



Espiral. Cuadernos del Profesorado
Vol. 18, Issue 38
September 2025
ISSN 1988-7701

How to reference this article:

Ollora-Triana, N., & García-Zabaleta, E. (2025). Benefits of dance as a leisure activity on the quality of life of people with Autism Spectrum Disorder. Analysis of the perceptions of coexistence professionals. *Espiral Cuadernos del Profesorado*, 18(38), 95-114.
<https://doi.org/10.25115/ecp.v18i38.10259>

Published on-line: 25 of September of 2025

Benefits of dance as a leisure activity on the quality of life of people with Autism Spectrum Disorder. Analysis of the perceptions of coexistence professionals

Beneficios de la danza como actividad de ocio sobre la calidad de vida de personas con Trastorno del Espectro Autista. Análisis de las percepciones de los profesionales de convivencia

Natalia Ollora-Triana ¹ and Esther García-Zabaleta ²

¹ University of La Rioja, Logroño, Spain; ² Public University of Navarra, Pamplona, Spain

Abstract

Autism Spectrum Disorder (ASD) mainly affects communication, learning and social behaviour. In addition, a high percentage of people with ASD have a mental illness, increasing their risk of social exclusion. It is the responsibility of social and educational institutions to offer interventions that improve their quality of life (QoL). The aim of the study is to evaluate the possible benefits that a Dance Movement Therapy and creative as a leisure practice brings to the QoL of people with ASD, based on the responses of the professionals who live with them. A qualitative, exploratory and descriptive research is developed through focus groups with a sample made up of nine professionals who live with them. The analysis was carried out with MAXQDA. The results of the analysis of the educators' perceptions show benefits in the emotional well-being and physical well-being dimensions and reflect the need to implement prolonged and personalized programs for the transfer of these improvements to daily life, thus favouring interpersonal relationships and social inclusion. It is concluded that dance is very valuable as a leisure practice, improving the QoL of these group, as well as the importance of considering the voices of professionals in interventions in real contexts.

Keywords: Qualitative analysis; well-being dimensions; intellectual disability; focus groups; mental health.

Resumen

El Trastorno del Espectro Autista (TEA) afecta fundamentalmente a la comunicación, al aprendizaje y al comportamiento social. Además, un alto porcentaje de quien lo padece presenta alguna enfermedad mental, aumentando su riesgo de exclusión social. Es responsabilidad de las instituciones sociales y educativas ofrecer intervenciones que mejoren su calidad de vida (CDV). El objetivo del estudio es evaluar los posibles beneficios que aporta a la CDV de personas con TEA un programa de Danza Movimiento Terapia y creativa como práctica de ocio, a partir de las respuestas de los profesionales que conviven con ellas. Se desarrolla una investigación cualitativa, exploratoria y descriptiva mediante grupos focales, con una muestra compuesta por nueve profesionales de convivencia. El análisis se realizó con MAXQDA. Los resultados del análisis de las percepciones de los educadores constatan beneficios en las dimensiones bienestar emocional y bienestar físico, y reflejan la necesidad de implementar programas prolongados y personalizados para la transferencia de estas mejoras a la vida cotidiana, favoreciendo así las relaciones interpersonales y la inclusión social. Se concluye que la danza es muy valiosa como práctica de ocio, mejorando la CDV de este colectivo, así como la importancia de considerar las voces de los profesionales en intervenciones en contextos reales.

Palabras clave: Análisis cualitativo; dimensiones bienestar; discapacidad intelectual; grupos focales; salud mental.

Received: November 14, 2024

Accepted: May 8, 2025

Correspondence: Esther García-Zabaleta, Public University of Navarra, Spain Email: esther.garciazabaleta@unavarra.es

Introduction

Autism Spectrum Disorder (ASD) is defined as a group of neurological and developmental disorders that directly affect communication, learning, as well as behaviour (National Institute of Mental Health [NIMH], 2022), characteristics that generate a persistent deficit in communication and social interaction of these individuals within a degree of varying severity (American Psychiatric Association [APA], 2018). Autism is a complex and highly heterogeneous disorder in terms of the manifestation and evolution of symptoms at different stages of development, in its expression and presentation according to sex, age, and other co-occurring factors (Celis & Ochoa, 2023; Hervás et al., 2017; Martín del Valle et al., 2022; Mottron & Bzdok, 2020) and is recognized as a permanent developmental disability (UN, 2008, RES/62/139).

The new DSM-V classification (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition) describes autism as a spectrum encompassing disorders with varying severity and a more multidimensional conceptualization. (Hervás et al., 2017). Throughout its development, a large number of people with ASD also suffer the presence of co-morbid disorders (NIMH, 2022), commonly mood disorders (57%), major depression (53.6%) and dysthymia (18.1%), being more frequent in adults (Lever & Geurts, 2016). Likewise, as a psychiatric disorder, they suffer from anxiety disorder (53.6%), the most frequent within it being Obsessive Compulsive Disorder (OCD, 21.7%) and agoraphobia (21%) (Lever & Geurts, 2016; Martín del Valle et al., 2022). As a non-psychiatric condition, sleep disorder (disturbance) is added (Martín del Valle et al., 2022). Therefore, a large percentage of people with ASD suffer from mental disorders of varying severity that begin to manifest in adolescence and become more severe in adulthood (Lever & Geurts, 2016; NIMH, 2022). These alterations in people with disabilities are considered chronic (non-communicable) diseases (WHO, 2011) and significantly affect their quality of life (QoL); therefore, its prevention must be considered in the establishment of timely and necessary interventions throughout its development.

The commitment to the well-being of people with any disability is signed into the International Convention on the Rights of Persons with Disabilities. It establishes the requests to the Member States responsibility to adopt the pertinent measures to make these rights effective (WHO, 2007, A/RES/61/106). Within Spanish territory, the I Spanish Strategic Action Plan on Autism Spectrum Disorder 2023-2027 (National Council on Disability, 2023) is signed, whose main objective is to improve the QoL of people with autism and their families. This plan is made up of six lines of action, whose measures for its development include, among other aspects/factors...: "generate and disseminate innovative recommendations based on evidence..." (Line 3, M.11, p.33); "Promote the design, evaluation, and implementation of pilot projects focused on fostering interventions aimed at enhancing quality of life (QoL) and encouraging active ageing among individuals with ASD" (line 3, M.14 p.34); in addition to taking on, on behalf of the scientific community, the responsibility for advancing research and its dissemination. In this way, the commitment to fully realizing human potential, along with nurturing a sense of dignity and self-worth, is addressed. Furthermore, it supports the comprehensive development of personality, talents, and creative, artistic, and intellectual capacities, as well as mental and physical abilities, thereby ensuring this group has access to diverse developmental opportunities.

All this places the various involved institutions in the responsibility to develop interventions and offering experiences that promote the complete progress of their potential, their social integration and the enhancement of their QoL, while also preventing or improving any mental health condition (Reviriego et al., 2022).

One of the experiences associated with well-being that serves as a factor in social integration and personal development is leisure time (Alcolea, 2010; Cuenca & Goytia, 2012; Usabiaga & Moral, 1997). People with autism have less access to social leisure activities and when they do have access, there is not a great participation, an aspect that places them at risk of social exclusion (Nieto et al., 2015). All this leads to the need to reconsider the leisure time offered to this group so that they can

develop their hobbies in favour of socialization (Cuenca, 1997). Thus, the evidence regarding psychosocial interventions attributes to leisure being an acting experience for social learning and the development of their identity (Alcolea, 2010; Reviriego et al., 2022), arguing the need to develop group programmes, consisting of structured leisure activities designed to integrate participants' interests and competencies (NIMH, 2022).

