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Playful attitude in locomotor development in children from 6 to 10 years of age

Actitud lúdica en el desarrollo locomotor de los niños de 6 a 10 años

Gloria Maribel Miranda Paredes[1], Marcelo Sailema Torres[2], Paulina Rosalva Paredes Bermeo[3], Norena Elizabeth Pardo Tamayo[4]

[1]Maestría en Educación mención Educación Física y Deporte/Escuela Fiscal Rafael Cruz Cevallos, Quito – Ecuador
[2]Universidad Técnica de Ambato, Facultad de Ciencias Humanas y de la Educación/Maestría en Educación mención Educación Física y Deporte, Ambato – Ecuador
[3]Universidad Técnica de Ambato, Facultad de Ciencias Humanas y de la Educación/Carrera de Psicopedagogía, Ambato – Ecuador
[4]Ministerio de Educación del Ecuador, Zona 3 Distrito 1, Unidad Educativa Atahualpa, Ambato – Ecuador

Correo de correspondencia: gloria.miranda@educacion.gob.ec, ma.sailema@uta.edu.ec
pr.paredes@uta.edu.ec, norena.pardo@educacion.gob.ec

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Resumen

La actividad física es fundamental para el desarrollo cognitivo de cada individuo, sobre todo durante la infancia, en este período el niño va adquiriendo aptitudes que le permiten desarrollarse en los diferentes entornos que vive. El juego es un aspecto vital del desarrollo del niño, por tanto, son áreas fundamentales la actitud lúdica para el desarrollo locomotor. La actitud lúdica presenta un enfoque positivo y motivador para la vida del niño, se caracteriza por la curiosidad, la creatividad y la voluntad de asumir riesgos, promueve el desarrollo físico en los niños, el participar en juegos lúdicos ayuda a desarrollar sus habilidades motoras gruesas y finas. El propósito del estudio fue determinar la actitud lúdica para el desarrollo locomotriz de los niños de 6 a 9 años; el enfoque de investigación fue cuali-cuantitativo, además se realizó una aplicación del pre y post test 3JS, el cual valora 7 habilidades motrices, se aplicó una intervención de juegos planificados para 12 semanas; se concluye que el juego lúdico brinda a los niños la oportunidad de explorar y experimentar un entorno de aprendizaje divertido y motivador, lo cual en nuestro caso de estudio ha contribuido al desarrollo de las habilidades locomotoras.

Palabras clave: *actitud lúdica, desarrollo locomotor, juegos recreativos, motricidad*.

Abstract

Physical activity is fundamental for the cognitive development of each individual, especially during childhood, in this period the child acquires skills that allow him/her to develop in the different environments in which he/she lives. Play is a vital aspect of the child's development; therefore, the playful attitude is fundamental for locomotor development. The playful attitude presents a positive and motivating approach to the child's life, it is characterized by curiosity, creativity and willingness to take risks, it promotes physical development in children, participating in playful games helps develop their gross and fine motor skills. The purpose of the study was to determine the playful attitude for the locomotor development of children aged 6 to 9 years; the research approach was quali-quantitative, also an application of the pre and posttest 3JS was performed, which assesses 7 motor skills, an intervention of games planned for 12 weeks was applied; it is concluded that playful play gives children the opportunity to explore and experience a fun and motivating learning environment, which in our case study has contributed to the development of locomotor skills.

Keywords: *playful attitude, locomotor development, recreational games, motor skills.*

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INTRODUCTION

A playful attitude in teaching refers to an approach that incorporates fun and creative activities into learning. It involves a teacher who is willing to take risks, be spontaneous, and engage in activities that foster a positive learning environment (Pinillos, 1996). In essence, a playful attitude is a mindset that values the importance of play in the learning process. It is not just about having fun but creating opportunities for students to explore and discover new concepts in an enjoyable and engaging way.

Play in teaching is critical because it can have a profound impact on student engagement and motivation. When students have fun while learning, they are more likely to participate in the process and retain information (Correa, et; al. 2019). A playful attitude can also help create a positive classroom culture where students feel comfortable taking risks and creatively expressing the information (Caputo, 2022). In addition, it has been shown that playful learning modifies the neural structure of the prefrontal cortex, which is the center of rationality and where cognitive functions such as working memory, planning, monitoring and modulation of emotions are developed.

Playful learning can transform education by making it more enjoyable and engaging for students (Guerra and Figueroa-Cespedes, 2018). It can also help develop cognitive and socioemotional skills, such as problem solving, communication, and collaboration (Pardo and Opazo; 2019). Game-based learning, in particular, is widely recognized as a fundamental practice for the cognitive and socioemotional development of students (Figueroa, et; al. 2022). Ultimately, the attitude and especially the playful attitude of the teacher is a determining factor for school learning and the success of their students (Sproule, et al; 2019).

