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Higher education and quality of life of persons with intellectual disability: a comparative study between Spain and Mexico

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Inclusive higher education has become a strategic pathway for promoting quality of life (QoL) and social participation among individuals with intellectual or developmental disabilities. Despite its growing relevance, empirical research examining the multidimensional scope of these programs remains limited; therefore, this study adopts QoL as both the theoretical framework and the primary dependent variable to evaluate the university experience. A quantitative quasi-experimental pre-test/post-test design without a control group was employed, utilizing a convenience sample of 32 students with ID (19 in Spain and 13 in Mexico). The self-report version of the cross-culturally validated INICO-FEAPS scale was administered before and after program participation. Data were analyzed using descriptive and inferential statistics, including Student's *t*-test and Cohen's *d* effect size. The results indicate that participants in both contexts generally exhibit medium-to-high levels of perceived QoL. While no statistically significant changes were observed in the Spanish sample, the Mexican sample showed significant improvements associated with the Dimensions of Rights and Material Wellbeing. Comparative analysis suggests that perceptions of change may be linked to institutional maturity and sociocultural context, with greater variability observed in emerging systems. The findings suggest a positive association between university education and the strengthening of QoL; however, the lack of change in Self-determination and interpersonal Relations highlights the need for strategies that explicitly foster autonomy. Due to design limitations and sample size, these results should be interpreted with caution as an exploration of trends supporting personal development and the exercise of rights in accordance with the Quality of Life and Supports Model.

KEYWORDS

inclusive higher education, intellectual disability, quality of life, supports model, university

1 Introduction

In recent decades, the availability of higher education programs for individuals with intellectual disabilities (ID) has grown substantially across many countries. This expansion has been driven by inclusion policies and international frameworks aimed at promoting equitable access to postsecondary education for this student population (Lee et al., 2021). However, opportunities for students with ID to access higher education

remain limited (García-González et al., 2020), partly because reductionist views persist among families and professionals, who often underestimate the importance of academic experiences in fostering self-determination, employability, and social inclusion among young people with ID (Blustein et al., 2016; Leonard et al., 2016).

Research into higher education programs for those with disabilities has primarily focused on assessing their impact through individual indicators, such as the development of academic competencies and adaptive skills, as well as administrative factors related to the institutional sustainability of these programs and resource management (Agarwal et al., 2021). However, few studies have systematically explored how participation in an inclusive university setting impacts the Quality of Life (QoL) of individuals with ID. This is a significant shortcoming given that QoL is a multidimensional construct internationally recognised as a key factor in evaluating the effectiveness of inclusive practices and educational policies aimed at this population.

Quality of Life (QoL) has become a central concept in the field of disability, guiding both the design of inclusive policies and practices and the evaluation of the impact of support systems and intervention programs. It provides a framework for evaluating the extent to which these initiatives genuinely contribute to the wellbeing, and full participation of people with disabilities (Schalock and Verdugo, 2007). Beyond its role as an indicator (Gómez et al., 2022), QoL is now recognised as a normative criterion reflecting the level of commitment to participation and inclusion for all individuals without exception. While there is broad agreement on its core dimensions, enhancing QoL directly depends on the context and support available to everyone (Lombardi et al., 2024).

Within this context, the Quality of Life and Supports Model developed by Schalock and Verdugo (2002, 2013) has become one of the most effective and recognised theoretical frameworks for understanding intellectual and developmental disabilities. In addition to offering a comprehensive view of QoL, the model is also a practical tool for cultural and social transformation, promoting respect for human rights, equity, social justice, and the full participation of those with disabilities in their communities (Verdugo, 2025). It also provides a framework for a holistic, person-centred professional practice (Verdugo et al., 2021), supporting individuals in the discovery of meaning and greater quality of life within their immediate environment (Carratalá, 2025).

From the current social paradigm of disability, Quality of Life (QoL) is understood in terms of the interaction of social environments and the structures that have historically limited the full participation of those with disabilities. This perspective invites a change in focus from individual limitations toward social and institutional barriers, highlighting the need for the creation of non-exclusionary contexts (Schalock et al., 2021). The Convention on the Rights of Persons with Disabilities (UN, 2006) reinforces this view by conceptualising Quality of Life as an aspect of well-being that can be demanded by individuals rather than merely a contingent outcome, emphasising dimensions such as personal fulfillment and the need for spaces of active citizenship and social justice. Thus, promoting the Quality of Life of those with disabilities not only aims to foster

their autonomy and self-determination but also to transform social environments and supports, enabling full and meaningful participation in their communities (Verdugo et al., 2024), while also ensuring their rights as individuals (Morán et al., 2023). The integration of these approaches reveals QoL to be a multilayered and dynamic construct, where interaction between individual experiences and social contexts determines the real opportunities for inclusion.

From the Quality of Life paradigm, in line with the principle of fair and equitable access to quality education for all, access to higher education for those with intellectual disability represents an emerging challenge (Fia et al., 2022). Understanding how and to what extent universities succeed in transforming historically exclusionary socio-educational institutions and structures is a key factor in overcoming traditionally deficit-oriented views to diversity and fostering a capability-oriented approach that recognises students' integrity and potential (Moriña, 2019; Yerbury and Yerbury, 2021). Thus, universities, as social institutions and places of knowledge generation, have the responsibility to create the structural and pedagogical conditions which acknowledge the integrity and potential of every student, boosting their sense of belonging and contributing to human development (Shek and Hollister, 2017).

In exploring the relation between Quality of Life and higher education, it is important to recognise that inclusion is much more than simply access to academic programs; it also encompasses the lived experience of students within these programs, their opportunities for active participation and, ultimately, their social and employment integration after graduation (Shaw, 2021). This comprehensive view of inclusion highlights how the performance of higher education institutions and their processes can have a direct impact on the quality of life of individuals with and without disabilities (Lazić et al., 2021; Portela, 2016). Thus, university programs should be conceived as transformative spaces which reinforce the dignity of individuals and foster the meaningful academic and social participation of those with intellectual disability (Vela et al., 2024; Yadav et al., 2025).

The academic and professional aspirations of those with intellectual disability are a reflection of a profound desire for personal growth, autonomy, and active participation in society. However, these aspirations for a more meaningful and fulfilling life are often constrained by attitudinal, structural, and cultural barriers that undermine confidence in their own abilities (Collins et al., 2018). Educational, family, and workplace environments often show low expectations or paternalistic attitudes towards those with intellectual disability, which can foster a self-perception of incapacity or dependence (Lindsay et al., 2021). Overcoming these limitations requires a more comprehensive and human-centred understanding of disability which embraces the role of the university as not merely a provider of resources, but as a space that affirms and validates the right, dignity and potential of each individual to actively shape their own life (Hartblay, 2020; Reno et al., 2021).

Although inclusive education is relatively well established at the pre-primary and primary levels, the academic progress of students with intellectual disabilities (ID) tends to show decreasing levels of inclusion as they move through the educational system (Dolmage, 2017). Opportunities for full

participation gradually diminish, even in contexts where legislation guarantees access to university campuses, limiting both academic and social integration (Lee and Taylor, 2022). However, internationally, numerous initiatives in inclusive higher education have been established to overcome these barriers and promote the full participation of students with ID. Countries such as Iceland, the United Kingdom, the United States, Australia, Canada, and New Zealand have developed pioneering inclusive academic programs within accessible university environments using pedagogical approaches centred on individual needs and the social inclusion of students with specific educational needs (Björnsdóttir, 2017; Lee et al., 2021; Serrano and Viguera, 2024; Whirley et al., 2020).

