a result, the social engagement capacity of the elderly will also be affected. Andesty & Syahrul (2018) found that 57.7% of older people of the female gender had poor social interactions; the reason for this is that the larger female population is more at risk of impaired social interactions.

Education Level

Education affects a person's ability to solve their problems. The higher the level of education of an elderly person, the more life experience he has, which makes him better prepared to face challenges (Wandik, 2020). Rohmawati W.N (2020), also states that elderly people with low education will find it difficult to solve the problem of loneliness in their lives. This means that the lower a person's level of education, the lower the level of coping so that it is easier to feel lonely, and the higher the education of the elderly, the higher the tolerance of coping in overcoming a problem will be better (Nadhiroh, U. Anggraeni & Indrayati, 2020).

Overview of the Level of Social Interaction of Elderly with Loneliness in the Intervention Group and Control Group

Researchers stated that elderly people with less social interaction occurred because the elderly did not understand or understand what was being said by other elderly people, seemed to prefer to be alone than in the crowd, and did not like participating in activities carried out at the orphanage. Meanwhile, lonely elderly people often feel that no one agrees with their thoughts, do not have friends or even friends who understand, look alone, always feel left alone, feel isolated, feel that their interests and ideas are not conveyed, and feel embarrassed.

The process of communication between individuals and groups related to social activities in society causes social interaction, which is defined as a mutually influencing and inseparable relationship between individuals and groups in daily life (Nurlianawati & Utami, 2020). Conversely, feelings of loneliness, isolation, and lack of social stimulation are the causes of elderly people who lack social interaction (Keswara, 2020).

The relationship between low levels of social interaction and high levels of loneliness. Witton et al (2024), state that when someone has little social interaction, they tend to experience feelings of loneliness. This results in feelings of alienation, emotional emptiness, and loneliness.

Analysis of Differences in Score Levels of Social Interaction of Elderly with Loneliness Pre-Test and Post-Test in the Intervention Group

This research is in line with Pambudi et al (2017), about the effect of socialization group activity therapy on the ability of social interaction of the elderly with loneliness. This research shows that there are differences in social relationship capacity scores in the elderly when given TAKS. The provision of

TAKS affects the social interaction skills of the elderly with a p-value of 0.001 (CI 95%), with a change in the average value of interaction skills before TAKS of 23.21 (sufficient social interaction skills) and after TAKS of 37.32 (good social interaction skills).

One type of communication or social interaction that can occur through communication is the storytelling method. In storytelling activities, the elderly can tell stories about their life experiences and convey their feelings and opinions to help others understand them. It can also be a way to show concern for the elderly so that they feel cared for. In addition, storytelling can be used to identify, evaluate, and gradually change a person's cognition because it attracts a person to match the events told with his life experiences (Resmonicasari et al., 2023).

In addition, research by Nuraini et al (2020), shows evidence that good social interaction can make elderly people in orphanages feel like they have friends to share stories, complain, and exchange opinions.

Analysis of Differences in Social Interaction Level Scores of Elderly with Loneliness Pre-Test and Post-Test in the Control Group

This research is in line with Saputra (2018), which shows that the average value of the TAKS pre-test is 29.20 (100%) of respondents in the level of social interaction ability is not good, while the average value of the TAKS post-test social interaction ability level is 45.80 which means that 10 out of 12 respondents are in the level of good social interaction ability with a score> 36 is good social interaction ability. Thus, the difference in the average score of social interaction skills before and after TAKS is 16.60, which indicates that the respondents' social interaction skills score has increased with a p-value of 0.001, which indicates that TAKS improves meaningful social interaction skills.

Another study by Sasanti (2020) showed that the level of loneliness before being given a group activity therapy intervention in the treatment group obtained a mean of 54.72, and the control group obtained a mean of 49.72. The level of loneliness after being given group activity therapy intervention in the treatment group obtained a mean of 34.81, and the control group obtained a mean of 49.72.

