ORIGINAL ARTICLE

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Development and psychometric properties of a self-report instrument for the assessment of sexual behaviour and concerns of people with mild intellectual disabilities (SEBECOMID-S)

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Funding information

The Spanish Ministry of Science, Innovation and Universities, Grant/Award Number: RTI2018-095538-B-I00

Abstract

Background: This paper presents a description of the development and psychometric properties of a self-report instrument for the assessment of sexual behaviour and concerns of people with mild intellectual disabilities (SEBECOMID-S).

Methods and procedures: The study included 281 people with mild intellectual disabilities. The psychometric properties were examined through exploratory factorial analysis, descriptive statistics, and reliability indices.

Results: The exploratory factor analyses offered a structure with three factors: concern about the appropriateness of their sexual behaviour, sexual practices performed, and safe sex practices. The model presents an excellent fit ($\chi^2/df=1.10$, RMSEA = 0.019, CFI = 0.997, TLI = 0.995, and SRMR = 0.065). General test reliability was good ($\alpha=0.77$, $\Omega=0.76$).

Conclusions: SEBECOMID-S is a valid and reliable tool to obtain objective information about the sexual behaviour and concerns of people with mild intellectual disabilities. The use of this instrument will make it possible to adjust their training to their real experiences, making it more effective.

KEYWORDS

intellectual disability, psychometric properties, self-report, sexual behaviour, sexuality

1 | INTRODUCTION

Sexuality is an inherent aspect of being human. It includes the physical, physiological, psychological, social, emotional, cultural, and ethical dimensions of sex and gender, and it influences people's thought, feelings, actions, and interactions, affecting their mental and physical health (Taylor, 2012). People with intellectual disabilities show curiosity, interest, and sexual desire, manifesting behaviours that involve the exploration and stimulation of their bodies, as well as their interest in meeting other

people and establishing more intimate relationships (Badilla et al., 2018). However, although people with intellectual disabilities have the same sexual needs as the non-disabled population, their needs are often ignored (Gil-Llario et al., 2018; Leutar & Mihokovic, 2007). They tend to be viewed as asexual (Winges-Yanez, 2014) and unable to make appropriate decisions about their sexuality without support or supervision (Swango-Wilson, 2009), or they are expected to have uncontrollable, dangerous, and aggressive sexual behaviours due to their lack of impulse control (Aunos & Feldman, 2002).

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These stereotypes have curbed the right of people with intellectual disabilities to achieve the free and adequate expression of their sexuality (Franco et al., 2012), partly because most professionals and family members have not received training in this area and do not feel competent to teach them (Löfgren-Mårtenson, 2012). They even claim that dealing with these issues causes them anxiety, and so they avoid people with intellectual disabilities in the area of sexuality (Parchomiuk, 2012). Due to stereotypes and lack of training, little importance is given to the sexual expression of people with intellectual disabilities, which hinders the development of their social and sexual identity (Medina-Rico et al., 2017). In fact, they are often denied the opportunity to discuss, seek information about, or even explore their sexuality on their own (Frawley & Wilson, 2016).

The fact that young people with mild intellectual disabilities have less information about sexual development and contraception than young people without disabilities makes them more vulnerable to unwanted pregnancy and sexually transmitted diseases (Dekker et al., 2014). Wilson et al. (2011), among other authors, report that sexual expression and desire are influenced by biological aspects in some young people with intellectual disabilities, which, without adequate training, makes them more likely to engage in atypical sexual practices. Later, when they become adults, opportunities to initiate emotional relationships and develop a healthy sexual identity remain limited (Chou et al., 2015), and so autoerotic behaviour is more common than in non-disabled adults (Gil-Llario et al., 2018; Kiiak, 2013). In the case of women, negative perceptions of sexuality with high levels of fear of sex and lack of pleasure have been observed (Bernert & Ogletree, 2013). Furthermore, aspects such as their frequently negative attitude towards contraception methods (Chou et al., 2015), insufficient understanding of the way contraception works (McCarthy, 2009), or receiving information that does not match their capabilities (Olavarrieta et al., 2013) explain the fact that they use contraception less than women without intellectual disabilities (van Schrojenstein Lantman-de Valk et al., 2011).