In this international context, inclusive higher education programs have significant benefits not only for students with intellectual disabilities (ID) but also for their peers without disabilities (Moriña et al., 2020). These programs have been found to improve academic, professional, and socioemotional competences, while fostering autonomy, self-determination, self-esteem, and a stronger sense of belonging within the university community (Moriña and Martins, 2024). Additionally, inclusive postsecondary education has been linked to improved employment prospects and higher economic status, enabling a more autonomous and fulfilling life (Hendrickson et al., 2015; Verdugo et al., 2021). These findings reveal the importance of adopting a QoL oriented approach with supports, pedagogical strategies and institutional structures tailored to both the individual characteristics of each student and their sociocultural realities, thus maximising educational and social benefits.

Internationally, both Spain and Mexico have made consistent progress in developing university programs for students with intellectual disabilities, having a growing commitment to inclusive higher education. In Mexico, several universities, primarily private institutions, have launched innovative programs that integrate academic learning, socio-emotional skills and preparation for adult life, establishing a comprehensive, person-centred support model (Ariaza et al., 2020; Cruz and Casillas, 2017; Pérez-Castro, 2016; Sánchez, 2023). In Spain, academic programs of this kind are offered at over thirty universities, with programs structured around vocational training, community participation, and boosting autonomy and self-determination (Pérez-Jorge et al., 2021; Sánchez and Morgado, 2023; Serrano and Viguera, 2024; Solera et al., 2015). These national experiences illustrate the diversification of educational models and the consolidation of university environments that foster meaningful inclusion, active participation, and improved quality of life for students with intellectual disability.

Considering the international landscape and the benefits observed across diverse educational contexts, it is necessary to examine how inclusive higher education programs may contribute to improving the quality of life of students with intellectual disability (ID). In this study, Quality of Life (QoL) is assumed to play a dual and interconnected role. First, it functions as the overarching conceptual framework guiding the research, drawing on the Quality of Life and Supports Model, which conceptualizes university inclusion as a process grounded in social justice and the exercise of rights. Second, QoL is operationalized as the study's principal dependent variable, assessed multidimensionally through the eight domains of the INICO-FEAPS scale. This alignment between the theoretical

foundation and the measurement tool ensures that the results are not only metric in nature but also directly reflect the principles of dignity and civic participation embedded in the conceptual model.

Thus, the present study aims to explore the quality of life of individuals with intellectual disabilities participating in inclusive higher education programs in Mexico and Spain. The research seeks to provide empirical evidence on how these programs could contribute to the well-being and participation of students with ID, considering the interaction between individual and contextual factors that determine their quality of life.

To meet this general objective, the following specific objectives have been established:

1. To assess the Quality of Life (QoL) of persons with Intellectual Disabilities (ID) across its different dimensions (physical, emotional, social, occupational, material, and self-determination) before and after completing an inclusive university program in Spain, identifying the changes experienced during their academic participation.
2. To assess the QoL of persons with ID across its different dimensions before and after completing an inclusive university program in Mexico, taking into account the specific educational and social context of each institution.
3. To compare the QoL levels of persons with ID according to their nationality, identifying differences and similarities between the Spanish and Mexican contexts, and evaluating how cultural, institutional, and support factors influence the observed outcomes.

2 Materials and methods

2.1 Design of the research

This study employs a quantitative approach, aimed at describing and analyzing changes in the Quality of Life of students with intellectual disability participating in inclusive university programs. For this, a quasi-experimental design with pre-test and post-test measurements, without a control group, was implemented. The absence of a control group is justified by the substantial interindividual variability among people with intellectual disabilities, which would likely introduce methodological bias when comparing non-equivalent groups. For this reason, it was considered more appropriate to assess each participant's quality of life at two time points, baseline and post-intervention, using an intra-individual pretest-posttest design that allows for the comparison of changes experienced by the same person throughout the educational process. A descriptive and comparative approach was also used to evaluate QoL indices and explore differences by geographical context, specifically between Spain and Mexico.

2.2 Variables

This study considers both dependent and independent variables. The dependent variables are related to the Quality of

Life of individuals with intellectual disabilities, assessed across eight dimensions: self-determination, rights, social inclusion, personal development, interpersonal relations, material well-being, emotional well-being, and physical well-being. The independent variables included the geographical origin of the participants, distinguishing between the Spanish and Mexican populations, as well as the moment of data collection, based on the measures obtained in the pretest and posttest.

2.3 Sample

The training programs from which the participant sample was drawn are, first, the *Diplomado en Desarrollo de Habilidades Sociales y Vocacionales* at Anáhuac Mexico University, an inclusive initiative created in 2010 and aimed at young people between 18 and 28 years of age with intellectual or developmental disabilities. This three-year program offers human, social, and vocational training through a curriculum structured around areas such as comprehensive university education, self-determination and independent living, vocational training through undergraduate courses, university life, and professional internships. Its content is adapted to the abilities and needs of each student and benefits from the collaboration of foundations such as *Incluyeme* and *Unidos*, which promote employment opportunities for graduates.

Additionally, the sample also includes students from the *AVANZA Program* at Francisco de Vitoria University (Spain), a training initiative launched in the 2019–2020 academic year and aimed at young people between 18 and 25 years of age with intellectual and developmental disabilities. This two-year program is designed to foster inclusion in the university environment through a flexible and personalized methodology, based on individualized support and adaptation to the characteristics and needs of each student. AVANZA offers several training pathways, including Administration and Marketing, Early Childhood Assistant, Professionalization Course, and *Avanza Oposita*.

Participants were selected using non-probability convenience sampling, given the specific characteristics of the target population and the logistical constraints typical of this type of research. The final sample included 32 students with intellectual disabilities who were enrolled in training programs at higher education institutions in Spain and Mexico at the time of data collection. The selection of participants in Spain and Mexico was justified by the fact that the collaborating institutions belong to the same international university network, which ensures alignment in their educational principles, institutional values, shared native language, and comparable socioeconomic conditions. This homogeneity contributes to controlling extraneous variables derived from structural differences between institutions, ensuring that the observed variations cannot be attributed to discrepancies in their training models.

Of the total participants, 59.4% ($n = 19$) were of Spanish nationality, while 40.6% ($n = 13$) were from Mexico, allowing for a comparison between two distinct sociocultural contexts. Regarding gender, 62.5% ($n = 20$) of participants identified as female, and 37.5% ($n = 12$) as male.

Participants ranged in age from 19 to 28 years, with a mean age of 21.9 years. All students were enrolled in university programs specifically designed for individuals with intellectual or developmental disabilities, which provided academic training as well as support in developing personal and social skills.

Inclusion in the sample was justified by their active involvement in inclusive educational experiences at the university level, enabling a contextualized analysis of their perception of quality of life before and after participating in these programs. Likewise, the reduced sample size can be attributed to the fact that it involves a specific and hard-to-reach population, given that university programs aimed at individuals with intellectual disabilities typically include a limited number of students.

