Spanish Adaptation of the Social Worries Questionnaire (SWQ): A Tool to Assess Social Anxiety in Preadolescent Children

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Abstract

Social anxiety may appear during preadolescence, causing children to worry and avoid situations where they may be evaluated by others. Previous studies have shown that about 4% of preadolescents present clinically elevated levels of social anxiety, which is related to the later onset of other problems. Therefore, it becomes necessary to have available screening measures, with few items, that assess the different social situations that elicit anxiety, as is the case of the Social Worries Questionnaire (SWQ). The objective of this study was to adapt and assess the psychometric properties of the SWQ in Spanish preadolescent children. The sample was composed of 218 children aged 8 to 12 years (54.1% boys). The SWQ, along with other measures of depression, anxiety and self-concept, were online administered to children. An item addressing videoconference anxiety was added to the SWQ. Using Confirmatory Factor Analysis, a one-factor structure composed of 14 items demonstrated favorable fit indices. The results indicate evidence of concurrent and discriminant validity, good internal consistency (Cronbach's $\alpha=0.81$; ordinal $\alpha=0.87$) and moderate-to-good test-retest stability. Despite some limitations, the Spanish adaptation of the SWQ shows good psychometric properties and enables the assessment of social anxiety generalization to several situations. The questionnaire can be a valuable self-reported tool for detecting risk cases and guiding the treatment in clinical settings.

Keywords Social Worries Questionnaire · Social anxiety · Children · Scale · Assessment

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Social anxiety refers to an experience of fear towards other people's evaluation in social interaction, observation and performance situations (American Psychiatric Association, 2014). Low levels of social anxiety can be normal and adaptive (Botella & Fernández-Álvarez, 2020), but in some cases the problem is persistent, excessive to the real threat and causes discomfort and interference in daily functioning, which corresponds to social anxiety disorder (American Psychiatric Association, 2014). This problem encompasses physiological symptoms, such as sweating or palpitations; cognitive symptoms, such as catastrophic thoughts about the own performance and judgements from others; and behavioral symptoms, such as avoidance, escape or safety behaviors in social and academic situations (Pastor, 2022). In addition, children may express anxiety towards social situations through crying, tantrums, clinging to a trusted person or failing to speak (American Psychiatric Association, 2014).

Social fears begin to appear at around 10 years of age due to factors like the development of cognitive skills to take others' point of view, a greater importance of social relationships, as well as school demands that imply greater performance tasks (Bokhorst et al., 2008). Regarding social anxiety, according to the meta-analysis conducted by Solmi et al. (2022), in half of the cases, initial symptoms emerge at age 13 or before, and in 25% of the cases, at age 7 or before. Research on the developmental trajectories of the problem indicates that it tends to persist throughout childhood (Poole et al., 2018) and can increase during preadolescence (Poole et al., 2022), especially if the initial level is high at age 10 (Morales-Muñoz et al., 2022). Canals et al. (2019) reported that about 4% of Spanish children aged 9 to 12 years met clinical criteria, with higher prevalence in girls than boys. Likewise, Orgilés et al. (2012) observed that 4.6% of children and adolescents aged 8 to 17 showed elevated levels of social anxiety. The early onset of this problem has been linked to the subsequent onset of depression and substance abuse problems (Krygsman & Vaillancourt, 2022; Long et al., 2018), problematic Internet use (Leo et al., 2021) and academic difficulties (Hoff et al., 2017).

The assessment of social anxiety in children and adolescents is conducted through interviews with both children and their parents; observation, either in the clinical setting, by parents, or by the children themselves when the age is appropriate; and questionnaires or scales (Pastor, 2022). The use of self-reported measures by children is frequent and highly useful, as well as those in which parents respond about their children. However, discrepancies have been noted in the reported symptomatology between these sources, which is higher in the self-report version (Caqueo-Urízar et al., 2022). According to the review conducted by De Los Reyes et al. (2015) there is a moderate to low correlation between self-reported measures and the ones reported by other informants, particularly in internalized problems – like social anxiety –. The minimum age for an accurate measurement using a self-reported instrument varies according to its characteristics. However, it is considered that from the age of 7, items can provide reliable results (Conijn et al., 2020), especially if they are simple and offer two or three response categories (De Leeuw, 2011). For this reason, self-reported measures would be preferable to assess internalized problems from the child's experience, considering adequate questionnaires in appropriate ages.

