

Tele-Education and Adaptive Behavior with Autism Spectrum Disorder, In Children From 1 to 5 Years Old

Juan Carlos Cotrina-Aliaga¹, Fidel Castro-Cayllahua², Yolvi Ocaña-Fernandez³

¹Universidad Privada San Juan Bautista, Perú.

²Universidad Peruana de los Andes, Perú.

³Universidad Nacional Mayor de San Marcos, Perú.

Email: juan.cotrina@upsjb.edu.pe

Abstract

This research aims to determine the relationship between tele-education and adaptive behavior in autism spectrum disorder in children aged 1 to 5 years. To do this, a cross-sectional, descriptive and correlational non-experimental design study was carried out, the study population consisted of 120 people, and the sample was of a non-probabilistic census type. For data collection, a tele-education survey and an adaptive behavior survey were produced, both with high levels of reliability. Statistical treatment included connection tables, bar graph, analysis and interpretation. For validation, we used Spearman's confirmation coefficient, $R_s=0.730$, which shows a high positive confirmation with $p=0.003$. Therefore, it is concluded that in the National Institute of Rehabilitation-Chorrillos there is a significant relationship between tele-education and adaptive behavior in children from 1 to 5 years old.

Keywords: Tele-education; online learning; Adaptive Behavior: Distance Training.

1. Introduction

In South America, diagnosing autism spectrum disorder requires a mental health service. In adaptive behavior, difficult social situations are shown to cause repetitive and restricted behavior, which affects social and communication skills (ROSELLÓ MIRANDA et al., 2022). In adaptive behavior, sacrifices have been made to avoid discrimination and increase the participation of society for a better environment, but great needs have been seen along the way because there were no volunteers to influence the action plans of people with disabilities (Guevara Cuesta et al., 2018). In Barcelona, patients with ASD in early childhood have behavioral and cognitive problems that affect their academic, functional and sleeping/eating habits. Perjury in your daily life, independence, in childhood and in adulthood, leading to increased dependency over time (Alejandra Sánchez-Ceballos et al., 2022).

According to Paz Fernández Suárez et al., (2021) adaptive behavior in children with ASD can generate a stressful environment, resulting in a difficult upbringing for parents and caregivers, increasing the risk of diseases, lowering the immune system, and exposing them to possible accidents. The adaptive behavior reflects a compliance to carry out these significant diagnoses, evidencing a maximum performance of the person with instruments capable of quantifying if it is correct and effective, but when this process is verified, often labeling (Gutierrez Zuñiga, 2018). In Quito, autism has developed over time due to ongoing research. This disorder is caused by fetal genesis, restricts society, students, and individuals,

and causes adaptive behavior problems. These skills are improving daily through specialized treatments, family and work support, but if they have behavioral limitations, it can be difficult to make substantial changes in their lives and environments (Y. M. Maita-Cruz et al., 2022). ASD neurologically affects the relationship of the boy or girl with their environment, arising from the family and causes communication problems. Parents and relatives may present rejection, depression and stress, becoming an economic burden and (L. Maita-Cruz et al., 2022).

Distance tele-education is a didactic training used for student training that promotes synchronous, participatory communication, but there were many inconveniences for students, teachers in the teaching syllabi, particularly at the beginning of its use, causing inconvenience (Cotrina Aliaga et al., 2021). In the midst of the pandemic, Espinoza-Cordero et al., (2021) access to educational technology is limited, causing students to struggle with their work and experience connectivity issues. As a result, educational quality suffered and students suffered. At the national level there is a great deficiency and lack of tele-education and technological management. Teachers lack knowledge, resulting in poor instruction and poor student performance, making it difficult to access and use this key tool (Alvarado Pila & Guarate Coronado, 2021).

The Tea has been studied for a long time by experts, who defined it as a multidimensional neuropsychological disorder, diminished the learning area, which is important to intervene to improve its cognitive structure and to be able to acquire knowledge under a (Crowe et al., 2021). In

Chile there is a great deficiency and lack of management of tele-education and basic special education based on rights, needs and discrimination, so it is important to provide a decent, specialized education, free of discrimination, that adapts to the new measures and allows social integration. Inclusion (Alván Mori & Quiroz Murrieta, 2020). Riobamba is a problem since many students do not have access to their courses, which prevents them from advancing in their studies. Growth and progress are important, affect communication (Cienfuegos Da Silva & Saavedra Covarrubia, 2020). In this case, telecommunications affect the communication and rights of patients during a pandemic, affecting the dignity, integrity and interpretation of patient dialogue (Vaidya et al., 2022).

Today's students are affected by network congestion, affecting the tele-education of thousands of students who opted for it due to the flu pandemic. The speed and megabytes of the Internet made it difficult for teachers to teach, which affected the academic performance of students. Tele-education helps and obtains an adequate quality of care and saves time and economic resources, but the problem is the terrible challenge that has been going through due to the fact that there are no fixed or exact answers.