2.4 Instrument

The validated INICO-FEAPS scale developed by [Verdugo et al. \(2013\)](#) was used for data collection. This instrument is designed to provide a comprehensive assessment of quality of life in individuals with intellectual or developmental disabilities. Only the Self-Report section of the instrument was used, as the purpose of the study was to capture first-person experiences and the perceived changes across the different dimensions of quality of life and participation within their everyday environment. This form is designed to assess the eight dimensions of quality of life:

- Self-determination: Refers to the individual's ability to make decisions about their own life, set personal goals, and act in accordance with their preferences and interests. It involves exercising control over daily choices and actively participating in planning for the future.
- Rights: Refers to the recognition and exercise of human and legal rights, including equal opportunities, non-discrimination, and access to justice. This dimension assesses the extent to which individuals are aware of and able to exercise their rights within society.
- Social inclusion: Focuses on active participation in the community, access to inclusive environments, and interaction with people without disabilities. It assesses how individuals engage in social, educational, and work activities, as well as their sense of belonging within society.
- Personal development: Involves continuous growth and learning, the acquisition of skills and competencies, and the achievement of personal goals. This dimension evaluates access to educational opportunities and experiences that promote individual development.
- Interpersonal relations: Refers to the existence and quality of meaningful personal relationships, including friendships, family, and romantic relationships. It assesses the emotional and social support a person receives, as well as their ability to establish and maintain close bonds.
- Material wellbeing: Refers to the economic and material conditions that enable a dignified life, such as access to adequate housing, sufficient financial resources, and basic services. This dimension considers economic stability and satisfaction with one's standard of living.
- Emotional wellbeing: Focuses on affective and psychological aspects, including self-esteem, life

satisfaction, absence of stress, and presence of positive emotions. It assesses overall emotional state and the ability to cope with adverse situations.

- Physical wellbeing: Involves physical health and access to medical care, adequate nutrition, and healthy living conditions. This dimension assesses overall health status and the ability to carry out daily activities without significant physical limitations.

Each dimension consists of 9 items, for a total of 72 items in the entire questionnaire. Responses are given on a four-point Likert scale with the following options: “N” = Never, “A” = Sometimes, “F” = Frequently, and “S” = Always.

2.5 Procedure

The research began with a thorough review of existing literature to identify the most suitable instruments for assessing quality of life in individuals with intellectual disabilities. The INICO-FEAPS scale was selected for its accessible format and easy comprehension for this population. Data were collected from a group of participants with intellectual and developmental disabilities involved in university-based programs. Data was collected in two stages: an initial assessment in September, at the start of the program, and a second assessment in June, shortly before its completion.

Before questionnaire administration, the research team provided all instructors with standardized guidelines on how to offer support in a uniform and non-directive manner. During the session, participants were given instructions on how to respond, including explanations of the meaning of specific response options. Throughout the procedure, instructors offered clarifications regarding phrases or vocabulary that participants did not understand, without influencing their answers. Finally, all collected data were compiled and organized into a database for subsequent analysis.

2.6 Data analysis

For data analysis, descriptive statistics were first performed to provide an overall picture of the study variables. The assumption of normality was then assessed using the Kolmogorov–Smirnov test, which indicated that the variables were normally distributed ($p > 0.05$). Given this result, inferential analyses were conducted using Student’s *t*-test to compare mean scores across the two time points. Effect sizes were also calculated following Cohen’s (1988) criteria, where 0.2 represents a small effect, 0.5 a medium effect, and 0.8 a large effect.

All analyses were performed using SPSS software (version 26).

3 Results

The following section presents the results obtained in relation to the objectives of this study. Descriptive and comparative analyses were conducted to provide an overall view of the main characteristics of the variables examined across both groups of participants.

3.1 Analysis of the quality of life of individuals with intellectual disability before and after the program in the Spanish sample

This first part of the results addresses the first specific objective “to assess the quality of life of individuals with intellectual disability across its various dimensions, before and after completing the program in Spain”.

Table 1 (Self-report – Spain) presents the descriptive and comparative statistics for each of the dimensions assessed in the Spanish sample, both at pre-test and post-test. These results provide an initial overview of the changes observed in different aspects of participants’ quality of life throughout the program.

To properly interpret the results, it is important to note that the descriptive statistics were calculated based on the total scores from the questionnaire. These scores range from a minimum of 9 to a maximum of 36 points, with a midpoint of 22.5. Therefore, scores above this value indicate a favorable perception regarding the different dimensions of quality of life.

As shown in Table 1, prior to participation in the university program, the dimension with the highest mean score was material wellbeing ($M = 30.47$; $SD = 4.48$), suggesting a generally positive evaluation of this area by the participants. In contrast, the lowest mean score was observed in the self-determination dimension ($M = 25.94$; $SD = 3.77$), which may reflect perceived limitations in participants’ ability to make independent decisions and exercise control over their personal lives.

After completion of the program, material wellbeing remained the highest-rated dimension ($M = 31.52$; $SD = 2.85$), showing a slight improvement compared to the initial measurement. Conversely, the lowest post-test score was found in the social inclusion dimension ($M = 26.78$; $SD = 5.18$), which may suggest a less positive perception regarding active participation and sense of belonging within the community.

However, that in both the initial and post-program assessments, all analyzed dimensions show mean scores above the theoretical midpoint of the scale (22.5). This indicates that participants generally perceive their quality of life positively, even in those dimensions with comparatively lower scores.

Additionally, the inferential analysis conducted using Student’s *t*-test for related samples did not reveal statistically significant differences between pre-test and post-test scores in any of the dimensions assessed. This suggests that, although slight increases were observed in some areas, these changes did not reach a sufficient level of significance to be confidently attributed to the effect of the program.

3.2 Analysis of the quality of life of individuals with intellectual disability before and after the program in the Mexican sample

The following section presents the results related to the second specific objective of the study “to assess the QoL of persons with ID across its different dimensions before and after completing an inclusive university program in Mexico.”

TABLE 1 Descriptive and inferential statistics of self-report results before and after completing the program in the Spanish sample.

Quality of life dimensions	N	App. program	Min.	Max.	Mean	Standard dev	p
Self-determination	19	Pre	18	34	25.94	3.77	.135
		Post	19	36	27.21	3.67	
Rights	19	Pre	19	34	27.10	4.58	.180
		Post	21	35	28.21	4.40	
Emotional wellbeing	19	Pre	13	34	27.47	5.26	.433
		Post	21	33	27.68	3.49	
Social inclusion	19	Pre	2	34	26.63	7.37	.461
		Post	17	35	26.78	5.18	
Personal development	19	Pre	21	33	29.52	3.84	.250
		Post	23	36	30.31	4.32	
Interpersonal relations	19	Pre	19	36	29.00	4.83	.422
		Post	21	34	28.73	3.57	
Material wellbeing	19	Pre	23	36	30.47	4.48	.192
		Post	27	36	31.52	2.85	
Physical wellbeing	19	Pre	22	36	30.15	3.71	.154
		Post	22	36	31.15	4.56	

Table 2 (Self-report – Mexico) presents the descriptive and comparative statistics for each of the dimensions assessed in the Mexican sample, both at pre-test and post-test.

The results obtained from the Mexican sample reveal some noteworthy patterns in the perception of quality of life before and after participation in the university program. As shown in Table 2, prior to the start of the program, the highest mean score corresponded to the personal development dimension ($M = 31.07$; $SD = 2.06$), suggesting that participants viewed

themselves as having a good level of personal growth, learning opportunities, and self-fulfillment.

In contrast, the lowest scores in this initial measurement were observed in the emotional wellbeing ($M = 27.61$; $SD = 3.94$) and rights ($M = 27.61$; $SD = 4.07$) dimensions. These results may suggest that, at the beginning of the program, participants experienced greater challenges in managing their emotions or maintaining a positive emotional state, as well as a limited perception of the recognition and effective exercise of their rights.

TABLE 2 Descriptive and inferential statistics of self-report results before and after completing the program in the Mexican sample.