According to the critical review by Tulbure et al. (2012), the majority of instruments for the assessment of social anxiety are aimed at adolescents. However, these

authors highlighted the existence of three self-reported questionnaires aimed at children aged 8 years and older. These instruments are recommended by the authors of the review and have been adapted to the Spanish population. The first is the Social Phobia and Anxiety Inventory for Children (SPAI-C), aimed at population between 8 and 17 years old in the original version (Beidel et al., 1995) and between 10 and 17 years old in its Spanish adaptation (Olivares et al., 2010). It consists of 26 items that, in the original version, constitute the factors "Assertiveness/General Conversation", "Public Performance" and "Traditional social encounters". The Spanish adaptation consists of four factors, including the content of the first two ones in the original version, as well as "Fear and avoidance/escape in social encounters" and "Cognitive and psychophysiological interferences". Another tool is the Social Anxiety Scale for Children-Revised (SASC-R), originally developed for children aged 9 to 13 years (La Greca & Stone, 1993) and aged 7 to 16 years in its Spanish adaptation (Sandín et al., 1999). It consists of 18 items grouped into the subscales "Fear of negative evaluation", "Social avoidance and distress-General" and "Social avoidance and distress-Specific to new peer". Finally, the Liebowitz Social Anxiety Scale for Children and Adolescents (LSAS-CA-SR) developed by Masia-Warner et al. (2003) consists of 24 fear items and 24 avoidance items in various situations, targeting children and adolescents aged 7 to 18 years old. The Spanish version (Olivares et al., 2009), examined in young people aged 10 to 17 years old, revealed a four-factor structure ("Fear of relationship", "Avoidance of relationship", "Fear of performance" and "Avoidance of performance").

Another assessment tool is the Social Anxiety Questionnaire for Children (SAQ-C24; Caballo et al., 2012), validated in Spanish children aged 9 to 15 years. It consists of 24 items that assess the factors "Speaking in public/Interactions with teachers", "Interactions with the opposite sex", "Criticism and embarrassment", "Assertive expression of annoyance or disgust", "Interactions with strangers" and "Performing in public".

The reviewed measures for assessing social anxiety demonstrate robust psychometric properties, both in their original versions and their Spanish adaptations. SPAI-C primarily assesses cognitive, physiological and motor symptoms, whereas SASC-R measures fears, emotions and behaviors in general situations. On the other hand, especially SAQ-C24 and LSAS-CA-SR target specific situations that generate anxiety, with the latter assessing fear and avoidance separately. The reviewed tools assess situations such as meeting new people, taking tests, expressing disagreement or standing up for personal interests, talking on the phone, going to parties, speaking in front of class or a group, or going to the school cafeteria (Beidel et al., 1995; Caballo et al., 2012; La Greca & Stone, 1993; Masia-Warner et al., 2003). Social anxiety towards video calls can be added to these situations, as it is a recent topic of interest in the scientific literature (Gözpınar et al., 2022; Gözpınar & Görmez, 2022) not addressed by the available questionnaires.

In clinical and research settings, it may be important to know the specific situations that generate anxiety or concern about the possible judgment of others, as well as the extent to which the problem is generalized. Some existing measures focus on concrete parameters of children's anxiety responses, rather than the situations that elicit them. Conversely, those more focused on these situations have a large number

of items. Several studies have shown the advantages of using brief measures (Fernández-Martínez et al., 2020; Rodríguez-Menchón et al., 2022). Thus, a small number of items can be particularly useful if the intention is to assess situations that generate social anxiety, without this being the main problem. To date, there is no screening measure validated for this purpose in a Spanish sample. In addition, the available measures cover a wide age spectrum, including adolescence, and none of them are specifically aimed at preadolescent children.

One measure that fills this gap is the Social Worries Questionnaire (SWQ), created by Spence (1995b), which consists of 13 items that assess worry or avoidance in specific social situations that may involve the negative evaluation of others. The situations addressed (e.g., "talking on the phone" or "eating in public") were selected from the scientific literature and standardized interviews with children with social anxiety. The original version, validated with 386 Australian children and adolescents, showed a one-factor structure with good internal consistency ($\alpha=0.84$) and concurrent validity with another measure of social fears. Mean scores do not vary significantly between genders or children's sociometric status (Spence, 1995a). The SWQ has been used to assess the effects of interventions for children with social phobia (Spence et al., 2000) and autism spectrum disorder (Luxford et al., 2017), as well as to research the relationship between both (White et al., 2015).

