Jurnal Arjuna: Publikasi Ilmu Pendidikan, Bahasa dan Matematika
Volume 1 No 4 Agustus 2023
e-ISSN : 3021-8136, p-ISSN : 3021-8144, Hal 37-43
DOI: https://doi.org/10.61132/arjuna.v1i4.

The Influence Of One Hole Game Media In Developing Fine Motor Skills In Early Childhood

Susanto Susanto
UIN Sayyid Ali Rahmatullah Tulungagung, Indonesia
Email: susanto.susan@gmail.com

Abstract *Introduction: Children's fine motor development is influenced by the use of educational games. There are types of educational games used in stimulating children's fine motor development, including one hole games. But unfortunately in the field, activities that can stimulate children's fine motor development are still not done adequately, in this case the frequency is still less than what is used. So that children's fine motor development becomes less than optimal. Aim: This study is to determine the effect of using educational game tools type one hole game on fine motor development of preschool children. Method: This study used a quasi experiment design with a pretest and posttest design. The sampling technique used purposive sampling of 25 respondents in the one hole game intervention group. Data collection methods using questionnaires and by observation. The assessment uses the DENVER II instrument sheet which is taken from the fine motor measurement aspect. Data analysis used was 2 dependent samples t test and 2 independent samples t test for bivariate. Result: The results prove that there is an effect of educational game intervention type one hole game on fine motor development of preschool children. Conclusion: Based on the results of the study, there is an effect of one hole game on fine motor development. To stimulate children's fine motor development, it is necessary to increase the frequency of games.*

Keywords: Fine Motor, Learning Media, One Hole Games.

Abstrak Pendahuluan: Perkembangan motorik halus anak dipengaruhi oleh penggunaan permainan edukatif. Terdapat jenis permainan edukatif yang digunakan untuk merangsang perkembangan motorik halus anak, diantaranya adalah one hole games. Namun sayangnya di lapangan, kegiatan yang dapat merangsang perkembangan motorik halus anak masih belum dilakukan secara memadai, dalam hal ini frekuensinya masih kurang dari yang digunakan. Sehingga perkembangan motorik halus anak menjadi kurang optimal. Tujuan: Penelitian ini untuk mengetahui pengaruh penggunaan alat permainan edukasi tipe one hole game terhadap perkembangan motorik halus anak prasekolah. Metode: Penelitian ini menggunakan desain quasi eksperimen dengan pretest and posttest design. Teknik pengambilan sampel menggunakan purposive sampling sebanyak 25 responden pada kelompok intervensi one hole game. Metode pengumpulan data menggunakan kuesioner dan observasi. Penilaian menggunakan lembar instrumen DENVER II yang diambil dari aspek pengukuran motorik halus. Analisis data yang digunakan adalah uji t 2 sampel dependen dan uji t 2 sampel independen untuk bivariat. Hasil: Hasil penelitian membuktikan bahwa ada pengaruh intervensi game edukasi tipe one hole game terhadap perkembangan motorik halus anak prasekolah. Kesimpulan: Berdasarkan hasil penelitian, terdapat pengaruh permainan satu lubang terhadap perkembangan motorik halus. Untuk merangsang perkembangan motorik halus anak, perlu dilakukan peningkatan frekuensi permainan.

Kata kunci: Motorik halus, Media pembelajaran, Permainan satu lubang.

Introduction

The world of children cannot be separated from playing activities, it makes children more selective in choosing various types of play activities. In line with the opinion of Pratiwi (2017) the world of children is the world of play. This is of course we understand that children are not easily tired when they are playing, this is in accordance with the energy surpulus theory that we know. Energy surplus theory itself is one of the theories that reveals that children have excess energy, with the excess energy used by children for play activities (Muslihin, 2020). In addition, with a variety of motion experiences for children through play activities, it can help in the process of bone density. The purpose of early childhood play cannot be separated from

Received Juni 20, 2023; Revised Juli 21, 2023; Acapted: Agustus 19, 2023
* Susanto, *susanto.susan@gmail.com*

the psychological aspect, where by playing children can train emotional restraint, self-confidence, responsibility and various other characters (Susanto et al., 2021).