2. Methodology

2.1 Research design

In the present study, this type of research is used to increase knowledge and fundamental theoretical principles through the correlation of many factors (Maite Vallejo, 2020). This research design is non-experimental because it follows a strategy and structure over time. Transversal because its base is analytical and descriptive, including the unit of simultaneous measurement. This study presented the descriptive and correlational level. Being descriptive since it is necessary to specify these characteristics trying to measure space and information of said time and place (Romaní Romaní

& Romaní Romaní, 2021). Likewise, it is of a correlational type since these variables have an investigative approach, approving that the level of linkage can be examined.

2.2 Population and Sample

It is a group of people who integrate in the state as a constituted element of individual character (Lo, 2004.) This research was comprised of 120 people. The sampling was non-probabilistic census type, where the sample is equal to the population with a total of 120 people.

3. Results

To obtain results, the institution adapted data collection tools for TEA parents. A time and date is set to adjust the mechanism to avoid interfering with the established work. In coordination with the plant coordinator, a space was allocated for the storage of tools. The parent group played both instruments for 30 minutes. Application of a pilot test to check the credibility of the sample.

The notes were collected through descriptive and inferential statistics, so SPSS 25 was used to create a database, obtaining the following results.

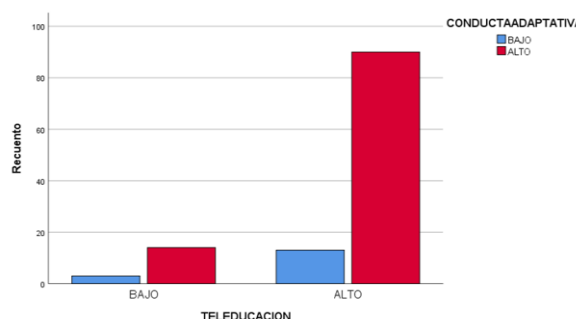


Figure 1 – Tele-education and Adaptive Behavior.

In graph 1, it is observed that 2.5% obtained a small learning through tele-education, therefore there was a small functional ability in adaptive behavior, on the contrary, 75% manifested a great learning through tele-education. tele-education and therefore there was great functional ability in the adaptive behavior of children with autism spectrum disorder.

Table 1 – Correlation Test of Teleeducation and Adaptive Behavior

		adaptive behavior	
Spearman's rha	tele-education	Correlation coefficient	.730
		Next (2-sided)	.003
		N	120

In table 1 we obtained the Rha Spearman correlation test (0.730), which belongs to a similar test, with a p value =0.003<0.05, therefore the acceptance of the mentioned hypothesis is determined, it means that there is an eloquent connection between the teleeducation and adaptive behavior.

According to the results of the study, it is observed that in the general hypothesis there is a relationship between tele-education and adaptive behavior in autism spectrum disorder, in children aged 1 to 5

years, National Institute of Rehabilitation-Chorrillos, year 2022; Spearman's statistic (0.730) was applied, it shows us that it belongs to a similar test, with a p value =0.003<0.05, therefore the acceptance of the mentioned hypothesis is determined; where 2.5% obtained a little learning through tele-education, therefore there was a small functional ability in adaptive behavior, on the contrary, 75% manifested a great learning through tele-education and therefore there was great ability in the adaptive behavior of children with autism

spectrum disorder.

These results agree in any way with international research, who conducted a study on the processes of socio-educational adaptation and autonomy in children with autism. It was concluded that the processes of adaptation and reinforcement of social education have affected the individual autonomy of children with autism since the "4th of July" unit.

Other national studies carried out an investigation on a clinical case study and applied a program of attention and concentration in a child with autism spectrum disorder. It was concluded that the care and manifestation mediation agenda was effective in increasing attention and time spent actively participating in the classroom, achieving its stated goal of restoring student compliance in patient care and education.

4. 4. Conclusions

According to the findings of a study conducted in 2022 at the National Institute of Rehabilitation-Chorrillos, there is a highly positive and statistically significant correlation between tele-education and adaptive behavior in young children with autism spectrum disorder (ages 1-6). This study focused on children who were between 1 and 6 years of age. At the level of significance established at 0.730, the amount of error that this hypothesis can introduce is 0.003 ($r_s = 0.003$ $p < 0.05$).

In conclusion, we found a relatively positive and statistically significant association between distance education and adaptive behavior in young children with ASD, as well as a significantly positive link between B-learning and adaptive behavior.

Finally, at the National Institute of Rehabilitation, online education and adaptive behavior in young children with autism spectrum disorder have a significant relationship.