In line with the theory put forward by the book by Keliat, Anna & Pawirowiyono (2014), TAKS is an effort to assist a number of clients in building social relationships with the aim of helping them interact with others through activities such as asking questions, talking, telling stories about themselves to the group, and greeting group friends. There is a dynamic of group interaction in the group that needs and depends on each other. TAKS participants are asked to introduce themselves, get to know their fellow participants, and share relaxed and fun experiences so that they can feel relaxed and open.

Analysis of the Effect of Socialization Group Activity Therapy through Storytelling Cards on the Level of Social Interaction of Elderly with Loneliness in the Intervention Group

The researchers have chosen socialization group activity therapy through storytelling cards as one of the therapeutic modalities or appropriate interventions for the elderly to improve social interaction due to loneliness in PSTW. This method is quite effective because there will be interaction with each other, mutual influence, interdependence, and one common thought, making it easy for the elderly to interact (Sitompul, 2022). Another opinion, according to Sinurat et al. (2022), states that socialization group activity therapy is very beneficial for the elderly because, with this therapy, the elderly can be entertained and can express their emotions and feelings so that they do not feel alienated because there are many people around them.

The researchers have used the story method through cards to complement and support socialization group activity therapy activities in healthy and independent elderly. The card media used presents images with unique meanings, descriptions, and interpretations so that they can facilitate and strengthen the memory of the elderly, increase insight, get to know each other, and attract them to participate in activities or interact with others (Maharani & Purbaningrum, 2020). This is also evidenced by the statement of Yohana et al (2020), that stories told with picture card media will be more interactive.

According to Made et al (2021), storytelling can also stimulate emotions to stabilize, cause positive feelings, and calm the heart so that this method is feasible to apply to the elderly as an effort to improve welfare.

The above results are evidenced by the research of Resmonicasari & Indrayana (2023), that the storytelling method has a statistically significant effect (p = 0.001) on the level of loneliness of the elderly who live alone, the difference in the average value of the level of loneliness of the elderly who

live alone with a mean value difference of 10.39, namely before the intervention was 55.94, while after the storytelling method the mean value decreased to 45.55. Chang et al (2023) also said that the storytelling method can be a place for the elderly to tell stories about their lives, express their feelings and thoughts, and increase happiness to reduce the loneliness felt by the elderly.

Analysis of the Effect of Socialization Group Activity Therapy (TAKS) on the Level of Social Interaction of Elderly with Loneliness in the Control Group

The current research is also supported by the research of Sasteri & Erni (2020), which shows the average mean value before treatment of 11.27 and the value after treatment of 29.87, obtained a p-value of 0.001 which means that there is a significant influence between socialization group activity therapy on the socialization ability of the elderly.

Researchers Sasanti (2020) showed that the mean level of loneliness before intervention in the treatment group was 54.72. After being given intervention in the treatment group, the mean result was 34.81. The Wilcoxon test analysis in the treatment group showed a significant effect on the level of loneliness with a p-value of 0.003, which means that group activity therapy affects the level of elderly loneliness. These results are also in line with the research of Yohanita Bea Mare (2015), which states that socialization group activity therapy has an influence on the level of loneliness in the elderly due to the interest of the elderly and the continuous socialization TAK process with a p-value of 0.001.

The relationship between high levels of loneliness and low levels of social interaction is explained through the theory of social disruption by Burlian (2016), according to this theory, people tend to feel lonely when they do not often interact with others, for example when they have no friends or are socially isolated. In addition, feelings of emotional emptiness, discomfort, and isolation can be caused by a lack of adequate social relationships.

CONCLUSIONS AND SUGGESTION

The results of this study indicate the effect of providing socialization group activity therapy (TAKS) through storytelling cards on increasing the social interaction of the elderly with loneliness. The results of the study are expected to increase knowledge about how to overcome problems that arise in the elderly who experience a decrease in social interaction due to loneliness by conducting socialization group activity therapy through storytelling cards. Future researchers are expected to involve more research subjects, such as social workers and nursing homes so that the implementation of socialization group activity therapy (TAKS) is more often carried out in a good and correct way so that the elderly are also more interested in doing it independently.

