



Teaching Games for Understanding (Tgfu) Developing Gross Motor Skills in Physical Education

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Abstract

This study aimed to identify the TGfU approach to improving gross motor skills in elementary school children. The method used in this research is the experimental method. The population of this research data is third-grade students in elementary school, totaling 22 students with a research sample of 22 students with a total sampling technique. The research tool utilized for this purpose is a gross motor skill test (TGMD 2). Based on the results of the data analysis obtained and discussion of research, the TGfU approach affects children's gross motor skills. Although the study showed significant improvement, environmental factors, such as school, home environment, and parental influence, may affect the results. This study underscores the central role of play in developing children's motor skills, in line with previous research findings. Therefore, play-focused learning can effectively support children's gross motor development, but it is essential to be aware of other factors that influence the outcome.

Keywords: Gross Motor Skill, TGfU, Elementary School

INTRODUCTION

Physical education is an integral part of individual development in all stages of education. This program is about improving physical health and developing knowledge, students' physical experience, social interaction, and cooperation abilities. The importance of physical education programs influencing students' lifelong exercise habits cannot be ignored. In the context of physical education, several studies suggest that physical education activities can contribute positively to early childhood gross motor skills (Candra et al., 2023; Rinaldi & Yudanto, 2019), Improve sports skills in physical education learning (Mustafa & Sugiharto, 2020),. In research (Setiawan et al., 2020), The level of motor skills of elementary school students can be influenced by many things, such as movement experience, environment, and facilities for learning, so it also has an impact on learning

outcomes. From some of these studies, it can be concluded that physical education activities can majorly contribute to improving one's motor skills.

Motor skills are a critical factor in child development, covering various aspects such as social, physiological, psychological, and cognitive development. However, research shows a decline in children's motor skill levels, a cause for concern (Brian et al., 2019; Rehtik et al., 2019). Research also shows that assessments of gross motor skills in some countries, including low- and middle-income countries, are at average or lower-than-average levels (Bakhtiar, 2014; Jakiwa & Suppiah, 2020). This alarming condition is not limited to low- or middle-income countries. Countries like the Czech Republic (Rehtik et al., 2019) and Singapore (Mukherjee et al., 2017) also face similar problems regarding motivation for physical education and physical activity for students. Loss of interest in movement and physical activity is also a significant cause for concern. Gross motor skills are essential for children's physical development and daily activities. This skill involves full-body movements that require large muscles, such as running, jumping, and climbing. Developing gross motor skills is essential for children's play and sports skills. According to a study, children who have achieved basic motor skills competencies are shown to successfully participate in various sports and movement activities (Field & Temple, 2017). Therefore, allowing children to nurture their gross motor skills during their growth stages is paramount.

Studies have shown that goal-oriented and modified play activities can improve a child's gross motor skills (Sutapa et al., 2021). Gross motor skills are essential for physical development and lifelong participation in physical activity. However, Traditional approaches to teaching gross motor skills can be monotonous and unappealing to students, which leads to boredom and lack of motivation to participate. Therefore, the concept of "Teaching Games for Understanding" (TGfU) As an innovative approach to teaching gross motor skills in physical education is believed to impact adult growth and development. *Teaching Games for Understanding* (TGfU) is an approach to teaching the game that emphasizes the importance of understanding the game before focusing on a particular skill. TGfU encourages a holistic approach to game teaching, develops critical thinking and problem-solving skills, and deepens knowledge and understanding of play.

TGfU Includes six stages: game form, appreciation, tactical awareness, decision-making, skill execution, and performance. TGfU has been proven to be a comprehensive approach to increasing student motivation in physical education. (Alcalá & Garijo, 2017), TGfU provides a student-center approach that prioritizes participants' needs and abilities. This approach increases students' levels of fun and participation while giving them the skills they need to move confidently in various physical activities. Recent approaches to TGfU have advocated a thematic approach to teaching games (Rachman, 2008).

This study aims to evaluate the impact of teaching units that follow the approach "Teaching Games for Understanding" (TGfU) on the gross motor skills of elementary school students in fifth and sixth grade. TGfU is a physical education model that aims to teach students about sports through tactical understanding rather than simply technique. Researchers wanted to understand whether the use of TGfU you could improve gross motor skills, which are the basic movements of all dominant sports, using large muscles in their characteristics. That has not yet been done because of its focus on the gross motor skills of fifth and sixth graders in physical education. Also, a student's inability to develop gross motor skills can have a long-term impact on their health and quality of life. Hence, this study carries significance in terms of its academic and practical implications, which are crucial for enhancing our comprehension of and enhancing the physical education learning process. Although it has been used extensively in physical education, and although several studies have shown that TGfU not only triggers significant cognitive domain development but also stimulates moderate to vigorous levels of physical activity and higher motivation towards an active lifestyle, assessments of how TGfU affects gross motor skills have not yet been explored.

