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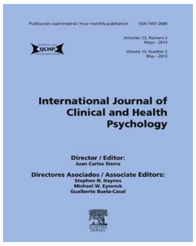

ORIGINAL ARTICLE

Psychometric properties of the Spanish version of the Personal Outcomes Scale

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Intellectual disabilities;
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Abstract Personal outcomes-related quality of life provides information about the impact of individualized supports and services that are provided to people with intellectual disability. The Personal Outcomes Scale (POS) is a valid and reliable instrument that measures these outcomes using two parts, self-report and report by others. Based on the POS, the aim of this study is to provide a new psychometric study of the instrument that allows the evaluation of the three principal informers involved in the enhancement of individual's quality of life: individual with intellectual disability, professional and family member. This approach overcomes the limitations of the POS. For the self-report were involved 529 people with intellectual disability. A professional ($N = 522$) and a family member ($N = 462$) separately participated for the report by others versions to assess personal outcomes for each participant. The reliability study provides appropriate values for the first and second order factors with α values being higher than .82. The construct validity analysis provides an adjustment of the theoretical model, particularly regarding the assessments from professionals. Results show this instrument is adequate to evaluate personal outcomes and giving the guidelines for making policy and practice decisions.

PALABRAS CLAVE
Discapacidad intelectual;
Escala de Resultados Personales;

Propiedades psicométricas de la Versión Española de la Escala de Resultados Personales

Resumen Los resultados personales relacionados con la calidad de vida aportan información sobre el impacto de los apoyos individualizados y servicios ofrecidos a las personas con discapacidad intelectual. La Escala de Resultados Personales (ERP) es un instrumento válido

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evaluación;
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y fiable que evalúa estos resultados en base a dos partes, el autoinforme y el informe de los otros. Basándonos en la ERP, el objetivo es ofrecer un nuevo estudio psicométrico de este instrumento contemplando la participación de los tres informadores implicados en la mejora de la calidad de vida: la persona con discapacidad intelectual, el profesional y un miembro de la familia. Esta aproximación supera los límites de la ERP. Para el autoinforme han participado 529 personas con discapacidad intelectual. El profesional (*N* = 522) y el miembro de la familia (*N* = 462) han participado separadamente en las versiones correspondientes. El estudio de fiabilidad aporta valores apropiados para los factores de primer y segundo orden ($\alpha \geq .82$). El análisis de la validez de constructo se ajusta al modelo teórico, particularmente en los profesionales. Según los resultados, este instrumento es adecuado para evaluar resultados personales y aportar información válida para las prácticas profesionales y las políticas sociales.

The concept of quality of life (QoL), which is understood to be a sensitizing notion in the field of intellectual disability (ID), has shifted towards a measurable construct that is expressed in terms of personal outcomes (Schalock, Gardner, & Bradley, 2007; Schalock & Verdugo, 2002). These outcomes are understood to be ''person-defined and valued aspirations. Personal outcomes are generally defined in reference to QoL domains and indicators'' (Schalock et al., 2007, p. 14). It is quite logical, then, to believe that personal outcomes can be used as a reference for the services and support that are provided to people with ID (Luckasson & Schalock, 2013a; Schalock & Verdugo, 2012a, 2012b; van Loon et al., 2013). Personal outcomes make sense within a QoL model. Regarding people with ID the most commonly used is the model by Schalock and Verdugo (2002). It is characterized by a hierarchical, multidimensional structure and includes both etic (universal) and emic (cultural) components. The eight dimensions of this model have been empirically validated in different cultures and countries (Jenaro et al., 2005; Schalock et al., 2005) and are arranged into three higher-order factors (Wang, Schalock, Verdugo, & Jenaro, 2010): (1) Independence, which includes the dimensions of personal development and self-determination; (2) Social Participation, which includes dimensions of interpersonal relations, social inclusion, and rights; and (3) Well-being, which includes the dimensions of emotional well-being, physical well-being, and material well-being.

In order to fully understand this model, we have to consider the ecological vision of disability, which is defined by the individual's three developmental environments (Bronfenbrenner & Morris, 1998): microsystem, mesosystem, and macrosystem. It is in these environments that valuable personal outcomes are expected to be achieved. This view is observed in the programs and services supplied to people with ID, which are not standard or predictable and have become support systems based on individualization (Luckasson & Schalock, 2013b; Schalock et al., 2007). The ecological perspective is closely linked to the paradigm of supports that places emphasis on the idea that the provision of individualized supports reduces the inconsistency between the individual's capacities and the environment's demands. Thus, the main purpose of organization should be the identification and provision of the supports using the Individualized Supports Plans (ISP). This is accomplished as a result of a support team composed by the individual, family member and staff which everyone plays an essential role to enhance desired outcomes (Buntinx & Schalock, 2010; Luckasson & Schalock, 2013a; Schalock, Bonham, & Verdugo, 2008; Thompson et al., 2009).

In order to properly evaluate and use personal outcomes, it is necessary to have measurement instruments with satisfactory psychometric properties that are based on an empirically validated QoL model (Arias, Verdugo, Navas, & Gómez, 2013; Jenaro et al., 2005; Schalock et al., 2005; Wang et al., 2010). Authors disagree about whether QoL assessment should include, on the one hand, the measurement of subjective well-being (including individual preferences) or, on the other, objective life circumstances and experiences (Schalock & Felce, 2004; Schalock et al., 2007). Although authors disagree about whether the objective or subjective perspective should be taken in regard to QoL, the soundest proposal is based on a combination of these perspectives (Ayaso-Maneiro, Domínguez-Prado, & García-Soidan, 2014; Cummins, 2005; Schalock & Felce, 2004; Schalock et al., 2007).

The Personal Outcomes Scale (POS) takes this approach and is a useful tool when studying the impact of support strategies that are provided to people with ID (van Loon, Van Hove, Schalock, & Claes, 2008). This scale was designed to assess, firstly, people with ID and, secondly, the perspectives of proxies (professionals or family members). Thus, this instrument contributes to the debate regarding the use of subjective or objective measures including different points of view in order to assess the QoL construct (Balboni, Coscarelli, Giunti, & Schalock, 2013; Claes, Vandevelde et al., 2012).

Related to the significance of assessing personal outcomes based on individual evaluations and proxies, the objective of this study is to provide a new psychometric study of this measurement instrument that allows us to examine the perspective of each participant involved in the ISP. Until now, the report of the others of the POS is used for both professional and family, but a specific scale is required for each one. Nowadays there are instruments validated for objective and subjective perspectives, but not for the assessment of objective views separately. For example, in Spanish context only two instruments related to the QoL model had been validated that included this two-fold perspective (objective and subjective). Firstly, the Integral Scale was validated (Verdugo, Gómez, Arias, & Schalock, 2009), although the fact that the two parts (reports from other people and self-report) did not have the same items could be seen as a limitation. The second instrument was the INICO-FEAPS Scale (Verdugo et al., 2013), which included two self-administered scales, one for the individual with ID and the other for external respondents. Although these two instruments use the QoL model that was previously mentioned (Schalock & Verdugo, 2002) and have satisfactory psychometric properties, the validation of the POS for the three main informers involved in ISP is required. The first reason for choosing the POS is because is not self-administered and is applied through use of an interview, both regarding the self-report and the reports from other respondents. The original authors specifically emphasized that there should be a dialogue about the items, which meant that the interview needed to be conducted by an interviewer who had prior training about the fundamentals and administration of this instrument (Claes, Van Hove, van Loon, Vandevelde, & Schalock, 2010). Secondly, we believe that the content of the items more accurately addresses the concept of personal outcomes, which was introduced by Schalock et al. (2007). As thirdly, the POS has showed acceptable psychometric properties in other languages and countries (Simões & Santos, 2013).