REFERENCES

Abraham, I., & Supriyati, Y. (2022). Desain Kuasi Eksperimen Dalam Pendidikan: Literatur Review. *Jurnal Ilmiah Mandala Education*, *8*(3), 2476–2482. https://doi.org/10.58258/jime.v8i3.3800

Adi, G. S., Haryono, R., Taukhit, Etik, P., Wulandari, B., Novi, Widiyastuti, R., & Maria, Putri, S. (2022). *Buku Modul Standar Operasional Prosedur (SOP) Keterampilan Keperawatan* (B. Wulandari, D. Brigita, Ayu, H. Purwanto, Sigit, & Ade (eds.)). Lembaga Omega Medika. http://eprints.stikes-notokusumo.ac.id/220/1/Modul SOP Keperawatan-STIKES Notokusumo.pdf

Adiputra, I. M. S., Trisnadewi, N. W., Oktaviani, N. P. W., & Munthe, S. A. (2021). *Metodologi Penelitian Kesehatan* (R. Watrianthos & Janner Simarmata (eds.); Pertama). Yayasan Kita Menulis. https://repositori.uin-alauddin.ac.id/19810/1/2021_Book Chapter_Metodologi Penelitian Kesehatan.pdf

American Foundation for Suicide Prevention. (2024). Suicide Statistics. *American Foundation for Suicide Prevention*. https://afsp.org/suicide-statistics/

Andesty, D., & Syahrul, F. (2018). Hubungan Interaksi Sosial dengan Kualitas Hidup Lansia di Unit Pelayanan Terpadu (UPTD) Griya Werdha Kota Surabaya. *The Indonesian Journal Public Health*, *13*(2), 169–180. https://doi.org/10.20473/ijph.vl13il.2018.169-180

Anny, M. R., Achir, H. S. Y., & Luknis, S. (2020). Pengaruh Latihan Keterampilan Sosial terhadap Kemampuan Sosialisasi pada Lansia dengan Kesepian di Panti Werdha Semarang. *Jurnal Keperawatan Soedirman (The Soedirman Journal of Nursing)*, *7*(1), 38–44. http://www.jks.fikes.unsoed.ac.id/index.php/jks/article/view/97

Badan Pusat Statistik. (2023). Statistik Penduduk Lanjut Usia. In *Badan Pusat Statistik* (Vol. 20, Issue

1). http://link.springer.com/10.1007/978-3-319-59379-1%0Ahttp://dx.doi.org/10.1016/B978-0-12-420070-8.00002-7%0Ahttp://dx.doi.org/10.1016/j.ab.2015.03.024%0Ahttps://doi.org/10.1080/07352689.2018.1441103%0Ahttp://www.chile.bmw-motorrad.cl/sync/showroom/lam/es/

Badan Pusat Statistik. (2024). Angka Harapan Hidup (AHH) Menurut Provinsi dan Jenis Kelamin (Tahun), 2022-2023. *Bps.Go.Id*. https://www.bps.go.id/id/statistics-table/2/NTAxIzI=/angka-harapan-hidup--ahh--menurut-provinsi-dan-jenis-kelamin.html

Badan Pusat Statistik Indonesia. (2022). *Statistik Penduduk Lanjut Usia* (M. Andhie, Surya, S. Raden, I. Maylasari, & B. Santoso (eds.)). Badan Pusat Statistik. https://www.bps.go.id/id/publication/2022/02/25/0a2afea4fab72a5d052cb315/statistik-indonesia-2022.html

Badan Pusat Statistik Provinsi DKI Jakarta. (2022). *Profil Penduduk Lanjut Usia di Provinsi DKI Jakarta* (Issue 1). BPS Provinsi DKI Jakarta. https://jakarta.bps.go.id/id/publication/2023/07/28/deca0b3c662929af819ddac7/profil-penduduk-lanjut-usia-di-provinsi-dki-jakarta-2022-.html