The objective of this work is to adapt and to obtain the psychometric properties of the Social Worries Questionnaire in a sample of Spanish children. Although the properties of the original version were studied with a population aged 8 to 17 (Spence, 1995a), the questionnaire will be adapted and validated in preadolescent children, from 8 to 12 years old, due to the importance of early detection.

Method

Participants

The participants were 218 children (54.1% boys, $n=118$) between 8 and 12 years of age, with a mean of 9.45 years ($SD=1.33$). According to Table 1, most of the reference parents or legal guardians of the children were married or living with a partner (81.7%), were employed full-time (51.4%) and had a bachelor's degree (39.9%) or secondary education and vocational training (27.1%). The majority of the children were born in Spain (95.4%) and reside primarily in the provinces of Alicante (29.8%), Madrid (26.1%), Balearic Islands (9.6%), Murcia (7.8%) and Seville (6.0%). Among the children, 17.9% ($n=39$) were receiving psychological treatment for one or multiple reasons at the time of the study.

Instruments

First, the reference parent or legal guardian of each participant provided sociodemographic data of the children (gender, age, current psychological treatment, country of birth and province of residence) and of themselves (monthly family income, marital

Characteristics	% (*n*)
Child's age	
8 years	33.0% (72)
9 years	22.9% (50)
10 years	19.3% (42)
11 years	15.6% (34)
12 years	9.2% (20)
Marital status of the reference parent or legal guardian	
Married or living as a couple	81.7% (178)
Divorced or separated	12.4% (27)
Single	4.6% (10)
Widower	1.4% (3)
Studies of the reference parent or legal guardian	
Basic	17.4% (38)
Secondary or vocational training	27.1% (59)
Bachelor's degree	39.9% (87)
Master's or PhD	15.6% (34)
Employment status of the reference parent or legal guardian	
Full-time employee	51.4% (112)
Part-time employee	15.6% (34)
Self employed	10.6% (23)
Unemployed	21.5% (47)
Student	0.9% (2)
Monthly family income	
Up to €499	2.3% (5)
€500 - €999	12.8% (28)
€1000 - €1999	25.2% (55)
€2000 - €2999	21.6% (47)
€3000 - €4999	22.9% (50)
€5000 or more	3.2% (7)
No answer	11.9% (26)

Table 1 Description of the sample

status, studies and employment status). The following self-reported assessment tools for children were also used.

- Social Worries Questionnaire (Spence, 1995a, b). The SWQ measures avoidance or worry in the last 4 weeks towards different performance, social interaction and exposure situations. The original 13 items have a scale of three categories (0 = Not true [*Nada*]; 1 = Sometimes true [*Algo*]; 2 = Mostly true [*Mucho*]), so that a higher score indicates a greater generalization of avoided or feared situations. In the adaptation process, the guidelines of the International Test Commission were followed (Hernández et al., 2020). First, permission was obtained from the SWQ author to carry out the adaptation. It was decided to add the item "Talking in a video call" due to the new forms of contact applied to the school environment and social interaction (Consejo Escolar del Estado, 2021) and the conceptualization of *videoconference anxiety* as a novel component of social anxiety (Gözpınar et

al., 2022; Gözpınar & Görmez, 2022). Therefore, the version used of the SWQ is composed of 14 items. Two bilingual researchers translated the items from English to Spanish and made vocabulary modifications to enhance comprehensibility. In the original version, all items begin with the words "I avoid or get worried about". To facilitate children's understanding of the questionnaire, these words were deleted and included in a general question preceding the items. The items were posed in second person, while the original version used the first. Once the changes were made, another bilingual researcher back-translated the items into English. Together, the three researchers compared the back-translated items with the original version to ensure the preservation of their original meaning, making minor adjustments.

