

AN AUTISM SPECTRUM DISORDER CASE STUDY: A NOVEL APPROACH FROM THE ICF FRAMEWORK.

RESUMEN:

El Trastorno del Espectro Autista (TEA) engloba un grupo heterogéneo de trastornos del neurodesarrollo caracterizados por la presencia de déficits en la comunicación e interacción social, así como patrones repetitivos y restringidos de conducta, actividades e intereses (DSM-5, 2013). Estos déficits suponen una notable restricción en la participación y limitaciones en la actividad que impactan en el funcionamiento. El principal objetivo es realizar un estudio de caso de una menor con TEA mediante los parámetros de la CIF, en concreto el conjunto básico para autismo (Core sets). Una aportación para mejorar la calidad de vida de las personas con Autismo sería la planificación de la intervención teniendo en cuenta los resultados clínicos, funcionales y personales (Tamarit, 2005). Por ello, para este estudio de caso se hace uso de la ECADI (Evaluación de la Capacidad y el Desempeño en la Infancia), la versión infantil de la BECAD (Moro & Mezquita, 2013), utilizando para esta investigación 3 de las 12 escalas que la conforman (aprendizaje, comunicación y autocuidado). Cada una de las escalas tiene el propósito de analizar las divergencias entre las puntuaciones obtenidas entre desempeño y capacidad de cada una de las actividades, para detectar así las barreras y facilitadores que intervienen en el entorno. La administración de la ECADI se realizó mediante diferentes sesiones por medio de observaciones dentro del aula, entrevistas a los profesionales que la acompañan y tareas a resolver por la niña. Mediante los resultados obtenidos, la ECADI logra el propósito de analizar las divergencias entre desempeño y capacidad para detectar tanto las barreras como los facilitadores que intervienen en el entorno. No obstante, se encuentran dificultades que coinciden con otros estudios basados en la utilización de la CIF como el entender los límites de cada ítem y como proceder a su puntuación, llevando a afirmar la necesidad de desarrollar instrumentos como la ECADI si se pretende utilizar la CIF como instrumento de evaluación.

Palabras clave: Autismo, Estudio de caso, Calidad de vida, ECADI, Desempeño, Capacidad, Conjunto básico, Funcionamiento, CIF, OMS.

ABSTRACT:

Autism Spectrum Disorder (ASD) involves a heterogeneous group of neurodevelopmental disorders characterized by deficits in communication and social interaction, as well as repetitive and restricted patterns of behavior, activities and interests (DSM-5, 2013). These deficits result in significant participation restrictions and activity limitations impacting on their functioning. Therefore, the aim is to conduct a case study of a child with ASD using the parameters of the ICF, specifically the "Core set" for autism. A contribution to improve the quality of life of people with autism is the planning of the intervention considering clinical, functional and personal outcomes (Tamarit, 2005). For this reason, the ECADI (Evaluation of Capability and Performance in Childhood), the children's version of the BECAD (Moro & Mezquita, 2013), were used 3 out of the 12 scales that comprise learning, communication and self-care. These scales have the purpose of analyzing the divergences between the scores obtained in performance and ability in the activities, in order to detect the barriers and facilitators that intervene in the environment.

The ECADI was managed in different sessions through classroom observations, interviews with professionals and tasks to be solved by the child. From the results obtained, the ECADI achieves the purpose of analysing the divergences between performance and capacity in order to detect the barriers and facilitators that intervene in the environment. However, difficulties are found that coincide with other studies based on the use of the ICF, such as understanding the limits of each item and how to proceed with its scoring, leading to the need to develop instruments such as the ECADI if the ICF is to be used as an assessment tool.

Keywords: Autism, Case study, Quality of life, ECADI, Performance, Ability, Core set, Functioning, ICF, WHO.

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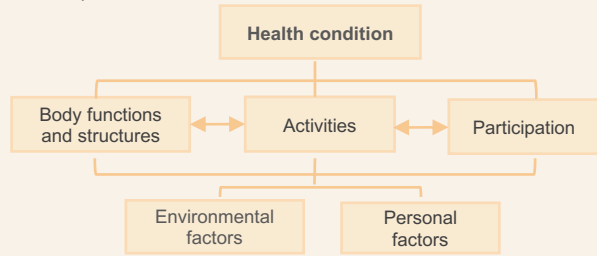
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INTRODUCTION

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by impaired social interaction and communication and by restricted and repetitive behavior (DSM-5, 2013) that begin during early in childhood and last throughout life. In this way, the **International Classification of Functioning (ICF)** (WHO, 2001):



The **core set** of autism is intended to provide more effective and useful descriptions with agreed lists for relevant categories. The ICF is not intended to make a diagnosis, instead, ICF complements the **ICD-10** information. As a result of the good outcomes of the **BECAD** (Moro & Mezquita, 2013), it is being developed and adapted for children with the name **ECADI**.