Therefore, it is necessary to have information about the sexual behaviours and concerns of people with intellectual disabilities in order to avoid inappropriate or risky behaviours and better determine their real needs.

To evaluate sexual aspects of people with intellectual disabilities, validated instruments are available, such as the assessment of sexual knowledge (Galea et al., 2004) or the General Sexual Knowledge Questionnaire (Talbot & Langdon, 2006), but these instruments focus on issues such as anatomy, pregnancy, contraception, or sexually transmitted diseases, without specifically asking about sexual experiences. Other instruments focus on more specific aspects. For example, the Detection of Sexual Abuse Risk Screening Scale (Gil-Llario et al., 2019) identifies their skills in protecting themselves from sexual abuse. However, none of these instruments analyse positive aspects of their sexuality.

Therefore, we considered it necessary to design and validate an instrument that, based on the classic definition of sexual behaviour defended by Katchadourian (1983), would cover observable aspects of the sexual behaviour of people with intellectual disabilities. Some examples would be the sexual practices they have engaged in (by themselves or

with another person), the protective measures they take to practice safe sex, and internal aspects of the person that may influence his/her sexual behaviour, such as the state of sexual arousal and concerns about these aspects. The use of this instrument would provide an opportunity to help them to resolve their concerns.

Having information about these aspects would make it easier to determine the real training needs of people with mild intellectual disabilities and facilitate the selection and adaptation of the training contents to their situation (Dukes & McGuire, 2009).

In learning about personal experiences, the respondent's perspective is crucial (Patrick et al., 2007). People with mild intellectual disabilities are capable of responding to a self-report if it is appropriate for their characteristics (Finlay & Lyons, 2001; Vlot-van Anrooij et al., 2018). Our instrument is specifically designed for this population to give them a voice and help to fill the gap in the self-report tests available for them.

Therefore, we present a description of the development and psychometric properties of a self-report instrument for the assessment of sexual behaviour and concerns of people with mild intellectual disabilities (SEBECOMID-S).

2 | MATERIAL AND METHODS

2.1 | Participants

In the present study, the participants were 281 people with mild intellectual disabilities from 23 occupational centres located in Spain. Of them, 54.09% (n=152) were men, and 45.91% (n=129) were women. The ages of the participants ranged between 19 and 67 years (M=31.21; SD=18.74). Most of the sample lived with their parents or guardians (77.9%; n=219), 10.3% (n=29) lived in nursing home/hospital settings for people with disabilities, 8.8% (n=25) resided in community living situations with different degrees of supervision, and less than 3% (n=8) lived alone or with other people, but without supervision. Table 1 shows the characteristics of the participants and information about the age when participants were diagnosed with intellectual disability. The table reveals that most of them were diagnosed when they were between 1 and 8 years old (65.7%; n=184). Levene's test confirmed the homogeneity of variances with regard to gender and age (W=0.745, p=.289).

2.2 | Instruments

The SEBECOMID-S is a self-administered instrument that includes 14 questions. The questions have different response formats depending on the content: a frequency scale ranging from never to always (e.g., 'How often do you use a condom when you have oral sex with your partner?') and dichotomous questions with yes/no answers (e.g., 'Have you ever masturbated?'; see the instrument in the Appendix).

This instrument includes three main aspects: worry, or concerns of people with intellectual disabilities about issues related to sex or interpersonal relationships (e.g., 'Do you worry that people you like