- Short version of the Spence Children's Anxiety Scale (SCAS-C-8; Reardon et al., 2018; Rodríguez-Menchón et al., 2022). The SCAS-C-8 addresses anxiety symptoms (e.g., "Feel afraid"), with a Likert scale from 0 (Never) to 3 (Always). A higher score indicates higher levels of anxiety. Rodríguez-Menchón et al. (2022) validated the scale in a sample of Spanish children between 8 and 12 years old, with a one-factor structure, acceptable internal consistency ($\alpha = 0.75$), good test-retest reliability and convergent validity with another measure of internalized problems.

- Short Mood and Feelings Questionnaire (SMFQ; Angold et al., 1996). The SMFQ is a questionnaire of children's depressive symptoms, with 13 items (e.g., "I cried a lot") with a Likert scale from 0 (Not true) to 2 (True). A higher score indicates higher levels of mood problems. Espada et al. (2022) examined its psychometric properties in Spanish children aged 8 to 12 years old, with a one-factor structure, good internal consistency ($\alpha = 0.85$), acceptable test-retest reliability and convergent validity with measures of internalized problems.

- *Autoconcepto Forma-5* (AF-5; García & Musitu, 2014). The AF-5 assesses five dimensions of self-concept (academic, social, emotional, familial and physical), with 6 items in each. Items present a Likert scale ranging from 1 ("Strongly disagree") to 5 ("Strongly agree"). A higher score indicates a better self-concept, except for the emotional dimension, where it is lower. Among the various validation studies, the median of the total scale's internal consistency is 0.84, and it ranges from 0.71 to 0.88 in the dimensions. It shows good convergent validity with related measures.

Procedure

The study was disseminated through contacts and social networks (WhatsApp, Facebook, Twitter and Instagram) for two weeks, with a snowball sampling. The Google Forms tool was used because of its efficiency, as online self-reported questionnaires for children have been shown to be invariant and psychometrically equivalent to pencil and paper versions (e.g., Pineda et al., 2018, with children aged 7 years and older). First, the form included an informed consent for the reference parent or legal guardian and asked them to provide sociodemographic information. After that, they were asked to give the device to their child to complete the assessment instruments. Data

was collected anonymously, assigning an identifier code to each participant. After eight weeks, the form was sent again through the same channels to assess stability of responses over time. No financial incentives were offered to participants.

Statistical Analysis

R Project software, version 2022.12.0+353 for Mac, was used. A Confirmatory Factor Analysis (CFA) was performed using the Diagonal Weight Least Squares (DWLS) estimator. DWLS was chosen because the three-category scale of the SWQ does not allow a continuous methodology (Rhemtulla et al., 2012) nor a normal distribution of the data. This estimator is suitable for ordinal data, makes no assumptions about its distribution (Mîndrilă, 2010) and allows a better fit of the model, compared to other estimators (DiStefano & Morgan, 2014; Li, 2016). Model fit indices were considered acceptable with the following criteria: RMSEA<0.06; SRMR<0.08 (or 0.09 in combination with RMSEA<0.06); and CFI and GFI>0.95 (Hu & Bentler, 1999; Schreiber et al., 2006). Factor loadings and residuals were obtained. Cronbach's alpha and ordinal alpha coefficients were calculated, following the recommendations of Doval et al. (2023) and Elosúa and Zumbo (2008), respectively. Internal consistency was interpreted following George and Mallery (2019): acceptable (α>0.70), good (α>0.80) or excellent (α>0.90). Composite reliability was also obtained and interpreted following these criteria. To test convergent validity, Average Variance Extracted (AVE) was calculated with a minimum acceptable value of 0.50. However, a lower AVE value could be acceptable if the composite reliability was over 0.60 (Fornell & Larcker, 1981; Shrestha, 2021).

SPSS v25 for Mac was also used. Descriptive statistics were obtained for each item: mean, standard deviation and discrimination index. The latter was obtained with the Spearman's correlation between each item and the total score, being interpreted with Cohen's (1988) criteria: weak (ρ>0.10), moderate (ρ>0.30) and strong relationship (ρ>0.50). This correlation was also used to study the concurrent and discriminant validity of the SWQ with the other instruments, since no variable followed a normal distribution according to Kolmogorov-Smirnov test (p<0.001). On the other hand, the Intraclass Correlation Coefficient (ICC) was calculated to analyze the temporal stability of the SWQ scores. ICC(2,k) was used, with a two-way random effects ANOVA model, absolute agreement and multiple measurements, following Aldridge et al. (2017) and Koo and Li (2016). ICC was interpreted following the latter authors: under 0.50, poor reliability; between 0.50 and 0.75, moderate; between 0.75 and 0.90, good; and greater than 0.90, excellent. Previously, differences were studied between the retest subsample and the rest of the initial sample with the Chi-Square test (χ^2) according to gender, and Mann-Whitney's U for age and initial SWQ score. A 95% confidence level was used.