Therefore, the objective of this paper is to present a new psychometric study of the POS for the three informers (the individual with ID, the professional, and the family member) in the Spanish population. This project will allow to future research to use this instrument and obtaining a final decision regarding the congruency of these three sources of information.

Method

Participants

The sample consisted of a total of 529 people with ID (296 men and 233 women), with M_{age}= 35.03, *SD*= 10.82, age range: 16-66, who came from seven autonomous communities in Spain: Andalusia (20.9%), Aragon (4%), Catalonia (25%), Castile and León (6.6%), Castile-La Mancha (14.8%), Madrid (17.4%), and Galicia (11.7%). Besides, professionals (*N* = 522) and their families (*N* = 462) participated.

In this study, accidental, non-randomized sampling was carried out in every autonomous community. The Table 1 shows the main descriptive data regarding the individual with ID, the professional and the family member who participated for every community.

Instruments

In order to carry out the psychometric study of the POS, two related instruments were used: Personal Outcomes Scale (POS; Appendix 1) and Gencat Scale.

The POS (van Loon et al., 2008) aims to assess QoL in people with ID on the basis of the eight dimensions of Schalock and Verdugo's (2002) model, which were arranged into three higher-order factors: independence, social participation, and well-being (Wang et al., 2010). The Spanish version of the POS is divided into three information sources: (a) self-report, where the individual answers on his/her own; therefore, this assesses the subjective perspective of QoL; (b) report by the professional, which assessed the individual's experiences and circumstances from the view of direct care staff or a service technician; and (c) family report, where the indicators are given scores from a family member's perspective. If the individual cannot answer on his/her own, only the professional's report and the family member's report are directly used. In this adaptation, the use of proxies for the self-report was not established. Every dimension has 6 items, which means that a total of 48 items are answered for the scale as a whole. Every item is assessed through the use of a 3-point Likert scale. Scores are obtained through an interview that is conducted by an interviewer who has previous training regarding the theoretical model of the scale and the proper administration of the scale. Respondents needed to know the individual with ID for at least 3 months and needed to have had the opportunity to observe him/her in one or more environments over a period of 3 to 6 months. Outcomes are obtained for every dimension and the three factors. For every dimension, the sum of all of the scores from the 6 items is obtained by using the following calculation: (3) = *always*, (2) = *sometimes*, and (1) = *rarely or never*. After the dimensions of every factor are summed, a final score is calculated for each factor. Because the original scale was adapted for this study, before administering it, a pilot test was carried out with a sample of 77 people with ID and their professionals, who were not later included in the final sample. This prior study demonstrated a good reliability level in terms of internal consistency (α = .85 to α = .89) for the different factors and sources of information and of appropriate discriminability values for the items (in all cases > .54), which guaranteed their maintenance in regard to all of the factors and respondents. These results prompted the final administration of the POS adaptation in the final sample.

The Gencat Scale (Verdugo, Arias, Gómez, & Schalock, 2008) was administered in order to assess the convergent validity of the POS. This scale is based on the multidimensional QoL model by Schalock and Verdugo (2002) and addresses all of the people who use social services. This instrument is self-administered by professionals and allows for the objective assessment of QoL, which is needed to elaborate ISP. This scale has appropriate reliability values in terms of internal consistency (α = .91) for the total scale, but these values fluctuate for the different factors that are defined (α = .47 to α = .88). Despite these fluctuations, this scale is considered to be a suitable control test for the assessment of convergent validity. This can be seen in the adjustment values that are found in the confirmatory measurement model, which were appropriate (Normed Fit Index = .95; Tucker Lewis Index = .96; Comparative Fit Index = .97; Standardized Root Mean Residual = .076; Goodness of Fit Index = .96; and Adjusted Goodness of Fit Index = .96) (Verdugo et al., 2008). By using the Gencat, you can obtain a total direct score for every dimension,

Table 1 Descriptive data of people with ID, professionals and family.

	Andalusia	Aragon	Catalonia	Castile and Leon	Castile-La Mancha	Madrid	Galicia
People with ID							
Gender							
Male	58.60	61.90	53.80	62.90	52.60	56.50	53.30
Female	41.40	38.10	46.20	37.10	47.40	43.50	46.70
Area of residence							
Rural	21.10	14.30	4.50	37.10	19.20	3.30	16.70
Semi-urban	34.90	85.70	34.10	-	46.20	17.40	41.70
Urban	44	-	61.40	62.90	34.60	79.30	41.70
Intellectual disability level							
Borderline	10.80	14.30	5.30	2.90	19.20	4.30	1.70
Mild	31.50	23.80	36.40	62.90	33.30	30.40	20
Moderate	50.50	57.10	46.20	31.40	44.90	52.20	45
Severe and/or profound	7.20	4.80	12.10	2.90	2.60	13	33.30
Day care							
Special work center	1.80	9.50	22.70	5.70	3.80	12	1.70
Occupational therapy services	76.10	81	73.50	85.70	88.50	59.80	45
Day center	8.30	9.50	3.80	2.90	3.80	17.40	43.30
Educational center	5.50	-	-	5.70	-	5.40	5
Others	8.30	-	-	-	-	5.40	1.70
Place of residence							
Residence	8.70	9.50	5.30	17.60	6.60	8.70	3.40
Supervised flat	-	-	22	23.50	10.50	-	6.80
Family home	86.50	81	68.90	58.80	81.60	88	89.80
Independent home	4.80	9.50	3.80	-	1.30	3.30	-
Professionals							
Type							
Direct care (day)	75	47.60	79.50	-	66.20	49.50	76.70
Direct care (night)	-	-	2.30	-	-	-	-
Direct care (physical activity)	6.70	-	-	-	13	29.70	5
Technical staff of service	13.50	42.90	17.40	100	20.80	6.60	11.70
Others	4.80	9.50	-	-	-	8.80	3.30
Educational level							
Secondary education	22.1	9.50	9.10	-	17.90	6.60	16.70
University degree	58.7	42.90	64.40	94.30	51.30	42.90	41.70
Higher university degree	1.90	-	11.40	5.70	14.10	5.50	21.70
Others	17.30	47.60	15.20	-	16.70	45.10	20
Family							
Relation with person with ID							
Parent	72.40	42.90	66.40	54.50	81.20	83.10	74.60
Sibling	21.80	52.40	21.80	36.40	15.90	12	22
Other family member	4.60	4.80	2.70	-	1.40	4.80	3.40
Legal tutor	1.10	-	9.10	9.10	1.40	-	-
Educational level							
No studies	19.80	4.80	6.40	-	20	12.20	6.80
Primary education	41.90	23.80	42.20	60	47.10	20.70	52.50
Secondary education	18.60	38.10	26.60	30	15.70	24.40	18.60
University studies	16.30	14.30	18.30	10	11.40	32.90	15.30
Others	3.50	19	6.40	-	5.70	9.80	6.80
Place of residence							
Rural	19.50	14.30	14.50	23.30	21.40	3.60	16.90
Semi-urban	43.70	85.70	36.40	3.30	42.90	15.70	45.80
Urban	36.80	-	49.10	73.30	35.70	80.70	37.30