OBJETIVES:

Aim of the work: A single case study of a child with ASD from the ICF framework with the ECADI scale.

Specific objectives:

- To describe the characteristics of a child with ASD by using an ICF based assessment tool.
- To develop an intervention program based on ICF tools.
- To analyze the problems in activities and participation with academic performance and interpersonal relationships.

METHOD

- The focus of this case study is a child aged **6 years and 4 months** diagnosed with **ASD (Grade II)** and Developmental Delay.
- She is studying in the classroom of Communication and Language (C&L) at the school where she lives.
- **Written informed consent** for parents and professionals.
- For the evaluation, the ECADI scale was used to assess 3 of the 12 scales that comprise it: **learning, communication and self-care**.
- The ECADI is composed by different items to be evaluated, such as tasks to be solved by the child, observations in the classroom and interviews with the professionals who work with the child.
- **ICF-based Documentation Form** – create different tables for the different scales.

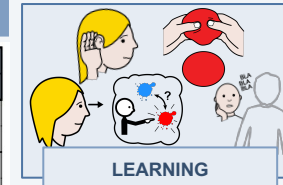
RESULTS

ACTIVITIES AND PARTICIPATION		LEARNING	Difficulty				
			0	1	2	3	4
d110	Watching	P					
		C					
d115	Listening	P					
		C					
d130	Copying	P					
		C					
d155	Acquiring skills	P					
		C					
d160	Focusing attention	P					
		C					
d175	Solving problems	P					
		C					
d177	Making decisions	P					
		C					

ACTIVITIES AND PARTICIPATION		COMMUNICATION	Difficulty				
			0	1	2	3	4
d315	Communicating with - receiving - nonverbal messages	P					
		C					
d330	Speaking	P					
		C					
d350	Conversation	P					
		C					

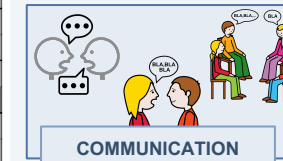
ACTIVITIES AND PARTICIPATION		SELF-CARE	Difficulty				
			0	1	2	3	4
d510	Washing oneself	P					
		C					
d530	Toileting	P					
		C					
d540	Dressing	P					
		C					

ENVIRONMENTAL FACTORS		FACILITATORS AND BARRIERS		Facilitator Barrier								
				+4	+3	+2	+1	0	1	2	3	4
e125	Products and technology for communication											
e130	Products and technology for education											
e340	Personal care providers and personal assistants											
e355	Health professionals											
e360	Other professionals											
e455	Individual attitudes of other professionals											
e585	Education and training services, systems and policies											



LEARNING

FACILITATOR:
Products and technology for education and communication. Health and other professionals.
BARRIER:
Education and training services, systems and policies.



COMMUNICATION

FACILITATOR:
Health and other professionals.



SELF-CARE

FACILITATOR:
Health and other professionals.
BARRIER:
Individual attitudes of other professionals. Personal care providers and personal assistants.

DISCUSSION

With the results of the study, the **ECADI** achieves the purpose of analysing the **divergences** between performance and the ability to detect all barriers and facilitators in the environment. These results have also been used to make a **report** that will be useful for parents and professionals.

However, the development of this study have difficulties that coincide with other studies based on the use of the ICF. In this case, it is important to mention the difficulty to understand how to evaluate the items, leading to the need to develop instruments such as the ECADI if the ICF is to be used as an assessment tool.

This case study represents the relevance of assessment from the **functional perspective** for the condition of autism. Therefore, considering the needs resulting from the increased prevalence of a diagnosis whose impact on functioning goes beyond difficulties in the early developmental stages, it can be understood that autism implies a **social and health cost** with considerable implications for society (Ganz, 2007; Hurley-Hanson, Giannantonio, & Griffiths, 2020; Rogge & Janssen, 2019).

LIMITATIONS:

Further research on assessment instruments to address all the domains included in the core set for autism and train professionals who are going to evaluate with the ECADI.

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