Burlian, P. (2016). *Patologi Sosial* (Restu Damayanti (ed.); Pertama). PT Bumi Aksara. https://basyamediautama.com/patologi-sosial/

Chang, H., Do, Y., & JinYeong Ahn. (2023). Digital Storytelling as an Intervention for Older Adults: A Scoping Review. *National Library of Medicine*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9859096/

Darmayanti, & Eliza, Cynthia, L. (2022). *Hubungan Peran Sosial dengan Kualitas Hidup Lansia di Kelurahan Bakung Kecamatan Biringkanaya Makasar*. http://repository.stikstellamarismks.ac.id/533/1/SKRIPSI Darmayanti C1614201010 %26 Eliza Cynthia Lelepadang C1614201012.pdf

Dian Eka Putri. (2021). Hubungan Fungsi Kognitif dengan Kualitas Hidup Lansia. *Jurnal Inovasi Penelitian*, *21*(1), 1–9. https://doi.org/10.1016/j.solener.2019.02.027%0Ahttps://www.golder.com/insights/block-caving-a-viable-alternative/%0A???

Dwi, A., Damayanti, R., & Pradana, A. A. (2024). *Faktor-Faktor yang berhubungan dengan Kondisi Frailty pada Lansia di Kelurahan Mangunjaya*. *06*(02), 157–168. https://www.researchgate.net/publication/382473316_FACTORS_ASSOCIATED_WITH_CONDITION_OF_FRAILTY_TO_OLDERLY_IN_MANGUNJAYA_VILLAGE

Fina, Amru, M. (2022). Pelatihan dan Pendampingan Manajemen Depresi bagi Perawat Lasnia. *Universitas Nahdlatul Ulama Surabaya*. https://lppm.unusa.ac.id/pelatihan-pendampingan-manajemen-depresi-bagi-perawat-lansia/

Gabele, M., Thoms, A., Alpers, J., Hußlein, S., & Hansen, C. (2020). Effects of interactive storytelling and quests in cognitive rehabilitation for adults. *CEUR Workshop Proceedings*, *2359*, 118–129. https://ceur-ws.org/Vol-2359/paper11.pdf

Hindriyastuti, S., & Safitri, F. (2022). Hubungan Kesepian dengan Tingkat Depresi pada Lansia di Posyandu Lansia Desa Geritan Kecamatan Panti. *Jurnal Profesi Keperawatan*, *9*(2), 110–126. http://jurnal.akperkridahusada.ac.id

Jafar, N., Wiarsih, W., & Permatasari, H. (2014). Pengalaman Lanjut Usia Mendapatkan Dukungan Keluarga. *Jurnal Keperawatan Indonesia*, *14*(3), 157–164. https://doi.org/10.7454/jki.v14i3.62

Kassiani Nikolopoulou. (2023). What Is Purposive Sampling? | Definition & Examples. *Scribbr.Com*. https://www.scribbr.com/methodology/purposive-sampling/#:~:text=Purposive sampling refers to a, on purpose" in purposive sampling.

Keliat, Anna, B., & Pawirowiyono, A. (2014). *Keperawatan Jiwa: Terapi Aktivitas Kelompok* (B. Angelina (ed.); Kedua). EGC. https://scholar.google.co.id/citations?user=FMOZzmEAAAAJ&hl=en

Keswara, U. R. (2020). Hubungan Interaksi Sosial Lansia dengan Kesepian Pada Lansia di UPT Panti Sosial Usia Lanjut Kecamatan Natar Kabupaten Lampung Selatan. *Jurnal Kesehatan Holistik*, *11*(1), 1–4. http://ejurnalmalahayati.ac.id/index.php/holistik/article/view/210

Made, N., Anindita, G., Putri, N., Ayu, P., Utami, S., Ngurah, A. A., & Wijaya, T. (2021). Pengaruh Terapi Bercerita Terhadap Tingkat Depresi Lansia. *In Community of Publishing in Nursing*, *7*. https://ojs.unud.ac.id/index.php/coping/article/download/13965/31831