Developing a playful attitude in teaching can have a significant impact on students' learning experience. One strategy to accomplish this is to incorporate humor into lessons. Humor can be used as a transition strategy, enhance understanding of the subject matter, or even serve as a motivational method (Perez; et al. 2022). In fact, students tend to prefer classes with teachers who incorporate humor into their teaching style (Candela, et al; 2020). By using humor appropriately, teachers can create a relaxed and enjoyable learning environment, which can lead to greater engagement and retention of information.

Encouraging creativity and imagination is another effective strategy for developing a playful attitude in teaching. Creativity can help teachers better understand what students may be thinking or feeling and can also help students develop critical thinking skills (Figueroa, et; al. 2022). Teachers can foster creativity in their students by providing opportunities for self-expression through art and literature, as well as promoting a positive attitude toward new situations (Pardo and Opazo, 2019). By fostering creativity and imagination, teachers can help students see learning as a fun and engaging activity rather than a chore. Basic Motor Skills (BMS) are considered capabilities, motor actions acquired by learning by the person to correctly perform a certain task, being the basis for the execution of specific and sports skills and abilities. According to (García-Marín and Fernández-López, 2020) points to the HBM as "the basis on which more complex motor responses are built" (p.38). The learning and development of the HBMs originate gradually between the ages of 3 to 12 years, for this reason, the school stage is the source to achieve their development, i.e. it should be the key within the educational environment. "When we talk about basic motor skills, we refer to the naturally occurring motor actions that form the basic sensorimotor structure that supports the other motor actions that we humans develop" (Dara, 2018, p. 227). Motor skills are the abilities to control body movements. It involves coordinating the central nervous system, muscles, and joints to perform small, precise movements called fine motor skills. Examples of fine motor skills are picking up a small object or writing with the index finger and thumb (Lopez, et al; 2022), while motor skills also include general body movements called gross motor skills, such as running or jumping.

For (Imbernón-Giménez, et al; 2020) Motor skills are not limited to physical movements, but also include mental and emotional aspects such as spontaneity and creativity. This is a learning process that children develop from birth and learn motor skills as they grow (Hernández, et al; 2021). Fine motor skills develop after gross motor skills, and both types of motor skills are crucial to a child's cognitive and language development.

Locomotor skills are all those coordinated movements that allow you to move from one point to another in the environment. Types of displacement (locomotor skills): walking, running, crawling, crawling, quadrupeds, jumping, climbing and descending. (Massri, et al; 2022) the locomotor skills of students can be developed through the application of games, allowing fun, motivation and participation, it can be called ludo-motricity the same that can be activities of corporal expression, dance, walking, traditional-popular games, juggling, acrobatics, etc. that allow an improvement in the indicators of physical mobility. Pérez and Simoni (2019) mention that "It is the use of play to promote human motricity through motor actions associated with pleasure, joy, happiness and enjoyment, resulting in conscious and directed learning with pedagogical intent" (p. 48).

Educational play is an interactive activity that replicates expected real-world conditions to stimulate learning in decision-making (Gómez-Álvarez and Zapata, 2022). To achieve this goal, a competition is offered in which participants adopt rules of conduct and make decisions that affect them and their competitors. (Garcia and Taboada,

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2021) ratifies that learning through play can promote critical thinking, group communication, debate and decision making, elements that are difficult to capture using only theoretical approaches. The purpose of the study was to determine the effectiveness of playfulness in improving children's locomotor development.

MATERIALS AND METHODS

The study presents a quali-quantitative approach, using mathematical processes determined in scales on the levels of motor development to interpret the results obtained from the tests; it was correlational by the type of variables, playful attitude and locomotor development; a pre and post-test evaluation of the skills determined in the 3JS test was performed. The subjects of the study were 160, 71 girls and 89 boys belonging to the Elementary Basic sub-level of the "Rafael Cruz Cevallos" School in the city of Quito-Ecuador, who were in an age range between 6-9 years old; children with special educational needs were excluded.

The instrument used in this research is the "3JS" which was validated by (Cenizo at el, 2016). The objective is to evaluate the level of motor coordination of children aged 6-11 years, which contains seven tests (see in Table 1): locomotor test, which measures running, turning and jumping: and object control (hand-foot) such as throwing, kicking and dribbling the ball. It is a quantitative qualitative procedure that details the motor evaluation criteria.

