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Life Satisfaction among Indigenous People from Chile: Evaluation of Measurement Invariance

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Abstract   Although the Life Satisfaction Scale (SWLS) has been used to establish comparisons among nations/cultures, the measurement invariance of this scale has not always been demonstrated. The forced acculturative experience of indigenous minorities and its differentiation of gender roles could impact how people respond to this scale. The purpose of this study was to examine the measurement invariance of the SWLS when it is applied to a Chilean indigenous group, considering gender and their most frequent acculturative types (i.e., acculturated and bicultural). Eight hundred adults of Mapuche origin answered a Spanish version of the SWLS and the Mapuche Acculturation Scale. The results supported the SWLS strict invariance between acculturated and bicultural and also between acculturated men and women. Partial strict invariance was found between bicultural men and women; specifically, the residual variance of Item 3 was higher in women than in men. Since Spanish is a gendered language, a linguistic explanation is proposed for the non-invariance of this item. The importance of careful wording of the items, when administered in multilanguage acculturation contexts, is discussed.

Satisfacción con la vida en indígenas de Chile: evaluación de la Invarianza de Medida

Resumen   Aunque la Escala de Satisfacción con la Vida (SWLS) se ha usado para comparar personas de distintas naciones/culturas, no siempre su invarianza de medición ha sido demostrada. La aculturación forzada de las minorías indígenas y sus particulares roles de género podrían afectar las respuestas de esas personas a esta escala. Este estudio tuvo por objetivo examinar la invarianza de la SWLS en un grupo indígena chileno, considerando el género y los tipos aculturativos más frecuentes (i.e., aculturados y biculturales). Ochocientos adultos mapuches respondieron, en castellano, la SWLS y la Escala de Aculturación Mapuche. Se encontró apoyo para invarianza estricta entre aculturados y biculturales y, además, entre hombres y mujeres aculturados. Se encontró invarianza estricta parcial entre hombres y mujeres biculturales; específicamente, la

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varianza residual del ítem 3 fue mayor en mujeres que en hombres. Siendo el castellano un idioma con distinción de géneros, se propuso una explicación lingüística para la falta de invarianza de ese ítem. Se discute la importancia de redactar cuidadosamente los ítems cuando son administrados en contextos aculturativos multilingües.

In recent years there has been a growing interest in researching positive aspects of the human experience (e.g., Goodman, Disabato, Kashdan, & Kauffman, 2017). One of these aspects is life satisfaction, which refers to the degree to which a person favorably evaluates their own life, based on their subjective point of view (Diener, Emmons, Larsen, & Griffin, 1985). This definition of life satisfaction alludes to the cognitive component of subjective well-being (Pavot & Diener, 2009).

The Satisfaction with Life Scale (SWLS, Diener, et al., 1985) is one of the most frequently employed instruments used to obtain an overall assessment of life satisfaction. The unidimensional structure of the SWLS has been widely replicated in numerous nations/cultures (e.g., Pavot & Diener, 2009), including different Chilean populations (e.g., Vera-Villarroel, Urzúa, Pavéz, Celis-Atenas, & Silva, 2012).

However, the separate validation of the scale's structure within each different population group does not allow researchers to determine if these groups interpret the items to which they are responding to in the same way (Greenfield, 1997). To ensure the understanding of the items across groups, it is necessary to evaluate the invariance of the scale until, hopefully, its most demanding level is reached (Byrne, 2008).

Studies that have examined the invariance of SWLS across national/cultural groups (Atienza, Balaguer, Corte-Real, & Fonseca, 2016; Casas et al., 2012; Dimitrova & Dominguez Espinosa, 2015; Jovanović & Brdar, 2018; Schnettler et al., 2017; Whisman & Judd, 2016; Zanon, Bardagi, Layous, & Hultz, 2014) have seldom achieved the strictest level of invariance. Such finding suggests that cultural differences could cause respondents to have different interpretations of at least some of the items on the SWLS (Gálvez-Nieto, Salvo, Pérez-Luco, Hederich, & Trizano-Hermosilla, 2017; Oishi & Gilbert, 2016).

