



Filling the 8-Year-Old Gap in the Study of Well-Being: Cross-Cultural Assessment and Validation of a Subjective Well-Being Measure Across 19 Countries

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Abstract

Research on child well-being under 10 years old is limited. A first step towards stimulating research targeting this population is the validation of psychometric scales across cultures. The current study examines the cross-cultural validity of the Children's Worlds - Subjective Well-being Scale (CS-SWBS-8-year-old version), a six-item subjective well-being scale in an international sample of 8-year-olds (N=20,822) across 19 countries. A confirmatory factor analysis of the CW-SWBS-8yo showed adequate fit after structural equation modelling. Multi-group analysis supported scalar invariance when one of the countries (Chile) was not included in the model. When testing convergent validity, results suggested that the CW-SWBS-8yo is predicted by life satisfaction, positive affect, and negative affect. Overall, the findings support the use of the CW-SWBS-8yo in 8 year-olds in both eastern and western countries.

Keywords Subjective well-being · Children · Cross-cultural · Children's Worlds

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1 Introduction

As a science, psychology is committed to measuring, describing and predicting psychological phenomena. Over the last two decades, increasing attention has been placed on subjective well-being (SWB) in an effort to explain what this construct is about, which components define it and how it evolves over time. The structural conceptualization of SWB includes a cognitive (life satisfaction) and an affective component (positive and negative affect), known as the tripartite model (Diener, 1984; Metler & Busseri, 2017). In the quest to capture the cognitive aspect, scholars can use domain-based (satisfaction with specific areas of life) or context-free measures of life satisfaction (global life satisfaction) (Campbell et al., 1976). When it comes to assessing context-free SWB, multi-item scales are recommended over single-item ones (Diamantopoulos et al., 2012).

Child well-being is at the core of scholars' and practitioners' interest, especially since the inclusion of the United Nations 1989 Convention on the Rights of the Child in the 2030 Agenda as a fundamental sustainable developmental goal (UN General Assembly, 2015). Children are to be seen as a population with their own rights and needs, and tracking their well-being is one part of recognizing them as crucial targets for social policies that should prioritize their well-being (Ben-Arieh, 2000). To accomplish this aim, indicators of well-being are used to inform about a variety of aspects that influence children's quality of life. It therefore becomes crucial to provide appropriate and evidence-based instruments to capture and understand changes in child well-being (Jiang et al., 2013).

A common practice in research is to compare results from different studies to examine similarities or dissimilarities in relation to the construct of interest, which often involves a diversity of sample characteristics. In the case of SWB, comparing results from different cultural backgrounds or countries might help shed light on the mechanisms that facilitate children's well-being beyond cultural boundaries. However, such a comparison requires that the assumptions of measurement invariance be met.

Measurement invariance describes the procedure for testing the extent to which the structure of a construct holds over time or across samples (Meredith, 1993). If measurement invariance is established, changes in the scores of a particular sample reflect variations in the construct as measured through that specific scale, implying that cross-cultural validity is supported and comparisons across measurement occasions or samples are tenable. In contrast, if measurement invariance does not hold, differences in the scores might not represent actual differences of the construct and comparisons are not justified. Measurement invariance is therefore key in cross-cultural studies aimed at examining the determinants and outcomes of SWB, because it establishes consistency in measurement of the construct.

That being said, progress in the study of child well-being is limited by methodological challenges regarding the development of appropriate psychometric scales to ensure that children understand the questions being asked. Providing children with an active role in the research process, such as promoting their participation in the design of items and response-format as if they were "consultants", contributes to developing questionnaires capable of capturing more reliably their opinion (Mason & Urquhart,

2001). For example, when children are to answer a questionnaire, researchers should dialogue with them and involve other children to clarify difficult items by using their own words (Casas et al., 2013). Especially with children as young as eight, it is recommended that emoticons rather than traditional numerical Likert-type scales be used as the response format to make answering easier (Casas et al., 2013).

A further limitation in child well-being research lies in the scarce literature devoted to studying the psychometric performance of scales across different countries or populations, especially in children under ten years old. Measures of SWB have been included in studies on eight-year-olds with varying research purposes. These include, for instance, describing overall and domain-based life satisfaction (Migliorini et al., 2019; Savahl et al., 2020; Strózik et al., 2016), examining the decreasing tendency in SWB from childhood to adolescence (Casas & González-Carrasco, 2019; Kim et al., 2019), exploring associations between overall and domain-based life satisfaction and children's rights (Kutsar et al., 2019), their subjective perceptions using qualitative approaches (Navarro et al., 2019), and conducting psychometric validations (Borua-logo & Casas, 2019). However, a specific cross-cultural analysis of SWB measures has not been performed for this age group.

