Is Social support a key factor influencing depressive symptoms among older adults Living in Cimahi, West Java Province, Indonesia?

Sunanta Thongpat, 2Kiki Gustryanti*, 3Sonthaya Maneerat

1,3 Boromarajonani College of Nursing, Nopparat Vajira affiliated Kasetsart University, Thailand
2Stikes Jenderal A. Yani Cimahi, Indonesia
*E-mail: kikye_21@yahoo.co.id

Abstract
Depression is a major factor in late life suicide among older adults. A factor contributing to depressive symptoms among older adults who live in Cimahi is social support, which has been found to influence depressive symptoms. However, the association between social support and depressive symptoms in this population is still unclear in Cimahi, West Java Province, Indonesia. Objective: This study aimed to describe depressive symptoms and social support of older adults and to examine the relationship between social support and depressive symptoms among older adults living in Cimahi, West Java Province, Indonesia. A cross sectional design was used in this study. Participants were selected from 13 primary health centers in Cimahi using multi stage sampling method. A total of 243 older adults were recruited. Data were collected by questionnaires which were the socio-demographic data, Geriatric Depression Scale -15 and The multidimensional Scale of Perceived Social Support. Self-administered questionnaire was used to collect data. Descriptive statistics and Chi-square method was used for analysing data. The finding indicate that depressive symptoms of older adults were majority at a normal level (56.2%). Furthermore, 25.09% of older adults were found to have mild depressive symptoms. The mean of the social support factor for older adults was 52.8% received high social support. The results of this study found that social support of older adults living in Cimahi, West Java Province, Indonesia is significantly correlated with depressive symptoms ($\chi^2 =28.976$, $p < .01$). Community nurse should consider the effects of social support on depressive symptoms in the older adults. Relevant program at primary health centers should include this factor to alleviating depressive symptoms in older adults.

Key words: Depressive symptoms, older adults, social support.
The Influence of Playdough On the development fine motoric of Preschool age at Nurul Iman Kindergarten in Cimahi

1Rini Mulyati*, 2Setiawati, 3Bambang Wicaksono
1,2,3 Stikes Jenderal Achmad Yani Cimahi
*Email: tesarafkhani@yahoo.com

Abstract
Preschool age which is part of early childhood is a crucial stage of life in terms of a child's physical, intellectual, emotional and social development. Physical development refers to the advancements and refinements of motor skills. These advancements are evident in gross- and fine-motor skills. Fine motor skills involve the control of small muscles in the hands, feet, fingers, and toes. Fine motor skills can be stimulated by playing with play dough that includes kneading, rolling, molding, which can help strengthen their upper arm muscles, hands and fingers. Based on preliminary studies conducted at kindergarten Nurul Iman Cimahi, some students have not been able to perform some fine motor tasks that correspond with their age.

This research adopted Quasy Experiment method with one group pre-test and post-test design. Twenty nine pre-school age (4-6 years) children took part as samples, with purposive sampling method implemented. This research was carried out for a period of 30 minutes, 3 times in a week by involving the respondents in playing with playdough activity. From bivariate analysis using Wilcoxon test, it is revealed that p value was <0.05, indicates that there is an effect of playing with play dough on fine motor skills development in pre-school age children at Nurul Iman Cimahi Kindergarten.

It is suggested that teacher integrating playing with educational toys in their teaching learning process to enhance fine motor development of pre school age children at Nurul Iman Kinder Garten, Cimahi.

Key words: Pre School Age, fine motor Development, Playdough

Introduction
Preschoolers are early childhood with a sensitive period and a very important period for child development. This age has the development of child sensitivity, especially the sensory function, therefore, the children need to be optimally stimulated by parents and the environment through exploitation and learning activities. The developmental tasks must be achieved by pre-school by developing of motor skills both gross motor and fine motor involving large muscles and coordination of small muscles with eyes and hands respectively (Yusuf Syamsu, 2007). The development of fine motor is one of the most important factors in the development of the individual lead to impact on aspects of overall development (Soetjaningsih, 1995 in Yuniarti, 2015).

Good motor adaptive related to the child's ability to observe things, perform movements involving specific body parts and small muscles, require careful coordination, and do not require much energy for example inserting beads into bottles, sticking, cutting etc. (Susilaningrum, 2013). The matur of fine motor can be achieved by performing various activities involving motor activity. This motor maturity motivates the child to perform motor activities in a broad scope of physical activity continuously both involving rough and fine motor (Jamaris, 2006). The fine motor of the child can be developed optimally through directed stimulation.

