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# QUALITY OF LIFE, ADOLESCENCE AND INCLUSIVE SCHOOLS: COMPARING REGULAR AND SPECIAL NEEDS STUDENTS

## *Calidad de vida, adolescencia y escuelas inclusivas: comparación entre alumnado regular y con necesidades educativas especiales*

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**INTRODUCTION.** The study of the quality of life in adolescence is a fairly new topic in scientific research; having wide implications on the development of educational practices. The pursuit of the educational inclusion requires a commitment from schools to higher participation and satisfaction of all students in their school life. The main objective of this paper is to analyse the perception of the quality of life that adolescent students have with and without special educational needs (SEN). **METHOD.** This research is a descriptive and exploratory study with a quantitative approach. The impact of personal and educational variables is analysed. The Questionnaire for the Evaluation of the Adolescents Students Quality of life (Gómez-Vela & Verdugo, 2009) was applied to a sample of 438 adolescents at ages between 12-19 in Galician schools (Spain). It assesses seven domains: emotional wellbeing, interpersonal relationships, personal development, physical wellbeing, inclusion (originally, it was referred to as integration/presence in the community), material wellbeing, and self-determination. **RESULTS.** The results showed appropriate levels of quality of life in all adolescents. These being slightly lower for students with Intellectual Disability (ID) in the domains of self-determination and physical wellbeing, and students with Attention Deficit and Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) in physical wellbeing. Younger students, generally, achieved better results, especially in physical wellbeing and self-determination. These domains had lower scores in students of Special Educational Centers (SEC). Male students earned higher scores on emotional wellbeing and inclusion than female students. **DISCUSSION.** These findings suggest the presence of regular needs of students that require special care by schools, as well as specific needs that demand a response based on personalized support adapted to each student, especially students vulnerable to social and educative exclusion.

**Keywords:** *Inclusive education, Quality of life, Special needs students, Educational needs, Adolescents.*

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## Introduction

Improving life conditions and satisfaction of adolescents plays a central role in current research and educational practices due to the changes in the way of understanding education. The main intention of schools is to reach major levels of equity, participation and satisfaction of all students based on the principles of normalization and educative inclusion. The major advances in the field of educational inclusion and students quality of life are presented.

### Inclusive education in the classroom and quality of life

The concept of inclusion emerged in Europe in the nineties, following the conclusion of the World Conference on Education for All (Jomtien, Thailand). The central axis was the struggle for a more tolerant and comprehensive school with students. Therefore, schools should facilitate opportunities to take part in the decision-making process involving them. In Spain, the inclusive movement took place four years later, after the World Conference on Special Needs Education (United Nations Educational, Scientific and Cultural Organization [UNESCO], 1994). A few key proposals to achieve a quality school begun to be designed: the reinterpretation of individual differences, of the educational action and of the concept of Special Educational Needs (SEN), and the promotion of improvements in the education of students with SEN inside the process of a global educational reform (Echeita & Ainscow, 2011; Verdugo, 2009). The inclusive movement promotes a systematic improvement and innovation of the schools. All students should be encouraged to participate in school life, especially those more vulnerable to the exclusion or academic failure. The elimination of traditional teaching practices, the reform of the curriculum and the disposition of supports in irregular classrooms were essential (Callado, Molina, Pérez, & Rodríguez, 2015; Shyman, 2015).

The main goal for an inclusive school is to improve the quality of life of all students (Schalock, Gardner, & Bratley, 2009). Quality of life measurement becomes an excellent point in the evaluation of a personal results-based education. It allows to identify needs and deficit areas of adolescents' life, and lead interventions to contribute to their successful transition to adult life, in areas related to employment, autonomy and personal independence (Cock, Thoresen & Lee, 2015; Gómez-Vela & Verdugo, 2009; Hole, Stainton, & Rosal, 2015; Muntaner, 2013).

The wellbeing of adolescents and their successful transition into the adult life will be possible insofar as the various actors involved in their education attend on their individual needs from a holistic approach. Familiar and professional supports must be programmed from students' experiences, desires and opinions, and focus on the attainment of their personal goals (Belmonte & García, 2013; Callado *et al.*, 2015). This way, the current interest in knowing and improving the quality of life of adolescents has led to a gradual increase of research; namely, the analysis and evaluation of the intervention programs.