Table 2 Descriptive analysis of SWQ items

Item[a]	M (SD)	$\rho_{i\text{-}t}$
1. Going to parties [*Ir a una fiesta*].	0.31 (0.60)	0.52
2. Using the telephone [*Hablar por teléfono*].	0.42 (0.62)	0.58
3. Meeting new people [*Conocer gente nueva*].	0.56 (0.66)	0.54
4. Presenting work to the class [*Exponer un trabajo delante de la clase*].	0.79 (0.44)	0.58
5. Attending clubs or sports activities [*Ir a clubs o actividades deportivas*].	0.44 (0.69)	0.56
6. Asking a group of kids if I can join in [*Preguntar a un grupo de niños si puedes estar con ellos*].	0.69 (0.80)	0.60
7. Talking in front of a group of adults [*Hablar delante de un grupo de adultos*].	0.74 (0.78)	0.55
8. Going shopping alone [*Ir tú solo a comprar algo*].	0.77 (0.85)	0.46
9. Standing up for myself with other kids [*Tener que defenderte de otros niños*].	0.73 (0.74)	0.49
10. Entering a room full of people [*Entrar en una habitación llena de gente*].	0.76 (0.79)	0.56
11. Using public toilets or bathrooms [*Usar aseos públicos*].	0.59 (0.75)	0.47
12. Eating in public [*Comer en público*].	0.36 (0.68)	0.57
13. Taking tests at school [*Hacer un examen*].	0.80 (0.78)	0.50
14. Talking in a video call [*Hablar en una videollamada*].	0.38 (0.64)	0.52

Note M = Item mean; *SD* = Item standard deviation; $\rho_{i\text{-}t}$ = Item-test Spearman's correlation (discrimination index)

[a]Every item shows the initial and the Spanish version. Item 14 does not belong to the original version

Table 3 Fit indices of the models

	df; χ^2	p	RMSEA	SRMR	CFI	GFI
Model 1	72; 142.24	0.001	0.063	0.092	0.962	0.957
Model 2	76; 109.85	0.007	0.045	0.085	0.980	0.967

Note df = Degrees of freedom; χ^2 = Chi-Square test; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual; CFI = Comparative Fit Index; GFI = Global Fit Index

Results

Descriptive Analysis

Descriptive analyses were performed for each item (Table 2). In a 0–2 range of responses, the items' mean is equal to or under 0.80, indicating a positive asymmetry in the data. Item-test Spearman's correlations were direct and strong (except for items 8, 9 and 11, although very close to 0.50), reflecting good values of item discrimination. The mean total score of the questionnaire was 8.34 (SD = 5.53).

Validity

The fit of the one-factor model proposed in the original version of the SWQ (Spence, 1995a) was tested using Confirmatory Factor Analysis (CFA). Table 3 shows the models created. In Model 1, all SWQ items were considered. To improve the fit indi-
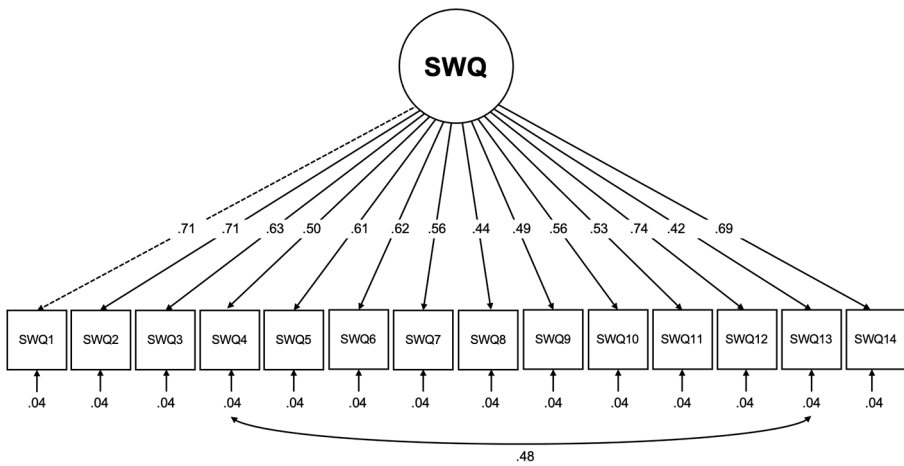
Fig. 1 Path diagram with the structure of the SWQ