TEST 3JS MOTOR DEVELOPMENT 7 SUBTESTS	
Locomotor skills (body control)	**Projection skills (object control)**
Running	Throwing the ball
Vertical jumping	Precision shot
Longitudinal turning	Dribbling
	Ball driving

Tabla 1. *Skills to be assessed in the 3JS Test.*

This test is divided into 7 skills to evaluate the criteria for each test. Each student was assigned a corresponding score ranging from 1 to 4 points depending on whether he/she met or did not meet the criteria. After analysis, the results of the locomotor movement and object control phases were aggregated. These results made it possible to determine the student's level of motor development.

After the application of the pretest, the recreational games planned for 12 weeks, such as: pursuit, collaborative, traditional-popular and pre-sports games, intervened through the playful, motivating and creative attitude of the teacher during class hours, in order to verify the improvement in the development of motor skills by means of the post-test.

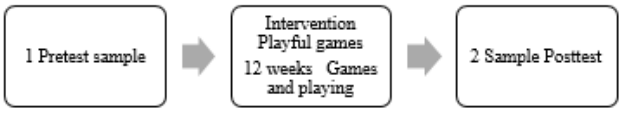

Figure 1. *Graph of the implemented procedure.*

RESULTS

Results of the application of the "3JS" test in 160 students between 6 and 9 years old belonging to the elementary basic sub-level, developed during 12 weeks with the theme "the game and playing" with the application of recreational games planned based on the items to be evaluated in the post-test.

Items to evaluate	Vertical jump	Turning	Running	Throwing	Precision Hitting	Bounce	Driving	Total	Range
	Body control			Object control					
26–28	2	1	2	2	2	2	2	13	Very Good
23–25	11	7	13	4	4	6	6	51	Good
18-20	11	6	17	8	7	7	6	62	Average
16-18	3	3	4	4	3	2	2	21	Poor
7–15	1	0	3	3	2	2	2	13	Very Poor
			Total					160	

Tabla 2. *Pre-test results 3JS Locomotor and projection skills.*

Table 2 shows the results of the application of 7 skills in the pretest, and it can be observed that, among all the children, 8.7% were in the very high range of motor development and object control, while 21.3% of the children were in the lower ranges of the table, while the majority of the students were at a normal level for their age and development.

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Based on the results found, a guide of activities was applied, related to playful games with creativity and imagination of the teacher; by executing the playful activities three days a week for 12 weeks, the 3JS posttest was applied, where the following results were reached.

Items to evaluate	Vertical jump	Turning	Running	Throwing	Precision Hitting	Bounce	Driving	Total	Range
	Body control			Object control					
26 – 28	11	9	16	9	9	8	7	69	Very Good
23 – 25	9	5	15	6	7	6	5	53	Good
18 - 20	5	1	9	3	3	4	3	28	Average
16 - 18	1	0	3	1	1	1	1	8	Poor
7– 15	0	0	2	0	0	0	0	2	Very Poor
Total								160	

Tabla 3. *Post-test results 3JS Locomotor and projection skills.*

Table 3 shows the number of subjects who qualified descriptively based on motor and object control in the follow-up, which showed that 76.2% of the students were located within the highest ranges. Poor and very poor levels according to the results obtained, 6.3% of the students are in the two lowest levels of motor development, which demonstrates the effectiveness of the playful attitude, the game to learn and have fun.

Correlation between study variables

To decide which test to use in the existing correlation between variables, it is necessary to determine the level of normality distribution of the statistical data, for this the Kolmogorov - Smirnov normality test was used, since the sample was > 50, obtaining as results a significant value P= < 0.001, based on these results, a Kendall's Tau-b non-parametric correlation test was used to measure the level of correlation of the study variables.

	Kolmogorov-Smirnov[a]		
	Statistic	gl	Sig.
Motor development	,378	160	<,001
Playful attitude	,327	160	<,001

Tabla 4. *Kolmogorov - Smirnov Normality Test.*

For the verification of the correlation of variables, Kendall's Tau-b cross table was used, for which 3 high, medium and low levels were used according to the results obtained in the 3JS pre- and post-test.

Interval	Category
De 0.00 a 0.19	Very low correlation
De 0.20 a 0.39	Low correlation
De 0.40 a 0.59	Moderate correlation
De 0.60 a 0.79	Good correlation
De 0.80 a 1.00	Very good correlation

Tabla 5. *Interpretation of the value of "Tau-b Kendall".*

Symmetrical measurements

		Value	Standard error asymptotic	T approximate	Significance
Ordinal by ordinal	Tau-b de Kendall	,780	,019	18,063	<,001
N of valid cases		320			

Tabla 6. *Results correlation "Tau-b Kendall".*

When applying Kendall's Tau-b test, a value of 0.78 was obtained, which indicates a good correlation between variables and an associated value of p <.001, therefore, it is significant, which indicates that the playful attitude has an impact on locomotor development in children from 6 to 9 years old at the "Rafael Cruz Cevallos" School in the city of Quito, province of Pichincha.