### Quality of life and adolescence

The quality of life has not been studied in the same depth in all stages of the development (Alfaro, Casas, & López, 2015; Higuera & Cardona, 2015). Until recently, it was common to adapt adult models and instruments to the study of the wellbeing of the adolescence with and without SEN. Nevertheless, recent changes in the educational paradigm have resulted in a new thinking, regarding quality of life as: (1) a sensitizer concept that focuses on assessing personal outcomes and on leading the advances and changes to the school improvement; (b) a vehicle for connecting the movement for the transformation of the school, based on the paradigm of support and the transition to adulthood; and (3) a new way of thinking

about the quality improvement by providing indications and standards for determining the living conditions of students, their needs and their satisfaction (Claes, van Hove, van Loon, Vandeveld, & Schalock, 2010; Muntaner, 2013; Urzúa & Caqueo-Urizar, 2012).

In Spain, several authors (Alfaro *et al.*, 2015; Gómez-Vela & Verdugo, 2004, 2009; Gómez Vela, Verdugo, & González-Gil, 2007; Higueta & Cardona, 2015; Muntaner, 2013) present a conceptual framework and a series of indicators to measure the quality of life in adolescence and, even more, to implement intervention programs regarding diagnosis. This allows a best comprehension of the level of satisfaction of adolescents with their own lives, their needs, the success of the interventions, and the strategies that must be implemented in the future.

Special interest raises the model developed by Gómez-Vela & Verdugo (2004, 2006), which conceptualizes adolescence as a stage of changes concerning the wellbeing of individuals. Quality of life is a multidimensional construction composed by seven domains: emotional wellbeing, material wellbeing, personal development, interpersonal relationships, self-determination, and integration/presence in the community. Please note that, for the present study, the last mentioned domain was changed for the term *inclusion*, due to the better adjustment to the current research terminology. These domains are impinged by individual and interpersonal variables, and their importance may change from individual to individual, both with or without SEN, and even throughout their lives.

Using as a reference this model, this study explores the value that every adolescent grants to different areas of his/her life. A focus on its basic domains was adopted, and series of researched questions were proposed: do adolescents with and without SEN perceive a fully satisfying quality of life? In which areas of their lives do they perceive higher and lower satisfaction? What role do the personal (gender, age, presence, type and level of SEN) and

educational variables (course, type of centre, educational support) have in their perception of the quality of life? How educational researchers and professionals could help to increase the quality of life of the adolescent, especially of those with major needs for educational support?

## Method

This research uses a descriptive and an exploratory study of perception of students' quality of life with and without SEN aged between 12-19. From a quantitative approach, it seeks to describe, know and understand personal and educational variables that affect their quality of life.

## Sample

The participants were 438 high school's students (56.8% men; 43.2% women) from regular and special education centres from Galicia (Spain), where diverse social non-profit entities are pursuing some initiatives contributing to the progress of the life quality of people with disability, especially, adult population. However, the school situation of students with SEN in Galicia remains unknown, as well as the results of professional interventions in this context. As a result, efforts in this research must prioritize the study of adolescents in both regular and specific educational centres.

Adolescence is a transition stage between childhood and adulthood whose definition depends on cultural and environmental context. At the moment, this temporary period is still confusing; furthermore, in the last decades it seems that this evolutionary stage has spread both in its beginning and in its end (Higueta & Cardona, 2015). Participants aged 12 to 19 years ( $M = 14.5$ ;  $SD = 1.64$ ) belonging to High School Centres (91.6%) and to Special Education Centres (8.4%). In addition, 145 participants have SEN (33.1%): 58.1% associated with neurodevelopmental disorders, 9.8% to severe

learning difficulties, and 4.1% to school delay motivated by familiar and/or socio-demographic determinants, school absenteeism, immigration and adaptation to a new culture and language, etc. Students with neurodevelopmental disorders have: Intellectual Disability (21.4%; N=31) - mild (1.4%), moderate (2.7%), severe (0.2%) and profound (0.2)-, Autism Spectrum Disorder (7.6%; N=11) – with intellectual deficit accompanist (27.3%)-, Attention Deficit Hyperactivity Disorder (16.6%; N=24) –with intellectual deficit accompanist (12.5%)-, Conduct Disorder (2.8%; N=4), Hearing Disability (6.2%; N=9), Physical Disability (0.7%; N=1) and Multiple Disabilities (0.7%; N=1). Information about students with SEN was extracted from reports of counsellors and psychologists from each centre.

### Measurement

One of the latest instruments validated within youth in Spain is the Questionnaire for the Evaluation of the Adolescents Students Quality of life (QEASQL, original title, *Cuestionario de Evaluación de la Calidad de Vida de Alumnos Adolescentes*, CCVA; Gómez-Vela & Verdugo, 2004, 2009).