Table 4 Spearman's correlations between SWQ and other measures

	SCAS-C-8	SMFQ	AF-5 Academic	AF-5 Social	AF-5 Emotional	AF-5 Familial	AF-5 Physical
ρ	0.34	0.45	−0.34	−0.42	0.38	−0.28	−0.36
(p)	(<0.001)	(<0.001)	(<0.001)	(<0.001)	(<0.001)	(<0.001)	(<0.001)

Note ρ=Spearman's correlation

ces, Model 2 was created by incorporating into Model 1 the correlation of the residuals of items 4 and 13. Both items show situations of academic evaluation by a teacher, as well as possibly by peers, so this theoretical relationship suggests that they may share similar sources of error (Herrero, 2010). The second model (Fig. 1) improved fit indices, being acceptable within the parameters and combinations considered, and was taken as definitive. All factor loadings exceed the value of 0.50, except in items 8, 9 and 12, in which they are greater than 0.42.

Next, the concurrent and discriminant validity of SWQ was studied with other questionnaires and scales that assess emotional problems and self-concept. Table 4 shows moderate correlations (over 0.40) of SWQ with depressive symptoms (SMFQ) and low social self-concept (AF-5). The weakest correlation (under 0.30) occurred with family self-concept. The correlation with SCAS-C-8 was moderate. Finally, the AVE was calculated, obtaining a 0.35 value, lower than the proposed 0.50. The implications of this result, as well as in combination with composite reliability, will be discussed subsequently.

Reliability

The internal consistency of the questionnaire was analyzed through Cronbach's alpha ($\alpha=0.81$) and ordinal alpha ($\alpha=0.87$). Both values exceed 0.80, indicating good internal consistency. Moreover, composite reliability showed a 0.88 value, indicating a good proportion of shared variance among the items.

Finally, temporal stability of SWQ was studied with a subsample of 52 children (23.9% of the total), which did not show significant differences compared to the rest of the initial sample in initial SWQ score (Mann-Whitney's $U=3740.50$; $p=0.146$), age (Mann-Whitney's $U=4128$; $p=0.625$) nor gender, with a χ^2 (1, $N=218$) of 1.01 ($p=0.316$). An ICC of 0.75 [95% CI (0.56, 0.85), $F=3.92$, $p<0.001$] was obtained, which corresponds to a moderate-to-good value of test-retest reliability.

Discussion

The objective of this study was to adapt and to obtain the psychometric properties of the Spanish version of the Social Worries Questionnaire with children aged 8 to 12 years. The items discriminate adequately and contribute to the construct of social anxiety, considered as the variety of situations of possible social evaluation, which generate worry and are avoided. The item-test correlations are higher than the ones of the original version. In addition, the model obtained through CFA confirms the existence of the one-factor structure, with factor loadings similar to the original ones ($\lambda>0.45$; Spence, 1995a) and favorable fit indices. Moreover, this version adds an item regarding videoconference anxiety (Gözpınar et al., 2022; Gözpınar & Görmez, 2022), which enlarges the construct with a novel situation related to social anxiety, showing good discrimination and factor loading.

When examining concurrent validity, moderate relationships (although close to be strong) are observed between the SWQ and a poorer social self-concept, i.e., more negative beliefs about social interaction skills, which is consistent with the scientific literature (Halldorsson et al., 2023; Heeren et al., 2020). The strongest relationship, although moderate, is with depressive symptoms, which would be justified by the high comorbidity between both problems (Krygsman & Vaillancourt, 2022; Long et al., 2018) and the characteristics that they share from a transdiagnostic point of view, such as negative affect, low positive affect or behavioral inhibition (Epkins & Heckler, 2011). Notably, the relationship between the SWQ and anxious symptoms is not strong. However, it should be considered that the SCAS-C-8 (Reardon et al., 2018; Rodríguez-Menchón et al., 2022) does not encompass symptoms of social anxiety (it only refers to the difficulty in attending school in one item), indicating that both instruments appear to assess related but different constructs. Finally, the dimension of familial self-concept exhibited the lowest relationship with the SWQ. In previous research on social anxiety, the importance of self-image in the problem has been highlighted (Dobinson et al., 2020), as well as the relationship with a worse family environment (Delgado et al., 2013; Olson, 2021). However, the familial dimension may not hold the same theoretical relevance, and this could be considered evidence of discriminant validity.