a QoL Index, a percentile for this index, and a QoL Profile. In order to obtain this total direct score, all of the answers have to be summed (1-2-3-4) for the items that correspond to each of the eight dimensions. In order to obtain the standard score and the percentile, an index table is used according to which group the individual who is being analyzed belongs to. The Gencat has four index tables: one for the general sample, one for the elderly (older than 50), one for people with ID, and one for the other groups (people with drug addiction, HIV/AIDS, physical disabilities and mental health problems). The summation of the standard scores for the eight dimensions results in the QoL Index (or compound standard score) and the percentile. Separate from this Index, these standard scores can be graphically represented, which provides us with the QoL Profile.

Procedure

Organizations that provide service were asked to participate by the Spanish Confederation of Organizations for the People with Intellectual Disability (FEAPS) and by logistic support from the delegations in every autonomous community. The organizations that agreed to participate provided day services (special work centers, occupational therapy, day centers), and most of them also provided residential services (supervised flats, residences) for adults with ID.

In every autonomous community, specific training was given regarding the application of the POS to those professionals who would participate as interviewers. Due to this, we could guarantee that the instrument's application would be in concordance with the original authors' guidelines. At the end of the training sessions, professionals were given all of the materials (scale forms and item descriptors) that were needed in order to administer the scale in every center. These professionals interviewed a total of 670 participants, 529 of which followed the established instructions. Accordingly, for each person evaluated, we identified the professional assisting them and we contacted their family, thus gathering the three informants that would later be evaluated. Given the characteristics of the sampling, the professional interviewed was the one usually assisting the person with ID since deep knowledge of the condition of the person with ID is required to fill in the scale. Consequently, once the person with ID was identified, obviously the family member and the professional were defined, too. Along with the questionnaires, in order to follow the guidelines of the Ethical Committee, these professionals were sent the informed consent form so that it could be read and signed by all of the participants.

Statistical data analysis

For more conventional analyses, as descriptive statistics or Pearson's correlations, we used the IBM SPSS Statistics 21 program and, in order to assess construct validity through Confirmatory Factor Analysis (CFA), we used MPlus (5th edition) (Muthén & Muthén, 1998-2007) to identify the characteristics of the parameter estimation procedures.

Results

For the analysis of construct validity, every source of information was submitted into a confirmatory factor analysis (CFA), which considered the existence of a measurement model with eight first-order factors and three second-order factors. Given the ordinal characteristics of the items on the scale, we estimated polychroric correlation coefficients and used a Maximum Likelihood estimation (MLE), which assumed the multinormality of observed distributions and the factor scores were distributed with a normal model of $\mu = 0$ and $\sigma^2 = 1$. The model that had a better adjustment was the one that was related to the reports by professionals, although the other two models did not have remarkably worse adjustments. These are normal results for confirmatory models, which supports the acceptance of this proposed model as being the structure of the construct. The adjustment results for the three measurement models can be seen in Table 2. Additionally, this table shows standardized factor loading values that were associated with every factor and source of information, with all of them being statistically significant ($p < .001$). The values that were obtained guarantee significant factor loadings of every item on the theoretically assigned factor.

Also, we obtained the final summations for every factor and source of information. The distributions that were observed for every factor are shown in Table 3 for first- and second-order factors.

In order to estimate the reliability in terms of internal consistency, Cronbach's α was used for every factor and source of information. Naturally, in this case, the results of the values should be considered as merely descriptive, since the POS is hetero-administered for all the informants and it would therefore not be strictly an internal consistency estimation. Results from this analysis are shown in Table 4.

The values that resulted from this analysis correspond to appropriate values for most of the factors, particularly for the second-order factors.

Finally, Pearson's correlation values were estimated from the values of every factor (first- and second-order), and these values were considered to be continuous functions. Results shown in Tables 5 and 6 point to there being a degree of dependence among the factors, which is similar to what the model proposed.

In order to estimate the convergent validity between the POS and Gencat, Pearson's correlations were obtained between the direct values of the different factors that were defined in both scales in order to verify their concurrence according to the general criteria (Izquierdo, Olea, & Abad, 2014). Global index values were ignored because they were not the object of this analysis. Table 7 shows the correlation values and distinguishes between the different POS sources by providing the Bonferroni correction for their significance in order to reduce the family wise error rate.

Discussion and conclusions

In this study, the psychometric properties for the three informers of the POS were examined. This measurement instrument assesses QoL in adults with ID in terms of personal outcomes. The reliability study found a proper internal

Table 2 Adjustments and factor loading of the three measurement models.

	Self-report Model	Professional Model	Family Model
Adjustments			
χ^2 *(df = 1052)*	1346.34 ($p < .001$)	973.09 ($p = .04$)	1067.43 ($p <$ 001)
Ratio (χ^2/df)	1.28	0.93	1.02
GFI	.943	.981	.940
AGFI	.951	.979	.941
BBNFI	.955	.980	.942
BBNNFI	.952	.979	.940
TLI	.956	.979	.944
CFI	.949	.978	.941
SRMR	.04	.02	.05
95% CI	.02–.06	.01–.03	.03–.07
AIC	-1323.12	-1533.12	-975.19
BIC	-1346.71	-1608.11	-1011.71
Factor Loading			
First-order factors			
Personal development	.64 to .74	.54 to .62	.47 to .62
Self-determination	.72 to .81	.51 to .52	.38 to .53
Interpersonal relations	.54 to .74	.57 to .64	.52 to .57
Social inclusion	.60 to .72	.61 to .74	.43 to .44
Rights	.59 to .68	.48 to .83	.41 to .50
Emotional well-being	.60 to .82	.69 to .72	.46 to .52
Physical well-being	.43 to .72	.74 to .89	.47 to .50
Material well-being	.57 to .72	.67 to .81	.43 to .60
Second-order factors			
Independence	.32 to .47	.77 to .84	.50 to .53
Social Participation	.45 to .54	.69 to .80	.60 to .69
Well-being	.37 to .41	.57 to .67	.59 to 6.2

Note. GFI: Goodness of Fit Index; AGFI: Adjusted Goodness of Fit Index; BBNFI: Bentler Bonnet Normed Fit Index; BBNNFI: Bentler Bonnet Non Normed Fit Index; CFI: Comparative Fit Index; TLI: Tucker Lewis Index; SRMR: Standardized Root Mean Standard Residual; CI: Confidence Interval; AIC: Akaike Information Criteria; BIC: Bayesian Information Criteria.
All significant ($p < .001$)

consistency for the items for every factor and respondent. The values for the second-order factors are slightly higher than those in the original scale, particularly for the Independence factor, both in the self-report and in the direct observation (Claes, Vandevelde et al., 2012).