TABLE 1 Participants' characteristics

	Total (n = 281) % or M (SD)	Female (n = 129) % or M (SD)	Male (n = 152) % or M (SD)	Effect size
Age	31 (18.74)	30.08 (19.44)	32.15 (18.14)	d = 0.11
Between 18 and 29 years old	30.5%	33.6%	27.9%	V = 0.06
Between 30 and 39 years old	26.8%	26.4%	27.2%	
Between 40 and 49 years old	29.3%	26.4%	31.6%	
Older than 50 years old	13.4%	13.6%	13.2%	
Residence type				
With relatives (with parents, siblings, guardians, etc.)	77.9%	78.2%	77.7%	V = 0.08
Community living (shared apartment with complete/partial supervision)	8.8%	8.1%	9.5%	
Nursing home/hospital setting (nursing home, congregate care, etc.)	10.3%	9.7%	10.8%	
Independent living (alone or with others with no supervision)	2.9%	4%	2%	
Age of intellectual disability diagnosis				
From birth	21.5%	20.2%	21.3%	V = 0.05
Between 1 and 8 years old	65.7%	67%	66.1%	
Between 9 and 18 years old	7.7%	8.2%	7.3%	
Older than 19 years old	5.5%	4.3%	5.8%	

will look at you funny or misunderstand you when you show that you like them?'); sex practices, or sexual activities that people with intellectual disabilities might engage in (e.g., 'Have you ever had anal intercourse?'; and condom use, or safe sex practices (e.g., 'How often do you use a condom when you have vaginal intercourse with your partner?').

2.3 | Procedure

To design the instrument, an initial group of three experts in developmental disorders, educational psychology, and sexuality determined what dimensions should be measured and established a battery of 36 items. For this purpose, they reviewed the scientific literature related to sexuality in people with intellectual disabilities (Azzopardi-Lane & Callus, 2015; Frawley & Wilson, 2016; Gil-Llario et al., 2019; Kijak, 2013) and the construct of sexual behaviour as defined by Katchadourian (1983).

Then, a second group of experts consisted of two psychologists who worked in support centres for people with intellectual disabilities and two speech therapists who were experts in 'easy reading' and had experience with people with intellectual disabilities. They reviewed the questions and rated the clarity, semantic understanding, and appropriateness of the statements for each construct on a scale from 0 to 5. Using this procedure, six items were eliminated due to formulation problems, three items were rewritten by creating alternative wording, and eight items with similar content were merged into four.

The corrected version consisted of 26 items with appropriate wording according to the professionals who assessed them. It was administered to a small pilot group of 10 people with mild intellectual

disabilities, employing the same conditions as those specified in the later study. Six participants were men, and four were women. They were chosen at random from attendees at two occupational centres who met the requirements for the sample but did not participate in the subsequent study. In this pilot test, after filling in the instrument, they were asked about the clarity and comprehension of the items. The participants stated that they had understood all the questions well, and that they had no doubts when answering them. After obtaining permission from the competent authorities, this final version was administered in 23 occupational centres for the care of adults with intellectual disabilities. These centres promote the personal and professional development of this population through educational programmes and tasks in workshops to improve their social and labour integration. The centres were selected for the study by using a stratified random sampling procedure, taking population density into account (Lohr, 2010), which made it possible to obtain a representative sample of people with mild intellectual disabilities.

The inclusion criteria were: being of legal age, having sufficient communication and reading skills (assessed in consultation with their educational supervisors), and meeting the DSM-5 criteria for mild intellectual disabilities (information that appeared in their medical records, assessed with standardised tests).

Two members of the research group evaluated each participant individually, explained how to fill in the questionnaire, and provided support if any doubts arose. As in the administration of this type of self-report instrument in the general population, their doubts were related to confirming that their answers would not be seen by their parents (an aspect that had already been discussed with them) or asking whether they had to circle the chosen option or cross out the rejected option. The language used in the instrument appeared to be

sufficiently clear because the support members of the research group did not receive any queries about the meaning of any words, and so there was no need to clarify the content of the items. To administer the instrument, the occupational centres set up a room that was not occupied during the scheduled interview. The researchers had a list of the participants who had given their consent, and they called them individually to go to the designated room while the rest of the colleagues carried out other activities at the centre. Once a participant had finished, he or she returned to the group, and the researchers called another participant.

The study complies with the rules and ethical principles of the Declaration of Helsinki, and it was approved by the Ethics Committee of the University of Valencia. The participants and their guardians were invited to a meeting at their centre, where two members of the research group, with a member of the centre present, explained the aim of the research. After this explanation, a document with the informed consent was distributed to the people with mild intellectual disabilities and their guardians, so that they could fill it in with their personal data and sign the document if they were interested in participating. They were given a week to deliver the document to the centre.