On the other hand, these psychosocial interventions should focus on improving their QoL, covering the different integrated dimensions (Cuesta et al., 2017). This concept, QoL, has become a social construct that guides professional practices in programmes and is increasingly used as a framework for structuring, proposing, and developing interventions in the field of disability, being considered as a desired state of well-being whose defining characteristic is multidimensionality (American Association on Intellectual and Developmental Disabilities [AAIDD], 2010; Schalock & Verdugo, 2007). The eight-dimensional model is proposed as a conceptual and measurement framework for QoL, which involves the person attaining three key dimensions: independence, social participation and well-being. To this end, intervention is made in the dimensions that jointly make up the construct of QoL: emotional well-being, interpersonal relationships, material well-being, personal development, physical well-being, self-determination, social inclusion and rights (Verdugo et al., 2021). Each dimension of the QoL model for individuals with disabilities includes indicators, identified by Schalock et al. (2003), that should be considered when evaluating these dimensions (Verdugo et al., 2009).

Any programme that aims to offer a space for leisure as an individualized support for the enhancement of these individuals' quality of life, must consider these dimensions on which the intervention to be carried out can incite change (Schalock & Verdugo, 2007). Likewise, the indicators that allow its evaluation based on information that can be extracted from the perceptions of professionals and family members who live with people with Intellectual Disabilities (ID) are considered (Verdugo et al., 2009).

Although the measurement and evaluation of QoL is not an easy task, the interest and responsibility to understand the concept has led the authors themselves to consider an evaluation that, among other characteristics, must take into account its multidimensional nature, the use of methodological pluralism that includes objective and subjective information and measures, and propose multivariate research designs (Verdugo & Schalock, 2009; Verdugo et al., 2009), emphasizing the significance of how the concept of QoL is perceived by those who live with individuals with disabilities and their families (Guldborg, 2017).

Physical health, as a key dimension of QoL, emerges as a primary concern in programme design, standing out as the most prominent indicator (Verdugo et al., 2009). For this reason, physical activity is offered as one of the most consolidated and beneficial activities on behaviour and socialization in people with ASD (Lirola et al., 2020). This is developed through group dynamics, promoting significantly beneficial changes in the QoL of children and adolescents with autism (Vélaz et al., 2024), fostering growth across multiple areas in individuals with disabilities: in physical and motor abilities, cognitive and emotional functioning, and social interaction (Collado, 1997; Morris et al., 2023a; Reviriego et al., 2022; Vélaz et al., 2024). Moreover, when such interventions emphasize creative bodily expression, they enhance motivation to participate in physical activity among this population (Lirola et al., 2020; Mercado et al., 2021; Morris et al., 2023b).

The practice of Dance Movement Therapy (DMT) and creative dance as activities of physical and motor requirement, offer people with autism a series of experiences linked to the inherent characteristics that constitute it as an activity of rhythmic and danced body expression (Sanchiz, 1997). As a means of expression, it fosters the development of body language and movement, while preserving participants' spontaneity and encouraging creativity and artistic exploration (Barnet-López et al., 2016; Chaiklin & Wengrower, 2008; Ollora et al., 2023). As an art form, it projects the participant's inner world outwards through body language, encouraging this creative communication that allows the development of one's own personality and enjoyment (Lirola et al., 2020; Sanchiz, 1997; Tein & Tin, 2024). Finally, as a motor and physical activity, it constitutes a multi-sensory experience, since during the practice multiple modalities for the senses are combined, especially the integration of auditory,

tactile and visual stimuli. Taking into account that the alteration in the sensory integration process is one characteristic associated with people with autism, dance becomes, on the one hand, a multisensory intervention that is going to have an impact on multisensory integration and motor skills (Koehne et al., 2016; Weitlauf et al., 2017), which will directly favour primary sensory processes and social skill functions (Chen & Hong, 2018; Thye et al., 2018). And, on the other hand, it serves as an activity that favours body schema integration and the development of basic motor skills through physically demanding coordinated movements (Morris et al., 2023b).

As part of our commitment to enhancing the QoL for this group, and taking into consideration the benefits of physical activity, the present study seeks to know the effects of a Dance Movement Therapy (DMT) and creative dance programme, as a leisure space, on the QoL of people with ASD, based on the testimonies from coexistence professionals at the Center where this programme has been implemented. To this end, the following objectives are proposed:

- To examine educators' perceptions—those who interact daily with programme participants—regarding the effects of practising Dance Movement Therapy and creative activities as forms of leisure on emotional and physical well-being, interpersonal relationships, and social inclusion among individuals with Autism Spectrum Disorder.
- To acquire knowledge of identify through the voices of the professionals who live with the participants in the programme, which dimension of QoL has been mainly developed and the indicators that have shown this development in each of the participants.

Method

Study Design

With the aim of achieving the objectives of the research, a cross-sectional qualitative study was conducted, characterized as exploratory and descriptive in nature, based on focus groups constituted of the people who live with the sample that has participated in the DMT programme. In the research, some data analysis techniques typical of the Grounded Theory have been used, aimed at understanding the reality of the experience through the reports from these individuals. These are open coding and axial coding (Bénard, 2016; Hernández et al., 2014; Strauss & Corbin, 2002).

Intervention Programme

Field Immersion

Once authorization was obtained for the study to be conducted by the Vice-Rectorate for Research of the University of La Rioja, during the months of October-November 2023, three visits were carried out to the Leo Kanner Center (Logroño. La Rioja) to define the sample units with those responsible for it. A field immersion was executed to observe the participants, and a field diary was created, contrasting the concerns of those responsible for the Center regarding the object of study with those concerning the research team (Latorre et al., 1996). In turn, the people responsible for the Center were informed of the methodology and activities to be performed, as well as the need to have their support for the preparation of the focus groups. On the other hand, the informed families' consent of the participants in the programme was obtained, adhering to upholding the principles of confidentiality and anonymity.

Sample Participant in the Programme

An intentional sampling was carried out by the researchers, the psychologist and the director of the Center (Arrogante, 2022), determining a sample of case-types with 2 men and 4 women. Based on the information from the Center, the people who made up the sample have ASD, with biological ages between 33 and 53 years, whose maturation age is between 6-8 years and 12 years. According to the DSM-V categories (APA, 2018), the participants are diagnosed with moderate to severe degrees of intellectual disability. They present minimal social communication and restrictive and repetitive patterns interfere notoriously with the activities of their daily life. In addition, individually they suffer from other co-morbid disorders (anxiety, depression, phobias and obsessive-compulsive disorder). They had all

lived in the Center for 5 years, so their interpersonal relationships were known, making it easier for them to develop social skills among them. The participants had no prior acquaintance with the people who guided the programme, who, prior to its implementation, observed and recorded their behaviours at three different times in a field diary to consider them when developing the programme.

Programme Development and Implementation

During the months of November-December 2023, the programme was designed, establishing a schedule. Its implementation began on January 9, 2024, and lasted 6 months. It was structured in two phases: from January to March and from April to June (both months included), with a weekly session that was always held in the same room recognized by the exhibition. Throughout the programme, DMT, creative dance, and body expression content were developed (Barnet, 2017; Chaiklin & Wengrower, 2008; Learreta et al., 2005): individual and group consciousness; body and spatial control; channelling emotions; impulse control; improvement of expression and exploration of movements and rhythm; improvisation. Tables 1 and 2 show in more detail the contents and timing of the programme.

Table 1

Programme contents and types of sessions, first phase

JANUARY		FEBRUARY		MARCH	
Day	Session	Day	Session	Day	Session
9	Adaptation-knowledge between participants and those in charge.	6	Progression and development. Body control, individual and group exploration, contact and exploration of internal rhythm, from improvisation.	5	Improvisation. Channelling emotions through work with objects and contact between colleagues.
16	Adaptation. Spatial and self-awareness, self-movement, social relationships, communication, impulse control.	13	Progression and development. Body control, individual and group exploration, contact and exploration of internal rhythm, from improvisation.	12	Improvisation. Channelling emotions through work with objects and contact between colleagues.
23	Adaptation. Spatial and self-awareness, self-movement, social relationships, communication, impulse control.	20	Progression and development. Body control, individual and group exploration, contact and exploration of internal rhythm, from improvisation.	19	Improvisation. Channelling emotions through work with objects and contact between colleagues.
30	Adaptation. Spatial and self-awareness, self-movement, social relationships, communication, impulse control.	27	Progression and development. Body control, individual and group exploration, contact and exploration of internal rhythm, from improvisation.	26	Easter.