Previous studies have analysed the cross-cultural comparability of SWB measures across samples of 12–16 years old, reporting some degree of invariance, but also informing about the complexity of translating and validating well-being measures at this age (Casas et al., 2012, 2014). In some cases, only two to four countries were compared, although there are exceptions, such as studies that included more than 10 countries and 10-12-year-old children (Casas, 2017; Casas & González-Carrasco, 2021; Casas & Rees, 2015). Therefore, in order to contribute more empirical evidence to the SWB literature, it is necessary to first address the following limitations: (1) the lack of studies investigating the cross-cultural equivalency of SWB measures in children; (2) more specifically, in children under 10 years old; and (3) the small-scale data sets used to compare the tenability of the measures across (not a great) diversity of countries. The goal of the present study is to examine the cross-cultural validity of a context-free SWB scale, the Children's Worlds – Subjective Well-being Scale (CW-SWBS-8yo version), across 19 countries. In doing so, we aim to fill the gaps presented above.

2 Methodology

2.1 Participants and Procedure

Data for the present study were obtained from the third wave of the Children's Worlds survey, a global study of childhood from the child's perspective. It began as a small unfunded pilot project in 2010, but with the Jacobs Foundation's support, it has developed to collect the views of more than 200,000 children in over 40 countries across five continents. Children's Worlds focuses on a wide variety of aspects related to children's well-being. The third wave addressed some gaps detected in recent waves of the Health Behaviour in School-aged Children study (HBSC) (Currie et al., 2009) and the Programme for International Student Assessment (PISA). But

although the aforementioned studies included several subjective questions in recent waves, neither covered a wide variety of aspects that define children's lives, include different levels of national economic wealth or include multi-item scales to assess cognitive SWB. In addition to this, the PISA and HBSC reports did not involve children under 11 years old.

In order to improve measurement issues, the questionnaire for the third wave was developed based on quantitative and qualitative feedback obtained from the second wave (May 2016). It was then circulated to all of those research teams involved in the Children's Worlds project that indicated their intention to join the third wave. Feedback was received on the formulation and feasibility of questions, and some additional suggestions were made for new content. In February 2017, the final version of the survey was facilitated to all participating teams for piloting and discussion with children (Rees et al., 2020).

The Children's Worlds project includes data pertaining to adolescents aged from 8 to 14. The final sample for the present study included 20,822 children from the 8-year-old age group (attending the school year in each country where most children are expected to be aged 8) ($M=8.14$, $SD=0.66$; 50.4% girls; 0.6% unreported). Ethical approval and parental consent were obtained for all participants (for details, see Rees et al., 2020).

2.2 Instruments

Children's Worlds Subjective Well-Being Scale (CW-SWBS) 8-year-old version. This is a six-item self-reported context-free psychometric instrument that evaluates the cognitive component of SWB through a five-point emoticon scale. It was originally based on some of the items of the Student Life Satisfaction Scale (Huebner, 1991), and was modified and improved in each of the three waves of the Children's Worlds survey by asking children for feedback in non-Indo-European speaking countries. The internal consistency of the current data using the pooled sample was good ($\alpha=0.90$). The items on the scale are *I enjoy my life*, *My life is going well*, *I have a good life*, *The things that happen in my life are excellent*, *I like my life* and *I am happy with my life*.

Single-item scale on Overall Life Satisfaction (OLS). A single-item measure of satisfaction with life as a whole ("*How happy are you with your life as a whole?*") was used, with a scale ranging from 0 (completely unhappy) to 10 (completely happy). The importance of including a single-item scale on OLS when studying personal well-being was first highlighted by Campbell et al., (1976).

Core Affect. Two items from the Children's Worlds Positive and Negative Affect Scale were included for children of this age group. The two items made reference to the frequency that children felt "*happy*" or "*sad*" during the last week. Responses were provided using a scale with categorical responses: 0 (never), 1 (sometimes), 2 (often) and 3 (always).

3 Analytical Plan

3.1 Data Preparation

The data set used for this analysis had been cleansed and prepared as part of the international project prior to the database being made available. This process included identifying and excluding cases with high proportions of missing data and identifying and excluding cases with systematic response patterns. In order to avoid excluding participants who responded at the top or bottom of the CW-SWBS-8yo, considering that some children tend to express complete satisfaction with their life at this age, uniform response patterns were identified for five different sets of items in the data set and cases were excluded if they exhibited such patterns for more than one of the five item sets (Rees et al., 2020). Before analysing the structural validity of the CW-SWBS-8yo, a second cleansing of the data was performed to detect missing cases. Missing items were substituted by multiple imputation using regression in AMOS25 when three or less items were missing in the CW-SWBS-8yo – children with more than three missing values for this scale were excluded.

3.2 Data Analysis

The overall analytical procedure followed four steps. First, the structure and measurement invariance of the CW-SWBS-8yo was analysed in a large international dataset from the third wave of the International Survey of Children's Well-Being (ISCIWeB), also known as Children's Worlds. The structural validity of the initial Model was analysed using the pooled sample. The structure was unifactorial and the corresponding items therefore loaded on one latent variable. We relied on standard recommendations to evaluate model fit, which suggest estimates of Comparative Fit Index (CFI) > 0.95, and Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Residual (SRMR) < 0.08 (Schermelleh-Engel et al., 2003).