It is a self-report measure of quality of life for adolescents aged 12 to 18 years. It consists of 61 items with Likert format (4-points). A total of 56 items measure the seven domains of the Quality of Life in Adolescence Model, previously quoted. Social desirability is controlled by ten items, and includes seven pairs of items of inverse content for control of acquiescence. It was normed with 1121 students (12-18 years) with and without SEN, and reported adequate reliability (Cronbach's  $\alpha=.84$ ) and adequate construction and content validity (Gómez-Vela & Verdugo, 2004, 2006; Gómez-Vela *et al.*, 2007). A written permission to use of the instrument was obtained from the authors.

With the standardization sample in Spain, it shows a suitable reliability of the scale ( $\alpha=.863$ )

and of most domains. Material wellbeing domain reported low reliability ( $\alpha=.38$ ), may be due to the influence of a cultural component in the interpretation of the items. There is a strong dependence on familiar economical support throughout adolescence, and a lack of knowledge of students on the family's economic situation and the management of the parental money. Generally, results are similar to the ones obtained by authors (see table 1).

**TABLE 1. Coefficient of internal consistency of the QESQL**

	<i>Alfa</i> (Gómez-Vela & Verdugo, 2009)	<i>Alfa</i> (Present research)
Interpersonal Relationships	.67	.66
Material Wellbeing	.58	.38
Personal Development	.65	.60
Emotional Wellbeing	.82	.79
Inclusion	.61	.73
Physical Wellbeing	.58	.50
Self-Determination	.58	.59
Total	.84	.86

Regarding to the validity, an Exploratory and Confirmatory Factor Analysis were conducted. The first one indicated a structure in 17 factors, which account for 60.14% of the total variance, but it showed dispersion of the conceptual identity of the items. Therefore, considering its original structure, it was forced a Varimax rotation in seven factors. It was obtained an account of 38.1% of the total variance Total variance explained. This rotation was maintained to create item parcels (i.e. the sum of several items that constitutes units of analysis, Little, 2013) to do the Confirmatory Factor Analysis (CFA).

The results, presented in table 2, indicated a good fit of Quality of Life Model (CMIN/df < 3; CFI > .9; GFI > .9; AGFI > .9; RMSEA < .8).

TABLE 2. Statistical goodness of fit of CCVA

	$\chi^2$	df	p	CMIN/gl	CFI	GFI	AGFI	RMSEA
Model 1	195.581	69	.000	2.835	.944	.957	.925	.056 [.046 - .065]

Note.  $\chi^2$ : Chi-Square; df: Degrees of freedom; CMIN/gl:  $\chi^2$ relative; CFI: Comparative Fit Index; GFI: Goodness of Fit Index; AGFI: Adjusted Goodness of Fit Index; RMSEA: Root Mean Square Error of Approximation.

## Procedure

Contact with students and professionals was made throughout educational centres. The official government website provided a list of public, private, regular and special educational centres. A document with information about the research and its institutional support was written and sent it by e-mail to educational centres. They had to send it to families of students, and both had to sign participation assent. Also researchers, assuring the confidentiality of the proportionate information, signed the document. The instrument was applied during the course 2014/2015, in groupal format, at ten regular and two special classrooms: in the first ones, the requirement for application was that it had, at least, one pupil with SEN, and in the second ones, students must have language skills. However, those students with intensive support needs were surveyed individually, and so they received the support from school professionals.

## Data Analysis

After data collection, acquiescence and social desirability were controlled, deleting 127 questionnaires: those whose students offered the same response to pairs of inverse items (acquiescence), those whose sum of ten items from controlling social desirability was superior to 30 (maximum sum was 40) and those with blank questions. After these protocols, descriptive statistics were calculated; first, by the sum of item

responses, and then, because every dimension has a different number of items, these values were transformed to a 0-100 standardized scale. The guidelines to correct the scale considers cores exceed 70% or more would mean a satisfactory quality of life perception. As regard the inferential analysis, most of domains were not fulfilled the assumptions of normal distribution, nor either homogeneity of the variances; therefore, nonparametric statistics were used (Mann-Whitney U test and Kruskal-Wallis H test). Effect sizes were determined using *d* proposed by Cohen (1988): .1 = small effect, .3 = medium effect, and .5 = large effect.

## Results

Results revealed a satisfactory level of quality of life for the 438 students (above 75%). With a median value *Mdn*=3. The median of domains was also above to *Mdn*=3 (except for inclusion *Mdn*=2). The interest of this study is to contrast inter-group disparities; so, non-parametric statistics are used to contrast differences between personal variables (presence or not of SEN, type of SEN, intensity of SEN, gender, age) and educational variables (course, type of centre, type of support).

Comparison between students with and without SEN in table 3, reveals significantly low punctuations in the domains of self-determination ( $p < .05$ ) and physical wellbeing ( $p < .05$ ) in pupils with SEN, but the *d* value shows a small effect between compared groups their perception of self-determination and physical wellbeing.

