Journal of Advanced Zoology



ISSN:0253-7214 Volume 44 Issue 2 Year 2023Page 512-516

Effects Of Goal Oriented Activities InCoperated Into Play On Motor And Psychosocial Skill In Children

Neha Chauhan¹ Prof.(Dr.) R. k. Sharma², Dr. Chhavi Kalra³, Dr. Ankita Sharma⁴

MOT (Neurology)Student,Santosh Occupational therapyCollege¹
Dean, Paramedical, Principal Santosh Occupational Therapy College Ghaziabad²
AssistantProfessor (Neurology)³,
Assistant Professor (Neurology)⁴

*Corresponding Author:-Neha Chauhan , Prof. (Dr.) R. k. Sharma
*MOT (Neurology) Student, Santosh Occupational therapyCollege ; Dean, Paramedical, Principal Santosh
Occupational Therapy College Ghaziabad

Abstract

Goal-oriented play activity encourages children to exercise and triggers the movement of body muscles. Active muscles are stronger, more agile, faster, and more powerful. The purpose of this study is to determine that goal-oriented play activity in early childhood improves Motor and psychosocial skills.

Methods- Fifty children aged 3–6 years old were recruited and took part in a set of training activities divided into Posts 1–5. To pass each post, a child had to jumping jacks, jump and turn about face, hopping on one foot, "prehistoric animal" (get down on hands and feet with knees straight then move in sequence hand-hand-foot-foot), scarf twirl (twirl scarf with arm out straight while walking in a straight line), tiptoe balance Training was given three times every week for 4 weeks. Data collected consisted of the difference in PSAS scores between POST and PRE stages (DIFF-PSAS) also shows a significant difference, with the Experiment group (9.20) showing a larger decrease than the Control group (2.56) (p < 0.001).

Result- Overall, these results suggest that while there were no significant differences between the Control and Experiment groups at the PRE stage for both CAS and PSAS measures, the intervention had a significant impact on the PSAS scores at the POST stage, with the Experiment group showing a larger decrease in PSAS scores compared to the Control group. The trend towards significance in the DIFF-CAS scores also suggests a potential impact of the intervention on CAS scores.

Conclusion: All six training activities conducted for 4 weeks provided significant improvements in the motor and psycho-social skills areas in children aged 3–6 years old.

CC License CC-BY-NC-SA 4.0

[Keywords-motor skills; psychosocial skills; childhood; goal-oriented play activity]

Introduction

In the recent times as the increasingly advancement in every field, every parent has increased focus on the growth and development of their child and want optimal development since the child starts attending school. Parents even start preparing for everything so that their child can get the best education since child is born into the world. As the awareness of different issues and challenges a child can face is increasing in the modern times, especially related to the gross motor skills of children it has started to gain more concern than ever. As per census 2011, Indian population was reported to be 1.21 billion comprising of 164.5 million children in the age of group 0-6 yr. and 372.4 million in the age group 0-14 yr. which constitute almost 14 percent and 31 percent of the total population respectively. Out of these 74 percent of children lives in rural areas whereas the rural population constitute 69 percent of the total population of India. All this data suggest that children are an important part of the total population of our country as of any other country in the world. Also, as the last census was done almost 13 years ago, this number has significantly increased in this period of time. So, focusing on the overall development of children whether its educational, physical or motor skills is an important point of discussion for researchers as well as healthcare providers. One of the many ways that are helpful in the overall development of children are activities or games that are being taught to them or played by them since their early childhood. It's also very effective and has been in practice for a long time since children find playing to be a fun and exciting activity. It's appropriate to say that playing is a child's world because it is a necessary activity. During these activities and games children have an opportunity to adapt to others and the environment through playing, which significantly has a positive impact on their motor development, thinking ability, and ability to solve problems [1]. However, parents still prioritize their children's academic abilities in reading and math because they believe that having more abilities means being good at them^[2]. This assumption is based on the premise that has been heard from generation to generation that playing is a waste of time. However, this assumption has started to change a bit by bit in many households and parents have started focusing on extracurricular activities equally. It has also been proven that a lot of children can benefit from more targeted and planned play, such as goal-oriented play activities.