Fine motoric that are continuously stimulated in preschoolers are required during school periods such as drawing, holding spoons and writing. When children develop fine motor skills will affect other developments such as language, social skills, and
confidence. In addition, this can encourage independent attitude of children that lead to complete their duties without depend on others (Mansur, 2011). Stimulation for fine motor can be done through a variety of games including playdough.

Playdough is one of the educational game tools that is safe and not harmful for children and lead to stimulate fine motor development. Playdough include activities such as squeezing, rolling, and printing various forms with the creativity of children, therefore, children not only gained pleasure, but also can enhance the sensory function and imagination of children. In addition, This can be strengthen upper arms and the muscles of the palms of the hands and fingers (Yuniarti, 2015). This is reinforced by research Rahmawati (2014) that playdough can give effects to improve fine motor ability child of medium tunagrahita year 1 in SLB Sekar Teratai 1 Randakan. Furthermore, the research of Difatiguna (2015) there is influence playdough activity using playdough on fine motor ability in child age 4 to 5 years in kindergarten Dharma Wanita Subdistrict of pesisir utara in West Pasir.

Playdough has many benefits for pre-school age children to train motor sensory ability, to know something object through touch, to learn about texture and how to create something with own creations and without any rules (Ali.N.R, 2016). According to Sari (2015) there is influence playdough to enhance creativity of children aged 5 to 6 years in Al-Azhar Kindergarten 1 Bandar Lampung. This can be evidenced by the ability of children to make shapes, make color combinations, and the ability of children to experiment.

In order to achieve its development to be developed in accordance with what is expected, children need a good stimulus from adults around him, especially parents, because it is undeniable that parents who spend much time with children and the first education obtained by children. Therefore, if parents are not appropriate to provide stimulus in children then it is feared aspects of child development can not develop optimally. In addition to parents, the role of teachers is very important in helping to develop aspects of child development, because in the School teacher is a substitute figure of parents who can be used as a model for children and can help children to develop aspects of its development. In an effort to help children, teachers should be able to create a learning environment that is fun for children and can stimulate child development, especially fine motor development.

Wong (2009) argues that the motor skills of children are said to be late, when the children should have been able to develop new skills, but he showed no progress. For instance, the children of school age about 6 years old have not been able to use stationery properly and correctly. Children who experience delays fine motor development, have difficult to coordinate hand movements and fingers flexibly. Also, Permendiknas No. 58 (2009) confirmed that in the age range of 4-5 years should be able to do activities related to fine motor including "Creating a vertical line, horizontal, curved, plagiarized, doing activities related to eye and hand, coordination to perform complex movements, performing manipulative movements to produce a form by using various media and expressing themselves by working art using various media ".

In fact, the result of observation conducted in kindergarten Nurul Iman with 47 children consisting of 4 classes with 13 children class A aged 4-5 years, 9 children B2 aged 6 years old, 13 children of B3 aged 5-6 years old, and 12 children of grade B4 aged 4-5 years old. The result has found that 14 children have still not optimal of using fine motor development for example the way holding pencil and irregular coloring way, unable to make a straight line well, can not cut neatly, and unable to stick the paper neatly. Playdough is one of the games that can be an alternative to optimize fine motor in Nurul Iman kindergarten because this game activity consists of squeezing, rolling & printing various forms with their own creations & capabilities that can strengthen upper arm, palm muscles and his fingers.
Delaying of fine motor development can cause deviation of growth and even can be interference inhibition of fine motor development, which is the based of children to enter school age.

**Discussion**

The results of the study are presented in table in accordance with the objectives of the study.

1. Univariate Analysis

a. Fine Motoric Development of Preschoolers before Intervention

<table>
<thead>
<tr>
<th>Variabel</th>
<th>N</th>
<th>Mean</th>
<th>Median (min-max)</th>
<th>Standard Deviasi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of fine motor aged</td>
<td>29</td>
<td>2.90</td>
<td>3.00 (1-5)</td>
<td>0.939</td>
</tr>
<tr>
<td>4-6 years old</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In table 1 above shows that respondents aged 4-6 years (N = 29) obtained a mean value of 2.90 & median value 3.00, minimum value 1 and maximum value 5 with a standard deviation of 0.939.

Based on the result of the research that respondents aged 4-6 years (pre-school) based on observation result of modification of DDST and KPSP showed in pre test stage from 29 respondents obtained 24 respondents (82.8%) not appropriate of fine motor development and 5 respondents (17.2%) appropriate of fine motor development. According to Adriana (2011), developmental delays can be caused by internal factors and external factors. One of the external factors that can impact on fine motor development is stimulation. This stimulation is greatly influenced by the initial time of stimulation; how long and how to do it.