In regard to the validity study, construct validity and convergent validity were examined. In regard to the CFA, we can assume that the model that adjusts better to the construct is that of the professionals' reports, although the models for people with ID and family members are also considered to be appropriate. The results were consistent with previous studies in regard to the multi-dimensionality of the QoL construct (Jenaro et al., 2005; Schalock et al., 2005) and the presence of three second-order factors (Wang et al., 2010).

In regard to convergent validity, as previously explained, the Gencat Scale was used because it was also used in the validation of the first original POS version. However, although the Gencat assesses QoL from the professional's objective perspective, first-order factors were analyzed for the three kinds of respondents. Results showed an acceptable correlation with the measurement criterion that this adapted scale intends to evaluate.

Regarding this psychometric study, the authors believe that two points need to be highlighted. Firstly, as seen in the reliability and validity results for the self-report, we have a good measurement instrument that allows for the direct participation of the individual with ID in the assessment of their QoL. These results were obtained with appropriate representation from people with ID due to the instructions for the proper application of the scale were strictly followed and the guidelines for the assessment of QoL were considered (Claes et al., 2010). Therefore, we agree with Claes, Vandevelde et al. (2012) that if the people with ID can speak for themselves, the self-report should be directly answered by them. If the individual with ID has communication problems, this part being answered by a proxy (professional or family member) cannot be justified because it was not created for this purpose. Moreover, we have to consider that, in relation to the degree of agreement among the different POS respondents, the correlations between self-reports and the information from the other respondents may be low (Claes, Vandevelde et al., 2012). Therefore, in those situations when self-reports cannot be assessed, applying the report of others is proposed, which has satisfactory

Table 3 Descriptive data of first and second-order factors.

	N	*M*	*SD*	Range
First-order factors				
Personal development				
Self	491	14.04	2.37	7-18
PO	511	13.81	2.43	7-18
FO	450	13.35	2.53	6-18
Self-determination				
Self	489	13.90	2.29	7-18
PO	517	13.86	2.34	7-18
FO	455	13.91	2.37	7-18
Interpersonal relations				
Self	487	15.78	1.90	7-18
PO	514	15.11	2.27	7-18
FO	437	15.31	2.29	7-18
Social inclusion				
Self	489	13.31	2.63	6-18
PO	509	12.86	2.76	6-18
FO	452	13.09	2.93	6-18
Rights				
Self	487	13.92	2.48	6-18
PO	490	13.26	2.55	7-18
FO	438	13.78	2.43	7-18
Emotional well-being				
Self	492	16.27	1.81	7-18
PO	515	15.57	2.11	9-18
FO	449	16.12	1.86	9-18
Physical well-being				
Self	491	15.13	1.97	9-18
PO	514	15.52	1.96	8-18
FO	450	15.77	1.88	8-18
Material well-being				
Self	493	13.32	2.67	6-18
PO	496	12.86	2.61	6-18
FO	452	13.29	2.62	6-18
Second-order factors				
Independence				
Self	484	27.94	4.06	14-36
PO	511	27.64	4.26	16-36
FO	448	27.24	4.36	15-36
Social Participation				
Self	472	42.92	5.12	24-54
PO	482	41.34	5.87	25-54
FO	420	42.22	5.53	27-54
Well-being				
Self	487	44.74	4.54	31-54
PO	491	43.97	4.34	31-54
FO	439	45.16	4.22	33-54

Note. Self: Self-report; PO: Professional's Observation; FO: Family member's Observation.

psychometric properties, both for professional and family versions.

Secondly, we assert that we have an instrument with a sufficient amount of psychometric qualities, for the self-report and for the report of professional and family member. It allows us to assess QoL from subjective and objective perspectives that are proposed in relevant literature in this field (Schalock & Verdugo, 2002; Schalock et al.,

Table 4 Cronbach's α values per every factor and source of information.

	Self-report ($N = 529$)	Report of Professional ($N = 522$)	Report of Family ($N = 462$)
First-order factors			
Personal development	.73	.79	.80
Self-determination	.77	.85	.78
Interpersonal relations	.70	.85	.83
Social inclusion	.80	.62	.62
Rights	.62	.85	.77
Emotional well-being	.75	.68	.69
Physical well-being	.63	.70	.67
Material well-being	.68	.75	.72
Second-order factors			
Independence	.82	.87	.84
Social Participation	.87	.89	.85
Well-being	.86	.89	.86

Table 5 Correlations between first-order factors.

	PD	SD	IR	SI	R	EWB	PWB	MWB
PD	1							
SD	.48	1						
	.53							
	.61							
IR	.73	.46	1					
	.64	.39						
	.70	.44						
SI	.64	.37	.53	1				
	.62	.40	.50					
	.64	.48	.57					
R	.72	.39	.61	.32	1			
	.67	.37	.59	.39				
	.67	.42	.66	.47				
EWB	.65	.50	.55	.34	.47	1		
	.52	.53	.56	.40	.48			
	.48	.56	.60	.56	.51			
PWB	.56	.56	.55	.42	.45	.60	1	
	.60	.49	.51	.40	.47	.54		
	.58	.53	.66	.46	.52	.67		
MWB	.44	.40	.46	.52	.58	.62	.56	1
	.42	.37	.43	.57	.52	.58	.53	
	.50	.48	.51	.58	.61	.62	.63	

Note. First value: Self-report Model; Second value: Family Model; and Third Value: Professional Model. All values ($p < .001$).
PD= Personal Development, SD= Self-Determination, IR= Interpersonal Relations, SI= Social Inclusion, R = Rights, EWB= Emotional Well-Being, PWB= Physical Well-Being, MWB= Material Well-Being

Table 6 Correlations between second-order factors.

	Independence	Social Participation	Well-being
Independence	1		
Social Participation	.54 .77 .67	1	
Well-being	.67 .69 .60	.42 .43 .47	1

Note. First value: Self-report Model; Second value: Family Model; and Third Value: Professional Model. All values ($p < .001$)

2007). Thus, the organizations in Spain that rely on this QoL model and work for the development of ISP have a valid and reliable instrument at their disposal, which will allow them to assess the impact of these plans on the expected personal outcomes.

This study has a few limitations. Firstly, the organizations that participated from the different autonomous communities are not at the same levels in terms of their knowledge and application of Schalock & Verdugo's (2002) QoL model and their guidelines that are defined in relation to the support paradigm (Schalock et al., 2008; Thompson et al., 2009). Thus, although some training was carried out in regard to the theoretical background and administration of the POS, the degree of comprehension of the items may have been influenced the study, depending on the organization's degree of involvement in using the QoL model and their commitment to promoting social inclusion. A second limitation lies in the fact that most of the participants with ID live with their families, and there is a low presence of those who live in supervised homes or independent homes. This situation is due to the fact that for this study, we needed the participation of the family, and indeed, the organizations have had more access to those parents who live with the individual with ID. In some cases, when the individual with ID lived in a supervised home, the legal tutor was considered to be a family member because their role was similar to that of a family member. Nevertheless, this was not the case for all of the cases because these cases were specific to participants who did not have a family or had parents who were rather old. In regard to the last limitation, we highlight the low participation of people with severe and/or profound ID due to their limitations in comprehension and communication. It is true that the administration of this scale through an interview has increased the participation of people with high comprehension difficulties; however, the representation of such people was low in our study. Otherwise, the use of the Classical Theory of Test can be a methodological and technical limitation in order to obtain more adjusted results in terms of generalizability so, for this type of instrument, it may be an interesting approach according to Rupp (2013) propositions.