Therefore, the Spanish version of SWQ can be considered a measure with evidence of content validity (judgment on the original items, with the addition of item 14), construct validity (CFA) and criterion validity (correlations with other measures). However, the reduced AVE value may affect convergent validity by reducing the items' variance explained by the construct (Shrestha, 2021). This would suggest that the items would not represent completely the construct of social anxiety defined

by the SWQ. This could be due to the need for a greater number of items (Moral-de la Rubia, 2019), inadequacies in their formulation – failing to encompass all the aspects of the construct –, or the variety of situations that they cover. Nevertheless, the composite reliability value remains favorable, which would indicate that the items share enough variance to consider that they are measuring the same construct. In this line, evidence of reliability has been demonstrated, with a good internal consistency, consistent with the original version's α=0.84 (Spence, 1995a). On the other hand, the temporal stability was moderate to good. A possible explanation for not obtaining a higher value could be the age of onset and the course of social anxiety, with an increase during the early years of adolescence (Poole et al., 2022). Moreover, Canals et al. (2019) found that 38.5% of youth diagnosed with social phobia did not meet the criteria two years later. These previous findings could explain the fluctuations of the problem over time in children aged 8 to 12.

The situations that seem to generate avoidance or worry in most cases are those of observation by others, such as taking an exam, presenting a work in front of the class, going shopping alone or entering a room full of people. The average scores of the items are lower than the intermediate category of the scale, which may reflect some limitations in detecting cases with low levels of social anxiety. This may be due to the reduced number of categories, despite their recommendation for children (De Leeuw, 2011). Another limitation is found in the sample size, of 218 children, and its sampling for convenience. This weakness opens future lines of research in the SWQ, such as checking its factor invariance in larger and more representative samples. This property has already been studied in other child clinical assessment instruments, such as SCAS-C-8 (Rodríguez-Menchón et al., 2022) and SMFQ (Espada et al., 2022). Factor invariance would ensure the comparability of SWQ scores between children of different groups, like gender or age. Moreover, although social self-concept has been used as a criterion of concurrent validity, it would be interesting to examine this property with some of the existing measures for the assessment of social anxiety (e.g., LSAS-CA-SR; Masia-Warner et al., 2003; Olivares et al., 2009). Finally, as previously noted, the AVE has been observed to be reduced, which could compromise convergent validity – despite composite reliability and factor loadings displaying acceptable values –. Therefore, further research would be needed to determine if any specific item leads to an unexpected interpretation, or if the inclusion of more representative items is necessary, without substantially increasing the scale length.

In conclusion, this study provides evidence of reliability and validity of the Social Worries Questionnaire (SWQ) for Spanish children, in a developmental stage – preadolescence – in which symptoms of social anxiety may emerge (Solmi et al., 2022). At present, the need for early detection of psychological problems in childhood has been highlighted (UNICEF, 2022), and questionnaires allow to do it at a low cost (Creswell et al., 2020). The SWQ enables to assess the generalization of social anxiety to different situations that cause avoidance or worry. Thus, it fills an existing gap in the evaluation of this problem, by examining in preadolescent children various situations (incorporating video calls, present in the new forms of social interaction), through a reduced number of items and answer categories. Therefore, it can be useful to perform a screening of social anxiety, as well as an assessment in children in whom this appears not to be the main problem, considering its high comorbid-

ity and interference (Canals et al., 2019). Thus, the SWQ would allow to guide a cognitive-behavioral treatment, following the latest recommendations (Díaz-Castela et al., 2023). Its information could be provided through the global analysis – of the questionnaire total score – and individual identification of the situations reflected in its items.

Data Availability Data, materials and code are not available.

Declarations

Ethical Approval This work is part of a research line approved by the Ethics Committee of Miguel Hernández University (DPS.MOA.210423).

Consent Parents of children provided an informed consent about participating in the study.

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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