**TABLE 3. Comparison of the quality of life domains according to the presence of SEN**

	Group <sup>a,b</sup>	M Rank	U	Z	d	p
Interpersonal Relationships	1	217.25	20916.5	-.262	-.012	.793
	2	220.61				
Emotional Wellbeing	1	219.48	21240.0	-.002	-9.56	.998
	2	219.51				
Inclusion	1	222.03	20875.5	-.295	-.014	.768
	2	218.25				
Personal Development	1	213.66	20395.0	-.683	-.032	.494
	2	222.39				
Physical Wellbeing	1	183.92	16083.5	-.683	-.032	.000
	2	237.11				
Self-determination	1	198.59	18211.0	-2.443	-.116	.015
	2	229.85				
Material Wellbeing	1	213.66	20395.0	.495	-.023	.495
	2	222.39				
Total Quality of Life	1	210.16	19888.0	-1.087	-.051	.277
	2	224.12				

Note: a. Group 1 represents students with SEN and Group 2, students without SEN. b. Acronyms: V – Variable, M– Mean, U – Test U Mann-Whitney, Z – Standard score, d – Cohen’s measure for effect size., p – chance value.

Differences according to the type of SEN were verified using Kruskal-Wallis H test. There were significant differences in the domains of self-determination ( $\chi^2= 25.946$ ;  $p<.001$ ) and physical wellbeing ( $\chi^2= 19.397$ ;  $p<.05$ ); namely, adolescents with Intellectual Disability (ID) scored significantly less than the students with Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorder (ASD), Specific Learning Disorder (SLD), Severe Learning Difficulties (SLD-2) and Hearing Disability (HD) in self-determination. As before, the effect size of comparisons (using N=145 students with SEN) was small in most of the cases (less than .3), and medium ( $r=.3$ ) in the comparison between students with ID and SLD-2. Regarding to physical wellbeing, students with ID and with ASD scored significantly lower than students with SLD and with SLD-2, and students with

ADHD had significantly lower punctuation than their peers with ASD and SLD. The d value states a small effect of all differences (see table 4).

Due to differences found in students with ID compared to their peers with other neurodevelopmental disorders, it was conducted an intra-group analysis depending on the intensity of support required (mild, moderate, severe or profound). However, differences in quality of life scores nor either in its domains were not found.

In addition, differences in terms of age and gender were found (see table 5 & 6), although the strength of these were small in every case (effect sizes  $r < .3$ ). Age had a bearing both in the group of students with and without SEN in the

TABLE 4. Comparison of self-determination and physical wellbeing according to the type of SEN<sup>a</sup>

	Self-determination					Physical wellbeing					
	M rank	U	Z	d	p	M rank	U	Z	d	p	
ID	19.05					ID	16.06				
ASD	28.41	94.5	-2.19	-.18	.028	SLD	31.50	2.0	-2.21	-.18	.015
ID	22.97					ID	30.61				
ADHD	34.50	216.0	-2.67	-.22	.008	SLD-2	42.47	453.0	-2.36	-.20	.018
ID	16.05					ASD	6.00				
SLD	31.75	1.5	-2.25	-.18	.008	SLD	12.50	343.0	-2.19	-.18	.026
ID	26.98					ASD	19.18				
SLD-2	45.08	340.5	-3.59	-.30	.000	SLD-2	29.63	145.0	-1.99	-.16	.047
ID	18.26					ADHD	12.54				
HD	28.22	70.0	-2.27	-.19	.024	SLD	25.00	1.0	-2.24	-.19	.012
						ADHD	32.13				
						SLD-2	35.05	344.0	-2.27	-.19	.023

Note: a. The table only presents the groups where significant differences were found ( $p < .05$ ). b. Acronyms: M – Mean, U – Test U Mann-Whitney, Z – Standard score, d – Cohen's measure for effect size, p – chance value, ID (Intellectual Disability), ASD (Autism Spectrum Disorder), ADHD (Attention Deficit Hyperactivity Disorder), SLD (Specific Learning Disorder), SLD-2 (Severe Learning Difficulties), HD (Hearing Disability).

domains of interpersonal relationships, personal development, self-determination and physical wellbeing, and in the total quality of life. Younger students (12-13 years) felt more satisfied than the rest of age groups. Also, students with SEN aged 12-13 and 14-15 years gets higher scores in quoted domains and in quality of life, compared to their peers aged 16-17. The level of self-determination is higher in students without SEN from 12 to 15 years. Furthermore, the gender variable reveals male students have a better perception of their quality of life, especially on emotional wellbeing and inclusion. These differences are maintained within the group of students without SEN, and in the domain inclusion in the group of students with SEN.