2.4 | Statistical analyses

On the one hand, we performed descriptive analyses using SPSS (version 25.0) to explore sociodemographic, clinical, and sexual behaviour. To compare these characteristics according to gender, t tests and chi-square tests were performed. Effect sizes for t tests (i.e., Cohen's d) were computed with the G*Power software (version 3.1.9.6), whereas effect sizes for categorical variables (i.e., Cramer's V) were calculated with the SPSS. For Cohen's d, effect sizes above 0.20 were considered small, above 0.50 moderate, and above 0.80 large (Cohen, 1988); for Cramer's V, these sizes corresponded to values of 0.10, 0.30, and 0.50, respectively (Ellis, 2010).

On the other hand, Mplus software (version 7.4) was used to obtain the factor structure of the SEBECOMID-S, by means of exploratory factor analysis (EFA). Mplus software makes it possible to create structural models with both dichotomous and categorical variables in the same model (Muthén & Muthén, 2015) and obtain the factor structure based on tetrachoric correlations using the robust weighted least square mean and variance adjusted estimator, which is the most appropriate for small sample sizes (Asparouhov & Muthén, 2010). In this case, the ideal number of factors was extracted from the eigenvalues, the presence or not of negative residual variances, and a set of goodnessof-fit indices. The goodness-of-fit was measured with the following indices: Satorra-Bentler chi-square (χ^2), normalised chi-square (χ^2/df), statistical probability (p), root mean square error of approximation (RMSEA), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and the standardised root mean square residual (SRMR). An acceptable overall fit corresponds to chi values with a p > .01, normalised chisquare values between 2 and 3, RMSEA values <0.06, SRMR <1, and CFI and TLI values >0.90 (DiStefano et al., 2017; Hooper et al., 2008). Excellent values correspond to chi values with a p > .05, normalised

chi-square values between 1 and 2, CFI and TLI values above 0.95, RMSEA <0.05, and SRMR <0.08 (Bagozzi & Yi, 2011; DiStefano et al., 2017). Therefore, the results support the factor structure obtained. Furthermore, multi-group EFA was performed to confirm the structure across genders.

Finally, the RStudio software was used to calculate the scale's reliability and dimensions. According to Viladrich et al. (2017), for dichotomous and ordinal items, ordinal Omega and ordinal Alpha reliability statistics should be used. To test overall reliability, the 'coefficient alpha' package was used (Zhang & Yuan, 2016), which is specifically employed when data are multi-dimensional and non-normal. In addition, for each factor reliability, the 'user friendly science' package was used (Peters, 2014), which also provides ordinal Omega and ordinal Alpha for unidimensional models.

3 | RESULTS

3.1 | Exploratory factor analysis

For this type of analysis, Oblimin rotation (oblique method) was used, which provides the best results when items saturate in several factors at the same time, given that it provides small cross-loadings, minimises variables' complexity, and produces a cleaner factor structure (Schmitt & Sass, 2011).

Although the initial version had 26 items, some of them were eliminated following the logical steps for an EFA, commonly referred to as 'scale purification' (Muthén & Muthén, 2009; Wieland et al., 2017). Thus, the item 'Would you tell your partner that you want to use a condom?' was eliminated because it was similar to item 13 'Do you talk your partner into using a condom?', and their correlation was greater than 0.8. Similarly, the items 'When you see photos of people you like or someone you are attracted to is near you, does your heart race?", 'When you see photos of people you like or someone you are attracted to is near you, do you feel heat?', 'When you see photos of people you like or someone you are attracted to is near you, do you get hot?', and 'When you see photos of people you like or someone you are attracted to is near you, do you feel like touching yourself?' were quite similar, and their correlations were greater than 0.7. Therefore, the authors decided to use the item 'When you see photos of people you like or someone you are attracted to is near you, do you feel like touching yourself?', eliminating the other three items due to their multi-collinearity.