Various types and kinds of games today have sprung up even to viral in various media, in addition, the lato-lato game fever is not only loved by children but also adults like the game that is currently viral. According to Mayesty, play is an activity that children do all day, because for children play is life and life is for play. In addition, playing through traditional games can stimulate children's character and critical thinking (Susanto et al., 2022). One of the games that is currently viral is the lato-lato game, this game has a very high hypnotic power, because it is very interesting and makes many people challenged to try to play it. Lato-lato itself relies on stable fingers and balance in order to maintain the rhythm of the collision of two plastic balls.

The game is useful in training fine motor skills, and not only that, it can also entertain the mood. But behind the benefits themselves we hear and see in various media, that the lato-lato game itself if it is less wise in playing it causes various kinds of injuries to the person playing it as an example of injury to the face area, injury to the head area and injury to the hands. Indeed, games for children must of course meet the rules of safety in playing the aim is to minimize the risk of injury by means of, such as the use of good safety equipment, materials or tools used in the game are not pointed, and always follow the rules of play.

Fine motor is the process of contraction of small muscles as a result of the activity of the body in motion. Fine motor is a movement skill that involves small muscles consisting of coordinated eye and hand coordination in a balanced manner (Sutini et al., 2018). In addition, fine motor is a movement that involves certain parts and performs small muscle movements (Primayana, K. H. 2020). One part of the fine muscles that need to be trained is the fingers. This requires media or tools as training in stimulating these fine muscles. Elizabeth Hurlock (1950), mentions several reasons for the function of motor development in the constellation of personal development: First, motor skills keep children entertained and give them a feeling of joy. Throwing and catching balls, playing one hole games, and using other tools.

One of the media needed is by making a game tool that can provide benefits to train fine motor skills, especially in children. As for other benefits of fine motor training on children's fingers, among others, first, it can train hand coordination. Second, fingers are easily adapted from activities that require fingers such as writing, cutting. Third, it is not easy to get tired when doing activities using fingers. By training fine motor skills in early childhood, it aims to develop children's fine motor skills (Robingatin et al., 2022). According to Endang Rini Sukamti (2015: 15) that motor development is a golden process or movement that directly involves the muscles to move and the innervation process that becomes a person able to move

his body. According to Beaty (2011: 55), fine motor development in children is the child's ability to show and obtain muscle movements in the form of coordination, dexterity, and dexterity in the use of hands and fingers.

Educational games need to be introduced to preschool children, this can improve children's cognition (Veronica, N. 2018). Educational games are games that have educational elements, therefore it is necessary to make a game that can accommodate the development and growth of children (Aprilianto, A., & Mariana, W. (2018). Thus, making educational games does not have to be at a high cost, in this case we can make a game that utilizes household waste materials to be used as educational games.

Leftover building materials are often found at home as an example of plywood and wood boards. Leftover materials are materials that come from items that are no longer used (Nurhafizah, 2018). Not used anymore (Nurhafizah, 2018). Thus, these leftover items can be utilized to make various kinds of useful items, one of which is by making play tools for children. The making of this game tool aims to train fine motor skills, especially on the fingers. This game by the author himself is named one hole game, which man equipment needed in playing consists of a rectangular board with a size of 40x45 cm, and colorful plastic coin seeds with a diameter of 2 cm. The following one hole game is shown in Figure 1.

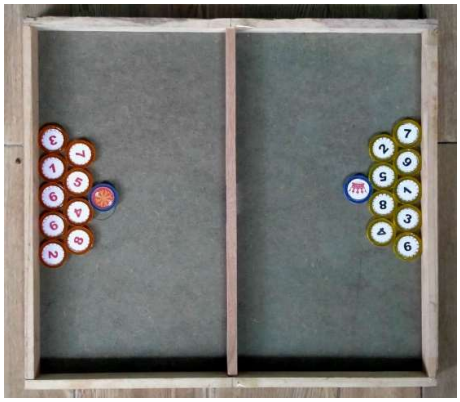

Figure 1: One Hole Game Board

The reason this game is called 'one hole game' is because this game is characterized by only one hole to insert coins. Therefore, the author wants to know how much influence the one hole geme game has in developing fine motor skills in early childhood.