The gender variable, furthermore, reveals male students have a better perception of their quality of life, especially on emotional wellbeing and inclusion. These differences are maintained

within the group of students without SEN, and in the domain inclusion in the group of students with SEN (see table 6).

Regarding to the educational variables, it has been analysed the course, the type of centre and the supports received. The course shows differences in physical wellbeing ( $\chi^2 = 20.132$ ;  $p = .000$ ) and self-determination ( $\chi^2 = 16.302$ ;  $p = .003$ ), but the effect size was small in all cases (less than .3). Students of 1st grade have generally better results in physical wellbeing, meanwhile students from special educational centres (there is no course distinction) have the worst ones. As for self-determination, the students from bachelor had significant higher scores than pupils from 1st and 2nd grade. Again, the lowest values reside in the students from special education regarding to students from bachelor and from 1st and 2nd grade (see table 7).



**TABLE 5. Comparison of quality of life and its domains according to age<sup>ab</sup>**

Domain	SEN Group (N=145)					No-SEN Group (N=293)					Total (N=438)				
	M rank	U	Z	d	p	M rank	U	Z	r	p	M rank	U	Z	d	p
IR	12-13	48.48									147.17				
	16-17	28.66	314.0	-3.96	-.19	.000					123.83	6542.5	-2.39	-.11	.017
	12-13	26.26									108.63				
	18-19	14.04	90.5	-2.77	-.13	.005					71.08	775.0	-2.1	-.10	.039
	14-15	55.86													
	16-17	42.79	893.5	-2.22	-.11	.026									
EW	14-15	56.16													
	16-17	42.35	875.5	-2.35	-.11	.019									
PD	12-13	48.3									149.05				
	16-17	30.56	320.0	-3.91	-.19	.000					130.43	6290.5	-2.81		.005
	14-15	56.83													
	16-17	41.39	836.0	-2.64	-.13	.008									
PW	12-13	46.12									150.77				
	16-17	30.56	392.0	-3.12	-.15	.002					114.83	5946.0	-3.4	-.16	.001
	12-13	25.44									109.16				
	18-19	16.29	117.5	-2.09	-.10	.038					62.21	668.5	-2.61	-.12	.009
	14-15	55.66													
	16-17	43.07	905.0	-2.15	-.10	.031									
SD	12-13	54.17													
	14-15	42.21	720.5	-2.07	-.10	.039									
	12-13	44.32					97.44								
	16-17	32.01	451.5	-2.46	-.12	.014	129.46	2244.0	-3.04	-.15	.002				
	12-13	25.74									108.97				
	18-19	15.46	107.5	-2.33	-.11	.019					65.29	705.5	-2.41	-.12	.016
	14-15						57.72								
	16-17						76.38	1194.0	-2.67	-.13	.008				
	14-15										81.68				
	18-19										52.92	557.0	-2.1	-.10	.035
	16-17										48.86				
	18-19										30.79	291.5	-2.2	-.11	.028
QL	12-13	46.97									147.17				
	16-17	29.88	364.0	-3.40	-.16	.001					123.83	6666.0	-2.18	-.10	.029
	14-15	57.09													
	16-17	41.01	820.5	-2.73	-.13	.006									

Note: a. The table only presents the groups where significant differences were found ( $p < .05$ ). Empty boxes express no significance differences. b. Acronyms: M – Mean, U – Test U Mann-Whitney, Z – Standard score, d – Cohen’s measure for effect size, p – chance value IR – Interpersonal Relationships, EW – Emotional Wellbeing, PD – Personal Development, PW – Physical Wellbeing, SD – Self-Determination, QL – Quality of life.

**TABLE 6. Comparison of quality of life and its domains according to gender<sup>ab</sup>**

Domain	SEN Group (N=145)					No-SEN Group (N=293)					Total (N=438)				
	M rank	U	Z	d	p	M rank	U	Z	r	p	M Rank	U	Z	d	p
EW	M					170.98					244.48				
	F					121.84	7127.5	-4.98	-.24	.000	186.60	17311.5	-4.76	-.23	.000
INC	M	79.11				156.51					235.75				
	F	59.86	1672.5	-2.57	-.12	.010	137.03	9299.0	-1.97	-.10	.049	198.09	19484.5	-3.1	-.15
QL	M					161.34					235.88				
	F					131.96	8574.0	-2.97	-.14	.003	197.93	19453.0	-3.11	-.15	.002

Note: a. The table only presents the groups where significant differences were found ( $p < .05$ ). Empty boxes express no significance differences. b. Acronyms: M Rank – Mean, U – Test U Mann-Withney, Z – Standard score, d – Cohen's measure for effect size,, p – chance value, M – Male, F – Female, EW – Emotional Wellbeing, INC – Inclusion, QL – Quality of life.