The second step was to compare the performance of the CW-SWBS-8yo across different countries. We conducted a MGCFA to examine measurement invariance (Meredith, 1993): configural invariance (unconstrained variables – differences in the basic factorial structure), metric invariance (constrained factor loadings – differences in the understanding of the construct) and scalar invariance (constrained factor loadings and intercepts – differences in the understanding of the items). Establishing metric invariance allows for a comparison of correlations and regressions, while scalar invariance allows latent means to be compared (Coenders et al., 2005). To accept the fit of the MGCFA, the subsequently constrained models should not exceed differences > 0.010 in CFI and > 0.015 in RMSEA (Chen, 2007).

Thirdly, to test the concurrent validity of the CW-SWBS-8yo, we conducted a structure equation modelling (SEM) analysis in which the single-item of life satisfaction and the two items of affect were used as criteria. We followed the same criteria as with the CFA to evaluate the fit indices of the SEM. Finally, squared multiple correlations (SMC) were calculated for each country to estimate the variance of the CW-SWBS-8yo latent variable explained by all other exogenous variables in the model; that is, to analyse how accurately each variable was predicted by the

Table 1 Descriptive Statistics and Correlations of the Studied Variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. I enjoy my life	3.46	0.97	-							
2. My life is going well	3.36	1.00	0.59**	-						
3. I have a good life	3.46	0.97	0.50**	0.67**	-					
4. The things in my life are excellent	3.16	1.12	0.49**	0.55**	0.56**	-				
5. I like my life	3.52	0.92	0.60**	0.63**	0.66**	0.55**	-			
6. I am happy with my life	3.52	0.93	0.58**	0.62**	0.65**	0.55**	0.71**	-		
7. Happy (last week)	2.36	0.81	0.28**	0.31**	0.31**	0.30**	0.30**	0.31**	-	
8. Sad (last week)	0.97	0.79	-0.17**	-0.20**	-0.20**	-0.18**	-0.19**	-0.20**	-0.26**	-
9. Happy with life as a whole	3.56	0.83	0.30**	0.42**	0.43**	-0.38**	0.45**	0.44**	0.33**	-0.20**

Note. ** $p < .01$

other variables in the model. Each SMC value is an estimate from the lower band of reliability relating to its variable (Arbuckle, 2010; Byrne, 2010) and its percentage reflects the explained variance of each variable by all other related variables.

4 Results

4.1 Descriptive Statistics

As Table 1 shows, the six items on the CW-SWBS-8yo were given similarly high ratings by participants (pooled sample), and scores were akin to the mean scores for life satisfaction, indicating that levels of SWB and positive affect were generally high and levels of negative affect were low. Table 2 displays the descriptive statistics for the studied variables across groups. Values were similar for all countries and no relevant differences were found in the mean levels of SWB and positive and negative affect.

4.2 Verification of the CW-SWBS-8yo Structure

A unifactorial CFA model was analysed to verify the structural validity of the scale. The CW-SWBS-8yo model displayed a good fit with the data ($\chi^2_{(9)} = 621.39$; $p < .001$;