Table 2

Programme contents and types of sessions, second phase

APRIL		MAY		JUNE	
Day	Session Type	Day	Session Type	Day	Session Type
9	Monitoring and observation.	7	Exploration and reinforcement. Individual and group awareness, body and spatial control, channelling emotions, impulse control, improvement of expression and exploration of movements and rhythm.	4	Process Closure. Initiative, security and autonomy.
16	Exploration and reinforcement. Individual and group awareness, body and spatial control, channelling emotions, impulse control, improvement of expression and exploration of movements and rhythm.	4	Exploration and reinforcement. Individual and group awareness, body and spatial control, channelling emotions, impulse control, improvement of expression and exploration of movements and rhythm.	11	Process Closure. Initiative, security and autonomy.
23	Exploration and reinforcement. Individual and group awareness, body and spatial control, channelling emotions, impulse control, improvement of expression and exploration of movements and rhythm.	4	Exploration and reinforcement. Individual and group awareness, body and spatial control, channelling emotions, impulse control, improvement of expression and exploration of movements and rhythm.	18	Process Closure. Initiative, security and autonomy.
30	Exploration and reinforcement. Individual and group awareness, body and spatial control, channelling emotions, impulse control, improvement of expression and exploration of	4	Exploration and reinforcement. Individual and group awareness, body and spatial control, channelling emotions, impulse control, improvement of expression and exploration of movements and rhythm.	25	Termination and farewell.

movements and
rhythm.

Procedure

Considering the need and importance of including the perceptions from those who live with the sample, due to their diagnosis of ID (Culdborg, 2017; Verdugo et al., 2009), focus groups were created with the Center's professionals, as a form of group interview that allows a degree of interaction between participants with semi-structured and directed moderation, as well as participation with a high degree of individuality among the members who constitute the group (Hughes & DuMont, 2002). By means of propositional sampling, a total of nine people were identified, who made up the two focus groups, four people in the morning and five in the afternoon (Prieto & March, 2002). They were homogeneous groups as they had shared the experience (Rodas & Pacheco, 2020), acting as companions of the participants in the intervention programme and allowing complete accessibility, forming part of the team of professionals at the Center and living with these people on a regular basis.

The morning group consisted of a man and three women with ages ranging from 25 to 36 years, whose seniority as cohabitants in the Center was between 9 months and 5 years, one with a background in psychology, two in social work and another qualified as an auxiliary social and health care assistance. Among the four professionals, two were engaged under part-time contracts involving rotating shifts, whereas the other two held full-time appointments. The group coming in the afternoon consisted of two men and three women with ages ranging from 23 to 31 years with a seniority in the Center of between 10 months and 8 years. Regarding her qualifications, one is a psychologist, another a social integrator, two participants are social workers and the last is a social and health assistant technician. Regarding the labour regime, two of them worked part-time (rotating shifts) and the rest full-time.

With this diversity of characteristics, heterogeneity is guaranteed, which favours exchange and reciprocity from the difference of perceptions (Callejo, 2002). Each of the participants had the opportunity to observe the sample in different contexts as they had been working at the Center for more than 6 months (Verdugo et al., 2009), thus upholding both the minimum of homogeneity and heterogeneity, along together in addition to the ideal size of the focus groups (Hernández et al., 2014; Krueger & Casey, 2000; Prieto & March, 2002). A previous informative and formative meeting was held with all of them, to familiarize them with the concept of QoL, its dimensions and indicators, so that before starting the intervention, they were immersed in the context (Barreda et al., 2020).

Instrument

A script with semi-structured questions designed *ad hoc* was used, which guided the established focus groups. The elaboration of the questions and data collection was structured in the following stages:

- Considering the objectives of the research, seven structural questions were written for the script (Rodas & Pacheco, 2020) which were related to the dimensions of the QoL to be studied together with its indicators (Schalock & Verdugo, 2007) and contrasting questions. The indicators that guided the questions referred to the following dimensions: emotional well-being, interpersonal relationships, physical well-being and social inclusion.
- The semi-open-ended questions were elaborated with clear and concise language. With the aim to create an efficient instrument for data collection, these questions were reviewed by four experts (Babatava et al., 2024), including two with expertise in qualitative research and three with subject-matter knowledge relevant to the study. Once the script was sent to the panel of experts and returned to the researchers, one question was eliminated, the wording of three others was modified, and a new question was integrated (Barreda et al., 2020). Finally, following the reformulation of the questions, the main category of analysis Quality of Life (QoL) was defined as follows: a desired state of personal well-being that is multidimensional, with objective and subjective components and that is influenced by personal and environmental factors (Schalock & Verdugo, 2007). Below are some examples of issues for each dimension of the QoL category studied (Table 3):

Table 3

Focus group protocol

Central dimensions of the QoL (Schalock & Verdugo, 2002)	Script for the development of the focus groups
Emotional Well-Being (EW)	1. How does activity affect impulse control? 2. Do you perceive any difference with respect to other days?
Interpersonal Relations (IR)	3. Could you identify any changes in the relationship of users with family, friends, educators or other people?
Physical Well-Being (PW)	4. What aspects of physical well-being do you think the programme influences?
Social Inclusion (SI)	5. Do you think that the programme has helped them to be more willing to interact and participate in different activities and with different people and groups?

- Ethical aspects: the researchers employed purposive sampling to contact individuals for the focus groups, aiming to determine their willingness and availability to participate in the study. They were presented with an informed consent form which included the objectives of the research and its purpose as a scientific dissemination of results. Consequently, their confidentiality and anonymity were assured, and they were informed of the right to leave or stop the focus group at any time. Once the agreement of the participants was obtained, the morning and afternoon schedules for the creation of each focus group were agreed with the individuals in charge of responsible for the management the Center. For the analysis of the information, the personal data were anonymized, and the content of the focus groups was encrypted. Likewise, all the data were analysed on devices used only by the researchers.
- Development of the focus groups: they were held in the same Center and, following the recommendations given by the experts, the only moderator was in charge of initiating and maintaining the conversation explicitly, proposing the topics, and implicitly, deciding the attention given to the participants, so their participation was passive in the debate. At the beginning of each focus group, the objectives and instructions to be considered for the development of the debate were clarified, and the recommendations to implement a focus group efficiently were followed (Rodas & Pacheco, 2020). The duration of each group ranged from 50 to 60 minutes (Rodas & Pacheco, 2020). A flexible time criterion was applied, and both sessions were concluded when data saturation or redundancy in participants' discourse became evident to the moderator (Ortega, 2020). The groups were organized as follows: the morning group at the end of the participants' working day, and the afternoon group before the start of their working day, since both moments were the only ones in which the professionals involved could. The moderator asked the questions clearly and answered the doubts that arose. The intervention of both focus groups were recorded in audio format for later transcription. To increase the reliability of the study in relation to the methodology, the development of the focus groups was administered by a single moderator, who was responsible for initiating, maintaining, and leading both groups without intervening directly (Onwuegbuzie et al., 2011; Orvik et al., 2014).

Information Analysis

Using the MAXQDA qualitative analysis programme, a content analysis was executed through categories that were extracted deductively in a first phase of theoretical review on QoL, and, at a subsequent point, through an inductive categorization phase (Viramontes, 2024). The inductive phase comprised the analysis of the transcriptions using a preliminary process of open coding, to continue with an axial coding that allowed identifying the relationships with the categories established in the open coding. Finally, a selective coding was implemented to delimit the central categories and their

subcategories (Strauss & Corbin, 2002; Viramontes, 2024), assigning codes to specific segments for understanding.