References

- Alejandra Sánchez-Ceballos, L., Trujillo-Galeano, Á., Marcela Marín-González Juan Sebastián Ruiz-Palacio Métodos, D., & Sebastián Ruiz Palacio, J. (2022). Métodos de intervención en el trastorno del espectro autista: una revisión sistemática. *Revista Latinoamericana En Discapacidad, Sociedad y Derechos Humanos*, 5(2). <http://redcdpd.net/revista/index.php/revista/articloe/view/279>
- Alván Mori, G. C., & Quiroz Murrieta, L. L. (2020). CALIDAD DEL CUIDADO DE ENFERMERÍA Y SATISFACCIÓN DEL PACIENTE EN EL SERVICIO DE EMERGENCIA DEL HOSPITAL APOYO IQUITOS - 2020. <http://repositorio.ucp.edu.pe/handle/UCP/1332>
- Alvarado Pila, K. T., & Guarate Coronado, Y. C. (2021). Nivel de satisfacción de los familiares de pacientes con Covid-19 sobre la atención recibida. *Horizontes de Enfermería*, 11. <https://doi.org/10.32645/13906984.1084>
- Cienfuegos Da Silva, K. P., & Saavedra Covarrubia, M. E. (2020). Cuidado de enfermería en la prevención de úlceras por presión en adultos mayores del servicio de medicina interna de un hospital local, Chiclayo 2019. *ACC CIETNA: Revista de La Escuela de Enfermería*, 7(2). <https://doi.org/10.35383/cietna.v7i2.375>
- Cotrina Aliaga, J. C., Vera Flores, M. A., Sosa Celi, P., & Espinoza Cordero, T. (2021). Uso de herramientas digitales en el primer nivel de atención frente a la covid-19. *Revista Científica Ágora*, 8(1), 29–33. <https://doi.org/10.21679/arc.v8i1.204>
- Crowe, S., Howard, A. F., Vanderspank-Wright, B., Gillis, P., McLeod, F., Penner, C., & Haljan, G. (2021). The effect of COVID-19 pandemic on the mental health of Canadian critical care nurses providing patient care during the early phase pandemic: A mixed method study. *Intensive and Critical Care Nursing*, 63. <https://doi.org/10.1016/J.ICCN.2020.102999>
- Espinoza-Cordero, T., Ortiz-Cotrina, K., Carranza-Llanos, C., & Cotrina-Aliaga, J. C. (2021). Implementation of Electronic Medical Records System EQUALI to Improve Patient Care. *Bulletin of Computer Science and Electrical Engineering*, 2(1). <https://doi.org/10.25008/bcsee.v2i1.1144>
- Guevara Cuesta, E., San Juan de Dios Ciempozuelos, C., España David Escudero López, M., Jesús Muñoz García, J., & España Jonás Reguilón Liébana, M. (2018). Characterization of users in dual diagnostic devices: adaptive behaviour and psychopathology. <https://doi.org/10.5569/2340>
- Gutierrez Zuñiga, R. (2018). Vista de Instrumentos de evaluación de la conducta adaptativa en personas con discapacidad intelectual. <http://revistaucmaule.ucm.cl/article/view/145/295>
- Ló, P. L. (n.d.). POBLACIÓN MUESTRA Y MUESTREO.
- Maita-Cruz, L., Veramendi Vemazza, R. T., Ramos Callata, E. R., Maita-Cruz, Y., & Cotrina-Aliaga, J. C. (2022). TELEMEDICINE IN THE COVID 19 PANDEMIC: SCOPE OF CARE IN ONCOLOGY PATIENTS. A REVIEW OF THE SCIENTIFIC LITERATURE. *International Journal of Early Childhood Special Education (INT-JECSE)*, 14(5), 3189–3192. <https://doi.org/10.9756/INTJECSE/V14I5.342>
- Maita-Cruz, Y. M., Flores-Sotelo, W. S., Maita-Cruz, Y. A., & Cotrina-Aliaga, J. C. (2022). Artificial intelligence in public management in times of Covid-19. *Revista de Ciencias Sociales*, 28(ESPECIAL 5). <https://doi.org/10.31876/rcs.v28i.38167>
- Maite Vallejo. (2020). El diseño de investigación: una breve revisión metodológica. *Archivos de Cardiología de México*. https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1405-99402002000100002
- Paz Fernández Suárez, M., Elizabeth, A., & Soto, E. (2021). Salud mental e intervenciones para padres

de niños con trastorno del espectro autista: una revisión narrativa y la relevancia de esta temática en Chile.

<https://doi.org/10.18800/psico.201902.011>

Romaní Romaní, F., & Romaní Romaní, F. (2021). No visibilización del Instituto Nacional de Salud del Perú en los análisis de la producción científica peruana publicados por CONCYTEC. *Anales de La Facultad de Medicina*, 82(3), 244–246.

<https://doi.org/10.15381/anales.v82i3.21138>

ROSELLÓ MIRANDA, B., MIRA GADEA, Á., ROSA GARCÍA CASTELLAR, & ANA MIRANDA. (2022). ESTABILIDAD DIAGNÓSTICA DE NIÑOS CON TRASTORNO DEL ESPECTRO AUTISTA EN LA ADOLESCENCIA (TEA). FUNCIONAMIENTO EJECUTIVO, SOCIO-ADAPTATIVO Y CONDUCTUAL. *Buenos Aires*, 82, 43–47.

Vaidya, G., Jamali, M. C., Katheria, S., & Cotrina-Aliaga, J. C. (2022). Decryption of DNA and Its Role in Treating Genetic Disorder at Early Stage. *Journal of Pharmaceutical Research International*. <https://doi.org/10.9734/jpri/2022/v34i26b35984>