**TABLE 7. Comparison of quality of life and its domains according to course<sup>ab</sup>**

Domain	SEN Group (N=145)					No-SEN Group (N=293)					Total (N=438)				
	M rank	U	Z	d	p	M rank	U	Z	r	p	M Rank	U	Z	d	p
PW	1 <sup>st</sup>					137.2					196.52				
	2 <sup>nd</sup>					109.6	3279.0	-2.03	-.12	.042	155.69	7975.0	-2.77	-.16	.006
	1 <sup>st</sup>														
	Bac.														
	1 <sup>st</sup>										161.53				
	VT										80.42	461.5	-2.16	-.13	.031
	1 <sup>st</sup>	57.46									173.71				
	SE	42.02	708.5	-2.17	-.13	.03					107.63	2283.0	-3.24	-.19	.001
	Bac.										31.22				
	SE										22.85	248.5	-1.97	-.12	.049
SD	1 <sup>st</sup>					124.1					167.66				
	Bac.					170.5	1983.5	-3.09	-.18	.002	217.27	3337.0	-2.63	-.15	.009
	1 <sup>st</sup>	57.66									173.12				
	SE	41.33	692.0	-2.28	-.13	.023					115.23	2465.5	-2.82	-.16	.005
	2 <sup>nd</sup>					322.5					43.87				
	Bac.					988.5	322.5	-2.29	-.13	.022	56.95	706.5	-2.16	-.13	.031
	2 <sup>nd</sup>	31.12									48.92				
	SE	22.02	228.5	-2.15	-.13	.032					34.38	525.0	-2.37	-.14	.018
	Bac.										34.05				
	SE										19.31	163.5	-3.45	-.20	.001

Note: a. The table only presents the groups where significant differences were found ( $p < .05$ ). Empty boxes express no significance differences. b. Acronyms: M Rank – Mean rank, U – Test U Mann-Whitney, Z – Standard score, d – Cohen's measure for effect size,, p – chance value, PW- Physical Wellbeing, SD – Self-Determination, 1<sup>st</sup> – First grade (1<sup>st</sup>& 2<sup>nd</sup> course), 2<sup>nd</sup> – Second grade (3<sup>rd</sup>& 4<sup>th</sup> course), Bac. – Bachelor, VT – Vocational Training, SE – Especial Education (no course).

In addition, differences between ordinary, specific or combined schooling of pupils with SEN are founded in terms of self-determination ( $\chi^2=8.612$ ;  $p=0.13$ ) and more specifically, between students involved in ordinary and especial educational centres ( $U=963.0$ ;  $Z=-2.993$ ;  $p=.003$ ;  $d=-.25$ ). The effect size was small (less than .3).

Finally, the presence or not of educational supports to students with SEN and type (individualized educational program, IEP, or Educational Reinforcement, ER) are explored. Both analysis reveal no significant differences between categories ( $p>.05$ ).

## Discussion

This research explore quality of life perception of students with and without SEN in Galicia (Spain), across seven domains important of adolescents' life in terms of wellbeing (emotional, physical and material), social participation (interpersonal relationships and inclusion), and independence (personal development and self-determination). The influence of personal and educational variables was also considered.

The first objective was to assess the quality of life experienced by students in Galicia. Generally, the results indicate a positive perception of adolescents' quality of life. Similar perceptions were found for students with and without SEN. This finding is consistent with previous research (Coelho, 2012; Gómez-Vela *et al.*, 2007), in which adequate or high scores of quality of life scores are found for adolescents with and without SEN. All students have general and specific needs that require attention. So, in the struggle for equality between different social groups, the right of minority groups as the students with intellectual and developmental disability or another special needs must be recognized, to the same rights and obligations as the rest of society.

Although non-significant differences have been found in general life satisfaction between students with and without SEN, some differences appear in areas of self-determination and physical wellbeing both for the variables type of SEN and course. Lower scores in self-determination for students with SEN warn of possible difficulties for these adolescents to learn and experience with abilities as: taking decisions, making meaningful choices, taking control in their education, leisure, etc. Several resources have shown that individuals with disabilities or other neurodevelopmental disorders are less self-determined than their peers without disability. This is due, primarily, the fewer opportunities granted to them in order to make decisions and choices, and to express preferences about their wishes, and because of their own perception of their inability to exercise control over specific objectives (Gómez-Vela, Verdugo, González Gil, Badía Corbella, & Wehmeyer, 2012; Hole *et al.*, 2015; Wehmeyer *et al.*, 2011).