After eliminating these four items, a first EFA with 22 items was performed. Results revealed that structures with two, three, four, and five factors presented cross-loadings. Therefore, following the recommendations of Muthén and Muthén (2009) and Wieland et al. (2017), the eight items that presented cross-loadings were also eliminated.

Next, a second EFA with 14 items was carried out, revealing that there were no more cross-loadings. At this point, the output showed that the three-factor structure fitted the data best (Table 2) because models with two factors or less obtain some goodness of fit values below an acceptable criterion, and models with four or more factors have items with negative residual variances, indicating that there are too many factors (Muthén & Muthén, 2009). In the three-factor

TABLE 2 EFA fit indices and residual variances

Number of factors	χ^2	df	р	χ^2/df	CFI	TLI	RMSEA	SRMR	Negative residual variances
1	540.711	77	<.001	7.02	0.756	0.712	0.146	0.234	No
2	179.550	64	<.001	2.81	0.939	0.914	0.080	0.169	No
3	57.026	52	.294	1.10	0.997	0.995	0.019	0.065	No
4	33.441	41	.793	0.82	1	1	0	0.046	Yes
5	24.820	31	.776	0.80	1	1	0	0.040	Yes

Abbreviation: EFA, exploratory factor analysis.

TABLE 3 EFA with rotated components matrix and eigenvalue for the three-factor model

	Total sample ($n = 281$)			Female (n =	= 129)		Male (n = 152)			
Item number	F1	F2	F3	F1	F2	F3	F1	F2	F3	
1	0.480	-0.123	-0.100	0.408	-0.142	-0.025	0.662	-0.144	-0.092	
2	0.901	0.055	0.251	0.803	0.202	0.264	0.942	-0.040	0.166	
3	0.905	-0.103	0.025	0.995	-0.092	0.130	0.866	-0.088	-0.081	
4	0.354	-0.062	-0.021	0.305	-0.049	-0.012	0.314	-0.065	-0.017	
5	0.172	0.387	0.270	-0.016	0.527	0.109	0.256	0.379	0.266	
6	0.050	0.904	0.244	-0.064	0.947	0.248	0.091	0.864	0.254	
7	-0.053	0.907	0.132	-0.095	0.931	0.130	-0.044	0.876	0.170	
8	-0.038	0.874	0.235	0.069	0.899	0.118	-0.089	0.854	0.251	
9	-0.103	0.908	0.125	0.039	0.921	0.127	-0.199	0.908	0.114	
10	0.160	0.183	0.848	0.035	0.137	0.849	0.200	0.227	0.868	
11	0.092	0.195	0.916	0.243	0.200	0.989	-0.070	0.178	0.914	
12	0.143	0.188	0.996	0.262	0.094	0.907	0.039	0.278	0.991	
13	-0.015	0.125	0.529	-0.235	0.207	0.668	0.073	0.044	0.430	
14	-0.115	0.083	0.306	0.147	-0.061	0.412	-0.287	0.235	0.324	
Eigenvalue	4.12	2.74	2.22	4.27	3.09	2.09	4.13	2.88	2.35	

Note: the data presented in bold highlights the factor where each item saturates.

Abbreviation: EFA, exploratory factor analysis.

model, in addition to reaching all the excellent ranges for the fit statistics, all the residual variance values of the items were positive, which supports the three-factor structure as the most suitable.

In the three-factor model, the χ^2 value was not statistically significant (p=.294), and the value corresponding to the relative chi-square (χ^2/df) was 1.10, which is considered adequate because it lies between one and two. The CFI and TLI reached values of 0.997 and 0.995, respectively, with both CFI and TLI above the cut-off point established for an excellent fit. The RMSEA had a value of 0.019, indicating an excellent fit of the model according to the strictest criteria. Finally, the SRMR had a value of 0.065 (below 0.08 is considered excellent).

Table 3 shows the factor where each item saturates. The first factor is made up of four items (one, two, three, and four). This factor includes items that refer to concerns that people with intellectual disabilities have or experience about issues related to sex or interpersonal relationships (e.g., 'Do you worry that others will look at you funny or misunderstand you when you show that you like them?'). This factor was called *worry*.