To facilitate the designation of the transcripts (one for each focus group), each of them was assigned a code:

1. Trans 1_ Audio– Code 1 (Focus Group 1)
2. Trans 2_ Audio– Code 2 (Focus Group 2)

Finally, the coding was configured with the following categorization entities:

- Families: thematic sets of categories, corresponding to the dimensions studied of the QoL for people with ID (ASD).
- Categories: they are used to organize the information in a more detailed way.
- Subcategories: they are used to categorize ideas or opinions that are repeated throughout the debates.

Table 4 shows the descriptions of the different categories obtained.

Table 4
Families, system of categories and subcategories and their description

FAMILY: Emotional well-being (EW)		
Category	Subcategory	Descriptor
1.No change	-	Accompanying individuals do not notice any changes related to the EW
2. Positive changes	2.1. Stress reduction	Reduction and management of adverse or stressful situations that affect them on a day-to-day basis are observed, by showing a calm attitude during the completion of the programme
	2.2. Expectation	Tension is observed in the expectation of the activity as an event on the days it is implemented.
	2.3. Self-esteem	Participation, interest and daring are observed in actions that outside the activity do not dare
	2.4. Impulse control	A decrease in certain behaviours is observed in response to actions that normally alter them, showing more tolerance and emotional self-regulation as they feel more relaxed by the activity
	2.5. Happiness	A change in mood is observed when performing the activity and after it, through facial and body expressions that indicate enjoyment, pleasure and motivation
	2.6. Joy	Visible expressions related to joy are observed: laughter and smiles
	2.7. Distraction	Attention shifting to stimuli other than the common stresses of everyday life is observed
	2.8. Abstraction of concerns	A reduction in repetitive verbalizations of aspects that cause concern is observed
	2.9. Satisfaction	Participation in all sessions of the programme without showing any type of refusal.
	2.10. Positivism	The participants are observed calm, showing a receptive attitude to the realization of the programme

	2.1.1. Difference with other days	Relevant changes are observed in the participants in the activity, as opposed the activities carried out on other days
3. Negative changes	-	Changes are observed that reflect a worsening in the EW dimension
FAMILY: Interpersonal Relations (IR)		
Category	Subcategory	Descriptor
1.No change	-	Accompanying individuals do not perceive any IR-related changes
	2.1. Friends/colleagues	More peer interactions are observed while the programme.
	2.2. Educators	More connected behaviours with educators are observed
2. Positive changes	2.3. Family	More family-connected behaviours are observed.
	2.4. Physical contact	Receptivity is observed in physical contact with other individuals.
FAMILY: Physical Well-being (PW)		
Category	Subcategory	Descriptor
1. No changes	-	Accompanying individuals do not notice any changes related to the PW
	2.1. Routine activities	The performance of new daily activities is observed, contributing to greater autonomy in the participants
2. Positive changes	2.2. Body mobility	The performance of new physical activities is observed, contributing to greater autonomy in the participants
	2.3. Control of stereotypes	A reduction in obsessive thoughts and Self-harming repetitive behaviours is observed.
FAMILY: Social Inclusion (SI)		
Category	Subcategory	Descriptor
1.No change	-	Accompanying individuals do not notice any changes related to the SI
	2.1. Relationships	Good tolerance for introducing new people into their close circle
2. Positive changes	2.2. Participation	A good process of adaptation and involvement in the activities of the programme has been observed

As a concluding phase, the categorization entities were validated through the judgement of experts, made up of four university research professors with a PhD degree in the field of education. To measure the agreement between the experts involved in the validation, the Fleiss Kappa index (Torres & Perera, 2009) was used, which yielded a level of agreement among the experts of excellent (0.815). On the other hand, Cohen's Kappa index was applied to evaluate the agreement between the principal investigator and the remaining peer experts, yielding an almost perfect value (0.802) with one expert, a perfect value (1) with two experts, and a substantial value (0.783) with the remaining expert (Landis & Koch, 1977).

Based on this categorization, each of the quotations presented in the results includes a reference structured as follows: Document code\Family\Category\Subcategory (if applicable).

Results

The following presents the results derived from the analysis of reports by professionals who lived with the sample, focusing on the dance programme's effects on the QoL dimensions aligned with

this study's objectives: emotional well-being, physical well-being, interpersonal relationships and social inclusion.

Emotional Well-being

With regard to this dimension, the majority of professionals across both focus groups generally reported positive changes. However, some opinions were also identified that reflected the absence of significant changes and it was even stated that in some cases it could lead to negative consequences. It is worth highlighting, however, that these negative effects refer to the expectation or state characterized by impatience and anxiety in certain participants on the days when they knew that the activity was going to be implemented.

[...] Maybe one day, because it hasn't been done and he does ask with those nerves if they are going to be there, if they are going to come, if the activity is going to be done or not. Before they can live it with a little more anxiety. (1\EW\Negative changes)

Despite this fact, the testimonies of positive changes are considerably more numerous. At first, the same expectation that was previously identified as a negative consequence for some people, for others meant positive connotations, since asking about the activity and inquiring whether it would be implemented was perceived as a manifestation of desire or interest in executing it.

You can tell [...] to know if the activity is going to be done or not [...] and ask a lot from the morning. About participant 6, I have been told that during the morning to have asked a lot about the activity as well, I don't know if during the afternoon before the activity he would ask (2\EW\Changes\Expectation)

Similarly, notwithstanding the potential initial anxiety experienced by some individuals due to anticipation and, in one case, due to a high volume of new stimuli during the early stages of the programme, there was general consensus in asserting that, throughout the implementation of the programme, participants exhibited greater relaxation, thereby fostering a stress-free environment.

We have mentioned it before, Participant 4, removing when Participant 6 gets in at the end, that, if he gets to his own thing, he may scream or something that scares him, but during the activity he has not suffer any alteration or any moment like that of many nerves. This has been distinctly noticeable (2\EW\Changes\Absence of stress)

In this regard, the professionals indicated that the participants' experience of relaxation throughout the activity contributed to enhanced impulse control. Likewise, concentration on an activity with a clear purpose also facilitates emotional self-regulation, thus helping to control impulses. In this regard, one of the participants was a very representative example, since, while outside the activity he did not tolerate the invasion of his personal space, during it he showed a more flexible behaviour.

Regarding impulse control, about Participant 1 I mentioned that if he was touched even minimally outside the context of the activity, he would react strongly or say something. However, during the activity, since it is perceived by him as part of the experience and involves movement, he engages with it without reacting or expressing any concerns. Additionally, if someone were to touch his shoes, he would not be as attentive as he was initially, which also relates to impulse control. (2\EW\Changes\Impulse control)

Moreover, in both focus groups it was argued that they found the activity attractive, which was evidenced by their signs of happiness and enjoyment during its development.

It does seem to me that Participant 1 [...] really enjoys the activity, he is eager, and you can tell during the activity that he is much happier, he is very motivated, almost euphoric in some moments that you have seen him jumping, dancing and such. About Participant 3, some days I also thought that he participated exceptionally well. So did Participants 2 and 4 as well. (2\EW\Changes\Happiness)

In this context, a case was referenced in which certain professionals noted that, following the completion of the activity, behavioural changes were observed in the individual, and these changes were sustained throughout the remainder of the day.

Having seen him very nervous in the morning and then in the afternoon, I was told that he had a good afternoon after doing the activity. It may or may not be related, but it is undeniable that this has taken place (1\EW\Difference with other days)

Physical Well-being

Regarding this dimension, it was perceived that the activity served as a restorative space for the participants, being especially beneficial for those with more obsessive thoughts and repetitive behaviour patterns, sometimes self-harming.

It's like a KitKat there for people who have a lot of looping, like Participants 3 and 1. So for those people in particular it's fantastic that you suddenly cut that loop to do something that allows them a lot of things [...] attention, they have to memorize or name [...] (2\PW\Changes\Control of stereotypes)

This effect is closely related to the reduction of harmful repetitive behaviour patterns. Participant 4 was given as an example, since she quite often causes herself skin lesions by excessive scratching, as a form of self-regulation in response to elevated levels of anxiety or stress.

When this individual is very nervous and is, for example, scratching and causing self-injuries, then in the activity itself he disconnects, and he does not scratch [...] it forms as well part of physical well-being (2\PW\Changes\Control of stereotypes).

