

# NurseLine https://jurnal.unej.ac.id/index.php/NLJ Journal

Volume 8 Issue 2 November 2023



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**Published by:**  
**Faculty of Nursing Universitas Jember**  
**in collaboration with**  
**The Indonesian Nurses Association (PPNI) District of Jember**

NurseLine Journal | Vol.8 | No.2 | Nov 2023

p-ISSN 2540-7937  
e-ISSN 2541-464X



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**LADO BALA FOR CHILDREN IN THE AGRONURSING AREA**

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**ABSTRACT**

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**Article Info:**

Submitted: 20-07-2023

Revised: 13-11-2023

Accepted: 15-11-2023

<http://doi.org/10.19184/nlj.v8i2.41688>

Lado Bala (Laydough made from natural ingredients) is the development of play media using natural materials in agricultural areas. Playing is the main activity for children, one of which facilitates development. Fine motor development takes longer to achieve, so stimulation is needed, one of which is playing. Playing is also part of the intervention for anxiety problems in children. The research aims to analyze the development of Lado Bala play therapy (pLAYdough made from natural ingredients) on fine motor development and anxiety levels in children in agricultural areas. This research is a quasi-experiment research with one group pretest-posttest design. Respondents were 78 preschool-age children using a purposive sampling technique. The measuring tools used are the DDST sheet to assess development and the Faces Image Scale (FIS) to assess anxiety. The newest thing in this research is that the media used is the result of research development, namely playdough with natural ingredients, namely wheat flour, salt, food colouring, and warm water by utilizing local resources and wisdom in the agronursing area, namely using coconut oil which is safe and beneficial for children's skin health. The data obtained were analyzed using the Wilcoxon signed ranks test to determine the influence between variables. The analysis results obtained were  $p=0.001$ , which stated that there was an influence of playdough development on fine motor development and anxiety levels in children in the agricultural area. Playing Lado Bala facilitates children's development through squeezing, shaping and increasing creativity in children, as well as making children feel happy it can reduce anxiety in children. Playing ladobala is a form of stimulation for fine motor development and is an intervention to reduce anxiety in preschool children in agronursing areas.

**Keywords:**

Agronursing, Anxiety, Fine motor development, Playdough

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## BACKGROUND

Playing is the main activity for children because playing facilitates growth and development in children. The development of fine motor skills plays a role in supporting children's skills in sharing things, however, the development of fine motor skills is slower than the development of gross motor skills in children. Fine motor skills are physical skills that involve small muscles and hand-eye coordination. Fine motor activities are skills that require the ability to coordinate or regulate small/fine muscles, for example, related to efficient, precise and adaptive eye and hand movements. Motor skills develop in line with nerve and muscle maturity. Therefore, every movement a child makes, no matter how simple, is the result of a complex interaction pattern of various parts and systems in the body that are controlled by the brain (Suriantoso et al., 2016). If fine motor skills are not sharpened or improved, it can result in difficulties when participating in learning activities such as writing and drawing. Fine motor development is an aspect that needs to be stimulated, one of which is through play therapy.

Based on observations when conducting a preliminary study, researchers found that there were several preschool children or children with KB (Play Group) who often experienced anxiety and disinterest in the development of fine motor skills which was highlighted. Most pre-school children have hand movements that still look stiff and slow and the children are still unable to focus on the objects they are holding so that the direction they are going is irregular (Shadrina Nurul, 2023). Preschool age is an age that is vulnerable to experiencing feelings of anxiety or anxiety, which causes them to experience changes in character such as being moody, and emotional and sometimes preferring to stay alone and not do as much as possible (Padila et al., 2019). According to (SIKI, 2018), the action plan for anxiety problems can include several actions, including anxiety reduction and distraction techniques. In the distraction technique, there are several components, one of which is playing. According to Alini, in 2017 a possible implementation is distraction therapy using play. Various kinds of games help children to improve fine motor skills and reduce anxiety levels in children.

Playdough is a game medium to help children practice fine motor skills (Musviro et al., 2022). Playing playdough is playing through dough. Playdough is play dough or play plasticine which is a modern form of clay toy. The media used in playing playdough currently is the finished product. Research-

ers in this study carried out development using playdough with natural ingredients. From this background, researchers want to further analyze the development of Lado Bala (Laydough made from natural ingredients) on fine motor development and anxiety levels in children in the agronursing area.