DISCUSSION

When talking about the contribution of the playful attitude of the physical education teacher in the locomotor development of children, one can deduce the importance of play in the learning process, where it is not only about having fun, but also about creating opportunities for students to explore and discover new concepts in a pleasant and fun way, as Arufe (Arufe, 2020) explains. A playful attitude can also help create a positive classroom culture, where students feel comfortable taking risks and creatively expressing information. Encouraging creativity and imagination is another effective strategy to develop a playful attitude in teaching. In addition (Castillero, 2018) notes that creativity can help teachers better understand what students may be thinking or feeling and can also help students develop critical thinking skills. In turn (Galiano, 2023) states that it is important for teachers to be flexible and adaptable in their teaching approach, incorporating playful activities that adapt to the diverse learning styles and needs of their students.

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The analysis of the 3JS test results show that most students are within the very good, good and normal range as a level of motor development, due to the motivation, guidance and creativity that the teacher applies in (running, jumping, turning, throwing, kicking, driving and booting) in a global way through the game, overcoming various levels of complexity, solving motor and cognitive problems, as shown by the results of Kendall's Tau-b test, which states a good correlation of 0.78 between the variables (Sailema, et al; 2017) agrees that, motor skills are essential that allow the integral development of the child. These skills range from coordination, flexibility, balance, strength and endurance. For (Holguín, 2019) it is important that the teacher encourages the development of these skills through play, ensuring that all play activities proposed are focused on the development of these skills.

CONCLUSIONS

A fun and motivating learning environment in a playful way leaves positive traces in the lives of your students and in their integral development. It also helps to create a climate of trust, respect and cooperation. It is the teacher's responsibility to create spaces conducive to play, design motivating and adapted activities and provide the necessary support so that all students can enjoy and benefit from it.

The 3JS test shows the adequate level of locomotor development and object control achieved by the children through the application of recreational activities such as: traditional games, chase games, individual and group games that allow strengthening their motor skills, such as balance, coordination and muscular strength.

The application of Kendall's Tau-b test allows us to confirm the correlation between the established variables r= 0.78, which corresponds to a degree of good correlation, it also shows that the playful attitude effectively influences the development of locomotor movement in children from 6 to 9 years old.

CONTRIBUTION OF THE AUTHORS

The development of this study is the authorship of each researcher.

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REFERENCES

Arufe-Giráldez, V. (2020). ¿Cómo debe ser el trabajo de educación física en educación infantil? *Retos: nuevas tendencias en educación física, deporte y recreación*, *37*, 588-596.

Candela Borja, Y. M., & Benavides Bailón, J. (2020). Actividades lúdicas en el proceso de enseñanza-aprendizaje de los estudiantes de básica superior. *Revista de Ciencias Humanísticas y Sociales (ReHuSo)*, *5*(3), 90-98.

Caputo, M. 2022). La actitud lúdica en educación: lo que pasa en el cerebro de un chico cuando está jugando. *Con Bienestar*.

Castillero, O. (2018). Tipos de actitudes, como se definen. https://www.eumed.net/rev/atlante/2019/06/actitud-aptitud-aprendizaje.html

Cenizo Benjumea, J., Ravelo Alfonso, J., Morilla Pineda, S., Ramírez Hurtado, J., & Fernández-Truan, J. (2016). Diseño y validación de instrumento para evaluar coordinación motriz en primaria / Design and Validation of a Tool to Assess Motor Coordination in Primary. *Revista Internacional De Medicina Y Ciencias De La Actividad Física Y Del Deporte*, (62).

Correa Mejía, D. M., Abarca Guangaje, A. N., Baños Peña, C. A., & & Analuisa Aorca, S. G. (2019). Actitud y aptitud en el proceso del aprendizaje del aprendizaje. Atlante Cuadernos de Educación y Desarrollo. https://www.eumed.net/rev/atlante/2019/06/actitud-aptitud-aprendizaje.html

Dara, A. (2018). Desarrollo de las habilidades motrices de las personas con discapacidad intelectual a través del proceso cognitivo. Artseduca. (19). https://dialnet.unirioja.es/servlet

Figueroa-Céspedes, I. (2020). La experiencia de aprendizaje mediado en la educación parvularia: Criterios para el enriquecimiento de las interacciones pedagógicas. Revista Infancia, Educación y Aprendizaje, 7(1), 107-131. _____.