Based on the result of data collecting conducted by observation of 4 years old, 2 respondents from 9 respondents who are able to follow questionnaire command that is putting 8 pieces of cube one by one above others without dropping cube but the children can not follow to draw circle, make a longer line, form of drawing added, drawing 3 parts of people. 5 years old only 2 respondents from 10 respondents who are able to follow command of drawing people with 6 parts but can not follow to point the longer line, drawing plus sign and rectangular shape. Furthermore, the age of 6 years can not follow the order of observation sheet, only 1 respondent from 10 respondents who can follow command to draw rectangle 4 and choose a longer line but most of them can not follow drawing 3 body parts and 6 body parts.

The result of pre test conducted by using observation sheet from DDST and KPSP modification of children aged 4-6 years have not reached 100%. The delay of development of fine motor can occur due to lack of training or stimulus in the school environment and provision of educational media as well as facilities and learning processes in schools. Furthermore, home environment that lack the educational game tools to enhance development of fine motor, can lead to lack fine motoric. By encouraging parents to do the stimulation and always accompany the child during fine motoric development directed regularly, the children can be confident and growth at the next age (Wong, 2009). Educational game media is an excellent stimulation to optimize the fine motoric development of children such as playdough.

This is supported by research Suryameng (2016), the playdough method can improve the fine motor skills of 14 respondents with 57.1 % pre-intervention and 93% obtained post intervention to. The development of fine motoric should be achieved in every child development their age. The stimulation factor is important for both fine motor
and growth of the children. Children who directed stimulation will quickly develop compared to children who are less / not getting stimulation (Soetjiningsih, 2012). The more stimulation given, the knowledge of the children becomes broader that lead to optimal the child’s development.

b. Fine Motoric Development of Preschoolers after Intervention

<table>
<thead>
<tr>
<th>Variabel</th>
<th>N</th>
<th>Mean</th>
<th>Median (min-max)</th>
<th>Standar Deviasi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of fine motor in aged 4-6 years old</td>
<td>29</td>
<td>4.28</td>
<td>4.00 (3-5)</td>
<td>0.591</td>
</tr>
</tbody>
</table>

In table 2 above shows that respondents aged 4-6 years (N = 29) obtained mean value 4.28 & median value 4.00, minimum value 3 and maximum value 5 with standard deviation 0.591.

The result of the research in Table 4.2 shows that from 29 respondents using DDST modification observation sheet and KPSP, the average of fine motor development after being given playdough intervention is 4.00 means categorized in fine motor development of 4-6 years old. Playdough is one of safe educational tools for pre-school children and can optimize children's development especially fine motor development and gives impact to children's physical, linguistic, cognitive and social development (Soetjiningsih, 2012).

The results of this study was supported by Ali (2016), that playdough is one type of child play that is beneficial for the development of brains and fine motor of pre-school age. Playing a playdough is directed to create something fun with his own creations and abilities. Playdough is a useful game for the ability of imagination, creativity, language skills and emotional social children.

The result of data collecting by giving educational game playdough, the ability of respondents in fine motor development has increased (93.2%) of 29 respondents; 27 respondents has experience improvement in fine motor development and only 2 respondents (6.9%) is not appropriate of development fine motor. This is due to factors such as lack of stimulation at home and parental assistance at the time of children practicing at home. Furthermore, the observation results obtained that Children aged 4 years still not able to draw people with 3 parts of the body.

The development of fine motor aspects stimulated through playdough that indirectly stimulates other aspects of development including interacting with their friends, conveying work, and showing to friends and teachers that they can make something in accordance with the wishes of children or teachers. This atmosphere is a very fun atmosphere for children to become more thinking, imagining, and increasingly independent. According to Soetjiningsing (2012) playing playdough makes children more creativity, improving the skills of small muscles, better adapting to stress and more responsible for the task given.

This is supported by research conducted by Arlinah (2013), by Improving Children's Creativity through Plasticine Playing in Group A In Paud Plus Al Fattah Kulon Jombang District in 2014, 20 respondents who conducted 3 meetings in a week with duration of 30 minute are quite effective to train the fine motoric development in pre-school age.

Ardatmika’s research (2016) showed that the average of ability fine motoric development increase significantly from cycle I to cycle II by 25.5% (73 % to 98.5 %) by playdough at group A children in Widhya Kumarasthana kindergarten.
According to researchers, educative game tools such as playdough is very useful for pre-school children to stimulate the smooth muscles and movement of the fingers. Yuniarti (2015) argues that playdough has functions to train, stimulate fine motor consisting of squeezing, rolling and scoring activities, stimulating creativity and imagination of children in order to prepare to practice hand skill such as writing, and other needs when entering school age.