Likewise, the results of this study provide new ways and opportunities for future research. Firstly, the Spanish version of the POS can be used to examine the degree of agreement between the self-report and the information from professional and family and, in this sense, to advance the knowledge of the significance of QoL assessment (Balboni et al., 2013; Claes, Vandevelde et al., 2012; Gómez, Arias, Verdugo, & Navas, 2012). Secondly, some studies show that personal outcomes are influenced by specific support strategies, environmental factors and personal characteristics (Claes, Van Hove, Vandevelde, van Loon, & Schalock, 2012). Thus, the Spanish POS can be used to assess the impact of support strategies that are provided by services such as was done with the original version (Claes, Van Hove et al., 2012) and to adopt improvement measures (van Loon et al., 2013). Finally, it is becoming more necessary to know the relationship between QoL and certain personal conditions of disability. We have to consider whether the dimensions, subdimensions, and indicators that are proposed in an evaluation system are equally relevant for all of the people with ID or whether there should be different

Table 7 Correlation coefficients between POS and Gencat factors.

	Self-report POS	Professional POS	Family POS
Emotional well-being	.45	.54	.50
Interpersonal relations	.54	.64	.55
Material well-being	.48	.62	.52
Personal development	.55	.68	.58
Physical well-being	.64	.72	.67
Self-determination	.68	.69	.68
Social inclusion	.50	.62	.57
Rights	.67	.72	.70

Note. All significant ($p < .001$) with Bonferroni correction.

or more detailed specifications (Petry, Maes, & Vlaskamp, 2009; Verdugo, Gómez, Arias, Navas, & Schalock, 2014). It is important to note that a more thorough analysis is needed of the convergence among sources of information and, even more, the divergence among them. That divergence may be very informative in evaluation and systematization processes when using the Spanish version of the POS. Some proposals and indexes have been put forward for this type of situation (Carbó-Carreté, Guàrdia-Olmos, & Giné, 2015) which we should also apply to this scale as future complementary analysis research.

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Appendix 1*. Escala de Resultados Personales.

AUTOINFORME

Dimensión: Desarrollo personal

1. ¿Hasta qué punto eres capaz de comer, acostarte y levantarte de la cama, ir al baño y vestirte?
   Generalmente solo (3)   Con ayuda (2)   No puedo por mí mismo (1)
2. ¿Hasta qué punto puedes prepararte la comida, hacer las tareas de casa, moverte con independencia, tomarte la medicación?
   Generalmente solo (3)   Con ayuda (2)   No puedo por mí mismo (1)
3. ¿Estás aprendiendo nuevas habilidades que te permitirán hacer más cosas o estás participando en algún curso/programa educativo?
   Muchas (3)   Algunas (2)   Pocas, si hay (1)
4. ¿Tienes la oportunidad de ejercer tus habilidades?
   A menudo (3)   A veces (2)   Raramente o nunca (1)
5. ¿Tienes acceso a información que te interese a través de, por ejemplo, periódicos, revistas, Internet, bibliotecas?
   Total (3)   Limitado (2)   Restringido o inexistente (1)
6. ¿Utilizas el ordenador, el teléfono móvil o la calculadora?
   A menudo (3)   A veces (2)   Raramente o nunca (1)

Dimensión: autodeterminación

1. ¿Tienes la posibilidad de elegir (p. ej. cómo vestir, qué comer o dónde ir)?
   A menudo (3)   A veces (2)   Raramente o nunca (1)
2. Si te dan la posibilidad de elegir, ¿eliges tú mismo/a?
   Siempre (3)   A veces (2)   Raramente o nunca (1)
3. ¿Puedes decidir no hacer algo que se te pide?
   Siempre (3)   A veces (2)   Raramente o nunca (1)
4. ¿La gente respeta tus decisiones?
   Siempre (3)   A veces (2)   Nunca (1)
5. ¿Controlas al menos una parte de tu dinero?
   Control considerable (3)   Cierto control (2)   No controlo nada (1)

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[*] Para la versión completa de la escala contactar con mariadelessalinescc@blanquerna.url.edu

6. ¿Tienes la oportunidad de expresar tu opinión sobre lo que prefieres hacer, cómo vestir, qué comer, dónde ir, etc.?
Siempre (3) A veces (2) Raramente o nunca (1)

Dimensión: relaciones interpersonales

1. ¿Tienes amigos?
Sí (3) Más o menos (2) No (1)

2. ¿Con qué frecuencia participas en actividades sociales, como invitar amigos a casa, salir a comer o ir a fiestas, bailes, etc.?
A menudo (3) A veces (2) Nunca (1)

3 ¿Con qué frecuencia hablas con tu familia, ya sea en persona, por teléfono/teléfono móvil o por correo electrónico?
A menudo (3) A veces (2) Nunca (1)

4. ¿Con qué frecuencia tienes contacto con tus amigos, ya sea en persona, por teléfono/teléfono móvil o por correo electrónico?
A menudo (3) A veces (2) Nunca (1)

5. ¿Eres importante para tu familia?
Sí (3) Más o menos (2) No (1)

6. ¿Sabes a quién pedir ayuda, consejo o apoyo en caso de necesitarlo?
Sí (3) Más o menos (2) No (1)

Dimensión: inclusión social

1. ¿Hablas con gente que vive cerca de ti o vas a visitarla?
A menudo (3) A veces (2) Raramente o nunca (1)

2. ¿Cuántos vecinos de tu barrio conoces por su nombre?
Muchos Algunos Pocos
(5+) (3) (2-4) (2) (0-1) (1)

3. ¿Utilizas servicios del barrio donde vives (cafeterías, tiendas, peluquerías, pubs, bancos, cines, centros de culto religioso, salas de conciertos o instalaciones deportivas)?
A menudo A veces Nunca (1)
(a diario) (3) (1 o 2 veces por semana) (2)

4. ¿Ayudas a los demás cuando te necesitan?
A menudo (3) A veces (2) Raramente o nunca (1)

5. ¿La gente de tu comunidad hace cosas para ti (incluido visitarte y llevarte a sitios)?
A menudo (3) A veces (2) Raramente o nunca (1)

6. ¿Realizas actividades en la comunidad, como ir de compras, disfrutar de tiempo de ocio, salir a comer o ir a centros comerciales?
A menudo (3) A veces (2) Nunca (1)

Dimensión: derechos

1. ¿Tienes algún espacio en casa para poder estar solo?
Sí (3) Más o menos (2) No (1)

2. ¿Tienes llaves de casa?
Sí (3) Sí, pero no siempre (2) No (1)

3. ¿Podrías tener un animal de compañía, si quisieras?