Quality of life dimensions	N	App. program	Min.	Max.	Mean	Standard dev	p
Self-determination	13	Pre	21	36	27.69	3.83	.500
		Post	21	36	27.69	4.55	
Rights	13	Pre	22	36	27.61	4.07	<.001
		Post	24	36	31.53	4.01	
Emotional wellbeing	13	Pre	22	35	27.61	3.94	.068
		Post	24	33	29.53	2.81	
Social inclusion	13	Pre	27	36	30.61	3.27	.149
		Post	24	36	29.61	3.70	
Personal development	13	Pre	28	34	31.07	2.06	.247
		Post	24	36	31.84	3.53	
Interpersonal relations	13	Pre	19	36	28.07	4.75	.375
		Post	24	31	27.61	2.59	
Material wellbeing	13	Pre	24	36	30.92	4.31	.002
		Post	27	36	34.15	2.60	
Physical wellbeing	13	Pre	26	36	30.69	3.42	.249
		Post	24	36	31.46	3.84	

After completion of the program, some changes were observed in scores. In the post-test, the highest mean score corresponded to the material wellbeing dimension ($M = 34.15$; $SD = 2.60$), which may reflect an improved perception of aspects such as economic resources, living conditions, or access to basic goods and services. This change suggests a possible improved perception of material stability and security, potentially influenced both by participation in the program and by external personal or family circumstances.

The dimension with the lowest mean score after the program was interpersonal relations ($M = 27.61$; $SD = 5.59$). This result may indicate ongoing difficulties in establishing or maintaining strong social connections, highlighting the need to strengthen educational strategies aimed at developing social and interpersonal skills.

As in the Spanish sample, all scores were above the scale's midpoint (22.5), indicating that participants generally rated their quality of life positively both before and after completing the program.

However, unlike the Spanish results, the inferential analysis using Student's *t*-test for related samples revealed statistically significant differences in two dimensions: rights and material wellbeing. These findings suggest that participants experienced meaningful improvements in their perception of the recognition and exercise of their rights, as well as in their economic wellbeing and access to material resources following participation in the program.

3.3 Comparative analysis of the quality of life of individuals with intellectual disability by geographical context: Spain and Mexico

The following section presents the results related to the third and final specific objective of this study, which aims to compare

the quality of life of individuals with intellectual disability between Spain and Mexico, both before and after completing the university program.

This comparative analysis makes it possible to identify similarities and differences in the scores obtained by both groups across each of the dimensions assessed. By considering two distinct geographical and sociocultural contexts, the results provide a broader perspective on the scope of the program and help assess the extent to which its contributions may be influenced by external contextual factors, such as institutional, family, or community environments.

Regarding the third specific objective of the study, the results reveal a general trend of similarity between both populations across most of the dimensions assessed. As shown in Table 3, the only dimension in which statistically significant differences were found was social inclusion ($F = 2.393$; $p = .039$), with a higher mean observed among the Mexican participants. This finding suggests that, prior to participating in the program, individuals with intellectual disability in Mexico reported a more favorable perception of their community participation, sense of belonging, and social relationships.

The effect size analysis using Cohen's *d* ($d = -0.656$) indicated a moderate effect. Although only one dimension reached statistical significance, this effect size suggests that the difference is not trivial and may reflect real disparities in social and community conditions between the two geographical contexts.

No statistically significant differences were observed in the remaining dimensions ($p > .05$). Furthermore, the Cohen's *d* values for these dimensions ranged from -0.102 to -0.854 ; although none reached statistical significance, these variations suggest that the observed differences may be due to chance or to uncontrolled factors within this analysis.

After completion of the university program, a comparative analysis was conducted between the Spanish and Mexican

TABLE 3 Descriptive and inferential statistics of self-report results before and after completing the program in the Mexican sample.

Quality of life dimensions	N	Nationality	t	p	d	Differences
Self-determination	32	Spain	-1.275	.106	-0.459	
		Mexico				
Rights	32	Spain	.323	.374	-0.116	
		Mexico				
Emotional wellbeing	32	Spain	-0.082	.467	-0.030	
		Mexico				
Social inclusion	32	Spain	-1.822	.039	-0.656	Mexico > Spain
		Mexico				
Personal development	32	Spain	-1.324	.098	-0.477	
		Mexico				
Interpersonal relations	32	Spain	.534	.299	-0.192	
		Mexico				
Material wellbeing	32	Spain	-0.283	.390	-0.102	
		Mexico				
Physical wellbeing	32	Spain	-0.412	.342	-0.854	
		Mexico				

TABLE 4 Student's *t*-test for mean differences between the Spanish and Mexican samples AFTER the start of the program.

Quality of life dimensions	N	Nationality	<i>t</i>	<i>p</i>	<i>d</i>	Differences
Self-determination	32	Spain	−0.331	.372	−0.119	
		Mexico				
Rights	32	Spain	−2.174	.019	−0.783	Mexico > Spain
		Mexico				
Emotional wellbeing	32	Spain	−1.589	.061	−0.572	
		Mexico				
Social inclusion	32	Spain	−1.689	.051	−0.608	
		Mexico				
Personal development	32	Spain	−1.057	.150	−0.380	
		Mexico				
Interpersonal relations	32	Spain	.968	.170	−0.348	
		Mexico				
Material wellbeing	32	Spain	−2.645	.006	−0.952	Mexico > Spain
		Mexico				
Physical wellbeing	32	Spain	−0.197	.423	−0.071	
		Mexico				

samples to identify potential differences across the assessed dimensions of quality of life. The results, presented in Table 4, indicate that although most dimensions did not show statistically significant differences, two dimensions, rights and material wellbeing, did show significant differences, with higher mean scores observed in the Mexican sample.

In the dimension of rights, a statistically significant difference was found ($p = .019$), with an effect size of $d = -0.783$, indicating a large effect according to Cohen's (1988) criteria. This result suggests that Mexican participants perceived, to a greater extent than their Spanish counterparts, a higher level of respect, protection, and exercise of their personal rights following participation in the program.

For the dimension material wellbeing dimension showed an even more pronounced difference ($p = .006$), with a Cohen's d value of -0.952 , also representing a large effect. This difference may reflect more positive perceptions regarding economic stability, living conditions, and access to material resources in the Mexican context. However, it is important to note that these perceptions may be influenced not only by the influence of the program itself but also by personal, family, or structural factors specific to each country.

Although the dimensions emotional wellbeing ($p = .061$; $d = -0.572$) and social inclusion ($p = .051$; $d = -0.608$) did not reach statistical significance, their p -values are close to the conventional threshold ($p < .05$) and show moderate effect sizes. These findings suggest there may be relevant differences of practical relevance although they are not considered statistically significant within this analysis.