METHOD

Experimental research method, one-group pretest-posttest design used by researchers, where the results of one experimental group were measured using children's gross motor development index. The population in this study was children aged 8-9 years in elementary school Islamic of Imam syafii Banjarmasin, which amounted to 22 children . The sample in this study is children aged 8-9 years. Sampling techniques using purposive sampling are suitable for research and can provide the needed information. This study

requires data collection on the fundamental movement skills of elementary school students aged 8 to 9 years. The research tool utilized for this purpose is a gross motor skill test (TGMD 2). TGMD 2 is a test to measure an individual's basic locomotor ability, which develops early (Bakhtiar et al., 2015). Test TGMD-2 This measures the gross motor extent of the research sample. The test is carried out with a sample that performs several tests, including run, gallop, hoop, horizontal jump, leap, and slide. Manipulative movement: catch, striking a stationary ball, kick, overhand throw, underhand roll, dribble. Using a predetermined assessment instrument, we assign a value of one to students who succeed in the observation indicator and a value of zero to those who fail in the observation indicator during grading.

RESULTS AND DISCUSSION

Result

Data on gross motor skills collected through TGMD-2 before and after the intervention were analyzed using t-tests for all tests. The significance level was set at $P < 0.05$, which had previously passed the Kolmogorov-Smirnov normality prerequisite test, and homogeneity showed that the gross motor data measured were statistically significant, with a sample size of 22 people.

Upon analyzing the data from the hypothesis test involving a total sample of 22 individuals, it was revealed that both men ($P < 0.05$) and women ($P < 0.05$) exhibited a statistically significant difference in their calculations. Therefore, it can be concluded that TGfU significantly impacts children's gross motor skills in elementary school. Based on this fact, it can be concluded that the hypothesis proposed is an increase in gross motor skills in children in teaching that applies the approach "Teaching Games for Understanding" (TGfU) to the gross motor skills of fifth and sixth-grade elementary school students. The alignment with previous research is supported by the finding that the positive impact on children's enthusiasm for learning through play results from practical improvements in their gross motor skills. (Nugraha et al., 2019). As with previous studies' results, simple games positively influence students' kinesthetic and gross motor intelligence (Surodadi et al., 2023).

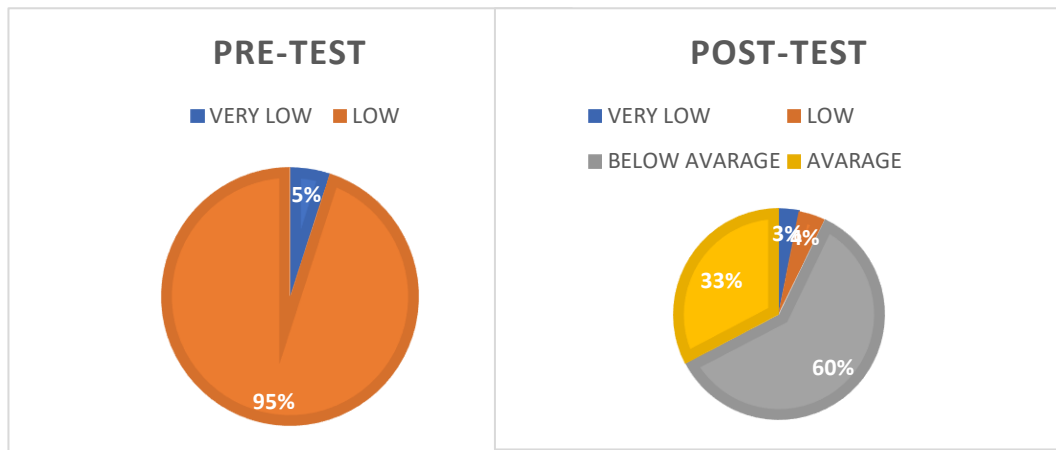
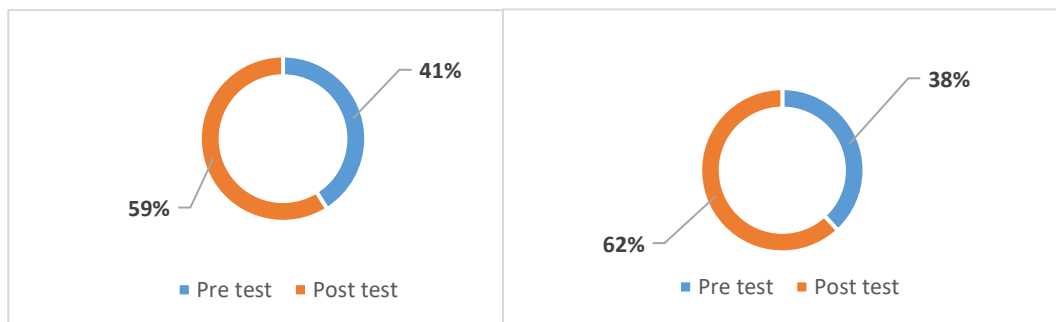