Regarding physical wellbeing, several researches reveal the benefit of participation in physical and cultural activities on increasing satisfaction of youth in other areas of their lives (Leveresen, Danielsen, Birkeland & Samdal, 2012), their feeling of acceptance by their peers with and without SEN, and the development of their social skills (Daham-Oliel, Shikako-Thomas, & Majnemer, 2012; Pham & Murray, 2015). However, despite the benefits of sharing experiences with the peers outside the school, results indicate a remarkable misinformation of adolescent and a low participation in school activities and, even more, in their neighbourhood or in the city. This situation is further complicated when it comes to students involved in special education centres, where contact with their peers without disabilities is limited and, consequently, their opportunities to share experiences with them are reduced.

Otherwise, the better perception of the youngest adolescents in interpersonal relationships, personal development, physical wellbeing, and

in their general sense of satisfaction with life, reveal how the importance attached to the activities associated with quality of life can vary with age. Several factors could come into play as opportunities offered by school, family and other learning environments, and adolescents' expectations in their transition to adult life (Casas *et al.*, 2008; Gómez-Vela *et al.*, 2007; Viñas, González Carrasco, García Moreno, Malo, & Casas, 2015).

The youngest students (12-15 years) and 1st degree offers greater importance to issues related to their physical, while students aged 16-17, especially those who are attending bachelor, give more importance to their level of self-determination. The academic requirements of bachelor students and their responsibility in making decisions about their future careers, are higher. This issue is consistent with current approaches that indicate that this domain is the result of a process of acquisition and development throughout life (Gómez-Vela *et al.*, 2012; Shogren, Wehmeyer, Palmer, & Paek, 2013; Wehmeyer *et al.*, 2011).

Against this, the lower punctuation in self-determination of students from special educational centres reveals that not only the teaching but also expectative and opportunities has an important role in youth developmental improvement. In fact, previous researches reveal the predictor power of time spent by students with SEN in regular classrooms on planning their future (Griffin, Neubert, Moon, & Graham, 2014; Wagner *et al.*, 2012).

Finally, the higher scores in male students in terms of emotional wellbeing and inclusion had already been found (Casas *et al.*, 2008; Gilman *et al.*, 2008). But it is also drawn from the results a relationship between domains of emotional wellbeing and inclusion, both in adolescents with and without SEN; in this regard, a large number of studies have noted how active participation in activities contributes to emotional wellbeing of young people (with

or without disability) and allows them to enjoy rewarding and funny experiences (Badía, Longo, Orgaz, & Aguierre, 2010; Danahm-Oliel *et al.*, 2012).

To summarize, adolescence is a time of life full of changes, challenges and difficulties. As we can see from the obtained results, the situation of youth with intellectual disability requires special attention, expressing the greatest needs in terms of self-determination and physical wellbeing. They require special support from their close environment but, in many cases, families and professionals do not have enough information and training to adequate their actions to these students' specific needs. Also, social barriers, prejudice and stereotypes about their possibilities to being independent and autonomous are added. This may affect their perception about their capacity to achieve their own life goals, to make decisions and elections, to take responsibility and control over their own lives and, generally, to hold a successful transition to adulthood.

For these reasons, inclusive education for students' diversity requires conducting a collaborative and cooperative work among professionals and families. The change in educational model will only be possible if there is a real response from every individual involved in these adolescents' lives; hence the need for support from school, families and in their relationship with the educational environment. This will coordinate work that fosters the acquisition of skills needed in all these students and ensure improved quality of life.

## Limitations of the study

After discussing the findings, it is necessary to acknowledge limitations of the research. First, although it is a large sample, is not representative of the Galician population due to the lack of randomness and its geographic limitations, which may make it difficult to generalize the

results. Secondly, due to the heterogeneity of the sample, both between students with SEN and without them. Third, the instrument presents some limitations such as the difficulty of students to understand some items inversely formulated, the excessive application time (one hour or more), or the ambiguity of some questions raised. However, despite these limitations, this data may provide important information that advances the knowledge of personal quality of life on scholar adolescents in the Galician

population, since there are no studies in this community to address these issues.