Method

This study used a quasi-experimental research design using a pretest and posttest design. To measure the pretest and posttest using the t test where the dependent sample t test is used to see if there is an effect of pretest and posttest on the intervention group given the one hole

game. The population in this study were 25 preschool children. The sampling technique in this study used Purposive sampling, which is a method of selecting samples based on certain goals or objectives determined by the researcher. The samples in this study were preschool children with inclusion criteria. Based on the calculation of the minimum sample according to Sugiyono (2012) and based on the calculation of the sample formula, a sample of 25 people was given the treatment of one hole game. The study was conducted for 1 (one) month, the assessment used a biodata questionnaire sheet of preschool children, instruments to see the fine motor development of preschool children (modification of Denver II fine motor aspects) and procedures for using educational game tools one hole game. Data analysis used was univariate and bivariate analysis with t-test.

Result

1. The average fine motor development of children before and after being given educational games of one hole game.

Table 1. Mean fine motor development of children before and after being given the one hole game

Variabel	Mean	SD	Minimal-Maksimal	95%CI
Pretest	3,35	0,493	3-4	3,10-3,61
Posttest	1,88	0,600	1-3	1,57-2,19

Based on table 1. by paying attention to the results of the distribution of values on the pretest of educational game intervention type one hole game, the pretest average is 3.35, (95% CI = 3.10-3.61) with SD 0.493, the lowest score value is 3 and the highest is 4. From the results of the interval estimation, it is concluded that 95% is believed that the average pretest of children's fine motor development with the one hole game educational game intervention group is between 3.10 and 3.61. While the results of the distribution of values on the posttest after the intervention of educational games of the one hole game type obtained an average of 1.88, (95% CI = 1.57-2.19) with SD 0.600, the lowest score value is 1 and the highest is 3. From the results of the interval estimation it is concluded that 95% is believed that the average posttest of children's fine motor development with the intervention group of educational games of one hole game is between 1.57 to 2.19. From the results of the interval estimation, it was concluded that 95% believed that the difference in the average increase in children's fine motor development before and after the intervention of educational games of the one hole game type was between 1.53 and 1.42.

2. Analysis of the effect of using educational game tools one hole game on fine motor development of preschool children

Table 2. Results of the effect of using one hole game tools on fine motor development

Variabel	Mean	SD	SE	P value	N
Pretest	3,35	0,493	0,119	0,0001	25
Posttest	1,88	0,600	0,146	0,0001	25

Based on table 2. shows that the average fine motor development before the one hole game or pretest is 3.35 with a standard deviation of 0.493. After the one hole game or posttest, the average fine motor development was 1.88 with a standard deviation of 0.600. It can be seen that the mean difference between pretest and posttest is 1.47 with a standard deviation of 0.624. The statistical test results obtained a value of p = 0.0001, it can be concluded that there is a significant difference in the average fine motor development before and after the one hole game.

Discussion

The results showed that in the one hole game intervention group before being given the intervention of educational games of the one hole game type, namely with an average value of 3.35. While after being given the intervention of educational games of the one hole game type, the average value is 1.88. From the results of the interval estimation, it is concluded that 95% is believed that the average change in children's fine motor development before the intervention of educational games of the one hole game type is between 3.10 to 3.61. Then from the results of the interval estimation it is concluded that 95% is believed that the average fine motor development of children after the intervention of the type of one hole game is between 1.57 to 2.19. So it can be seen that the difference in the average increase in fine motor development before and after the intervention of educational games of the one hole game type is between 1.53 to 1.42. From the results of the study, it was found that 25 people in the one hole game intervention group consisted of 11 boys and 14 girls, it was found that most of the children before being given educational games of the one hole game type, their fine motor skills were moderate, namely 11 respondents (64.7%), the rest were 6 (35.3%) respondents had low fine motor development. Then after the intervention of educational games of the one hole game type, it was found that most of the fine motor children were in the high criteria, namely 11 (64.7%) respondents, then children with very high fine motor development were 4 (23.5)

respondents and the rest were 2 (11.8%) respondents who had moderate fine motor development.

One hole games are a form of play that is highly regarded as a medium that can help develop fine motor skills and with coordination between hands and eyes, arranging one hole games into the shape of an animal, plane, ship and so on. One hole game is one type of educational game tool that is interesting to introduce to pre-school children. In line with the results of this study, that playing one hole games can stimulate or improve children's fine motor skills. Playing one hole game is an activity where children play a game of inserting coins in one hole towards the opponent's area. In inserting coins one hole game involves or relates to the small muscles of the child, especially the hands and fingers. Through the activity of playing one hole game, without realizing it, children will actively learn to use their fingers to arrange the right picture and this can unconsciously train eye and hand coordination well so that it can stimulate children's fine motor skills. The results of this study are in line with the results of Pramono's (2008) research on the effectiveness of educational game tools of the type one hole game on fine motor development in children aged 4-5 years, stating that there is an effect of educational games one hole game on fine motor skills of children aged 4-5 years.