Table 2 Descriptive Statistics of the Studied Variables Across Countries

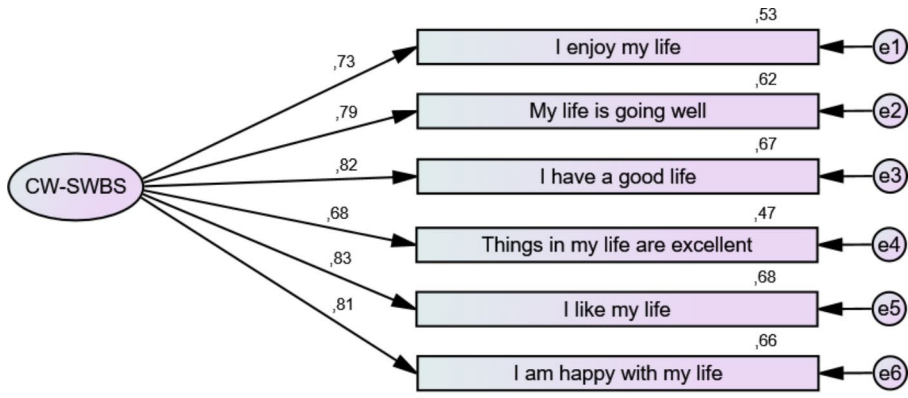
	<i>N</i>	<i>CW-SWBS-8yo</i>		Positive Affect		Negative affect	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Algeria	957	3.39	0.79	2.27	1.01	0.93	1.02
Bangladesh	701	3.18	0.99	2.19	0.96	0.93	0.89
Belgium	1,045	3.30	0.85	2.19	0.80	1.01	0.81
Brazil	833	3.42	0.73	2.62	0.72	0.91	0.81
Chile	770	3.53	0.73	2.53	0.74	1.04	0.82
Croatia	958	3.57	0.67	2.58	0.65	0.77	0.70
Estonia	912	3.39	0.83	2.43	0.75	1.08	0.78
Finland	1,038	3.33	0.84	2.20	0.72	1.00	0.58
Hungary	908	3.64	0.61	2.51	0.61	0.95	0.74
India	986	3.41	0.88	2.57	0.82	0.74	0.87
Israel	1,208	3.34	0.91	2.12	0.99	1.01	0.86
Malaysia	944	3.39	0.75	2.40	0.92	1.20	0.91
Malta	510	3.50	0.78	2.51	0.84	0.80	0.87
Poland	901	3.52	0.73	2.30	0.76	1.01	0.78
Romania	938	3.58	0.65	2.61	0.67	0.81	0.75
South Korea	3,105	3.30	0.90	2.33	0.72	1.00	0.67
Spain	2,250	3.56	0.65	2.24	0.79	1.00	0.69
Taiwan	1,191	3.17	0.93	2.25	0.82	1.21	0.79
Vietnam	667	3.27	0.69	2.31	0.91	0.79	0.86
Total	20,822	3.40	0.82	2.36	0.81	0.97	0.79

CFI=0.991; RMSEA=0.057[0.054–0.061]; SRMR=0.015), which is shown in Fig. 1.

4.3 Comparison Across Countries

An MGCFA was performed with the aim of verifying the structure of the scale across countries. Table 3 shows the summary of the fit indices for the different CW-SWBS-8yo invariance models. Although the results from the MGCFA supported metric invariance across groups (Model 3; $\Delta\text{CFI}<0.010$, $\Delta\text{RMSEA}<0.015$), the differences in CFI exceeded acceptable recommendations regarding scalar invariance (Model 4; $\Delta\text{CFI}=0.011$). A semi-partial constrained model with the removal of Chile showed acceptable cross-cultural performance for scalar invariance (Model 5; $\Delta\text{CFI}<0.010$, $\Delta\text{RMSEA}<0.015$). This indicates that the mean scores for Chile were not comparable with those of other countries, probably due to different response styles. Given that the results suggested scalar invariance was tenable, the intercepts of the countries may be deemed to be equal, indicating that children in 18 countries understood SWB items the same way and factor loadings were comparable.

Next, we examined differences in the extent to which the CW-SWBS-8yo latent variable explained each of its items. SMC with constrained loadings and intercepts for each of the CW-SWBS-8yo items by country are shown in Fig. 2. The items “I like my life”, “I am happy with my life” and “I have a good life” displayed the largest explained variance across countries. In contrast, “The things that happen in my life are excellent” displayed the smallest explained variance, except for Algeria, Bangla-



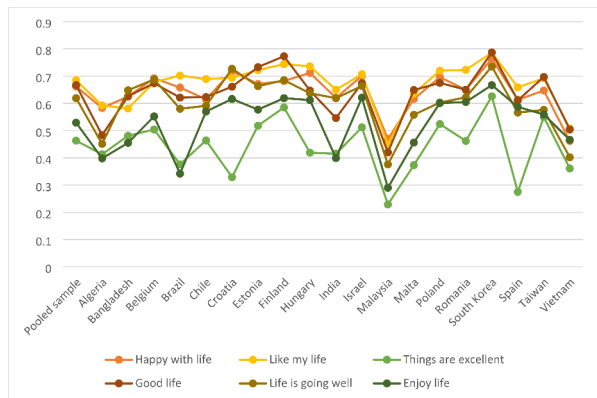
CHI=621,390;CFI=,991;RMSEA=,057; SRMR=.015

Fig. 1 Confirmatory Factor Analysis of the CW-SWBS-8yo for the Pooled Sample (Model 1 in Table 3)

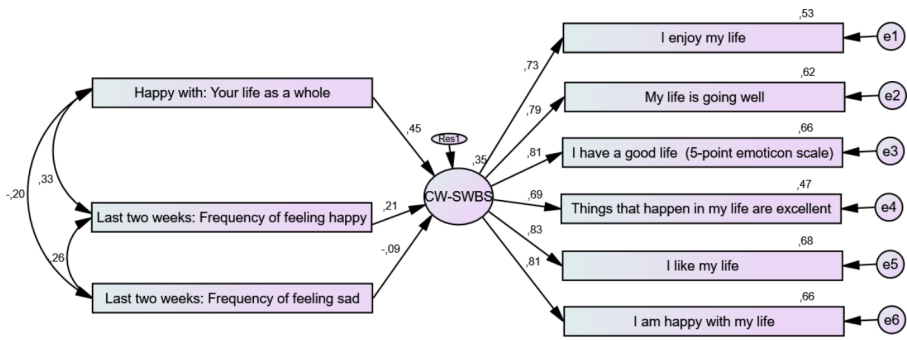
Table 3 Fit Statistics for the CFA Initial Model (Pooled Sample1) and Multi-Group CFA Models for Measurement Invariance of the CW-SWBS-8yo