Figure 1. Pretest

Figure 2. Posttest



**Figure 3.
Male group lift diagram**

**Figure 4.
women's group improvement diagram**

Discussion

This study aims to determine the improvement of children's gross motor by giving treatment or treatment, namely the TGfU approach. According to (Yanti et al., 2023), Learning devices can improve children's gross motor skills and interaction through game-based learning. The game here is necessary and effective because it tends to play in this age. To be more creative and innovative, teachers should improve movement skills with fun forms of play for their students.

The results showed increased gross motor skills before and after learning through the TGfU approach. The t-test analysis showed that the significance value ($p < 0.05$) indicates a significant difference between the pretest and post-test, thus indicating that there is a significant improvement in the child's gross motor skills after learning through TgfU.

Furthermore, it will explain the results of the description of the sample data, and there are 4% and 5% results of the post-test that there are data on children who do not experience significant gross motor improvement; this results from factors that are outside

the control of researchers and can influence children's motor development, such as elements within the school environment, the environment around the house and factors of parents. In line with previous findings (Dini, 2022), while the importance of the environment in stimulating a child's gross motor development, the home environment should provide opportunities for children to engage in physical activity.

For the description of the 59% data, it can be seen from the post-test results that there is a significant increase in children's gross motor skills; the researchers assume there are factors that cause the increase in children, such as factors from children who do have potential or talent but there is no appropriate stimulation until the child has not completed motor before the intervention. Play provides ample opportunities for children to move and learn and develop their motor skills; along with previous findings, play provides ample opportunities for children to move and learn and develop their motor skills (Hasanah, 2016).

The description of the 32% data in the results shows a drastic increase from 32% of children; this is a striking increase Because 32% of these children have higher rates than other children. The previous problem can cause this; some factors support the school environment, home environment and parental factors that encourage these children to move actively, which indirectly is a stimulus that can improve the child's gross motor. With the game or game approach applied, it is possible to encourage children to move while they are unaware that they are engaging in physical activity that can help them develop their motor skills. The data obtained by the women's sample showed an average pretest score of 55.5, and the average post-test data was 90. The average pretest score of the male sample was 58, and the average score for the post-test data was 83.2. It turns out that the child's gross motor skills have improved thanks to interventions carried out during several meetings. After receiving the intervention, it rose 18% for the male group.

Meanwhile, the women's group increased by 24% after being given the intervention. These results showed that children's gross motor skills improved after treatment, namely a TGfU approach. Based on the results of these findings, it can be interpreted that the importance of taking the TGfU approach in motion learning, especially in gross motor learning, is in line with previous findings that an appropriate motion learning approach or exercise will have an impact on the desired results (Hasmarita & Kurnia, 2020). From the explanation above, it can be indicated that TGfU can improve the child's gross motor with the increasing gross motor of the child, which can contribute to the child's growth.

CONCLUSION

The study highlights the importance of play in children's learning, especially in improving their gross motor skills. Using the TGfU approach, this study observed a significant improvement in children's gross motor skills after a game-based learning process. These results confirm that learning involving play elements can help children develop their gross motor skills. However, it is essential to note that not all children experience the same improvement. Some children may not show significant improvement in their gross motor skills. Suggests that other factors, such as the school environment, home environment, or parental influences, may influence a child's motor development. Therefore, the role of parents and caregivers in creating an environment that stimulates the child's motor development becomes crucial.

Moreover, the study's findings align with previous research emphasizing the importance of play in children's development. Play allows children to move, learn, and develop their motor skills actively. Supports the idea that games are a natural and effective way to help children grow and develop. The TGfU approach can positively contribute to children's gross motor development. However, the effects can vary, and environmental factors and the child's potential also play an essential role in the outcome. Therefore, A play-focused approach should be used with attention to other factors that affect children's development.