Sí (3) Depende (2) No (1)

4. ¿Podrías tener novio/a, si quisieras?
Sí (3) Tal vez, depende (2) No (1)

5. ¿Si tienes novio/a, tenéis permiso para estar juntos tanto tiempo como queráis?
Si no tiene pareja, puntuar: Sí
Sí (3) Depende (2) No (1)

6. ¿Cuántas veces has ido a votar en los últimos años?
Casi siempre o siempre (3) Alguna vez (2) Nunca (1)

Dimensión: bienestar emocional

1. ¿Te sientes a salvo y seguro en tu entorno diario?
Mucho (3) Bastante (2) Nada (1)

2. ¿Te sientes realizado en lo que haces?
Sí (3) Más o menos (2) No (1)

3. ¿Con qué frecuencia expresas cariño o afecto hacia los demás?
Siempre o casi siempre (3) A veces (2) Nunca (1)

4. ¿Dirías que eres una persona feliz?
Sí (3) Más o menos (2) No (1)

5. ¿Estás satisfecho de cómo te van las cosas? Esto significa que no estás inquieto o que no tienes preocupaciones serias sobre algún asunto.
Decididamente sí (3) Tal vez (2) No (1)

6. ¿Confías en las personas que son importantes para ti?
Siempre (3) A veces (2) Nunca (1)

Dimensión: bienestar físico

1. ¿Cómo estás de salud en general? ¿Cómo te encuentras?
Muy bien (3) Bien (2) Mal / Enfermo (1)

2. ¿Con qué frecuencia haces ejercicio (ir al gimnasio, montar en bicicleta, nadar) o practicas deporte (por ej. jugar al fútbol)?
A menudo (3) A veces (2) Nunca (1)

3. ¿Descansas bien y sabes relajarte?
Sí (3) Más o menos (2) No (1)

4. ¿Comes alimentos que son buenos para tu salud?
Siempre (3) A veces (2) Nunca (1)

5. ¿Te preocupa hacerte daño o sentir dolor?
No, raramente (3) A veces (2) Regularmente (1)

6. ¿Cómo te sientes cuando te levantas por la mañana?
Bien descansado (3) Un poco cansado (2) Cansado (1)

Dimensión: bienestar material

1. ¿Tienes suficiente dinero para comprar lo que realmente necesitas?
Sí (3) Más o menos (2) No (1)

2. ¿Tienes suficiente dinero para poder ahorrar?

Siempre (3) A veces (2) Nunca (1)

3. ¿Tienes objetos personales que consideres importantes, como una radio, televisor, equipo de música, cuadros, etc.?
   Muchos (3) Algunos (2) Ninguno o casi ninguno (1)

4. ¿Tienes un trabajo remunerado?
   Con regularidad (3) Esporádicamente (2) Raramente o nunca (1)

5. ¿Tienes llaves de tu casa?
   Siempre (3) A veces (2) Nunca (1)

6. ¿Tienes suficiente dinero para poder escoger (por ej. cómo vestirte o qué comprar)?
   Siempre (3) A veces (2) Nunca (1)

INFORME DEL PROFESIONAL Y DE LA FAMILIA

(Esta parte del cuestionario debe ser cumplimentada por separado entre profesional y familia. A pesar de contener los mismos ítems, cada fuente de información genera una evaluación independiente de la otra)

Dimensión: desarrollo personal

1. ¿Cómo valora el grado de realización de la persona en las siguientes actividades diarias: alimentarse, acostarse y levantarse de la cama, ir al baño, vestirse?
   Generalmente independiente (3) Con ayuda (2) No puede por sí solo (1)

2. ¿Cómo valora el grado de realización de la persona en las siguientes actividades instrumentales diarias: cocinar, realizar las tareas del hogar, moverse con independencia, tomarse la medicación?
   Generalmente solo (3) Con ayuda (2) No puede por sí solo (1)

3. ¿Cuántos tipos de habilidades ha adquirido la persona o cuántos programas educativos ha seguido en los últimos 6-12 meses?
   Muchos (3) Algunos (2) Pocos, si hay (1)

4. ¿Con qué frecuencia ejerce las habilidades adquiridas (por ejemplo: en el trabajo, en la escuela, en casa)?
   A menudo (3) A veces (2) Raramente o nunca (1)

5. ¿Qué grado de acceso tiene a información que le interese a través de, por ejemplo, periódicos, revistas, Internet, bibliotecas?
   Total (3) Limitado (2) Restringido o inexistente (1)

6. ¿Con qué frecuencia utiliza tecnología de ayuda?
   A menudo (3) A veces (2) Raramente o nunca (1)

Dimensión: autodeterminación

1. ¿Hasta qué punto la persona controla cómo vestir, qué comer, dónde ir, etc.?
   Bastante (3) Un poco (2) Poco o nada (1)

2. Cuando se le ofrece la posibilidad de elegir, ¿la aprovecha?
   A menudo (3) A veces (2) Raramente o nunca (1)

3. ¿Hasta qué punto toma decisiones que son importantes para él/ella, aunque su opinión difiera de la de los demás?
   Con normalidad (3) Hasta cierto punto (2) Raramente o nunca (1)

4. ¿Hasta qué punto se respetan las decisiones que toma (independientemente de la decisión que sea)?
   Se aceptan y se respetan en gran medida (3) Se respetan hasta cierto punto (2) No se respetan (1)

5. ¿Hasta qué punto controla, al menos, una parte de su dinero?
   Control considerable (3)   Cierto control (2)   Ningún control (1)

6. ¿Hasta qué punto la persona tiene la oportunidad de expresar lo que quiere?
   Siempre (3)   A veces (2)   Raramente o nunca (1)

Dimensión: relaciones interpersonales

1. ¿La persona tiene amigos conocidos con quienes mantiene un contacto regular y se refiere a ellos como tales?
   Sí (3)   Más o menos (2)   No (1)

2. ¿Con qué frecuencia participa en actividades sociales, como recibir visitas de amigos, invitarlos comer a casa o ir a fiestas o bailes?
   A menudo (3)   A veces (2)   Nunca (1)

3 ¿Con qué frecuencia la persona interactúa con la familia o va a visitarla?
   A menudo (3)   A veces (2)   Nunca (1)

4. ¿Con qué frecuencia interactúa con los amigos o va a visitarlos?
   A menudo (3)   A veces (2)   Nunca (1)

5. ¿La familia lo trata con dignidad y respeto incondicionales, o le demuestra que es importante para ellos de cualquier otro modo?
   Por supuesto (3)   Puede que sí (2)   No (1)

6. ¿La persona cuenta con un entorno social al que puede recurrir si necesita ayuda, respuestas o apoyo?
   Un entorno fuerte (3)   Un entorno moderado (2)   Ningún entorno (1)

Dimensión: inclusión social

1. ¿Con qué frecuencia interactúa la persona con sus vecinos?
   A menudo (3)   A veces (2)   Raramente o nunca (1)

2. ¿A cuántos vecinos de la zona conoce por su nombre?
   Muchos (5+) (3)   Algunos (2-4) (2)   Pocos (0-1) (1)

3. ¿Utiliza servicios de la zona donde vive (cafeterías, tiendas, peluquerías, pubs, bancos, cines, lugares de culto religioso, autobuses públicos, salas de conciertos, instalaciones deportivas)?
   A menudo (a diario) (3)   A veces (1 o 2 veces por semana) (2)   Nunca (1)

4. ¿Se ofrece voluntario para ayudar a otros miembros de la comunidad?
   A menudo (3)   A veces (2)   Raramente o nunca (1)

5. ¿Con qué frecuencia la gente de la comunidad visita a la persona o la lleva a sitios?
   A menudo (3)   A veces (2)   Raramente o nunca (1)

6. ¿Con qué frecuencia participa la persona en actividades de la comunidad?
   A menudo (3)   A veces (2)   Nunca (1)

Dimensión: derechos

1. ¿La persona tiene una habitación o un espacio para su intimidad?
   Por supuesto (3)   Puede que sí, aunque depende (2)   No (1)

2. ¿La persona dispone de llaves de su casa/piso?