Maharani, N. T., & Purbaningrum, E. (2020). *Pengaruh Metode Bercerita Bermedia Kartu Gambar Terhadap Kemampuan Mengenal Keaksaran Anak Kelompok B di RA Perwanida IX*. *3*(3), 1–6. https://ejournal.unesa.ac.id/index.php/paud-teratai/article/view/7958

Mendoko, F., Katuuk, M., & Rompas, S. (2017). Perbedaan Status Psikososial Lanjut Usia Yang Tinggal Di Panti Werdha Damai Ranomuut Manado Dengan Yang Tinggal Bersama Keluarga Di Desa Sarongsong II Kecamatan Airmadidi Kabuaten Minahasa Utara. *E-Journal Keperawatan*, *5*(1), 1–9. https://ejournal.unsrat.ac.id/index.php/jkp/article/view/14671

Nadhiroh, U. Anggraeni, R., & Indrayati, N. (2020). Gambaran Deprivasi Afek Emosional dan Isolasi Sosial pada Lansia Kesepian. *Jurnal Ilmiah Kesehatan*. https://www.scribd.com/document/617523932/19-Article-Text-109-2-10-20210502

Notoatmodjo, S. (2018). *Metodologi Penelitian Kesehatan* (Ketiga). PT. Rineka Cipta. https://scholar.google.co.id/citations?user=t4hTra0AAAAJ&hl=en

Nuraini, Kusuma, F. H. D., & H., W. R. (2020). Hubungan interaksi sosial dengan kesepian pada lansia di kelurahan Tlogomas Kota Malang. *Jurnal Ilmiah Keperawatan*, *3*(1), 603–611. https://publikasi.unitri.ac.id/index.php/fikes/article/view/832/646

Nurlianawati, L., & Utami, W. . (2020). Hubungan Interaksi Sosial dengan Kualitas Hidup Lansia di PSTW Ciparay. *Jurnal Keperawatan BSI*. https://ejurnal.ars.ac.id/index.php/keperawatan/article/view/221

Oktavianti, A., & Setyowati, S. (2020). Interaksi Sosial Berhubungan dengan Kualitas Hidup Lansia. *Jurnal Keperawatan Terpadu (Integrated Nursing Journal)*, *2*(2), 119. https://doi.org/10.32807/jkt.v2i2.68

Pambudi, W. E., Dewi, E. I., & Sulistyorini, L. (2017). Pengaruh Terapi Aktivitas Kelompok Sosialisasi (TAKS) terhadap Kemampuan Interaksi Sosial pada Lansia dengan Kesepian di Pelayanan Sosial Lanjut Usia (PSLU) Jember. *Jurnal Pustaka Kesehatan*, *5*(2), 253–259. https://jurnal.unej.ac.id/index.php/JPK/article/view/5774

Priantoro, H. (2017). Hubungan Beban Kerja Dan Lingkungan Kerja Dengan Kejadian Burnout Perawat Dalam Menangani Pasien Bpjs. *Jurnal Ilmiah Kesehatan*, *16*(3), 9–16. https://doi.org/10.33221/jikes.v16i3.33

Rahimah, & Amaliah, N. (2021). Social Activity "Pojok Ceria" by Education and Recreation with the Elderly during the Covid-19 Pandemic at Lok Baintan Village, Banjarmasin. *Proceeding.Mbunivpress.or.Id*, 497–501. https://proceeding.mbunivpress.or.id/index.php/bamara/article/view/384/320

Resmonicasari, K., & Indrayana, S. (2023). Pengaruh Storytelling Terhadap Tingkat Kesepian Lansia yang Tinggal Sendirian di Wilayah Kerja Puskesmas Sewon 1. *Borobudur Nursing Review*, *03*(01), 2–5. https://doi.org/10.31603/bnur.5358

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, *66*(1), 20–40. https://doi.org/10.1207/s15327752jpa6601_2