REFERENCES

- Alcalá, D. H., & Garijo, A. H. (2017). Teaching games for understanding: A comprehensive approach to promote student's motivation in physical education. *Journal of Human Kinetics*, 59(1), 17–27.
- Bakhtiar, S. (2014). Fundamental motor skill among 6-year-old children in Padang, West Sumatera, Indonesia. *Asian Social Science*, 10(5), 155–158.
- Bakhtiar, S., Famelia, R., Goodway, J. D., & Kiram, Y. (2015). A needs assessment of the fundamental motor skills of urban and rural children in Indonesia. *Journal of Sport & Exercise Psychology*, 37(3), S72–S72.
- Brian, A., Taunton, S., Shortt, C., Pennell, A., & Sacko, R. (2019). Predictors of physical activity for preschool children with and without disabilities from socioeconomically disadvantaged settings. *Adapted Physical Activity Quarterly*, 36(1), 77–90.
- Candra, O., Pranoto, N. W., Ropitasari, R., Cahyono, D., Sukmawati, E., & Cs, A. (2023). Peran Pendidikan Jasmani dalam Pengembangan Motorik Kasar pada Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7, 2538–2546.
- Dini, J. (2022). Analisis Perkembangan Motorik Kasar Anak di Taman Kanak–Kanak Buton Selatan. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(4), 3429–3438.
- Field, S. C., & Temple, V. A. (2017). The relationship between fundamental motor skill

- proficiency and participation in organized sports and active recreation in middle childhood. *Sports*, 5(2), 43.
- Hasanah, U. (2016). Pengembangan kemampuan fisik motorik melalui permainan tradisional bagi anak usia dini. *Jurnal Pendidikan Anak*, 5(1).
- Hasmarita, S., & Kurnia, D. (2020). Pengaruh gaya mengajar dan kemampuan motorik terhadap hasil belajar forehand drive tenis meja. *Journal of Physical and Outdoor Education*, 2(2), 185–196.
- Jakiwa, J., & Suppiah, P. K. (2020). The differences between gross motor performance amongst children according to ethnic and age chronology. *Malaysian Journal of Movement, Health & Exercise*, 9(1), 159.
- Mukherjee, S., Ting Jamie, L. C., & Fong, L. H. (2017). Fundamental motor skill proficiency of 6-to 9-year-old Singaporean children. *Perceptual and Motor Skills*, 124(3), 584–600.
- Mustafa, P. S., & Sugiharto, S. (2020). Keterampilan motorik pada pendidikan jasmani meningkatkan pembelajaran gerak seumur hidup. *Sporta Saintika*, 5(2), 199–218.
- Nugraha, U., Mardian, R., & Hadinata, R. (2019). Cerdas Sifa, Edisi 1 No.2. November 2019. *Cerdas Sifa*, 1(2), 37–48.
- Rachman, H. A. (2008). Teaching Games for Understanding (TGfU): memahami Pendekatan taktik sebagai model pembelajaran dalam pendidikan jasmani. *Jurnal Pendidikan Jasmani Indonesia*, 5(2).
- Rechtik, Z., Miklankova, L., & Pugnerova, M. (2019). Assessment of gross motor skills in primary school children from the Czech Republic. *Baltic Journal of Health and Physical Activity*, 11(6), 4.
- Rinaldi, M. S., & Yudanto, Y. (2019). Tingkat Kemampuan Motorik Siswa Kelas Atas Di Sekolah Dasar Negeri Gadingan Wates Tahun 2018/2019. *PGSD Penjaskes*, 8(3).
- Setiawan, A., Yudiana, Y., Ugelta, S., Oktriani, S., Budi, D. R., & Listiandi, A. D. (2020). Hasil belajar pendidikan jasmani dan olahraga siswa sekolah dasar: pengaruh keterampilan motorik (tinggi) dan model pembelajaran (kooperatif). *TEGAR: Journal of Teaching Physical Education in Elementary School*, 3(2), 59–65.
- Surodadi, S. D. N., Ajaran, T., & Jaya, M. H. (2023). KINESTETIK DAN MOTORIK KASAR SISWA KELAS BAWAH. *Seminar Nasional Keindonesiaan, November 2022*, 817–827.
- Sutapa, P., Pratama, K. W., Rosly, M. M., Ali, S. K. S., & Karakauki, M. (2021). Improving motor skills in early childhood through goal-oriented play activity. *Children*, 8(11), 994.
- Yanti, R. D., Supriatna, E., Perdana, R. P., Samodra, Y. T. J., & Rubiyatno. (2023). IDENTIFIKASI KEMAMPUAN MOTOR EDUCABILITY SISWA SEKOLAH DASAR Rosa. *Jurnal Pendidikan Jasmani Kesehatan Dan Rekreasi*, 10(2), 107–119.