Figueroa-Céspedes, I., Lambiasi Pérez, R., & Cáceres Zapata, P. (2022). Actitud lúdica y rol mediador de aprendizajes en educadoras de párvulos: para aprender jugando se necesitan dos. *Revista de estudios y experiencias en educación*, *21*(47), 371-386.

Galiano, M. T. P., Ramírez, L. V., & Ramos, M. A. Á. (2023). Rol del profesorado de educación física en la práctica de actividad física-deportiva extraescolar según estudiantes universitarios. *Retos: nuevas tendencias en educación física, deporte y recreación*, (49), 314-321.

García Córdova, L. A., & Taboada Mio, A. J. (2021). Juegos didácticos de clasificación y seriación para potenciar el pensamiento lógico matemático en niños de cuatro años.

García-Marín, P., & Fernández-López, N. (2020). Asociación de la competencia en las habilidades motrices básicas con las actividades físico-

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deportivas extracurriculares y el índice de masa corporal en preescolares. Retos: nuevas tendencias en educación física, deporte y recreación, 38.

Gómez-Álvarez, M. C., & Zapata Jaramillo, C. M. (2022). Una propuesta de clasificación de juegos con propósito educativo para ingeniería de software. *Ingeniare. Revista chilena de ingeniería*, *30*(2), 239-254.

Guerra, P., y Figueroa-Céspedes, I. (2018). Investigación-acción y docentes de primera infancia en Chile: análisis de una experiencia de desarrollo profesional docente. Primeros años, 38(4), 396-410. https://doi.org/10.1080/09575146.2017.1288088

Hernández, H. J. P., Rosas, C. S., Rubio, M. F., & Paredes, A. C. (2022). La ludomotricidad y habilidades motrices básicas locomotrices (caminar, correr y saltar): Una propuesta didáctica para la clase de Educación Física en México. *Retos: nuevas tendencias en educación física, deporte y recreación*, (44), 1141-1146.

Holguín, J. S. V., Pérez, L., & Delgado, V. (2019). Retos de la Educación Física, Deportes y Recreación en Ecuador: las competencias docentes. *Retos: nuevas tendencias en educación física, deporte y recreación*, (36), 327-335.

Imbernón-Giménez, S., Díaz-Suárez, A., & Martínez-Moreno, A. (2020). Motricidad fina versus gruesa en niños de 3 a 5 años. *Journal of Sport and Health Research*, *12*(2), 228-237.

López, A. J. C., Gómez, U. M., Jaramillo, R. A. A., & Coyago, O. F. C. (2022). Desarrollo de habilidades motrices básicas de locomoción en clases educación física para educación primaria. *Ciencia Latina Revista Científica Multidisciplinar*, *6*(3), 3370-3387.

Massri, E. A. M., Armijos, J. C. A., & Rocha, C. L. (2022). Efectos en el desarrollo motor de un programa de estimulación motriz basado en actividades lúdicas globalizadas, en varones escolares de la ciudad de Valdivia. *Retos: nuevas tendencias en educación física, deporte y recreación*, (43), 719-727.

Pardo, M., y Opazo, MJ (2019). Resistir la escolarización desde el aula. Explorando la identidad profesional de las maestras de primera infancia en Chile. __, 31(1), 67-92. ____.

Pérez Hernández, H. J., Simoni Rosas, C., Fuentes-Rubio, M., & Castillo-Paredes, A. (2022). Ludomotricity and Basic Locomotion Motor Skills (Walk, Running and Jump). A didactic proposal for the Physical Education class in Mexico.

Pérez, H. J., & Simoni, C. (2019). Transitando del juego motriz a la ludomotricidad en educación física. EmásF: revista digital de educación física. https://dialnet.unirioja.es/servlet/articulo?codigo=7063105

Pinillos, J. M. (1996). Actitud lúdica en el maestro... capacidad lúdica en el alumno. *Educación física y deporte*, *18*(1), 81-84.

Sailema, Á., Sailema Torres, M., Amores Guevara, P. D. R., Navas Franco, L. E., Víctor Amable, M. Q., & Romero Frómeta, E. (2017). Juegos tradicionales como estimulador motriz en niños con sindrome de down. *Revista Cubana de Investigaciones Biomédicas*, *36*(2), 1-11.

Sproule, L., Walsh, G., y McGuinness, C. (2019). Más que 'simplemente jugar': Selección de tres dimensiones de una pedagogía equilibrada para la primera infancia. Revista Internacional de Educación para la Primera Infancia, 27(4), 409-422. https://doi.org/10.1080/09669760.2019.1628011.