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## Resumen

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### *Calidad de vida, adolescencia y escuelas inclusivas: comparación entre alumnado regular y con necesidades educativas especiales*

**INTRODUCCIÓN.** El estudio de la calidad de vida en la adolescencia es un tema de gran actualidad en la investigación, con amplias repercusiones en el desarrollo de las prácticas educativas. La búsqueda de la inclusión educativa exige a las escuelas que se comprometan por alcanzar una mayor participación y satisfacción de todo el alumnado en la vida escolar. El objetivo central de este estudio es analizar la percepción de la calidad de vida en la adolescencia con y sin necesidades educativas especiales (NEE). **MÉTODO.** Se trata de una investigación descriptiva y exploratoria, con enfoque cuantitativo. Se analiza el impacto de variables personales y educativas. El Cuestionario de Evaluación de la Calidad de Vida de Alumnos adolescentes (Gómez-Vela y Verdugo, 2009) es aplicado a 438 adolescentes de 12 a 19 años escolarizados en escuelas gallegas (España). Este instrumento evalúa siete dimensiones: bienestar emocional, relaciones interpersonales, desarrollo personal, bienestar físico, inclusión (originalmente, se utiliza integración/presencia en comunidad), bienestar material y autodeterminación. **RESULTADOS.** Los resultados revelan adecuados niveles de calidad de vida en la adolescencia, ligeramente inferiores para el alumnado con Discapacidad Intelectual (DI) en autodeterminación y bienestar físico, y para el alumnado con Trastorno por Déficit de Atención con Hiperactividad (TDAH) y Trastorno del Espectro Autista (TEA) en bienestar físico. El alumnado más joven obtiene mejores resultados, especialmente en bienestar físico y autodeterminación. Estas dimensiones obtienen las puntuaciones más bajas para el alumnado de Centros de Educación Especial (CEE). Los varones obtienen puntuaciones superiores en bienestar emocional e inclusión frente a las mujeres. **DISCUSIÓN.** Estos hallazgos sugieren la presencia de necesidades comunes en el alumnado que deben ser atendidas por las escuelas, así como necesidades específicas que requieren una respuesta basada en apoyos individualizados y adaptados a cada alumnos, especialmente, de los estudiantes más vulnerables a los procesos de exclusión social y educativa.

**Palabras clave:** Educación inclusiva, Calidad de vida, Estudiantes con necesidades educativas especiales, Necesidades educativas, Adolescentes.

## Résumé

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*Qualité de vie, adolescence et écoles inclusives: comparaison entre les étudiants réguliers et ceux à besoins éducatifs particuliers*

**INTRODUCTION.** L'étude de la qualité de vie à l'adolescence est une question d'actualité dans la recherche qui a de larges implications dans le développement des pratiques éducatives. La poursuite de l'insertion scolaire exige que les écoles assurent une plus grande participation ainsi que la satisfaction des besoins de tous les étudiants à la vie scolaire. L'objectif principal de cette étude est d'analyser comment on s'aperçoit la qualité de vie des adolescents avec ou sans besoins éducatifs particuliers (BEP). **MÉTHODE.** Il s'agit d'une recherche descriptive et exploratoire avec une approche quantitative. On a analysé l'impact des variables personnelles et éducatives. Le Questionnaire d'Évaluation de la Qualité de Vie des Étudiants Adolescents (Gómez-Vela et Verdugo, 2009) a été appliqué à 438 adolescents âgés de 12 à 19 ans appartenant à des écoles de Galice (Espagne). Cet instrument a évalué sept dimensions: le bien-être émotionnel, les relations interpersonnelles, le développement personnel, le bien-être physique, l'inclusion (autant l'intégration que la présence à la communauté), le bien-être matériel et l'autodétermination. **RÉSULTATS.** Les résultats montrent des niveaux adéquats de la qualité de vie à l'adolescence, obtenant des résultats légèrement inférieures à l'autodétermination et le bien-être physique les étudiants ayant une déficience intellectuelle (DI), étant aussi légèrement inférieures au bien-être physique pour les élèves présentant un trouble de déficit de l'attention avec hyperactivité (TDAH) ou des troubles du spectre autistique (TSA). Les élèves les plus jeunes obtiennent de meilleurs résultats, en particulier dans le bien-être physique et l'auto-détermination. Ces dimensions sont inférieures pour les étudiants des centres d'éducation spécialisée (CES). Les garçons, contre les femmes, obtiennent de meilleurs résultats au bien-être émotionnel et l'inclusion. **DISCUSSION.** Ces résultats suggèrent la présence des besoins communs dans les élèves qui doivent être abordées par les écoles et aussi la présence des besoins spécifiques qui précisent d'une réponse personnalisée et adaptée à chaque élève, qui s'occupe spécialement de ceux-ci qui sont les plus vulnérables aux processus d'exclusion sociale et éducatif, de la part des services de soutien scolaire.

**Mots-clés:** *Education inclusive, Qualité de vie, Elèves à besoins éducatifs spécifiques, Besoins éducatifs particuliers, Adolescents.*

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