Sí, y las lleva siempre (3)   Sí, pero con control parcial (2)   No (1)

3. ¿Podría tener una animal de compañía si quisiera?
   Por supuesto (3)   Puede que sí, aunque depende (2)   Nunca (1)

4. ¿Podría tener pareja sentimental si quisiera?
   Sí (3)   Puede, pero depende (2)   No (1)

5. ¿La persona y su pareja pueden estar juntos todo el tiempo que quieran?
   Si no tiene pareja, puntuar: Sí
   Sí (3)   Puede, pero depende (2)   No (1)

6. ¿Cuántas veces la persona ha ido a votar en los últimos años?
   Siempre o casi siempre (3)   Alguna vez (2)   Nunca (1)

Dimensión: bienestar emocional

1. ¿Cómo valora el grado de seguridad en el entorno diario de la persona?
   Muy seguro (3)   Más o menos seguro (2)   Nada seguro (1)

2. ¿Con qué frecuencia vive la persona experiencias de éxito, como ganar en un juego, completar una actividad deseada y/o que le reconozcan su éxito?
   A menudo (3)   A veces (2)   Nunca (1)

3. ¿Con qué frecuencia la persona expresa cariño o afecto hacia los demás?
   A menudo (3)   A veces (2)   Nunca (1)

4. ¿Cuántas veces ha visto a la persona mostrando signos de felicidad (ej. con una sonrisa, riéndose)?
   A menudo (3)   A veces (2)   Nunca (1)

5. ¿Cuántas veces expresa satisfacción a través de comentarios, gestos o expresiones faciales? (Esto significa que no está inquieto ni tiene preocupaciones serias sobre algún asunto en concreto.)
   A menudo (3)   A veces (2)   Nunca (1)

6. ¿La persona confía en los demás, comparte sus sentimientos y se siente a gusto cuando está con otras personas?
   A menudo (3)   A veces (2)   Nunca (1)

Dimensión: bienestar físico

1. ¿Cómo valoraría la salud de la persona en general?
   Muy buena (3)   Aceptable (2)   Pobre (1)

2. ¿Con qué frecuencia practica algún deporte o participa en alguna actividad de ocio?
   A menudo (3)   A veces (2)   Raramente o nunca (1)

3. ¿Con qué frecuencia la persona suele descansar bien y relajarse?
   A menudo (3)   A veces (2)   Raramente o nunca (1)

4. ¿Cómo valoraría su estado nutricional?
   Bueno (3)   Aceptable (2)   Pobre (1)

5. ¿Con qué frecuencia le preocupa la posibilidad de hacerse daño o sentir dolor?
   Raramente (3)   A veces (2)   A menudo (1)

6. ¿Cómo valoraría el estado de la persona al despertarse y levantarse de la cama?
   Bien descansado (3)   Un poco cansado (2)   Cansado (1)

Dimensión: bienestar material

1. ¿La persona tiene suficientes ingresos disponibles para comprar lo que realmente necesita?
   Siempre (3) A veces (2) Nunca (1)

2. ¿La persona tiene alguna cuenta de ahorro personal o alguna otra fuente de ahorros de la que pueda disponer?
   Siempre (3) A veces (2) Nunca (1)

3. ¿Tiene pertenencias personales que considere importantes (radio, televisor, equipo de música, cuadros)?
   Suficientes (3) Algunas (2) Pocas o ninguna (1)

4. ¿La persona tiene un trabajo remunerado?
   Con regularidad (3) Esporádicamente (2) Raramente o nunca (1)

5. ¿La persona tiene la llave de su casa?
   Siempre (3) A veces (2) Nunca (1)

6. ¿Tiene suficiente dinero para poder elegir lo que quiere (p. ej. cómo vestir o qué comprar)?
   Siempre (3) A veces (2) Nunca (1)

References

Arias, B., Verdugo, M. Á., Navas, P., & Gómez, L. E. (2013). Factor structure of the construct of adaptive behavior in children with and without intellectual disability. *International Journal of Clinical and Health Psychology*, *13*, 155–166. http://dx.doi.org/10.1016/S1697-2600(13)70019-X

Ayaso-Maneiro, J., Domínguez-Prado, D. M., & García-Soidan, J. L. (2014). Influence of weight loss therapy programs in body image self-perception in adults with intellectual disabilities. *International Journal of Clinical and Health Psychology*, *14*, 178–185. http://dx.doi.org/10.1016/j.ijchp.2014.03.002

Balboni, G., Coscarelli, A., Giunti, G., & Schalock, R. L. (2013). The assessment of the quality of life of adults with intellectual disability: The use of self-report and report of others assessment strategies. *Research in Developmental Disabilities*, *34*, 4248–4254. http://dx.doi.org/10.1016/j.ridd.2013.09.009

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Dalmon (Ed.), *Handbook of child psychology. Theoretical models of human development* (pp. 993–1028). New York: Wiley.

Buntinx, W. H. E., & Schalock, R. L. (2010). Models of disability, quality of life, and individualized supports: Implications for professional practice in intellectual disability. *Journal of Policy and Practice in Intellectual Disabilities*, *7*, 283–294. http://dx.doi.org/10.1111/j. 1741-1130.2010.00278.x

Carbó-Carreté, M., Guàrdia-Olmos, J. & Giné, C. (2015). Support needs and strategies for physical activity scale: a psychometric study of people with intellectual disability. Intellectual and Developmental Disabilities. Under editorial revision.

Claes, C., Van Hove, G., van Loon, J., Vandevelde, S., & Schalock, R. L. (2010). Quality of Life Measurement in the Field of Intellectual Disabilities: Eight principles for assessing quality of life-related personal outcomes. *Social Indicators Research*, *98*, 61–72. http://dx.doi.org/10.1007/s11205-009-9517-7

Claes, C., Van Hove, G., Vandevelde, S., van Loon, J., & Schalock, R. L. (2012). The influence of supports strategies, environmental factors, and client characteristics on quality of life-related personal outcomes. *Research in Developmental Disabilities*, *33*, 96–103. http://dx.doi.org/10.1016/j.ridd.2011.08.024

Claes, C., Vandevelde, S., Van Hove, G., van Loon, J., Verschelden, G., & Schalock, R. L. (2012). Relationship between self-report and proxy ratings on assessed personal quality of life-related outcomes. *Journal of Policy and Practice in Intellectual Disabilities*, *9*, 159–165. http://dx.doi.org/10.1111/j. 1741-1130.2012.00353.x

Cummins, R. A. (2005). Moving from the quality of life concept to a theory. *Journal of Intellectual Disability Research*, *49*, 699–706, 10.1111/j. 1365-2788.2005.00738.x.