Model	χ^2 (df)	CFI	RMSEA[95%CI]	SRMR
Model 1: CW-SWBS-8yo	621.39 ₍₉₎	0.991	0.057[0.054–0.061]	0.015
Model 2: CW-SWBS-8yo (Multigroup -Unconstrained)	1565.77 ₍₁₇₁₎	0.982	0.019[0.018–0.020]	0.029
Model 3: CW-SWBS-8yo (Multigroup – Constrained loadings)	2125.11 ₍₂₆₁₎	0.976	0.018[0.017–0.018]	0.046
Model 4: CW-SWBS-8yo (Multigroup – Constrained loadings and intercepts)	3107.77 ₍₃₅₁₎	0.965	0.019[0.018–0.019]	0.048
Model 5: CW-SWBS-8yo (Multigroup – Semi-partial constrained loadings and intercepts)	2857.28 ₍₃₃₂₎	0.967	0.019[0.018–0.019]	0.048

Fig. 2 Variance Explained by the CW-SWBS-8yo Latent Variable for each of its Items with Constrained Loadings and Intercepts by Country (SMC Coefficients)



desh, Brazil and India, where “I enjoy my life” explained the least variance. These



CHI=741,920;CFI=,991;RMSEA=,038; SRMR=.012

Fig. 3 Structural Equation Model checking for Concurrent Validity of the CW-SWBS-8yo with Life Satisfaction and Positive and Negative Affect (Model 6 in Table 4)

Table 4 Fit Statistics for the SEM Initial Model (Pooled Sample) and Multi-Group Models checking for Concurrent Validity of the CW-SWBS8yo

Model	χ^2 (df)	CFI	RMSEA[95%CI]	SRMR
Model 6: CW-SWBS-8yo+OLS+Affect	741.92 ₍₂₄₎	0.991	0.038[0.036–0.40]	0.012
Model 7: CW-SWBS-8yo+OLS+Affect (Multi-group -Unconstrained)	2148.70 ₍₄₅₆₎	0.981	0.013[0.013–0.014]	0.027
Model 8: CW-SWBS-8yo+OLS+Affect (Multi-group – Constrained loadings)	2684.16 ₍₅₄₆₎	0.975	0.014[0.013–0.014]	0.040
Model 9: CW-SWBS-8yo+OLS+Affect (Multi-group – Constrained loadings and intercepts)	3610.53 ₍₆₃₆₎	0.966	0.015[0.015–0.015]	0.041

results are generally in agreement with the cross-cultural validation of this scale in children aged 10 and 12 using 11-point scales (Casas & González-Carrasco, 2021).

It is worth noting that Malaysia reported considerably lower coefficients for all items compared to other countries (all < 0.50, from which two items < 0.30), followed by Vietnam (all < 0.50) and Algeria (all < 0.60). Conversely, South Korea presented the highest coefficients (all > 0.60). Overall, the variability of SMC across items was high. For example, SMC in “I enjoy my life” ranged from 0.29 (Malaysia) to 0.67 (South Korea), and SMC in “My life is going well” ranged from 0.42 (Malaysia) to 0.78 (South Korea). Also worthy of note is that the item “Things in my life are excellent” displayed a considerably lower SMC than the other items in Spain (0.28) and Croatia (0.33).

4.4 Concurrent Validity: Prediction of Life Satisfaction and Affect

To examine concurrent validity, we ran an SEM model (see Fig. 3) correlating the CW-SWBS-8yo with OLS, positive affect, and negative affect. As Table 4 shows, the model displayed an acceptable fit to the data and scalar invariance was supported, suggesting that the intercepts of the countries were equal and thus comparison of the SEM model across groups might be tenable.

As expected, the CW-SWBS-8yo was predicted positively by OLS and positive affect, and negatively by negative affect, supporting the convergent and divergent validity of the scale. The positive association of the CW-SWBS-8yo was higher with OLS than with positive affect.

The standardized regression weights and SMC of the SEM model for each country are presented in Table 5. The OLS was the greatest predictor of the CW-SWBS-8yo when compared with positive and negative affect in all countries except for Bangladesh, which reported negative affect as the greatest predictor. Regarding life satisfaction as a predictor of the CW-SWBS-8yo, Bangladesh (0.165) and India (0.211) reported the lowest coefficients, while the values in the rest of countries were more diverse, varying from 0.348 (Chile) to 0.611 (Hungary). As for positive affect, the regression weights were more similar across countries, ranging from 0.116 (Vietnam) to 0.258 (Taiwan). Akin to positive affect, negative affect appeared as a similar (negative) predictor across groups, ranging from -0.033 (Belgium) to -0.215 (Vietnam).