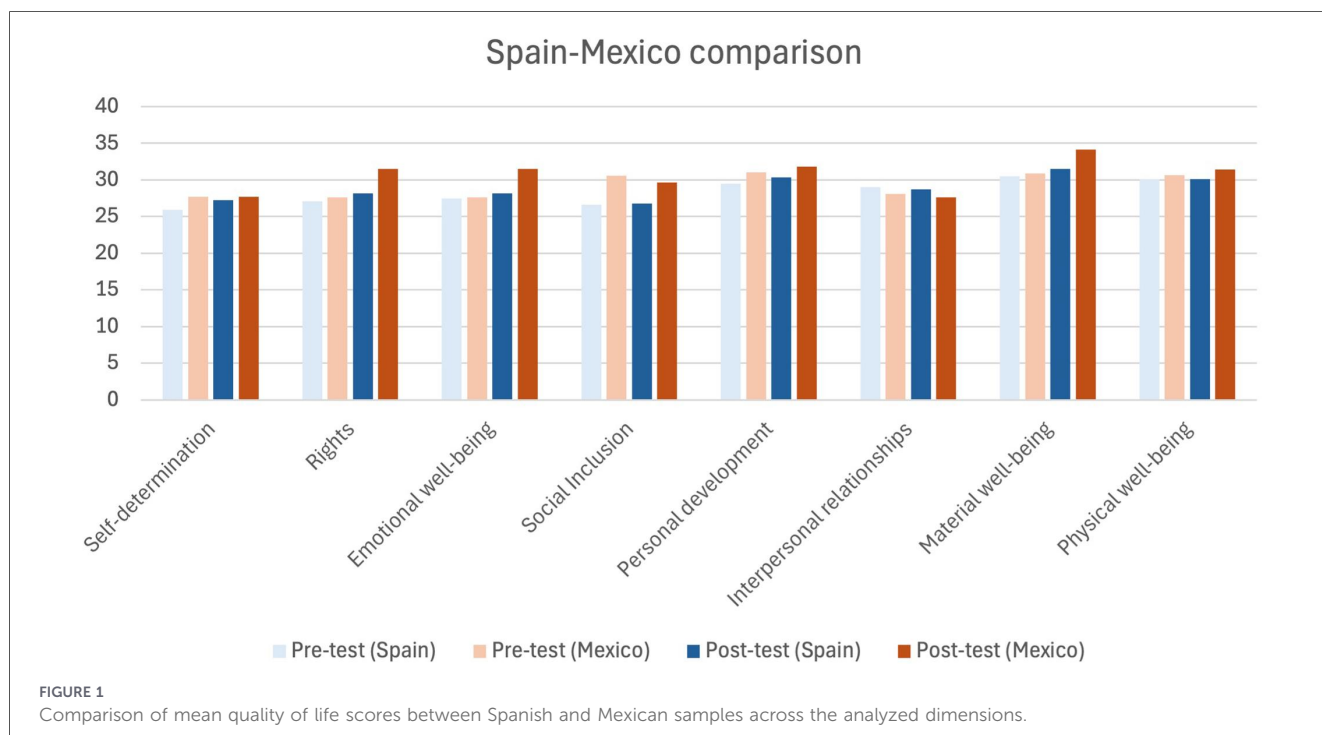
For the remaining dimensions, no significant differences were found ($p > .05$), and the effect sizes ranged from small to moderate. This indicates that, following participation in the program, perceptions of quality of life in these areas remained relatively similar between the two populations.

Subsequently, Figure 1 presents a graphical representation of the differences in mean scores obtained by the Spanish and Mexican samples across each of the analyzed dimensions of quality of life. This visual display facilitates comparison between the two groups, highlighting more clearly the potential discrepancies or similarities observed across the various areas evaluated.

4 Discussion

The results of this study allow for considering the possible contribution of inclusive higher education as a mechanism for promoting the quality of life of individuals with intellectual disability (Vela et al., 2024; Verdugo et al., 2021). The empirical evidence obtained in both the Spanish and Mexican contexts is related to the principles of the Quality of Life and Supports Model (Schalock and Verdugo, 2012, 2013; Verdugo, 2025), which posits that inclusive environments and personalized supports are key factors in fostering individual wellbeing and full participation in the community. In this regard, the findings should be interpreted as exploratory, given that the pre-post design without a control group limits causal inferences, although it still offers valuable indications of potential program impact. It is also important to note that including a control group was not considered appropriate due to the substantial heterogeneity in the needs, profiles, and developmental trajectories of individuals with intellectual disability. For this reason, comparing each participant's outcomes with their own scores at two different time points was deemed more robust and ethically sound.

Focusing on the results, it is first worth highlighting the finding of medium-to-high levels of quality of life across all dimensions, both before and after the programs, which indicates that a sense of belonging to an inclusive university environment



constitutes a relevant resource for the sustained wellbeing of individuals with disabilities (Barnes et al., 2021; Vaccaro et al., 2015). More broadly, beyond strictly academic or curricular aspects, this study also sought to explore how sharing everyday life in a university environment may contribute to quality of life, particularly in terms of socioemotional wellbeing and perceived inclusion for individuals with intellectual disability. Although this perception of inclusion coexists with the persistence of structural barriers that continue to limit the participation and full recognition of students with visible and invisible disabilities (Edgar et al., 2024), individuals ultimately aspire to be welcomed and acknowledged as part of the university community (Eisenman et al., 2020). This pattern suggests that students with intellectual disabilities who manage to access and remain in higher education are typically supported by relatively strong family and institutional networks. These networks function as an essential scaffold for their wellbeing and academic continuity, consistent with Verdugo et al. (2021), who emphasize the importance of synergy between formal supports, such as specialized university services, and informal supports, such as family and social involvement, in fostering positive life trajectories.

However, the significant differences observed in the Mexican case, particularly in the rights and material wellbeing dimensions, add an important nuance. These increases reflect the role of the university not only as a space for academic learning but also as a driver of social legitimization and civic empowerment (Bartolo et al., 2025; Bjørnerås et al., 2024; Corby et al., 2020; Rillotta et al., 2020). As students gain visibility and recognition within the university context, their perception of exercising their rights and their integration into more equitable social dynamics are strengthened (Lee and Taylor, 2022; Rodríguez et al., 2021). This direct link between educational inclusion and active citizenship aligns with the Convention on

the Rights of Persons with Disabilities (UN, 2006), which conceives higher education not merely as a formative resource but as a condition for participation and social justice. Taken together, these results suggest that participation in inclusive university programs may act as a catalyst for broader processes of social recognition and civic participation, particularly in contexts where such opportunities have historically been limited.

By contrast, the observed improvement in material wellbeing among the Mexican sample can be seen as a positive outcome of university participation: access to inclusive programs may enhance future employability, social mobility, and perceived stability within the family environment (Butler et al., 2016; Prohn et al., 2018). By comparison, the lack of significant change in the Spanish sample may reflect the more established policies and supports already present in the Spanish university system, which reduce the potential for noticeable improvement (Serrano and Viguera, 2024). This interpretation is consistent with the perspective of Lombardi et al. (2024), who highlight the critical role of the institutional context in shaping both the conceptualization and the subjective experience of Quality of Life. In addition, the relatively high baseline scores observed in the Spanish sample may indicate a ceiling effect that limits the observable margin for improvement and may also reflect differences in the sensitivity of the instrument across cultural contexts and in relation to the duration and intensity of the programs implemented.

The comparative analysis further underscores the persistence of cultural and structural differences between the two countries. In Mexico, inclusive universities remain an emerging arena for social transformation, which may account for the stronger perceived impact in areas related to recognition and equity (Ariaza et al., 2020). In Spain, while the implementation of these programs continues to challenge universities and raises multiple questions (Albert, 2023; Rodríguez, 2021), the gradual

consolidation of inclusive initiatives across institutions has fostered a comparatively more stable organizational and institutional environment. Yet, this maturity also seems to have led to a certain normalization of inclusion, tempering the perception of change. These interpretations should be understood as plausible hypotheses rather than conclusive explanations, given the limitations of the design and the sample size. From a meso- and macro-contextual perspective, these differences may be influenced by institutional cultures, the availability of community and support resources, socioeconomic conditions, and broader societal expectations regarding disability and inclusion in each country. These contextual factors highlight the importance of interpreting cross-country differences with caution, acknowledging that program outcomes are shaped not only by individual trajectories but also by wider sociocultural and institutional dynamics.

Among the dimensions showing less pronounced improvement, self-determination stands out, underscoring the persistent challenge it represents for inclusive higher education (Getzel and Thoma, 2008; Hakala et al., 2025; Moriña and Martins, 2024). Although institutional discourse increasingly promotes autonomy and active participation within inclusive campuses, the findings indicate that genuine opportunities for decision-making and self-regulation remain limited. In line with the arguments of Gavin-Chocano and Molero (2019), there is a clear need to advance toward the design of university curricula that explicitly incorporate strategies for developing self-determination, personal planning, and leadership skills, in coherence with a personalized, person-centered support approach (Carratalá, 2025; Verdugo et al., 2021). In both contexts, self-determination appears to be constrained by protective attitudes, rigid academic structures, and limited opportunities for students with intellectual disability to assume meaningful roles in planning and directing their own learning and participation, which may partly explain the modest changes observed in this dimension.