The second factor is made up of five items (five, six, seven, eight, and nine). This factor was called *sexual practices* because it groups together items related to various sexual activities that people with intellectual disabilities might engage in (e.g., 'Have you ever had vaginal intercourse?').

The third factor contains five items (10, 11, 12, 13, and 14). This factor includes items related to prophylactic use (e.g., 'How often do you use a condom when you have vaginal intercourse with your partner?'). Thus, this structure was called *condom use*.

In order to confirm that our scale was structurally equivalent for both women and men, two more EFA were performed and compared across genders. To guarantee comparability, both EFAs were conducted following the same steps employed for the overall data (using the same estimator and rotation method, comparing the same goodness-of-fit indices, analysing the eigenvalues, and looking for negative residual variances). Results can be observed in Table 3. For both genders, the outputs suggested that three factors should be retained. Apart from slight differences in factorial loadings due to the

TABLE 4 Descriptive statistics and reliability indexes for items and factors of the SEBECOMID-S

						Reliability indexes						
		M (SD)					Total		Femal	9	Male	
	Range	Total	Female	Male	t	d	α	Ω	α	Ω	α	Ω
F1 - Worry	0-4	1.16 (1.12)	1.15 (1.05)	1.37 (1.48)	0.283	0.20	0.62	0.66	0.52	0.55	0.67	0.68
Item 1	0-1	0.48 (0.86)	0.29 (0.46)	0.39 (0.80)	0.078	0.12	-		-		-	
Item 2	0-1	0.16 (0.37)	0.11 (0.32)	0.21 (0.41)	0.036*	0.27	-		-		-	
Item 3	0-1	0.28 (0.45)	0.27 (0.45)	0.29 (0.46)	0.737	0.04	-		-		-	
Item 4	0-1	0.50 (0.50)	0.48 (0.50)	0.51 (0.50)	0.625	0.06	-		-		-	
F2 – Sex practices	0-5	1.66 (1.54)	1.57 (1.69)	1.74 (1.40)	0.858	0.11	0.75	0.77	0.80	0.81	0.73	0.75
Item 5	0-1	0.67 (0.47)	0.47 (0.50)	0.85 (0.36)	7.06**	0.30	-		-		-	
Item 6	0-1	0.32 (0.47)	0.34 (0.48)	0.30 (0.46)	-0.749	0.04	-		-		-	
Item 7	0-1	0.20 (0.40)	0.22 (0.41)	0.18 (0.38)	-0.853	0.08	-		-		-	
Item 8	0-1	0.33 (0.47)	0.37 (0.49)	0.30 (0.46)	-1.299	0.06	-		-		-	
Item 9	0-1	0.16 (0.37)	0.18 (0.38)	0.14 (0.35)	-0.789	0.08	-		-		-	
F3 – Use condom	0-11	4.15 (3.57)	3.5 (3.59)	4.68 (3.55)	1.043	0.01	0.77	0.87	0.78	0.87	0.77	0.89
Item 10	0-3	0.83 (1.1)	0.55 (0.93)	1.05 (1.18)	1.947	0.23	-		-		-	
Item 11	0-3	1.18 (1.25)	1.04 (1.21)	1.31 (1.29)	1.112	0.06	-		-		-	
Item 12	0-3	1.12 (1.27)	.89 (1.23)	1.33 (1.29)	1.509	0.05	-		-		-	
Item 13	0-1	0.65 (0.48)	0.60 (0.49)	0.70 (0.46)	1.581	0.06	-		-		-	
Item 14	0-1	0.61 (0.49)	0.62 (0.49)	0.60 (0.49)	-0.221	0.00	-		-		-	

Note: *p < .05; **p < .001; general test reliability (α and Ω) = 0.77 and 0.76; general reliability in women (α and Ω) = 0.78 and 0.76; general reliability in men (α and Ω) = 0.78 and 0.78.

Abbreviation: SEBECOMID-S, assessment of sexual behaviour and concerns of people with mild intellectual disabilities.

reduction in the sample size, the three-factor solution obtained for the overall data set was consistent across genders, as Table 3 shows.