In relation to mobility dimension, the professionals observed improvements that could be extrapolated to daily actions, which in turn encourage the development of other physical and daily activities, thus contributing to greater autonomy and QoL.

They have acquired that ability. That maybe before you told them to make separate handkerchiefs, they didn't know how to do it [...] (1\PW\Changes\Body Mobility)

Interpersonal Relations

The results regarding this dimension reflected a disparity of opinions, since some professionals did not observe any change, while those who did perceive some progress attributed it to the fact that throughout the course of the programme there was greater interaction among peers. However, these peaks of interaction occurred only during the dance activity, with no changes outside of it.

They do relate to each other more during the activity itself, due to how the activity itself is, and because they have to touch each other, pass a ball, get into a hoop [...] So there the contact also changes. That is, outside the activity they do not relate to each other at all, unless they were ordered to interact between them in a concrete situation, (1\IR\Changes\Friends/colleagues)

In contrast, one of the professionals perceived positive changes at the relational level among the participants in the programme, both inside and outside it.

I think they even interact more outside than inside the game. Because they are already with you, they are already related to that activity and you, you know? (2\IR\No Change)

Regarding relations with professionals, some of the participants in the discussion mentioned that it is possible that during the activities realized, greater connection was fostered.

Yes, but well, inside the workshop they do tolerate that a little more because we send it to them through the workshop itself. But hey, they do have more of a relationship with each other, with you too and with people from outside (1\IR\Changes\Educators)

Social Inclusion

Overall, people who took part of the focus groups were considerably optimistic about the impact of the programme on social inclusion. It was primarily noted that the positive nature of the experience, along with the engaging and appealing nature of the activities undertaken, likely fostered increased openness to participating in similar future activities, even when these involve interaction with unfamiliar individuals,

It was emphasized that usually people with ASD who are in this Center, work and share space always with the same people. This routine can cause them to not easily tolerate the introduction of a new person into their close circle due to a lack of habit. Therefore, the implementation of dynamics that

force participants to withdraw from their comfort zone and provide them with a positive experience could make it easier for these situations to be perceived and received more favourably in the future.

Well, I think so. In the end, they are always here with the same people and the same educators and now they have had to take that leap, and you are three people, which is not just one, speaking simultaneously, at the same time and in the same space. I think that this will allow them to be more open to knowing [...] how they liked it, right? [...]. I think they would say yes and would do it with enthusiasm. (2\SI\Changes\Relationships)

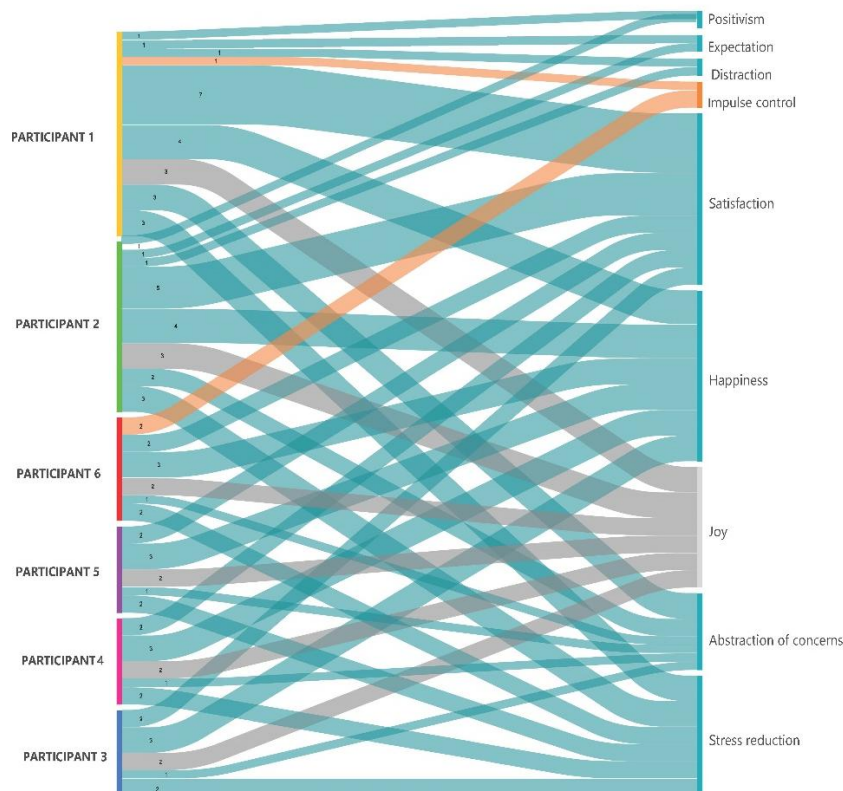
Therefore, the acceptance of new activities was also perceived as a positive influence. In this sense, initially, one of the participants showed strong resistance due to the novelty of the activity. However, through an adequate adaptation process he participated, so it was considered that this experience may have contributed to make those who participated in the programme become more receptive to initiating new activities in the future.

This may motivate them in the future to participate in additional activities outside the Center and with people from outside. Having experienced a positive outcome is likely to encourage them to continue engaging in such opportunities, which is considered beneficial for their personal development. (2\SI\Changes\Participation)

On the other hand, an analysis of the professionals' response frequencies who live with the sample allowed us to know in which indicators a greater development was observed, resulting in the following: abstraction of worries; joy; absence of stress; impulse control; distraction; expectation; happiness; positivism and satisfaction. Finally, an analysis of co-occurrences between the participants and these indicators was undertaken, which corresponds totally to the dimension of emotional well-being (Figure 1). After this analysis, it was possible to know how this dimension has developed in each of the participants, based on the perceptions of the nine professionals who constituted the focus groups.

Figure 1

Co-occurrence between the indicators of the EW dimension and the participants of the programme



Note: Sankey diagram: own elaboration

An examination of Figure 1 reveals that all participants perceived changes in the following indicators of the EW dimension: abstraction of worries, satisfaction, joy, absence of stress and happiness. In the indicators of positivism, expectancy, distraction and impulse control, improvements were only expressed in two participants in each. In relation to each of the people who participated in the programme, it should be noted that in participant 1 positive changes were observed in all the EW indicators, highlighting that of the nine professionals who participated in the focus groups, seven verbalized improvements in the level of satisfaction and four in the joy indicator. On the other hand, the testimonies of the professionals reflected positive effects in participant 2 in all indicators, except for impulse control, with five of them reporting changes in satisfaction. Subsequently, participants 3, 4 and 5 were in agreement that benefits were perceived in the following five indicators: abstraction of worries, satisfaction, joy, absence of stress and happiness. Finally, in participant 6, improvements were reported in all indicators except for positivity, expectation, and distraction.

Discussion

Autism spectrum disorder is a complex and heterogeneous condition that affects different levels of the person (physical, social, cognitive and emotional), reducing in many cases their QoL and involving mental health problems, a situation that affects both the individual on the Autism Spectrum and those who live with them, namely their family members and acquaintances. However, research in this field is dominated by experimental designs that evaluate the impact under the knowledge and understanding of individuals in Autism Spectrum themselves (Guldborg, 2017), without incorporating the perspectives and opinions of both families and the professionals who work with them into the methodologies. This fact leads to a gap between research and practice, which makes educational and social research responsible for the need to advance in more balanced methodologies that provide knowledge, both the autistic individuals and those who share their daily lives (National Council on Disability, 2023; Guldborg, 2017; Reviriego et al., 2022; Verdugo et al., 2009).

The present study considers the perceptions and knowledge of professionals who have coexisted, during the execution of a DMT and creative programme, with a group with autism and ID, revealing important results in terms of their impact on the emotional and physical well-being, social inclusion and interpersonal relationships of the participants. In this sense, the findings corroborate and complement previous research on the benefits of this activity in people with ASD.