Similarly, the relatively low scores in interpersonal relations suggest that mere presence in inclusive settings does not guarantee fully engaging social experiences or horizontal support networks (Jorgensen and Lambert, 2012; Qvortrup and Qvortrup, 2017). In this regard, Björnsdóttir (2017) and Rose et al. (2021) emphasize that social inclusion requires intentional pedagogical mediation and an institutional culture that fosters encounter, dialogue, and reciprocity. These findings underscore the need to strengthen mentorship and support programs within university curricula, ensuring that the participation of students with intellectual disabilities extends beyond mere physical coexistence to relational and symbolic integration in university life (Planella-Ribera and Martínez-Rivera, 2021). This points to the relevance of designing structured opportunities for peer interaction, collaborative learning, and shared projects that can foster more reciprocal and meaningful interpersonal relationships.

The results seem to suggest that inclusive higher education should not be evaluated solely in terms of access or retention, but also in relation to its potential for generating transformative impact (Schofer et al., 2020). Analysis across the eight dimensions of quality of life indicates that inclusive programs may foster multidimensional benefits that go beyond academics, extending to emotional, social, and ethical domains. From this

perspective, higher education could also function as an environment that enables individuals with disabilities to participate in their context, develop socially, and move toward their integral development, which is in line with the quality of life paradigm as a normative criterion (Gómez et al., 2022; Verdugo, 2025). Consequently, the value of these programs lies not only in the acquisition of academic competences, but also in the possibility of experiencing belonging, recognition, and participation in a community that has traditionally been less accessible to individuals with intellectual disability.

Thus, the findings of this study suggest that inclusive higher education could constitute a crucial environment for enhancing the quality of life of individuals with intellectual disabilities, promoting personal development, the exercise of rights, and recognition as full citizens (Vela et al., 2024). Although the quantitative data vary between contexts, the results show that university participation is associated with possible benefits for individual wellbeing and social perceptions of inclusion, especially when support structures, such as disability centers or specialized services, facilitate recognition as part of personal and community identity (Abreu et al., 2017; Lopez-Gavira et al., 2019; Shpigelman et al., 2021). However, challenges remain in promoting self-determination and interpersonal relations, highlighting the need to advance toward educational models that integrate person-centered support strategies and a genuinely transformative university culture (Moriña, 2019; Shek and Hollister, 2017). Ultimately, inclusive higher education programs may act as catalysts for social justice, capable of reshaping traditional university structures and contributing to the development of more equitable and participatory societies (Verdugo, 2025; Yadav et al., 2025). In this regard, the present study provides empirical evidence from two different national contexts, while also pointing to the need for continued reflection on how institutional, cultural, and policy frameworks condition the scope and depth of the changes that these programs can generate.

4.1 Limitations and prospective research

This study presents certain limitations that should be considered when interpreting the results. The small sample size restricts the generalizability of the findings, given that access to larger samples is particularly challenging due to the limited availability of inclusive higher education programs in university settings and the typically low student–teacher ratios that characterize these initiatives. Furthermore, the absence of a control group prevents the establishment of firm causal relationships between program participation and the observed changes. It should also be noted that unmeasured sociodemographic variables, such as family dynamics, access to community resources, or participation in parallel interventions, may have acted as confounding factors and contributed to the variations detected in certain dimensions of quality of life.

In addition, the pre–post design is susceptible to maturation effects, insofar as some of the changes recorded over time may be partially attributable to developmental processes or external events unrelated to the program. Similarly, regression to the mean may have influenced the results, particularly among participants who presented extreme scores at baseline.

Future research should employ mixed-method approaches that incorporate qualitative techniques, such as interviews and focus groups with students and families, to deepen the understanding of their experiences, as well as include relevant contextual variables. Longitudinal studies are also recommended to examine the evolution of quality of life over the medium and long term. In particular, longitudinal designs with control groups would make it possible to distinguish more clearly between changes attributable to program participation and those related to maturation, regression to the mean, or contextual confounding variables. Likewise, it would be pertinent to explore how self-determination and interpersonal relations evolve over time, and how specific pedagogical strategies and support practices can foster these dimensions in both the Spanish and Mexican contexts.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Universidad Francisco de Vitoria and Universidad Anáhuac, respectively. The studies were conducted in accordance with the local and institutional legislation of both countries (the countries involved in the research, Spain and Mexico). Written informed consent for participation in this study was provided by the participants' legal guardians/next of kin.

Author contributions

FM: Writing – original draft, Conceptualization, Investigation. LM: Investigation, Writing – review & editing, Conceptualization, Writing – original draft. CT-A: Methodology, Writing – original

draft, Investigation, Conceptualization. EV: Writing – review & editing, Writing – original draft, Methodology, Data curation, Investigation, Supervision, Validation. LS: Conceptualization, Validation, Writing – review & editing, Writing – original draft.

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References

- Abreu, M., Hillier, A., Frye, A., and Goldstein, J. (2017). Student experiences utilizing disability support services in a university setting. *Coll. Stud. J.* 50 (3), 323–328.
- Agarwal, R., Heron, L., and Burke, S. L. (2021). Evaluating a postsecondary education program for students with intellectual disabilities: leveraging the parent perspective. *J. Autism Dev. Disord.* 51 (7), 2229–2240. doi: 10.1007/s10803-020-04676-0
- Albert, M. (2023). Educación inclusiva en la universidad. *Rev. Rights Hum. Educ.* 2 (8), 167–188.
- Ariaza, M. A., Bolívar, P. P., López, O. T., Álvarez, L., and Méndez, J. E. (2020). El origen de la universidad incluyente en México: su evolución y retos. *Rev. Biol. Agropecuaria Tuxpan* 8 (1), 24–34. doi: 10.47808/revistabioagro.v8i1.6
- Barnes, R., Kelly, A. F., and Mulrooney, H. M. (2021). Student belonging: the impact of disability status within and between academic institutions. *New Dir. Teach. Phys. Sci.* 16 (1), 1–14. doi: 10.29311/ndtps.v0i1.6.3607
- Bartolo, P. A., Borg, M., Callus, A.-M., Camilleri, L., De Gaetano, A., Mangiafico, M., et al. (2025). Students with disabilities in higher education call for personal empowerment, equitable inclusive systems, and individualized accommodations. *Front. Educ.* 10, 1–20. doi: 10.3389/feduc.2025.1432682
- Bjørnerås, A. B., Langørgen, E., Witsø, A. E., Kvam, L., Nolan, C., Leithaug, A. E., et al. (2024). Processes empowering disabled students in the co-production of inclusive higher education. *Soc. Sci.* 13 (7), 1–13. doi: 10.3390/socsci13070345
- Björnsdóttir, K. (2017). Belonging to higher education: inclusive education for students with intellectual disabilities. *Eur. J. Spec. Needs Educ.* 32 (1), 125–136. doi: 10.1080/08856257.2016.1254968
- Blustein, C. L., Carter, E. W., and McMillan, E. D. (2016). The voices of parents: post-high school expectations, priorities, and concerns for children with intellectual and developmental disabilities. *J. Spec. Educ.* 50 (3), 164–177. doi: 10.1177/0022466916641381
- Butler, L. N., Sheppard-Jones, K., Whaley, B., Harrison, B., and Osness, M. (2016). Does participation in higher education make a difference in life outcomes for students with intellectual disability? *J. Vocat. Rehabil.* 44 (3), 295–298. doi: 10.3233/JVR-160804
- Carratalá, A. (2025). Acompañando a personas con discapacidad intelectual hacia una vida de calidad y con sentido. *Siglo Cero* 56 (1), 43–63. doi: 10.14201/scero.32273
- Cohen, S. (1988). "Perceived stress in a probability sample of the United States," in *The Social Psychology of Health*, eds. S. Spacapan, and S. Oskamp (Newbury Park: Sage), 31–67.
- Collins, A., Azmat, F., and Rentschler, R. (2018). "Bringing everyone on the same journey": revisiting inclusion in higher education. *Stud. High. Educ.* 44 (8), 1475–1487. doi: 10.1080/03075079.2018.1450852
- Corby, D., Taggart, L., and Cousins, W. (2020). The lived experience of people with intellectual disabilities in post-secondary or higher education. *J. Intellect. Disabil.* 24 (3), 339–357. doi: 10.1177/1744629518805603