2. Bivariate Analysis

Table 4.3 The Influence of Playdough To fine Motoric Development Of Pre School Age In Nurul Iman Cimahi Kindergarten

<table>
<thead>
<tr>
<th>Influence based on aged</th>
<th>N</th>
<th>Mean Rank Pre Test Dan Post Test</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-6 years old</td>
<td>29</td>
<td>0,00 – 12,50</td>
<td>0,001</td>
</tr>
</tbody>
</table>

Based on Table 3 The statistical test results obtained p value 0.001 (α <0.05), meaning there is influence playdough for fine motoric development in pre-school age children (4-6 years) in kindergarten Nurul Iman Cimahi.

Based on statistical test results obtained Ho rejected means there is influence playdough for fine motor development in pre-school age children (4-6 years) in kindergarten Nurul Iman Cimahi. The result of this study is similar with the theory of Yuniarti (2015), that the playdough that is educative game tools, is a safe game tool for pre-school age and has benefits to stimulate the development of physical, linguistic, cognitive, and social children that lead to optimize the development of children’s activities such as squeezing, rolling, and forming an object.

Moreover, when Playdough implemented, the children looks happy with this type of game for instance playing with their friends dan cooperative attitude at teh time of research. This because of playdough is not included in the curriculum Kindergarten Nurul Iman Cimahi.

The results of data collection showed that the children who has post test the fine motor ability of the child are able to perform the order in accordance with the observation sheet modifications between DDST and KPSP of fine motoric for pre-school age 4-6 years. In contrast, before given playdough interventions, most respondents included into the category of inappropriate fine motoric development. After being given playdough for 30 minutes /1 meeting held for 3 times, the children be able to write, draw (circle, rectangle, body parts), coloring, and draw straight line, can disstinguish short length of a line, and able composed of 8 level blocks. All respondents age 4 to 6 years were able to follow orders and enter into categories of fine motor development with 27 respondents (93.1%) and 2 respondents (6.9%) entered into the category inappropriate development .

This is supported by a study conducted by Difatiguna (2015), there is an influence between playdough activity with fine motor abilities in pre-school age. This is reinforced by Rahmawati (2014), in the learning motor skills, children need basic skills experience (locomotor, non locomotor and manipulative). Limitations experienced by children tunagrahita are among them is fine motor. Fine motor skills for the child’s tunagrahita is an important thing that must be had. The distribution of fine motor abilities
of children with tunagrahita after post intervention of playdough increase from 56.94% to 88.9%. As the result, it can be concluded that playdough can give effect in improving the fine motor ability in child tunagrahita.

Sari (2015) found there is influence playdough against aspects of fine motor development before and after the stimulation of pre-school age in kindergarten Al-Azhar 1 Bandar Lampung in academic year 2014/2015. The results of observations made before using playdough (plastisin) have a percentage of 30.21%, while the observations made after being intervention with playdough (plastisin) has increased to 71.88%. It can be concluded that there is influence playdough against aspects of fine motor development in kindergarten Azhar 1 in Bandar Lampung.

Playing activities are very effective for improving the fine motor skills associated with physical skills involving small muscles, eye and hand coordination (Yuniarti, 2015). Fine motor development is emphasized on the coordination of hand movements and fingers for example putting or holding an object. Children’s activities are very effective for monitoring children's developmental level, sensory and motor activity that is the largest component for the development of muscle functions (Soetjiningringsih, 2012).

According to the analysis of researchers with stimulation that is directed through playdough the small muscles of the child, is more stimulated including squeezing, rolling, and creating a form in accordance with the imagination and creativity. As consequence, this can have an impact on children muscle strength at the time of writing and the ability to follow orders in the observation sheet.

Researchers can see that the ability of pre-school age children (4-6 years) that in pre test, most children are not able to draw 3 to 6 body parts, to arrange 8 beams on it, to draw rectangles. Whereas, at post test, most children are able to do well when making a circle, showing longer lines, making rectangles, drawing people at least 3 to 6 parts of the body and arranging 8 blocks above.

This is in accordance with the theory of Sukarmin (2009), that educational game tools can optimize development of children by age and developmental level that is useful for the development of physical, language, cognitive, and social aspects. The playdough is one of the educational games suitable for optimizing fine motor development in pre school children for writing, drawing, and other needs at a later age.

**Conclusion**

1. Fine motor development in children aged 4-6 years before the intervention found 24 respondents (82.8%) of 29 respondents with categorical not appropriate.
2. The development of fine motor in children aged 4-6 years after intervention obtained 27 respondents (93.1%) of 29 respondents with categorical appropriate.
3. The result of statistical test is obtained p value 0.001 ($\alpha <0.05$) meaning that there is influence playdough to fine motor development in pre school age (4-6 years old) at Nurul Iman Cimahi Kindergarten (Ha accepted and Ho rejected).

**References**