Saputra, F. (2018). Pengaruh Terapi Aktivitas Kelompok Sosialisasi terhadap Kemampuan Interaksi Sosial Lansia di Wilayah Kerja Puskesmas Samata Kecamatan Somba Opu Kabupaten Gowa. *Universitas Islam Negeri Alauddin Makasar*, *21*(1), 1–9. http://repositori.uin-alauddin.ac.id/21905/

Sasanti, A. (2020). Pengaruh Terapi Aktivitas Kelompok Terhadap Tingkat Kesepian Pada Lansia Penderita Hipertensi Di Desa Pengkok Kedawung Sragen. *Doctoral Dissertation, Universitas Kusuma Husada Surakarta*. http://eprints.ukh.ac.id/id/eprint/909/1/NASKAH PUBLIKASI AROFI SASANTI.pdf

Sasteri, Y., & Erni, P. (2020). Pengaruh Terapi Aktivitas Kelompok Sosialisasi terhadap Kemampuan Sosialisasi Lanjut Usia di Posyandu Lansia Bermi Wilayah Binaan Puskesmas Denggen. *ProHealth Journal*, *7*. https://scholar.google.com/citations?user=K1OXbjIAAAAJ&hl=en

Septina, A. B., & Priyanto, P. H. (2020). Loneliness (Kesepian) pada lanjut usia di panti wreda Semarang. In *Universitas Katolik Soegijapranata: Prosiding Psikologi Berbagi*. http://repository.unika.ac.id/20829/1/LONELINESS LANSIA.pdf

Sinurat, S., Tampubolon, L. F., & Zalukhu, E. N. (2022). *The Effect Of Group Activity Therapy socialization (Taks) Towards Reducing Loneliness In The Elderly At The Upt Of Elderly Social Services In The Social Services Of Binjai , North Sumatra Province In 2021*. *13*(01), 153–157. https://ejournal.seaninstitute.or.id/index.php/healt/article/download/360/289

Sitompul, M. U. (2022). *Hubungan Interaksi Sosial dengan Happiness Pada Lansia di Desa Nogo Rejo Dusun Tiga, Kecamatan Galang.* https://repositori.uma.ac.id/bitstream/123456789/18361/1/158600352 - Maria Ulfa Sitompul - Fulltext.pdf

Wandik, E. (2020). *Gambaran Tingkat Kemandirian Lansia dalam Memenuhi Aktivitas Hidup Sehari-hari di Panti Bina Usia Lanjut Provinsi Papua.* https://online-journal.unja.ac.id/jpima/article/view/26810

Widodo, W. T. (2022). *Hubungan antara Interaksi Sosial dengan Tingkat Depresi pada Lansia di Panti Sosial Tresna Werdha Khusnul Khotimah Pekanbaru.* 1–100. http://repository.uin-suska.ac.id/59389/

Witon, Indah Permatasari, L., & Akbar, R. (2024). Studi Hubungan Interaksi Sosial Terhadap Tingkat Kesepian Lansia. *Journal of Citra Internasional Institute*, *7*(2), 133–137. http://jurnalilmiah.ici.ac.id/index.php/

World Health Organization. (2020). Ageing. *World Health Organization*. https://www.who.int/health-topics/ageing#tab=tab_1

Yohana, F. M., Bambang, A. P., & Iswari Fitria. (2020). Storytelling dengan menggunakan media flashcard terhadap Kemampuan Berbicara bahasa Inggris Mahasiswa Arsitektur. *Jurnal Magenta*, *4*(01). https://magenta.trisaktimultimedia.ac.id/magenta/index.php/magenta/article/view/53

Yohanita Bea Mare. (2015). Pengaruh Terapi Aktivitas Kelompok (TAK) Sosialisasi terhadap Tingkat Kesepian pada Lansia di Panti Werdha Hargodedali Surabaya. *Ekp*, *13*, 113–121. https://repository.ukwms.ac.id/id/eprint/3829/