Methods and Material

The methodology for investigating the effectiveness of dual-task training in improving motor and psychosocial skills in children in the Indian population would typically involve the following components: Study Design: A randomized controlled trial (RCT) design would be appropriate to evaluate the efficacy of dual-task training. Participants would be randomly assigned to either the intervention group receiving dual-task training or a control group receiving standard care or alternative interventions.2. Participant Recruitment: children age- 3 to 6yr, 3. Baseline Assessments: Baseline assessments would be conducted to evaluate participants' motor and psychosocial skills from the CAS scale and PSAS scale.

Data Analysis

Data analysis was done to compare pre post characteristics of both control and experimental group. Person correlation has been used to analyses the correlation of 2- Tailed test and mean standard deviation and the level of significance was set up to p value of both control and experimental group.

Result

Table- 10.1 Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean	P value
CAS- PRE	Control	25	53.00	7.136	1.427	0.431
	Exp	25	51.32	7.261	1.452	
CAS- POST	Control	25	55.24	6.778	1.356	0.674
	Exp	25	54.40	7.246	1.449	
DIFF- CAS	Control	25	2.24	1.268	0.254	0.079
	Exp	25	3.08	1.956	0.391	
PSAS- PRE	Control	25	72.52	5.973	1.195	0.816
	Exp	25	71.96	10.318	2.064	
PSAS- POST	Control	25	69.96	5.579	1.116	0.003
	Exp	25	62.76	10.080	2.016	
DIFF- PSAS	Control	25	2.56	1.828	0.366	<0.001
	Exp	25	9.20	4.282	0.856	

For the CAS measure, there is no significant difference in mean scores between the Control (53.00) and Experiment (51.32) groups at the PRE stage (p = 0.413). Similarly, at the POST stage, there is no significant difference in mean scores between the Control (55.24) and Experiment (54.40) groups (p = 0.674). However, the difference in CAS scores between POST and PRE stages (DIFF-CAS) shows a trend towards significance, with the Experiment group (3.08) showing a larger increase than the Control group (2.24) (p = 0.079).

For the PSAS measure, there is no significant difference in mean scores between the Control (72.52) and Experiment (71.96) groups at the PRE stage (p = 0.816). However, at the POST stage, there is a significant difference in mean scores between the Control (69.96) and Experiment (62.76) groups (p = 0.003), indicating that the intervention had an impact on the PSAS scores. The difference in PSAS scores between POST and PRE stages (DIFF-PSAS) also shows a significant difference, with the Experiment group (9.20) showing a larger decrease than the Control group (2.56) (p < 0.001).

Discussion

In this study, goal-oriented play activity considered of series of activities e.g. Jumping Jacks, Jump and turn about face, Hopping on one-foot, Prehistoric animal, Scarf Twirl and Tiptoe balance. The result of this study shows that there were significant differences (p<0.05) before and after the training was given. This shows that goal-oriented play activity can improve motor skill and psychosocial skills in early childhood (4-6) year old. This shows that goal oriented playful activity develops the motor skills such as walking on the balance beam, moving sticks, jumping goal post and throwing balls. It is also a part of educational and learning experiences that can be implemented easily in the pre-school. The skills learn in this period will be permanent and will provide the basis for new skills. Early childhood motor skill training can prove beneficial for physical literacy into adulthood as well as psychosocial development also.

CONCLUSION

Goal oriented play activity is a fun for children because it makes them interest to do the same activity and many benefits are gained through active play. The muscle ability to move will increase and since they stimulated, the child's motor ability will increase. The play activity training exercises in the four-week training program provided significant improvement in motor skills and psychosocial skills area of children aged 3-6 yr. the level of improvement both motor and psychosocial skills during early childhood may benefit from goal oriented active play and increase motor ability.

LIMITATIONS OF THIS STUDY

- This method has not been applied on older children
- This method only applied on the normal children
- This method hasn't been tried with self-regulation and home-based training
- This method focused on only psycho motor behavior but not on neuromuscular behavior
- It cannot measure the impact on cardiovascular, strength, duration, and endurance abilities.