Their perspectives are consistent with the assertions made by Barnet et al. (2015) and Barnet-López et al. (2016) who state that DMT is an effective tool for this group, providing a space for free emotional expression and improving social interaction. However, this study provides additional details on the heterogeneity of the results obtained in various dimensions of QoL. In this sense, the fact that the same effect can be considered negative for some people and positive for others, acknowledges the complexity of autism spectrum disorder, which is highly heterogeneous.

The emotional well-being dimension is the one that has demonstrated the most substantial changes for most participants. As Chaiklin & Wengrower (2008) indicated, the creative process inherent in DMT has strong therapeutic potential, as it allows the expression of emotions through movement, which generates an atmosphere of relaxation and decreases stress. In the present study, this statement aligns with the observation that stress was significantly reduced, and worries were alleviated in all participants, which contributed to the improvement of conditions such as anxiety (Barnet et al., 2015; Padilla & Coterón, 2013). However, instances of anticipatory anxiety before sessions highlight the need to adapt the approach for those individuals with ASD who react negatively to the expectation of a structured activity. This finding coincides with the approach of Hervás et al. (2017), who highlights the variability in the manifestations of ASD, which suggests that the intervention should be adjusted to the individual characteristics of each participant (Cuesta et al., 2017; Reviriego et al., 2022).

The study also indicates that DMT promotes social interactions during sessions, which is consistent with research by Chen et al. (2022), Mercado et al. (2021), and Morris et al. (2023a), which highlight the potential of this therapy to improve interpersonal relationships. However, a significant difference compared to prior studies is that these changes were not preserved in the participants'

everyday lives, which contrasts with the view of Cuesta et al. (2017), who underlines the need for interventions that achieve a sustained impact on social skills. This aspect underscores the importance of not only fostering interaction during the activity but also developing strategies to ensure that these improvements are generalized to other contexts. In this sense, the professionals' perception about the impact of the programme at the level of social inclusion is optimistic, since they consider that the fact of having shown a good acceptance of new activities and people in their routine will encourage greater openness to interaction with other people in the future.

Regarding physical well-being, the results of the study coincide with what Ollora et al. (2023) pointed out about the benefits of movement and dance. Alternatively, it involves sensory integration when developing in multisensory environments, significantly compromising the perceptual development of hearing, sight, and touch (Chen & Hong, 2018; Thye et al., 2018). An improvement in mobility and motor control was observed in the people who were part of the study, which has direct implications on their autonomy and basic motor skills. These findings are consistent with the postulates of Schalock & Verdugo (2007), who identify physical well-being as one of the key dimensions of QoL. However, as González (2024) and Nigaglioni (2023) mention, it is crucial that these interventions are prolonged over time to ensure lasting improvements and a greater generalization of these skills to the daily lives of the participants.

The results on some of the aforementioned QoL indicators confirm that, although to achieve improvements in social skills it is necessary to prolong the intervention over time, for dimensions such as physical and emotional well-being, the duration of the programme has favoured their improvement, as confirmed by the opinions of the educators in shorter interventions than the present one (Swaine et al., 2020).

Conclusions

Based on the objectives established in this research, it is concluded that the practice of Dance Movement Therapy (DMT) and creative dance, as leisure activities, provide benefits to the QoL in individuals affected from an Autism Spectrum Disorder. The positive effects observed tend to increase when the execution is maintained over time. These findings reinforce the need to generate leisure proposals that contribute to the comprehensive well-being of this group. In this sense, dance is configured as a valuable alternative, provided that its design and execution respect and adapt to the individual characteristics of those who practice it.

Conversely, the results largely coincide with the existing literature regarding the benefits of DMT to improve the physical and, especially, emotional well-being of people with ASD, since of the nine indicators integrated in the EW dimension, improvements have been reported in five of them in all participants. However, greater variability and limitation in sustainable improvements in interpersonal relationships and social inclusion is observed, as the programme fostered interaction between participants during the sessions, but these advances were not reflected in their daily lives. This raises questions about the intervention's ability to generate sustainable changes in participants' social skills, a crucial area for their social integration. However, the participants' acceptance of new activities and individuals over the course of the programme fostered optimism among professionals regarding the potential for social improvements in similar future contexts. This contrast in the dimensions analysed highlights the necessity for prolonged and personalized intervention programmes that, in addition to focusing on well-being during the sessions, work on the transfer of these improvements to daily life, as proposed by previous studies such as those of Cuesta et al. (2017) and Mercado et al. (2021).

Methodologically, the study emphasizes the significance of qualitative approaches in capturing subjective experiences and evaluating how practical interventions affect populations with disabilities. Using an exploratory and descriptive approach, and by means of focus groups, it was possible to gather the perceptions of professionals who work closely with the programme's participants an essential strategy for evaluating the impact of the intervention on a group facing significant challenges in verbal communication. This approach not only provides a more nuanced and in-depth view of the changes

generated by the programme but also strengthens the ecological validity of the results by being based on direct observations in real contexts.

One of the research prospects that could add the most value to the recognition of DMT as a leisure practice to improve the QoL in individuals affected by an Autistic Spectrum Disorder, with an impact on their mental health (Reviriego et al., 2022), would be the achievement of trials with a larger amount of participants that provide support for the findings. This emerges as one of the challenges encountered, since the specific characteristics related to people with ASD and ID have limited the intervention to a small sample of programme participants, which restricts the possibility of generalizing the results to broader populations. However, it is estimated that this numerical restriction of participants cannot be greater, as this would be detrimental to the care and quality of the intervention.

Given the significant impairments commonly observed in this population, research within the field of ASD establishes as one of the most important challenges for a real advance with a real impact on those who suffer from it, the evaluation of interventions taking into account the voices of those who work and live with this group. To summarize, it is necessary to gather evidence from practice, thus giving validity to studies with small samples and the reports and perceptions of coexistence educators (Guldborg, 2017; Verdugo et al., 2009). For this reason, this study used the testimonies of professionals who lived with the participants in this programme. Knowing that this implies a limited potential for generalization, the results obtained provide knowledge about experiences that have had a real impact on the lives of these individuals. The challenge will therefore be to find a balance between research methodologies, building new scientific paradigms (Guldborg, 2017; Lapresa et al., 2021) that consider the characteristics of the population with ASD and ID.

Contribution of each Author: "conceptualization, N.O.T. and E.G.Z.; methodology, N.O.T.; analysis, N.O.T. and E.G.Z.; manuscript writing, N.O.T. and E.G.Z.; revision and editing, N.O.T. and E.G.Z."

Funding: "This research has been supported by a Research Grant from the Institute of "Estudios Riojanos" of the Autonomous Community of La Rioja. Call 2023".

Conflict of Interest: "The authors declare that they have no conflict of interest."

Acknowledgments: Thanks are due to Nuria Ollora Triana for the translation of the article into English for its version in this language.

References

- Alcolea, G. (2010). La identidad de la persona con trastorno del espectro autista se conquista en el desarrollo de sus oportunidades de ocio. *Revista Española sobre Discapacidad Intelectual*, 41(233), 41-51.
- Altman, D. G. (1991). *Practical statistics for medical research*. Chapman and Hall.
- American Association on Intellectual and Developmental Disabilities [AAIDD]. (2010). *Intellectual Disability: Definition, Classification, and Systems of Supports*. American Association on Intellectual and Developmental Disabilities.
- American Psychiatric Association. (2018). *Manual Estadístico Diagnóstico de los Trastornos Mentales DSM-5 (5ta Ed.)*. En *guía de consulta de los criterios diagnósticos del DSM-5®*. <https://www.federaciocatalanadah.org/wp-content/uploads/2018/12/dsm5-manualdiagnosticoestadisticodelostrastornosmentales-161006005112.pdf>
- Arrogante, O. (2022). Técnicas de muestreo y cálculo del tamaño muestral: cómo y cuántos participantes debo seleccionar para mi investigación. *Enfermería Intensiva*, 33(1), 44-47. <https://doi.org/10.1016/j.enfi.2021.03.004>
- Babativa, H., Rubiano, P. A., Velásquez, T., González, J., Vega, M., & Gaona, N. (2024). La entrevista semiestructurada: una herramienta pertinente en la percepción de valores sociales para la vida. *Revista Lasallista de investigación*, 21(1), 92-107. <https://doi.org/10.22507/rli.v21n1a5>
- Barnet, S. (2017). *Implementación de un programa de danza para personas con Discapacidad Intelectual; Repercusiones en su Bienestar Emocional*. [Tesis de doctorado, Universitat Ramon Llull]. TDX. <https://www.tdx.cat/handle/10803/404840#page=1>