Conclusion

The results of the research Media one hole game is highly recommended for use in PAUD schools, because the media game one hole game is one form of game that has educational values. In the one hole game requires accuracy, children are trained to insert coins or pins into one hole, because this activity children must concentrate when inserting coins or pins into the hole using their fingers to enter the opponent's area. By playing the one hole game, children learn to understand the concepts of fine motor, accuracy and addition. Of course, the shape of the pins used in the one hole game is more diverse and has more striking colors.

Acknowledgments

We are grateful to Clering Pre-School for granting permission.

Conflict of Interest

The authors declare that there is no conflict of interest.

Reference:

Aprilianto, A., & Mariana, W. (2018). Permainan Edukasi (Game) Sebagai Strategi Pendidikan Karakter. *Nazhruna: Jurnal Pendidikan Islam*, *1*(1), 139-158.

Essa, A., & Ayad, H. (2012, April). Student success system: risk analytics and data visualization using ensembles of predictive models. In *Proceedings of the 2nd international conference on learning analytics and knowledge* (pp. 158-161).

Hurlock, E. B. (1950). *Child development*. Ratna Sagar.

Pratiwi, W. (2017). Konsep bermain pada anak usia dini. *TADBIR: Jurnal Manajemen Pendidikan Islam*, *5*(2), 106-117.

Muslihin, H. Y. (2020). Bagaimana Mengajarkan Gerak Lokomotor Pada Anak Usia Dini?. *Jurnal Paud Agapedia*, *2*(1), 76-88.

Nurhafizah, N. (2018). Pelatihan pembuatan media pembelajaran anak usia dini menggunakan bahan sisa. *Early Childhood: Jurnal Pendidikan*, *2*(2b), 44-53.

Pramono, I. S. (2008). *Pesona Sansevieria*. AgroMedia.

Primayana, K. H. (2020). Meningkatkan Keterampilan Motorik Halus Berbantuan Media Kolase Pada Anak Usia Dini. *Purwadita: Jurnal Agama dan Budaya*, *4*(1), 91-100.

Robingatin, R., Asiah, S. N., & Ekawati, E. (2022). Kemampuan Motorik Halus Anak Laki-Laki dan Perempuan. *BOCAH: Borneo Early Childhood Education and Humanity Journal*, *1*(1), 55-63.

Sukamti, E. R. (2015). Perbedaan Tingkat Kebugaran Mahasiswa PKO 2010 Kuliah Tahun Pertama. *Jorpres (Jurnal Olahraga Prestasi)*, *11*(1), 23-34.

Sutini, A., & Rahmawati, M. (2018). Mengembangkan kemampuan motorik halus anak melalui model pembelajaran BALS. *Cakrawala Dini: Jurnal Pendidikan Anak Usia Dini*, *6*(2).

Susanto, S., Siswantoyo, S., Prasetyo, Y., & Putranta, H. (2021). The effect of circuit training on physical fitness and archery accuracy in novice athletes. *Physical Activity Review*, *1*(9), 100-108.

Susanto, S. Traditional Sport-Based Physical Education Learning Model in Character Improvement and Critical Thinking of Elementary School Students. *SPORTS SCIENCE AND HEALTH*, *24*(2), 165-172.

Beaty. 2011. Motorik Halus:Petunjuk bagi Guru dan Orangtua. Jakarta: PPs UNJ.

Sugiyono. 2014. Metode Penelitian Kuantitatif Kualitatif dan kombinasi (Mixed Methodes). Bandung: Alfabeta.

Veronica, N. (2018). Permainan Edukatif Dan Perkembangan Kognitif Anak Usia Dini. *Pedagogi: Jurnal Anak Usia Dini Dan Pendidikan Anak Usia Dini*, *4*(2), 49-55.

Information Outhor:

Susanto, Email: susanto.susan@gmail.com Orcid: https://orcid.org/**0000-0002-1239-6597**, Sayyid Ali Rahmatullah State Islamic University Tulungagung, Tulungagung, Indonesia