Gómez, L. E., Arias, B., Verdugo, M. A., & Navas, P. (2012). Application of the Rasch rating scale model to the assessment of quality of life of persons with intellectual disability. *Journal of Intellectual and Developmental Disability*, *37*, 141–150. http://dx.doi.org/10.3109/13668250.2012.682647

Izquierdo, I., Olea, J., & Abad, F. J. (2014). Exploratory factor analysis in validation studies: Uses and recommendations. *Psicothema*, *26*, 395–400. http://dx.doi.org/10.7334/psicothema2013.349

Jenaro, C., Verdugo, M. A., Caballo, C., Balboni, G., Lachappele, Y., Otrebski, W., & Schalock, R. L. (2005). Cross-cultural study of person-centered quality of life domains and indicators: a replication. *Journal of Intellectual Disability Research*, *49*, 734–739. http://dx.doi.org/10.1111/j. 1365-2788.2005.00742.x

Muthén, L. K., & Muthén, B. O. (1998-2007). *Mplus User's Guide*. Los Angeles: Muthén & Muthén.

Luckasson, R., & Schalock, R. L. (2013a). Defining and applying a functionality approach to intellectual disability. *Journal of Intellectual Disability Research*, *57*, 657–668. http://dx.doi.org/10.1111/j. 1365-2788.2012.01575.x

Luckasson, R., & Schalock, R. L. (2013b). What's at stake in the lives of people with intellectual disability? Part II: Recommendations for naming, defining, diagnosing, classifying, and planning supports. *Intellectual and Developmental Disabilities*, *51*, 94–101. http://dx.doi.org/10.1352/1934-9556-51.2.094

Petry, K., Maes, B., & Vlaskamp, C. (2009). Psychometric evaluation of a questionnaire to measure the quality of life of people with profound multiple disabilities (QOL-PMD). *Research in Developmental Disabilities*, *30*, 1326–2136. http://dx.doi.org/10.1016/j.ridd.2009.05.009

Rupp, A. A. (2013). A systematic review of the methodology for person fit research in item response theory: Lessons about generalizability of inferences from the design of simulation studies. *Psychological Test and Assessment Modeling*, *55*, 3–38.

Schalock, R. L., Bonham, G. S., & Verdugo, M. A. (2008). The conceptualization and measurement of quality of life: Implications for program planning and evaluation in the field of intellectual disabilities. *Evaluation and Program Planning*, *31*, 181–190. http://dx.doi.org/10.1016/j.evalprogplan.2008.02.001

Schalock, R. L., & Felce, D. (2004). Quality of life and subjective wellbeing: Conceptual and measurement issues. In E. Emerson, C. Hatton, T. Thompson, & T. R. Parmenter (Eds.), *International handbook of applied research in intellectual disabilities* (pp. 261–279). London: Wiley.

Schalock, R. L., Gardner, J. F., & Bradley, V. J. (2007). *Quality of life for persons with intellectual and other developmental disabilities: Applications across individuals, organizations, communities and systems*. Washington: American Association on Intellectual and Developmental Disabilities.

Schalock, R. L., & Verdugo, M. A. (2002). *Handbook on quality of life for human service practitioners*. Washington: American Association on Mental Retardation.

Schalock, R. L., & Verdugo, M. A. (2012a). A conceptual and measurement framework to guide policy development and systems change. *Journal of Policy and Practice in Intellectual Disabilities*, *9*, 63–72. http://dx.doi.org/10.1111/j.1741-1130.2012.00329.x

Schalock, R. L., & Verdugo, M. A. (2012b). *A leadership guide for today's disabilities organizations: Overcoming challenges and making change happen*. Baltimore: Brookes Publishing Co.

Schalock, R. L., Verdugo, M. A., Jenaro, C., Wang, M., Wehmeyer, M., Jiancheng, X., & Lachapelle, Y. (2005). Cross-cultural study of quality of life indicators. *American Journal on Mental Retardation*, *110*, 298–311.

Simões, C., & Santos, S. (2013). Cross-Cultural Adaptation, Validity and Reliability of the Escala Pessoal de Resultados. *Social Indicators Research*, http://dx.doi.org/10.1007/s11205-013-0515-4

Thompson, J. R., Bradley, V., Buntinx, W. H. E., Schalock, R. L., Shogren, K. A., Snell, M. E., Wehmeyer, M. L., Borthwick-Duffy, S., Coulter, D. L., Craig, E. M., Gomez, S. C., Lachapelle, Y., Luckasson, R. A., Reeve, A., Spreat, S., Tassé, M. J., Verdugo, M. A., & Yeager, M. H. (2009). Conceptualizing supports and the support needs of people with intellectual disability. *Intellectual and Developmental Disabilities*, *47*, 135–146. http://dx.doi.org/10.1352/1934-9556-47.2.135

van Loon, J. H. M., Bonham, G. S., Peterson, D. D., Schalock, R. L., Claes, C., & Decramer, A. E. M. (2013). The use of evidence-based outcomes in systems and organizations providing services and supports to persons with intellectual disability. *Evaluation and Program Planning*, *36*, 80–87. http://dx.doi.org/10.1016/j.evalprogplan.2012.08.002

van Loon, J., Van Hove, G., Schalock, R. L., & Claes, C. (2008). *Personal Outcomes Scale: A Scale to Assess an Individual's Quality of Life*. Middelburg: Stichting Arduin and Gent: University of Gent.

Verdugo, M. A., Arias, B., Gómez, L. E., & Schalock, R. L. (2008). *Manual d'aplicació de l'Escala Gencat de Qualitat de vida*. Barcelona: Departament d'Acció Social i Ciutadania, Generalitat de Catalunya.

Verdugo, M. A., Gómez, L. E., Arias, B., Navas, P., & Schalock, R. L. (2014). Measuring quality of life in people with intellectual and multiple disabilities: Validation of the San Martín scale. *Research in Developmental Disabilities*, *35*, 75–86. http://dx.doi.org/10.1016/j.ridd.2013.10.025

Verdugo, M.A., Gómez, L.E., Arias, B., Santamaría, M., Clavero, D., & Tamarit, J. (2013). Escala INICO-FEAPS. Evaluación integral de la calidad de vida de personas con discapacidad intelectual o del desarrollo. Salamanca:.

Verdugo, M. A., Gómez, L. E., Arias, B., & Schalock, R. L. (2009). *Escala Integral de Calidad de Vida*. Madrid: CEPE.

Wang, M., Schalock, R. L., Verdugo, M. A., & Jenaro, C. (2010). Examining the factor structure and hierarchical nature of the quality of life construct. *American Journal of Intellectual and Developmental Disabilities*, *115*, 218–233. http://dx.doi.org/10.1352/1944-7558-115.3.218