- Barnet, S., Pérez, S., Arbonés, M., & Guerra, M. (2015). La danza en personas con discapacidad intelectual: Revisión sistemática e identificación de los elementos necesarios para evaluar cambios de movimiento. *AusArt*, 3(1), 213–227. <https://doi.org/10.1387/ausart.14398>
- Barnet-López, S., Pérez-Testor, S., & Guerra-Balic, M. (2016). La danza y su repercusión emocional en personas con Discapacidad Intelectual. In J. Segura Bernal (Coord.), *Psicología aplicada al deporte adaptado* (pp. 195–206). Editorial UOC. <http://hdl.handle.net/20.500.11904/992>
- Barreda, C. F., Marticorena, B. A., & Modi, J. E. (2020). *Guía para el diseño y aplicación de entrevistas en profundidad. G-DEP-006*. SINEACE, Sistema Nacional de Evaluación, acreditación y certificación de la calidad educativa.
- Bénard, S. (2016). *La teoría fundamentada: una metodología cualitativa*. Universidad Autónoma de Aguascalientes.
- Callejo, J. (2002). Observación, entrevista y grupo de discusión: el silencio de las tres prácticas de investigación. *Revista Española de Salud Pública*, 5, 409–422.
- Celis, G. & Ochoa, M. G. (2023). Trastorno del Espectro Autista (TEA). *Revista de la Facultad de Medicina de la UNAM*, 65(1), 7–20. <https://doi.org/10.22201/fm.24484865e.2022.65.1.02>
- Chaiklin, S., & Wengrower, H. (2008). *La vida es danza. El arte y la ciencia en la Danza Movimiento Terapia*. Gedisa.
- Chen, P., & Hong, W. (2018). Neural circuit Mechanisms of Social Behavior. *Neuron*, 98(1), 16–30. <https://doi.org/10.1016/j.neuron.2018.02.026>
- Chen, T., Wen, R., Liu, H., Zhong, X., & Jiang, C. (2022). Dance intervention for negative symptoms in individuals with autism spectrum disorder: A systematic review and meta-analysis. *Complementary Therapies in Clinical Practice*, 47, 101565. <https://doi.org/10.1016/j.ctcp.2022.101565>
- Collado, R. (1997). El deporte para todos. In M. Cuenca (Coord.), *Legislación y política social sobre discapacidad* (pp. 95–100). Universidad de Deusto.
- Consejo Nacional de Discapacidad, Ministerio de Derechos Sociales y Agenda 2030, (2023). *Resolución de la presidencia del Consejo Nacional de Discapacidad por la que se da publicidad al acuerdo pleno del Consejo nacional de Discapacidad por el que se aprueba el I Plan de Acción de Estrategia Española en Trastorno del Espectro del Autismo 2023-2027*. <https://sede.administracion.gob.es/pagSedeFront/servicios/consultaCSV.htm>
- Cuenca, M., & Goytia, A. (2012). Ocio experiencial: antecedentes y características. *Arbor*, 188(754), 265–281. <https://doi.org/10.3989/arbor.2012.754n2001>
- Cuesta, J. L., Sánchez, S., Orozco, M. L., Valenti, A., & Cottini, L. (2017). Trastorno del espectro del autismo: intervención educativa y formación a lo largo de la vida. *Psychology, Society & Education*, 8(2), 157–172. <https://doi.org/10.25115/psye.v8i2.556>
- González, K. S. (2024). Beneficios de la Danza Movimiento Terapia en el trastorno del Espectro Autista: Revisión Sistemática. *MENTOR, Revista de Investigación Educativa y Deportiva* 3(8), 547–569. <https://doi.org/10.56200/mried.v3i8.7502>
- Guldborg, K. (2017). Evidence-Based practice in autism educational research: can we bridge the research and practice gap? *Oxford Review of Education*, 43(2), 149–161. <https://doi.org/10.1080/03054985.2016.1248818>
- Hernández, R., Fernández, C., & Baptista, M. del P. (2014). *Metodología de la investigación*. McGraw-Hill/Interamericana.
- Hervás, A., Balmaña, N., & Salgado, M. (2017). Los trastornos del espectro autista (TEA). *Pediatría Integral*, XXI(2), 92–108.
- Hughes, D.L., & DuMont, K. (2002). Using focus groups to facilitate culturally anchored research. In T.A. Revenson, A.R. D’Augelli, S.E. French, D.L. Hughes, D. Livert, E. Seidman, M. Shinn, & H. Yoshikawa (Eds.) *Ecological research to promote social change: Methodological advances from community psychology* (pp. 257–289). Kluwer academic/Plenum Publishers. https://doi.org/10.1007/978-1-4615-0565-5_11
- Koehne, S., Behrends, A., Fairhurst, M. T., & Dziobek, I. (2016). Fostering Social Cognition through an Imitation and Synchronization-Based Dance/Movement Intervention in Adults with Autism Spectrum Disorder: A

- Controlled Proof-of-Concept Study. *Psychother Psychosom* 85(1), 27-35. <https://doi.org/10.1159/000441111>
- Krueger, R., & Casey, M. (2000). *Focus groups: A Practical guide for Applied Research*. Sage Publications.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *International Biometric Society*, 33(1), 159-74. <https://doi.org/10.2307/2529310>
- Lapresa, D., Gutiérrez, I., Pérez de Albéniz, A., Merino, P., & Anguera, T. (2021). Teacher-student-task-interactions in a motor skills programme for an adolescent boy with autism spectrum disorder: a systematic observation study. *Journal for the Study of Education and Development*, 44(3), 553-585. <https://doi.org/10.1080/02103702.2020.18021>
- Latorre, A., del Rincón, D., & Arnal, J. (1996). Naturaleza de la investigación educativa. In A. Latorre (Coord.). *Bases metodológicas de la investigación educativa* (pp.25-50). Hurtado Mompeó.
- Learreta, B., Sierra, M. A., & Ruano, K. (2005). *Los contenidos de expresión corporal*. INDE.
- Lever, A. G., & Geurts, H. M. (2016). Psychiatric Co-occurring Symptoms and Disorders in Young, Middle-Aged, and Older Adults with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 46(6), 1916-1930. <https://doi.org/10.1007/s10803-016-2722-8>
- Lirola, M. J., Ruiz-Rico, G., Hernández-Rodríguez, A. I., & Prados-Megías, M. E. (2020). Body Expression-Based Intervention Programs for Persons with Intellectual Disabilities: A Systematic Review. *International Journal of Environmental Research and Public Health*, 17(20), 7569. <https://doi.org/10.3390/ijerph17207569>
- Martín del Valle, F., García, A., & Losada del Pozo, R. (2022). Trastornos del espectro del autismo. In A. Camacho (Coord.), *Protocolos diagnósticos y terapéuticos en Neurología Pediátrica* (pp. 75-83). Asociación Española de Pediatría y Asociación Española de Neurología Pediátrica.
- Mercado, E., Merino, C., & González, D. (2021). Los beneficios de la danza en la mejora de la calidad de vida (CdV) de personas con discapacidad intelectual (PcDI). *Alternativas. Cuadernos de Trabajo Social*, 28(2), 215-246. <https://doi.org/10.14198/ALTERN2021.28.2.04>
- Morris, P., Hope, E., Foulsham, T., & Mills, J. P. (2023a). Dancing out for a voice; a narrative review of the literature exploring autism, physical activity, and dance. *Journal of Bodywork and Movement Therapies*, 33, 202-215. <https://doi.org/10.1016/j.jbmt.2022.09.016>
- Morris, P., Hope, E., Foulsham, T., & Mills, J. P. (2023b). Exploring the use of a dance-based exergame to enhance autistic children's social communication skills in the home and school environments: a feasibility study. *International Journal of Developmental Disabilities*, 71(1), 141-158. <https://doi.org/10.1080/20473869.2023.2212985>
- Mottron, L., & Bzdok, D. (2020). Autism spectrum heterogeneity: fact or artifact? *Molecular Psychiatry*, 25, 3178-3185. <https://doi.org/10.1038/s41380-020-0748-y>
- National Institute of Mental Health [NIMH] (2022). *Trastornos del Espectro Autista*. Oficina de Política Científica, Planificación y Comunicaciones.
- Nieto, C., Murillo, E., Belinchón, M., Giménez, A., Saldaña, D., Martínez, M. Á., & Frontera, M. (2015). Supporting people with autism spectrum disorders in leisure time: Impact of a university volunteer program, and related factors. *Anales de Psicología*, 31(1), 145-154. <http://dx.doi.org/10.6018/analesps.31.1.166591>
- Nigaglioni, S. (2023). La Danzaterapia como Medicina Complementaria y Alternativa Efectiva en Personas con Autismo: Una revisión de literatura sistemática. *Ciencias de la conducta/Behavioral Sciences Journal*, 38(1), 110-130.
- Ollora, N., Magnanini, A., & Isidori, E. (2023). Beneficios principales de la danza como práctica de actividad física adaptable a todas las generaciones de convivencia de la sociedad actual. *Riverche Pedagogiche*, 226, 51-63.
- Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2011). Un marco cualitativo para la recolección y análisis de datos en la investigación basada en grupos focales. *Paradigmas*, 3(1), 127-157.
- Organización Mundial de la Salud. (2007). *Convención de los derechos de las personas con discapacidad* (A/RES/61/106). <https://www.un.org/esa/socdev/enable/rights/convtexte.htm>