Although the item on positive affect generally displayed higher coefficients than that on negative affect, there were some countries with similar (absolute) regression weights between the two indicators, such as Brazil, Chile, Croatia, Estonia, Malta and Poland. On the other hand, the items that were predicted to a higher extent by the CW-SWBS-8yo in all countries were “I like my life”, “I have a good life” and “I am happy with my life”, whereas the items “The things that happen in my life are excellent” and “I enjoy my life” presented the lowest regression weights. In line with the SMC from the CW-SWBS-8yo measurement model, these two items also revealed the lowest SMC scores in the SEM model. The item “The things that happen in my life are excellent” presented $SMC < 0.40$ in Brazil, Croatia and Vietnam and < 0.30 in Malaysia and Spain, while the item “I enjoy my life” presented $SMC < 0.40$ in Brazil and India and < 0.30 in Malaysia. As with the CW-SWBS-8yo measurement model, in the SEM model the countries with the highest and lowest regression weights and SMC were South Korea and Malaysia, respectively.

5 Discussion

The importance of promoting well-being, especially in children, is manifested in policy and education agendas (Barry, 2012; UN General Assembly, 2015). However, research in children under 10 years old is scarce, and few validated instruments that assess SWB at these ages are available, which burdens the design and implementation of social interventions and actions aimed at improving their well-being. The required active involvement of children in research in order to understand the evolution and underlying mechanisms of their well-being calls for their voices to be captured and included on the scientific agenda at younger ages. To this end, it is first necessary to develop instruments that adequately capture SWB at this stage and analyse their validity across different cultures to ensure widespread applicability and understand cross-cultural variations. The present study assessed the cross-cultural comparability, in terms of structure and measurement invariance, concurrent validity and explained variance, of an SWB measure specifically designed for 8-year-old children. Our results for the five-point emoticon scale of the CW-SWBS-8yo version showed that

this scale can be reliably used as a brief measure of SWB across cultures in 8-year-old children.

The first aim of the study was to test the factor structure across different countries. The scale was deemed to be cross-culturally invariant, and the comparability of the structural equivalence and relationships across countries was therefore tenable. Notwithstanding, scalar invariance was achieved only after removing Chile from the analysis. According to these results, comparisons at the level of structural equivalence and regressions can be made for the 19 countries; however, comparisons at the level of mean scores shall be drawn cautiously in the case of Chile. Previous studies supported the cross-cultural validity of this scale in children aged 10 and 12 (Casas & González-Carrasco, 2021), but the lack of well-being instrument validation for 8-year-olds hinders the discussion and comparison of the present results with previous empirical evidence. Notably, while previous studies found support for establishing comparisons at the correlation/regression level in children aged from 10 to 12 to young adults aged 20 (Casas et al., 2014; Casas & Rees, 2015), the present study uncovers evidence for examining differences in 8-year-olds' SWB across countries with diverse cultural background at the level of mean scores. The current findings also align with research suggesting that multi-item context-free scales are appropriate tools for capturing cross-cultural differences in well-being (Casas, 2017).

The second aim was to analyse the concurrent validity of the scale in relation to cognitive and affective indicators of SWB. The results from the SEM analysis indicated that the item assessing overall life satisfaction was the strongest predictor of the CW-SWBS-8yo, followed by positive affect and negative affect. This reveals that in almost all of the studied countries, the CW-SWBS-8yo more resembles a measure that captures children's cognitive evaluations about how their life is going than measures of affect do. As both SWB and positive affect refer to positive aspects of children's lives, unlike negative affect, it is unsurprising that the correlations of the CW-SWBS-8yo were higher with positive than with negative indicators of SWB.

Finally, the third aim was to examine the variance explained by the CW-SWBS-8yo on all items. The SMC coefficients showed that the variance explained by this scale is generally lower in 8-year-old children compared to adolescents aged 10 and 12 (Casas & González-Carrasco, 2021). SMC showed little variability across countries, with the items "I like my life", "I am happy with my life" and "I have a good life" explaining the largest variance in most of the countries. By contrast, the item assessing the extent to which children considered the things in their life excellent displayed, broadly speaking, the smallest explained variance; this was similar to results reported by older age groups (Casas & González-Carrasco, 2021). That being said, the item "I enjoy my life" was found to explain the least variance in Algeria, Bangladesh, Brazil and India, meaning that these two items would be the least cross-culturally comparable of the CW-SBWS-8yo at this age. These findings were reported both in the measurement and SEM models, which suggest that these two indicators tend to capture less information related to children's life evaluations than the other four items of the scale. Overall, the CW-SWBS-8yo in Algeria, Malaysia and Vietnam, respectively, displayed the lowest explained variance in comparative terms. In contrast, South Korea was the country where the CW-SWBS-8yo best explained the variance in its items, in both the measurement and SEM models.