## METHODS

This research is a quasi-experiment research with one group pretest-posttest design. The respondents in this study were 78 preschool children using a purposive sampling technique. The measuring tools used in this research were the DDST sheet to assess development and the Faces Image Scale (FIS) to assess anxiety. The newest thing in this research is that the media used is the result of research development, namely playdough with natural ingredients, namely wheat flour, salt, food colouring, and warm water by utilizing local resources and wisdom in the agronursing area, namely using coconut oil which is safe and beneficial for children's skin health.

The data collection process began with obtaining ethical approval. This research received ethical approval by the Health Research Ethics Committee, University of Jember, Faculty of Nursing No. 247/UN25.1.14/KEPK/2023. After that, the researcher processed the research permit at the Lumajang Regency Health, Population Control and Family Planning Service, then after obtaining the permit, the researcher processed the permit at the Rogotrunan Community Health Center. After obtaining respondents according to the criteria and agreeing to informed consent, data was collected from the DDST and Faces Image Scale (FIS) sheets of respondents in the agronursing area. The data obtained were analyzed using the Wilcoxon signed ranks test to determine the influence between variables.

## RESULTS

### Characteristics of Respondents

The respondents in this study were preschool children aged 3-5 years in the Jogotrunan Lumajang agriculture area. Based on table 1 states that most of the respondents are female, namely 46 children (59%), and most respondents aged 3 ? 4 years as many as 48 children (61%).

### Effect of Playing Lado Bala on Reducing Anxiety Levels

Based on the results of the analysis using the Wilcoxon Test in Table 3, information was ob-



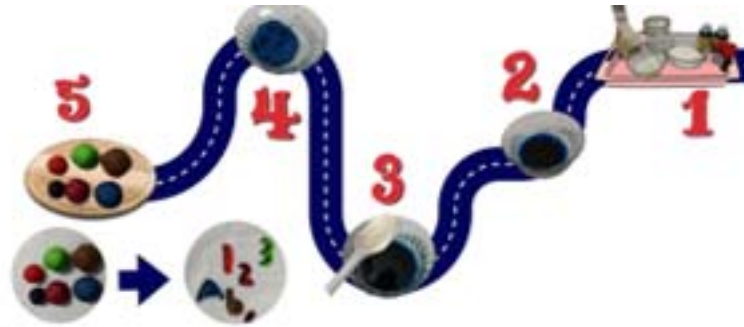


Figure 1. Media Ladobala (Source: Personal)

Table 1. Frequency Distribution of Respondent Characteristics Based on Sex and Age

Characteristic	f	%
Gender		
Male	32	41
Woman	46	59
Age (Years)		
3 ≤ 4	48	61
4 ≤ 5	30	39
5 ≤ 6	0	0

Table 2. Analysis of the Effect of Playing Lado Bala on Reducing Anxiety Levels in Children

Variable	Mean Pre-post test	Z	Sig
Anxiety	39.23	-6.094	0,001

Table 3. Analysis of the Effect of Lado Bala Play on Fine Motor Development in Children

T	Mean Pre-post test	Z	Sig
Fine Motor	42.48	-5.757	0,001

tained that the significant level for the anxiety variable was 0.001 so it can be concluded that there is an effect of Lado Bala play therapy on reducing anxiety levels in the agricultural area.

### Effect of Lado Bala Play on Fine Motor Development

Based on the results of the analysis using the Wilcoxon Test in Table 4, information was obtained that the significant level for the fine motor development variable was 0.001, namely p value < 0.05 so it can be concluded that there is an influence of playing Lado Bala on fine motor development in children in the agricultural area.

### DISCUSSION

Based on Table 1, most of the respondents were female and aged 3 years. 3 years is preschool

age, according to (Ismawaty, 2023) early childhood education is guidance aimed at children aged 0 to 6 years to achieve maximum and complete growth and development.