- Organización Mundial de la Salud. (2011). *Informe mundial sobre la discapacidad*. Organización Mundial de la Salud. <https://www.who.int/es/publications/i/item/9789241564182>
- Ortega, J. (2020). ¿Cómo saturamos los datos? Una propuesta analítica “desde” y “para” la investigación cualitativa. *Interciencia*, 45(6), 293-299.
- Orvik, A., Berland, A., Larum, L., & Ringsberg, K. C. (2014). Factores situacionales en estudios de grupos focales: una revisión sistemática. *Paradigmas*, 6(2), 87-127.
- Padilla, C., & Coterón, J. (2013). ¿Podemos mejorar nuestra salud mental a través de la danza?: una revisión sistemática. *Retos*, 24, 194-197. <https://doi.org/10.47197/retos.v0i24.34556>
- Prieto, M.A., & March, J.C. (2002). Paso a paso en el diseño de un estudio mediante grupos focales. *Atención primaria: Publicación oficial de la Sociedad Española de Familia y Comunitaria*, 29(6), 366-373.
- Reviriego, E., Bayón, J. C., Gutiérrez, A., & Galnares-Cordero, L. (2022). *Trastornos del Espectro autista: evidencia científica sobre la detección, el diagnóstico y el tratamiento*. Ministerio de Sanidad. Servicio de Evaluación de Tecnologías Sanitarias del País Vasco. Informes de Evaluación de Tecnologías Sanitarias: OSTEBA.
- Rodas, F. D., & Pacheco, V. G. (2020). Grupos focales: Marco de referencia para su implementación. *INNOVA Research Journal*, 5(3), 182-195. <https://doi.org/10.33890/innova.v5.n3.2020.1401>
- San Martín, D. (2014). Teoría fundamentada y Atlas.Ti: recursos metodológicos para la investigación educativa. *REDIE: Revista Electrónica de Investigación Educativa*, 16(1), 104-122.
- Sanchiz, N. (1997). Arte, creatividad y personas con discapacidad. In M. Cuenca (Coord.), *Legislación y política social sobre Ocio y Discapacidad* (pp. 87-94). Universidad de Deusto.
- Schalock, R. L., & Verdugo, M. A. (2007). El concepto de calidad de vida en los servicios y apoyos para personas con discapacidad intelectual. *Siglo Cero. Revista Española Sobre Discapacidad Intelectual*, 38(224), 21-36.
- Schalock, R., Verdugo, M. A., & Jenaro, C. (2003). *Calidad de vida. Manual para profesionales de la educación, salud y servicios sociales*. Alianza.
- Strauss, A., & Corbin, J. (2002). *Bases de la investigación cualitativa. Técnicas y procedimientos para desarrollar la teoría fundamentada*. Universidad de Antioquía.
- Swaine, B., Poncet, F., Lachance, B., Proulx-Goulet, C., Bergeron, V., Brousse, É., Lamoureux, J., & McKinley, P. (2020). The Effectiveness of Dance Movement Therapy as an Adjunct to Rehabilitation of Adults with a Physical Disability. *Frontiers in Psychology*, 11, 1963. <https://doi.org/10.3389/fpsyg.2020.01963>
- Tein Ni Moo, J., & Tin hung Ho, R. (2024). Family-centered creative arts therapies for children with autism: A configurate systematic review. *Family Relations*, 74(1), 412-429. <https://doi.org/10.1111/fare.13092>
- Thye, M. D., Bednarz, H., Herringshaw, A. J., Sartin, E. B., & Kana, R.K. (2018). The impact of atypical sensory processing on social impairments in autism spectrum disorder. *Developmental Cognitive Neuroscience*, 29, 151-167. <https://doi.org/10.1016/j.dcn.2017.04.010>
- Torres, J. J., & Perera, V. H. (2009). Cálculo de la fiabilidad y concordancia entre codificadores de un sistema de categorías para el estudio del foro online en E-Learning. *Revista de Investigación educativa*, 7(1), 89-103.
- Usabiaga, E., & Moral, J. (1997). El ocio y el tiempo libre de las personas con autismo. In M. Cuenca (Coord.), *Legislación y Política Social sobre Ocio y Discapacidad* (pp. 181-186). Instituto de Estudios de Ocio.
- Vélaz, A., Rodríguez-Negro, J., Marcos-Rivero, B., & Yanci, J. (2024). Efectos del ejercicio físico en la calidad de vida de niñas, niños y adolescentes con autismo: Una revisión bibliográfica. *Revista Española de Discapacidad*, 12(1), 177-193. <https://doi.org/10.5569/2340-5104.12.01.09>
- Verdugo, M. A., & Schalock, R. L. (2009). Aspectos clave para medir la calidad de vida. In M. A. Verdugo (Coord.), *Cómo mejorar la calidad de vida de las personas con discapacidad. Instrumentos y estrategias de evaluación* (pp. 417-448). Amaru.
- Verdugo, M. A., Gómez, L. E., & Arias, B. (2009). *Evaluación de la calidad de vida en personas mayores: Escala FUMAT*. Publicaciones del INICO.
- Verdugo, M. Á., Schalock, R. L., & Gómez, L. E. (2021). El modelo de calidad de vida y apoyos: la unión tras veinticinco años de caminos paralelos. *Siglo Cero*, 52(3), 9-28. <https://doi.org/10.14201/scero2021523928>

- Viramontes, E. (2024). Análisis cualitativo en la investigación. *Revista de investigación educativa de la Rediech*, 15. https://doi.org/10.33010/ie_rie_rediech.v15i0.2074
- Weitlauf, A. S., Shate, N. A., McPheeters, M. L., & Warren, Z. (2017). Interventions Targeting Sensory Challenges in Children with Autism Spectrum Disorder-An Update. *Comparative Effectiveness Review*, 186. (Prepared by the Vanderbilt Evidence-based Practice Center under Contract No. 290-2015-00003-I.) AHRQ Publication No. 17-EHC004-EF. Rockville, MD: Agency for Healthcare Research and Quality; May 2017. <https://doi.org/10.23970/AHRQEPCCER186>.