- Cruz, R., and Casillas, M.Á. (2017). Las instituciones de educación superior y los estudiantes con discapacidad en México. *Rev. Educ. Super.* 46 (181), 37–53. doi: 10.1016/j.resu.2016.11.002
- Dolmage, J. T. (2017). *Academic Ableism: Disability and Higher Education*. Ann Arbor: University of Michigan Press. doi: 10.3998/mpub.9708722
- Edgar, E., Pownall, M., and Harris, R. (2024). "Perceptions of university accessibility predicts feelings of belongingness in students with disabilities", international journal of disability. *Dev. Educ.* 72 (5), 896–907. doi: 10.1080/1034912X.2024.2362337
- Eisenman, L. T., Rolón-Dow, R., Freedman, B., Davison, A., and Yates, N. (2020). "Disabled or not, people just want to feel welcome": stories of microaggressions and microaffirmations from college students with intellectual disability. *Crit. Educ.* 11 (17), 1–22. doi: 10.14288/ce.v11i17.186499
- Fia, M., Ghasemzadeh, K., and Paletta, A. (2022). How higher education institutions walk their talk on the 2030 agenda: a systematic literature review. *High. Educ. Policy* 36, 599–632. doi: 10.1057/s41307-022-00277-x
- García-González, J. M., Gutiérrez Gómez-Calcerrada, S., Solera Hernández, E., and Ríos-Aguilar, S. (2020). Barriers in higher education: perceptions and discourse analysis of students with disabilities in Spain. *Disabil. Soc.* 36 (4), 579–595. doi: 10.1080/09687599.2020.1749565
- Gavin-Chocano, O., and Molero, D. (2019). Estudio sobre inteligencia emocional, quality of life y interpersonal relations de personas con intellectual disability. *Psychol. Soc. Educ.* 11 (3), 313–327. doi: 10.25115/psye.v11i3.2078
- Getzel, E. E., and Thoma, C. A. (2008). Experiences of college students with disabilities and the importance of self-determination in higher education settings. *Career Dev. Transit. Except. Individ.* 31 (2), 77–84. doi: 10.1177/0885728808317658
- Gómez, L. E., Morán, M. L., Al-Halabi, S., Swerts, C., Verdugo, M.Á., and Schalock, R. L. (2022). Quality of life and the international convention on the rights of persons with disabilities: consensus indicators for assessment. *Psicothema* 34 (2), 182–191. doi: 10.7334/psicothema2021.574
- Hakala, H. L., Virtanen, V., Toom, A., and Pyhältö, K. (2025). Enhancing study engagement and inclusion of students with disabilities in higher education through self-determination. *Int. J. Inclus. Educ.*, 30 (4), 1–18. doi: 10.1080/13603116.2025.2449831
- Hartblay, C. (2020). Disability expertise: claiming disability anthropology. *Curr. Anthropol.* 61 (21), 26–336. doi: 10.1086/705781
- Hendrickson, J., Therrien, W., Weeden, D., Pascarella, E., and Hosp, J. (2015). Engagement among students with intellectual disabilities and first year students: a comparison. *J. Stud. Aff. Res. Pract.* 52 (2), 204–219. doi: 10.1080/19496591.2015.1041872
- Jorgensen, C. M., and Lambert, L. (2012). Inclusion means more than just being. *Int. Jo. Whole Sch.* 8 (2), 21–36.
- Lazić, Z., Đorđević, A., and Gazizulina, A. (2021). Improvement of quality of higher education institutions as a basis for improvement of quality of life. *Sustainability* 13 (8), 1–27. doi: 10.3390/su13084149
- Lee, C. E., and Taylor, J. L. (2022). A review of the benefits and barriers to postsecondary education for students with intellectual and developmental disabilities. *J. Spec. Educ.* 55 (4), 234–245. doi: 10.1177/00224669211013354
- Lee, C. E., Day, T. L., Carter, E. W., and Taylor, J. L. (2021). Examining growth among college students with intellectual and developmental disability: a longitudinal study. *Behav. Modif.* 45 (2), 324–348. doi: 10.1177/0145445520982968
- Leonard, H., Foley, K. R., Pikora, T., Bourke, J., Wong, K., McPherson, L., et al. (2016). Transition to adulthood for young people with intellectual disability: the experiences of their families. *Eur. Child. Adolesc. Psychiatry.* 25 (12), 1369–1381. doi: 10.1007/s00787-016-0853-2
- Lindsay, S., Cagliostro, E., Leck, J., and Stinson, J. (2021). Career aspirations and workplace expectations among youth with physical disabilities. *Disabil. Rehabil.* 43 (12), 1657–1668. doi: 10.1080/09638288.2019.1671505
- Lombardi, M., Claes, C., Bradley, V. J., and Schalock, R. L. (2024). The influence of context on the conceptualization, measurement, and application of the concept of quality of life. *J. Policy. Pract. Intellect. Disabil.* 21 (2), e12508. doi: 10.1111/jppi.12508
- Lopez-Gavira, R., Moriña, A., and Morgado, B. (2019). Challenges to inclusive education at the university: the perspective of students and disability support service staff. *Innovation* 34 (3), 292–304. doi: 10.1080/13511610.2019.1578198
- Morán, L., Gómez, L. E., Verdugo, M. A., and Schalock, R. L. (2023). The quality of life supports model as a vehicle for implementing rights. *Behav. Sci.* 13 (5), 1–12. doi: 10.3390/bs13050365
- Moriña, A. (2019). "Inclusive education in higher education: challenges and opportunities," in *Postsecondary Educational Opportunities for Students with Special Education Needs*, eds. M. R. Coleman, and M. Shevlin (Routledge), 3–17. doi: 10.4324/9781351107570-2
- Moriña, A., and Martins, M. H. (2024). Success and self-determination: a systematic review of the narratives of students and graduates with disabilities. *High. Educ. Res. Dev.* 43 (5), 1107–1123. doi: 10.1080/07294360.2023.2293191
- Moriña, A., Sandoval, M., and Carnerero, F. (2020). Higher education inclusivity: when the disability enriches the university. *High. Educ. Res. Dev.* 39 (6), 1202–1216. doi: 10.1080/07294360.2020.1712676
- Organización de las Naciones Unidas – ONU (2006). Convención sobre los Rights de las Personas con Discapacidad. Available online at: <https://www.un.org/esa/socdev/enable/documents/tcccnvs.pdf> (Accessed July 12, 2025).
- Pérez-Castro, J. (2016). La inclusión de las personas con discapacidad en la educación superior en México. *Sinéctica* 46, 1–15.
- Pérez-Jorge, D., Ariño-Mateo, E., González-Contreras, A. I., and del Carmen Rodríguez-Jiménez, M. (2021). Evaluation of diversity programs in higher education training contexts in Spain. *Educ. Sci.* 11 (5), 1–15. doi: 10.3390/educsci11050226
- Planella-Ribera, J., and Martínez-Rivera, O. (2021). Los disability studies y el acompañamiento a estudiantes con discapacidad en la universidad española. *Rev. Bras. Educ. Esp.* 27, 509–528. doi: 10.1590/1980-54702021v27e0185
- Portela, P. M. (2016). Relación entre la educación inclusiva y la quality of life. *Revista INFAD de psicología. Int. J. Dev. Educ. Psychol.* 1 (2), 499–510. doi: 10.17060/ijodaep.2016.n2.v1.17
- Prohn, S., Kelley, K., and Westling, D. (2018). Students with intellectual disability going to college: what are the outcomes? A pilot study. *J. Vocat. Rehabil.* 48, 127–132. doi: 10.3233/jvr-170920
- Qvortrup, A., and Qvortrup, L. (2017). Inclusion: dimensions of inclusion in education. *Int. J. Inclus. Educ.* 22 (7), 803–817. doi: 10.1080/13603116.2017.1412506
- Reno, J., Hart, K., Mendelson, A., and Molzon, F. (2021). Toward a critical and comparative anthropology of disability: absent presence and exemplary personhood. *Soc. Anal.* 65 (3), 131–149. doi: 10.3167/sa.2021.650307
- Rillotta, F., Arthur, J., Hutchinson, C., and Raghavendra, P. (2020). Inclusive university experience in Australia: perspectives of students with intellectual disability and their mentors. *J. Intellect. Disabil.* 24 (1), 102–117. doi: 10.1177/1744629518769421
- Rodríguez, P., Izuzquiza, D., and Cabrera, A. (2021). Inclusive education at a Spanish university: the voice of students with intellectual disability. *Disabil. Soc.* 36 (3), 376–398. doi: 10.1080/09687599.2020.1745758
- Rodríguez, S. (2021). Educación y capacitismo: los límites de la educación inclusiva en España. *Dilemata* 36, 5–18.
- Rose, A. J., Kelley, K. R., and Raxter, A. (2021). Effects of PEERS® social skills training on young adults with intellectual and developmental disabilities during college. *Behav. Modif.* 45 (2), 297–323. doi: 10.1177/0145445520987146
- Sánchez, J. L. (2023). Análisis exploratorio de las políticas sobre diversidad e inclusión de diez universidades públicas en México a partir de documentos estratégicos. *Voces Educ.* 8 (16), 150–173.
- Sánchez, M. N., and Morgado, B. (2023). "With arms wide open". inclusive pedagogy in higher education in Spain. *Disabil. Soc.* 39 (7), 1800–1820. doi: 10.1080/09687599.2022.2162858
- Schalock, R. L., and Alonso, M. A. V. (2002). *Handbook on Quality of Life for Human Service Practitioners*. Washington: American Association on Mental Retardation.
- Schalock, R. L., and Verdugo, M. A. (2007). El concepto de quality of life en los servicios y apoyos para personas con intellectual disability. *Siglo Cero* 38 (4), 21–36. Available online at: <https://sid-inico.usal.es/docs/F8/ART10366/articulos2.pdf>
- Schalock, R. L., and Verdugo, M. A. (2012). A conceptual and measurement framework to guide policy development and systems change. *J. Policy Pract. Intellect. Disabil.* 9 (1), 63–72. doi: 10.1111/j.1741-1130.2012.00329.x
- Schalock, R. L., and Verdugo, M. A. (2013). *El Cambio en las Organizaciones de Discapacidad. Estrategias Para Superar sus Retos y Hacerlo Realidad. Guía de Liderazgo*. Alianza.
- Schalock, R. L., Luckasson, R., and Tassé, M. J. (2021). An overview of intellectual disability: definition, diagnosis, classification, and systems of supports. *Am. J. Intellect. Dev. Disabil.* 126 (6), 439–442. doi: 10.1352/1944-7558.126.6.439
- Schofer, E., Ramirez, F. O., and Meyer, J. W. (2020). The societal consequences of higher education. *Sociol. Educ.* 94 (1), 1–19. doi: 10.1177/0038040720942912
- Serrano, L., and Viguera, M. (2024). A systematic review of the presence and participation of students with intellectual disabilities in Spanish universities. *J. Intellect. Disabil.* 29 (4), 1063–1080. doi: 10.1177/17446295241246035
- Shaw, A. (2021). Inclusion of disabled higher education students: why are we not there yet? *Int. J. Inclus. Educ.* 28 (6), 820–838. doi: 10.1080/13603116.2021.1968514
- Shek, D. T., and Hollister, R. M. (2017). *University Social Responsibility and Quality of Life*. Springer Nature Singapore Pte Limited.
- Shpigelman, C. N., Mor, S., Sachs, D., and Schreuer, N. (2021). Supporting the development of students with disabilities in higher education: access, stigma, identity, and power. *Stud. High. Educ.* 47 (9), 1776–1791. doi: 10.1080/03075079.2021.1960303
- Solera, E., Gutiérrez, S., and García, J. M. (2015). "Students with disabilities at Spanish universities: data and analysis of the access to higher education," in *INTED2015, 9TH International Technology, Education and Development Conference*, eds. L. Gómez, A. López, and I. Candel, 2184–2193.
- Vaccaro, A., Daly-Cano, M., and Newman, B. M. (2015). "A sense of belonging among college students with disabilities: an emergent theoretical model". *J. Coll. Stud. Dev.* 56 (7), 670–686. doi: 10.1353/csd.2015.0072