Table 2 explains that there is an influence of Lado Bala play therapy on reducing anxiety levels in children in the agriculture area. Anxiety experienced by children is a feeling of worry or fear and anxiety accompanied by physical reactions whose causes are sometimes not specific or unknown to the child. According to (Nugroho & Rofiqoh, 2021) the causes of anxiety in children are changes in the environment and children's health. Other causes of anxiety are influenced by many factors, both in terms of adaptation to new people, the environment and parental assistance (Pangesti et al., 2022). Pre-school age children have different characteristics and characteristics from adults, where at this age children will always be alert and always be careful of things that

they think will hurt or injure the child, so that feelings of anxiety will arise in the child. This feeling of anxiety can cause changes in their environment that are unpleasant. Play therapy is a therapy to overcome anxiety in children, by playing children will be released from the feelings of tension and stress they experience. Playing can distract children.

Table 3 states that there is an influence of playing ladobala on the development of fine motor skills in children in the agriculture area. Research (Hakim et al., 2022) states that fine motor skills are actions that require the use of hand or finger movements, along with the integration of visual perception which allows hand and eye coordination to ensure appropriate physical responses. Fine motor skills are considered small muscle movements that involve using the hands and fingers together to perform movements. Motor skills at pre-school age need to be trained and honed to develop motor skills in children (Musviro et al., 2023).

Play therapy that is suitable for pre-school age children is skill play, where this game uses a lot of children's motor skills, one of which is playing with playdough. This game is also educational. Educational games play an important role in the development of children's motor skills (Nurherliyany et al., 2022). The soft and easy-to-mould texture makes children like it, but the composition is not good if the child eats this material. A play tool that has the same texture and function as plasticine but is made from safe materials is flour playdough (Difatiguna, et al, 2015). Therefore, researchers developed playdough with a safe material called Lado Bala.

Lado Bala is an abbreviation of "natural-based playdough" which comes from play which means playing while dough means dough or plasticine. If interpreted as a whole, playdough is playing using dough or plasticine which is easy to shape according to the child's wishes and creativity. The playdough in this research uses natural ingredients. The use of natural ingredients is safe and easy to find around us (Deen et al., n.d.). Playdough made from food ingredients such as wheat flour and food colouring is safe for children to play with (Putri et al., 2021). The media used utilizes local resources and wisdom in the agronursing area. Agronursing is agricultural-based nursing services and nursing care (Anna Permatasari Kamarudin et al., 2023).

The results of the research show that there is an influence of playing Lado Bala (playdough made from natural ingredients) on the development of fine motor skills in children in agricultural areas. Playdough is easy to play with and loved by toddlers.

By using playdough, children can express their creativity through three-dimensional creations. Playing with playdough is an activity that is suitable for children because it is fun and the material used is quite soft, elastic, easy to shape and safe for children. In this game, children make movements of squeezing, twisting, moulding and forming with playdough, thereby training the fine muscles of young children so their fine motor skills can develop well (Musviro et al., 2022). Playing Lado Bala facilitates the development of fine motor skills in children through squeezing, shaping and increasing creativity in children, as well as making children feel happy. Lado Bala can help aspects of children's overall development. The activity of forming playdough can develop eye and hand coordination abilities as a stimulating exercise for fine motor development. The types of movements when squeezing will form coordination, then the child can complete tasks related to himself (Bondi et al., 2022).

Through kneading activities, children's fine motor skills can be improved because children squeeze their fingers so that the dough becomes even (Sari & Rakimahwati, 2019). This is reinforced by Rakimahwati's (2012) statement explaining that the emphasis on developing children's fine motor skills is on coordinating fine motor movements, in this case, related to the activity of placing or holding an object using the fingers. The activity of forming playdough can develop eye and hand coordination abilities which can be used as a stimulating exercise for fine motor development.

## CONCLUSION

Lado Bala is a development of playdough playing media using natural materials. There is an influence of the development of Lado Bala on fine motor development and reducing anxiety levels in children in the agriculture area. Playing ladobala can be a form of stimulation for fine motor development in preschool children in agronursing areas and ladobala media can be made by children and their parents using materials that are easy to obtain and safe for children.

## ACKNOWLEDGMENTS

Thanks to the University of Jember, Faculty of Nursing for facilitating this research. Acknowledgements to the Rogotrunan Lumajang Health Center, Poskelkel, Cadres and the Rogotrunan Lumajang Play Group (KB) teacher who have facili-

tated and assisted the research.

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