FUTURE RECOMMENDATION OF THIS STUDY

- Improve children fine motor development
- Increase multiple intelligence consist of mathematical, intellectual and logical

References

- 1. Bergen, D. (2002). The Role of Pretend Play in Children's Cognitive Development. Early Childhood Research & Practice, 4(1).
- 2. Sutapa, P.; Pratima, K.W. Rosly, M.M.; Ali, S.K.S.; Karakauki, Improving Motor Skills in Early Childhood through Goal-Oriented Play Activity. Children 2021, 8, 994.https://doi.org/10.3390/children8110994
- 3. Ray D.C. Culturally and linguistically responsive play therapy: Adapting child-centered play therapy for deaf children. Int. J. Play. Ther. 2019; 28:79.
- 4. Mota J., Silva-Santos S., Santos A., Seabra A., Duncan M., Vale S. Parental education and perception of outdoor playing time for preschoolers. Mot. Rev. De Educ. Fascia. 2017;23: e101762. Doi: 10.1590/s1980-6574201700si0062.
- 5. St. John S. Factoring in fine motor: How improving fine motor abilities impacts reading and writing. Ill. Read. Counc. J. 2013; 41:134–146.
- 6. Roth K., Ruf K., Obringer M., Mauer S., Ahnert J., Schneider W., Graf C., Herbstreit H. Is there a secular decline in motor skills in preschool children? Scand. J. Med. Sci. Sports. 2010; 20:670–678. Doi: 10.1111/j.1600-0838.2009.00982.
- 7. Cristia A., Seidl A. Parental reports on touch screen use in early childhood. Plops ONE. 2015;10: e0128338. Doi: 10.1371/journal.pone.0128338.
- 8. Bergen D. Play as the Learning Medium for Future Scientists, Mathematicians, and Engineers. Am. J. Play. 2009; 1:413–428.
- 9. Mukherji P., Dryden L. Foundations of Early Childhood Principles and Practice. SAGE Publication; London, UK: 2014.
- 10.Sutapa P., Prasetyo Y., Pratima K.W., Karakauki M., Mustapha A., Idroos S.Z.S. Motor Development Index (MDI) Based on Combination of Human Development Index (HDI) and Sport Development Index (SDI) as a Success Parameter of Motor Development among Preschool Children: An Observational Study. J. Phys. Conf. Ser. 2020; 1529:032003. Doi: 10.1088/1742-6596/1529/3/032003.
- 11.Hong J.C., Hwang M.Y., Liu Y.T., Lin P.H., Chen Y.L. The role of pre-game learning attitude in the prediction to competitive anxiety, perceived utility of pre-game learning of game, and gameplay interest. Interact learn Environ
 - 2016 24:239-251. Doi: 10.1080/10494820.2013.841263.
- 12. Connelly J.A., Champagne M., Manningham S. Early childhood educators' perception of their role in Children's physical activity: Do we need to clarify expectations? J. Res. Child. Educ. 2018; 32:283–294. Doi: 10.1080/02568543.2018.1464979.
- 13. Goldstein J. Play in Children's Development, Health and Well-Being. Toy Industries of Europe; Brussels, Belgium: 2012.
- 14. Coker C.A. Motor Learning and Control for Practitioners. Routledge; London, UK: 2017.
- 15.Barded F., Huifen F., Deconinck F.J., De Martel Aer K., Seghers J., Lenoir M. Convergent and divergent validity between the KTK and MOT 3-6 motor tests in early childhood. Adapt. Phys. Act. Q. 2016; 33:33–47. Doi: 10.1123/APAQ.2014-0228.
- 16.Rudd J.R., Barnett L.M., Butson M.L., Farrow D., Berry J., Polman R.C. Fundamental movement skills are more than run, throw and catch: The role of stability skills. Plops ONE. 2015;10: e0140224.
- 17. Korsten J., Musiek M., Šťastný P., Gola's A. Fundamental motor skills of Czech children at the end of the preschoolperiod. ActaGymnica. 2017; 47:193–200. Doi: 10.5507/ag.2017.024.

- 18.Carlson A.G., Rowe E., Curby T.W. Disentangling fine motor skills' relations to academic achievement: The relative contributions of visual-spatial integration and visual-motor coordination. J. Genet. Psychol. 2013; 174:514–533. Doi: 10.1080/00221325.2012.717122.
- 19.Madrona P.G. Site development and teaching of motor skills in early childhood education. J. Arts Humanity. 2014; 3:09–20.
- 20. Payne V.G., Isaacs L.D. Human Motor Development: A Lifespan Approach. Routledge; London, UK: 2017