- Vela, E., Henao, D., Serrano, L., and Martín, L. (2024). Quality of life in higher education for individuals with intellectual disabilities and family perceptions. *J. Intellect. Disabil. Diagn. Treat.* 12, 1–11. doi: 10.6000/2292-2598.2024.12.01.1
- Verdugo, M. A. (2025). La construcción de una sociedad inclusiva. *Siglo Cero* 56 (1), 19–29. doi: 10.14201/scero.32212
- Verdugo, M. A., Gómez, L., Arias, B., Santamaría, M., Clavero, D., and Tamarit, J. (2013). *Escala INICO-FEAPS: Evaluación Integral de la Quality of Life de Personas con Intellectual Disability o del Desarrollo*. Salamanca: INICO.
- Verdugo, M. A., Schalock, R. L., and Gómez, L. E. (2021). El modelo de quality of life y apoyos: la unión tras veinticinco años de caminos paralelos. *Siglo Cero* 52 (3), 9–28. doi: 10.14201/scero2021523928
- Verdugo, M. A., Schalock, R. L., and Gomez, L. E. (2024). The quality of life supports model as a major component in applying the quality of life paradigm. *J. Policy Pract. Intellect. Disabil.* 21 (1), 1–5. doi: 10.1111/jppi.12468
- Whirley, M. L., Gilson, C. B., and Gushanas, C. M. (2020). Postsecondary education programs on college campuses supporting adults with intellectual and developmental disabilities in the literature: a scoping review. *Career Dev. Transit. Except. Individ.* 43 (4), 195–208. doi: 10.1177/2165143420929655
- Yadav, M., Sharma, P., and Nghiem, X. H. (2025). “Impact of inclusive education and lifelong learning in higher education,” in *Academic Support Services and Strategies in Higher Education*, ed. D. M. Velliariis (IGI Global Scientific Publishing), 221–250. doi: 10.4018/979-8-3693-4175-9.ch009
- Yerbury, J. J., and Yerbury, R. M. (2021). Disabled in academia: to be or not to be, that is the question. *Trends Neurosci.* 44 (7), 507–509. doi: 10.1016/j.tins.2021.04.004