Table 5 Standardized Regression Weights and Variance Explained by the CW-SWBS-8yo Latent Variable on each of its Items and Predictors with Constrained Loadings and Intercepts by Country (Model 9 in Table 4)

	Alge- ria	Ban- gla- des	Bel- gium	Brazil	Chile	Croa- tia	Esto- nia	Fin- land	Hun- gary	India	Israel	Ma- laysia	Malta	Po- land	Ro- mania	South	Spain	Tai- wan	Viet- nam	
Re- gres- sion																				
CW-	0.453	0.401	0.165	0.491	0.379	0.348	0.452	0.474	0.538	0.611	0.211	0.511	0.404	0.450	0.384	0.391	0.509	0.494	0.390	0.500
CW-	0.211	0.242	0.203	0.208	0.199	0.278	0.223	0.244	0.216	0.169	0.166	0.103	0.208	0.239	0.152	0.206	0.294	0.180	0.258	0.116
CW-	0.727	0.629	0.672	0.738	0.585	0.762	0.775	0.754	0.780	0.781	0.622	0.791	0.531	0.663	0.773	0.771	0.814	0.766	0.736	0.695
Enjoy life ↓																				
CW-	0.787	0.670	0.798	0.833	0.761	0.769	0.834	0.797	0.821	0.800	0.781	0.819	0.609	0.747	0.769	0.778	0.858	0.750	0.753	0.638
Life is going well ↓																				
CW-	0.815	0.691	0.787	0.823	0.793	0.797	0.803	0.847	0.876	0.814	0.736	0.818	0.645	0.806	0.819	0.793	0.888	0.780	0.830	0.682
Good life ↓																				
CW-	0.686	0.642	0.684	0.717	0.626	0.696	0.580	0.727	0.767	0.654	0.645	0.722	0.481	0.642	0.727	0.685	0.797	0.532	0.746	0.596
Like my life ↓																				
CW-	0.827	0.765	0.755	0.823	0.839	0.835	0.842	0.845	0.862	0.861	0.804	0.842	0.662	0.792	0.843	0.848	0.890	0.808	0.829	0.708
SMC																				
Enjoy life																				
CW-	0.812	0.757	0.782	0.836	0.810	0.786	0.828	0.818	0.822	0.843	0.785	0.841	0.681	0.777	0.838	0.801	0.877	0.788	0.804	0.665
Enjoy life																				
CW-	0.528	0.395	0.452	0.544	0.342	0.580	0.601	0.568	0.608	0.610	0.387	0.626	0.282	0.440	0.598	0.594	0.663	0.587	0.541	0.483

Table 5 (continued)

	Alge- ria	Ban- gla- desh	Bel- gium	Brazil	Chile	Croa- tia	Esto- nia	Fin- land	Hun- gary	India	Israel	Ma- laysia	Malta	Po- land	Ro- mania	South Spain	Tai- wan	Viet- nam		
Life is going well	0.619	0.449	0.637	0.694	0.579	0.592	0.696	0.635	0.674	0.640	0.610	0.671	0.371	0.558	0.592	0.605	0.736	0.563	0.567	0.407
Good life	0.664	0.477	0.619	0.677	0.629	0.635	0.645	0.717	0.663	0.541	0.669	0.416	0.650	0.671	0.628	0.788	0.609	0.689	0.689	0.465
Like my life	0.470	0.412	0.467	0.514	0.392	0.484	0.336	0.529	0.588	0.427	0.415	0.521	0.412	0.529	0.469	0.635	0.282	0.557	0.557	0.355
	0.684	0.585	0.569	0.678	0.704	0.698	0.710	0.715	0.743	0.741	0.646	0.708	0.439	0.627	0.719	0.791	0.653	0.687	0.687	0.501
	0.660	0.574	0.612	0.699	0.657	0.618	0.685	0.669	0.676	0.710	0.616	0.707	0.464	0.604	0.642	0.770	0.621	0.647	0.647	0.442

Children of 8 years old commonly report high well-being scores (Migliorini et al., 2019; Strózik et al., 2016), wherein aspects of being cared for and feeling safe appear as relevant determinants for their well-being (Kutsar et al., 2019). A close analysis of the mean scores reveal that the rank-order of the CW-SWBS-8yo items in the present study was the same as that in 10-year-olds, and highly similar to that in 12-year-olds (Casas & González-Carrasco, 2021), indicating that children tend to endorse items that refer to feeling happy with their life, liking their life, enjoying their life and having a good life to a greater extent than items that capture whether they feel satisfied with their life. Explanations regarding children's variations in SWB across countries differ from those posited for adults (Rees et al., 2016). Indeed, cross-cultural variations in children's SWB are difficult to account for, as it seems that national differences are larger than international differences and the associated factors that influence the level of SWB are not the same for each nation (Bradshaw & Rees, 2017). Despite this, we found that in some countries, like South Korea, Taiwan, Chile, Malta, Estonia, Croatia and Finland, positive affect was more related to SWB than in the other countries. In contrast, in Vietnam, Chile, Croatia, Estonia, Romania, Brazil, Poland and Malta, negative affect was more associated with SWB than in the other countries. This points towards the relative importance of well-being indicators at the country level, which can exert differential influences on the way children experience and evaluate their SWB.