3.2 | Descriptive data and reliability

Table 4 shows the means, standard deviations, and reliability indices for men, women, and the overall model, as well as for each factor.

In the first factor, values ranged between zero and four (the higher the score, the more concern the respondents have). Our participants did not seem to be very worried about these questions, given their low means on all the items. For all participants, the item that concerned them the most states that no one will fall in love with them, both for women and men. In this factor, men had significantly higher scores than women on Item two 'Do you think other people look at you funny because they think you do things with a sexual intent when you don't?'

In the second factor, values ranged from zero to five, with higher scores for the participants who have had more sexual practices. Our sample had the highest mean on masturbation, but low means on anal and oral sex. Men had practiced more masturbation than women, and this difference was significant. However, women reached higher mean values than men on the other practices, but the differences were not significant for these practices or for the whole factor.

Finally, in the third factor, values ranged from 0 to 11. A score of 0 indicates the absence of condom use, whereas 11 indicates that participants used prophylactics every time they engaged in a sexual practice. Our sample rarely used condoms in oral sex, especially the men. Although condom use was higher in vaginal and anal sex, it was not extended, particularly in men's anal sex practice. Fortunately, the participants seemed to convince their partners to use condoms in their sexual practices. None of the differences between genders in condom use or in the entire factor were significant.

Regarding the internal consistency, Omega's ordinal index and Cronbach's ordinal index exceeded the criterion of 0.70 for all tests in the total sample, in women, and in men (Hunsley & Mash, 2008). In the first factor, however, reliability indices were lower than in the other factors, especially in women, with values that did not reach 0.60. Nevertheless, for the second factor, reliability values were above 0.70, even in women, with scores above 0.80 for both the Alpha and Omega indices. Finally, in the third factor, alpha values were above 0.70, but omega values were even higher, exceeding values of 0.80 (for the whole sample, women, and men).

4 | DISCUSSION

The objective of the present study was to develop a self-reported sexual behaviour and concerns assessment instrument for people with mild intellectual disabilities (SEBECOMID-S) and test its psychometric properties.

Existing research focuses primarily on assessing knowledge, problematic sexual behaviours, attitudes, or skills to protect against sexual abuse (Galea et al., 2004; Gil-Llario et al., 2019; Griffiths & Lunsky, 2003; Talbot & Langdon, 2006). In contrast, the SEBECOMID-S focuses on aspects that have not previously been evaluated, such as the sexual practices they engage in (Factor 2), the type of sexual relationships in which they take precautions (Factor 3), or aspects of their own experience that concern them (Factor 1).

The results of our research indicate that the SEBECOMID-S has good psychometric properties. EFA grouped the SEBECOMID-S items into three factors. This model has excellent fit indices, and all the residual variance values of the items are positive, showing that the three-factor model is the best. The results of the EFAs conducted for the male and female groups indicate that the three-factor structure obtained is consistent across genders. The SEBECOMID-S factors have been shown to have good internal consistency for the total sample, the female group, and the male group.

These factors not only allow family members and professionals to better understand the situation of people with mild intellectual disabilities, but they also include aspects considered essential in sexual-affective education programmes (Gardiner & Braddon, 2009; Katz & Lazcano-Ponce, 2008).

The basic topics of sex education programmes designed for adults with intellectual disabilities usually include general aspects related to taking responsibility for sexual behaviour, contraception, marriage and parenthood, sexually transmitted diseases and their prevention, and unacceptable and criminal sexual conduct (Chrastina & Večeřová, 2018). However, the SEBECOMID-S is designed to obtain information about their positive sexual experiences. This information will aid in selecting or creating contents tailored to their practices and their individual or group concerns and needs, adapting the level to their experiences. Therefore, discovering the practices that people with mild intellectual disabilities engage in makes it possible to discuss them in depth in training programmes and find out whether they are performing them safely, thus contributing to the development of healthy sexuality (van Schrojenstein Lantman-de Valk et al., 2011). In addition, knowing what practices they have not yet carried out is important in order to present relevant information about the types of sexual practices and prevent risks. Likewise, integrating information about their concerns or worries in a training programme is an excellent way to respond to their real needs and help them to achieve sexual autonomy (Healy et al., 2009), in addition to fostering their participation and motivation in the sessions and ensuring the effectiveness of the programme.