Relevant to the current findings is the fact that individuals from different countries, including children, tend to respond to SWB questions distinctly (Boehm et al., 2011; Hommerich & Klien, 2012). Even different countries that share the same language (e.g., Spanish) display differences in their interpretation of the terms "happiness" and "satisfaction" (Casas et al., 2012). Therefore, although this approach of making general comparisons across samples is useful in offering a raw summary and identifying patterns of (dis)similarities on specific issues, researchers should note that contextual determinants that are relevant for establishing cross-cultural variations might be overlooked. In spite of this, the tenability of comparing well-being indicators across nations (Bolle & Kemp, 2009) supports the contribution of cross-cultural studies to identifying potential sources of variability in well-being.

6 Implications of the Findings

High levels of well-being together with low psychological distress have been associated with greater school functioning, including academic performance, prosocial behaviours and positive attitudes towards teachers, as well as lower levels of bullying and victimization behaviours in children (Arslan & Allen, 2020; Suldo et al., 2011). Given the above, identifying different levels of SWB can lead to the development of targeted social policies in efforts to meet the needs and demands of children. Using a South Korean sample, Kim et al., (2019) found that those aspects that most influenced the SWB of 8-year-old children were child-level factors (e.g., self-related satisfaction), as opposed to family- or school-context factors, which exerted a greater influence among 12-year-old children. Similarly, Rees (2019) showed that among 7-year-old children in the UK, child-based reports on personal aspects, especially

relationships and safety at school, exerted a greater influence on their SWB than parent-based reports or socio-economic factors. Although this pattern would need to be verified across different cultures, these findings highlight the implications of having available measurement tools that include aspects of child well-being.

With the notable advance in well-being research, scholars and practitioners need to fill the gap in the 8-year-old group by providing adequate and validated self-report measures of well-being so that children can be first-hand actors in reflecting their quality of life. This paper is a first step to making this goal attainable; it demonstrates the tenability of an instrument that assesses subjective well-being from the perspective of 8-year-old children, thereby entailing a good opportunity to move away from the exclusive use of parent- or teacher-based reports on children's well-being. In so doing, the findings give an active role to children's voices and opinions regarding how their life is going, opening up new avenues for further research in children under 8 years old.

The use of multi-item scales has been noted to be more informative than that of single-item scales (Diamantopoulos et al., 2012). It is therefore advisable that international agencies commit to multi-item scales when conducting worldwide comparisons and producing lists of leading countries in terms of children's quality of life. Our findings reveal that the CW-SWBS-8yo can be used to conduct such evaluations and comparisons of child well-being, since its brevity, theoretical appropriateness and the good psychometric performance it displays across several cultures ensure its tenability in describing and comparing cognitive evaluations of SWB. In light of this, and following recommendations for capturing evaluations of SWB in children under 10 years old, we can conclude from our analysis of 19 countries representing eastern and western cultures that the CW-SWBS-8yo can be used as a reliable measure of SWB in 8-year-olds.

7 Limitations and Future Research

The findings of the present study have some limitations. Firstly, it comprises an examination of a self-report measure, which could be complemented with non-self-reports to provide a comprehensive accounts of children's well-being (Sandvik et al., 2009). Secondly, the relationship between the CW-SWBS-8yo and indicators of life satisfaction and affect was limited to single-item self-report measures. Therefore, future studies might include more indicators or multi-item measures to replicate the findings. Thirdly, to capture all aspects of SWB, it is important to take into account both general evaluations of life, using measures like the CW-SWBS-8yo, and specific facets of life satisfaction (i.e., domain-based life satisfaction instruments) (Amerijckx & Humblet, 2014). In view of this, future research might include the above three aspects when examining the SWB of 8-year-olds. Finally, it should not be disregarded that people rate their well-being differently depending on the timeframe being measured (daily versus retrospective). For instance, Oishi (2002) found that European Americans displayed higher mean levels of well-being than Asians when using retrospective reports, although no cultural differences were identified in daily well-being. The complexity of well-being ratings and the potential influence of the

timeframe should therefore be regarded as important elements when evaluating and promoting children's SWB.

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Declarations

Conflict of Interest The authors have no conflicts of interest to declare.

Informed Consent Participant's parent/guardian provided written informed consent before participating in this study.

Ethics Approval No ethical approval was needed to conduct this research.

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