This study has the limitations of studies that use self-report measures, such as socially desirable responses, although we carefully explained to the participants that their responses would be anonymous and that it was important to answer honestly.

5 | CONCLUSIONS AND IMPLICATIONS

We can conclude that the SEBECOMID-S provides an objective tool to obtain information about the behaviour and concerns of people with mild intellectual disabilities in relation to sexuality and the types of protective behaviours they perform.

The information provided by the SEBECOMID-S will also make it possible to select or create content that fits individual or group concerns and needs and adapt the level to their experiences. This is important because more personalised sex education for people with intellectual disabilities leads to a direct and measurable improvement in their ability to make independent decisions in their sexual relationships (Dukes & McGuire, 2009).

This information will help to establish support plans that allow professionals and parents to know how to respond to the real problems that arise, which will improve their self-confidence and reduce their anxiety when providing this support (Dekker et al., 2014; Winges-Yanez, 2014).

In addition, the education of people with intellectual disabilities requires the engagement of professionals and parents (Chrastina & Večeřová, 2018; Martinello, 2014). Knowing the experiences and concerns of people with intellectual disabilities can help to raise awareness about the importance of their sexual expression (Whitney, 2006), which will enhance the development of their healthy sexuality (Chrastina & Večeřová, 2018) and contribute to improving their quality of life.

Thus, the SEBECOMID-S can be an important tool for future studies that explore the sexual behaviours of people with intellectual disabilities, and it can contribute to better understanding their sexual needs, thus favouring the normalisation of their sexuality. In addition, it can be used as a tool to evaluate the effectiveness of sexuality training programmes. Its administration before and after the intervention can allow researchers to measure the impact of the training on the sexual behaviours and concerns of people with mild intellectual disabilities.

ACKNOWLEDGEMENTS

This research is part of the Programa Estatal de I+D+i Orientada a los Retos de la Sociedad 'Desarrollo y análisis de la eficacia de un programa de educación afectivo-sexual para prevenir el abuso y mejorar la salud sexual en personas con diversidad funcional intelectual' (RTI2018-095538-B-I00), funded by the Spanish Ministry of Science, Innovation and Universities.

CONFLICT OF INTEREST

The authors declare there is no conflict of interest.

DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictionsThe data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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How to cite this article: Gil-Llario, M. D., Flores-Buils, R., Elipe-Miravet, M., Fernández-García, O., & Ballester-Arnal, R. (2021). Development and psychometric properties of a self-report instrument for the assessment of sexual behaviour and concerns of people with mild intellectual disabilities (SEBECOMID-S). Journal of Applied Research in Intellectual Disabilities, 1–9. https://doi.org/10.1111/jar.12924

APPENDIX A

Items									
1. If you oft yourself,	Yes □	No □							
2. Do you the because the intent who	Yes □	No 🗆							
you funny	3. Do you worry that people you like will look at you funny or misunderstand you when you show that you like them?								
4. Do you w you?	orry that no one wi	ll fall in love with	Yes □	No 🗆					
5. Have you	ever masturbated?		Yes □	No □					
6. Have you	ever masturbated e	each other?	Yes □	No □					
7. Have you someone	Yes □	No □							
8. Have you	8. Have you ever had vaginal intercourse?								
9. Have you	9. Have you ever had anal intercourse?								
10. How off your part		ndom when you have	e oral sex w	vith					
□ Never	☐ Sometimes	☐ Quite often	☐ Alway	/S					
	ten do you use a cor se with your partner	ndom when you have ?	e vaginal						
☐ Never	☐ Never ☐ Sometimes ☐ Quite often ☐ Always								
12. How often do you use a condom when you have anal sex with your partner?									
☐ Never	☐ Alway	/S							
13. Do you	Yes 🗌	No 🗆							
14. Are you sure to tell your partner that you want Yes ☐ No ☐ to use condoms even though he/she could reject you?									