The cultural reality of indigenous minorities could be a potential source of non-invariance. Indigenous populations from around the world have faced genocide, colonization, forced assimilation, and exclusion, provoking lifelong trauma and loss. Such circumstances have significantly undermined their overall well-being (Brave Heart, Chase, Elkins, & Altschul, 2011).

Through their drastic interaction with mainstream society, indigenous minorities have experienced acculturative changes that, in turn, have resulted in either maintaining or not their own culture (Berry, Phinney, Sam, & Vedder, 2006; Guitart, 2010). Depending on whether ancestral culture and values are preserved and/or the adoption of the mainstream culture is imposed, members of indigenous groups may interpret and respond to questionnaire items differently, especially if the questionnaire was constructed within another cultural context (Davidov, Meuleman, Cieciuch, Schmidt, & Billiet, 2014). Thus, it is necessary to assess whether mainstream instruments are valid and culturally appropriate measures to evaluate ethnic minorities. This study is the first to examine the invariance of the SWLS among native Chileans, the Mapuches, considering their acculturative heterogeneity.

The Present Study

In Latin America there are currently 826 indigenous groups, which represent 7.8% of the population (Banco Mundial, 2015). The Mapuches are the largest Chilean indigenous group, representing 9.9% of the national population (Instituto Nacional de Estadísticas, 2018). They are concentrated in the Araucanía region (34.9%) and the Metropolitan region, which includes Santiago, the country's capital (36.5%).

Like other indigenous minorities, the Mapuches have experienced poverty, discrimination (Programa de las Naciones Unidas para el Desarrollo, 2013) and imposed acculturative changes within the Chilean territory (e.g., Leca, 2007; Saiz, Cornejo, Fuchslocher, Holzapfel & Scheel, 1998). These acculturative changes have been marked by an asymmetric and chronic territorial conflict with the Chilean State that dates back to the late nineteenth century. This conflict forced the Mapuches into segregated rural settlements due to land usurpation. Moreover, with the military coup and the *de facto* government established in 1973, the Mapuches suffered severe military repression, assassination or disappearance of community members and, more critical for this study, the prohibition of their cultural practices, religion, customs and the use of their language (Minorities at Risk Project, 2009). This violent assimilation has caused a severe historical trauma for the Mapuche people (Vargas, 2017).

Previous studies (Saiz, 2003; Saiz et al., 1998) have reported that the most common acculturative groups (types) among the Mapuches are the acculturated (those with a low level of involvement in their ancestral culture and a high level of involvement in the mainstream culture) and the bicultural (those with a high level of involvement in both cultures). While both acculturative types have adopted the mainstream culture to some degree, only the bicultural conserve the ancestral culture.

Emerson, Guhn, and Gadermann (2017) reviewed three decades of research using the SWLS and found only one study that compared cultural invariance across ethnic groups (i.e., Swami & Chamorro-Premuzic, 2009). Findings from the study indicated that the meaning of SWLS items not only varied across cultures, but also between genders. Based on this and previous evidence (e.g., Atienza, Balaguer, & García-Merita, 2003; Bacro et al., 2019; Bagherzadeh et al., 2018; Checa, Perales, & Espejo, 2018; Moksnes, Løhre, Byrne, & Haugan, 2014; Lorenzo-Seva et al., 2019),

we will also test for gender invariance among the Mapuches, because in their traditional culture there is a noticeable gender role differentiation.

Mapuche women are usually given the role of transmitting the ancestral culture to new generations, implying that the cultural content would be more salient for women than for men (Warren, 2009). This difference in gender roles could be especially relevant among those in the bicultural group. For this reason, this study also investigated SWLS invariance between men and women within the acculturated and bicultural groups. Prior literature shows that the SWLS does not always reach the strictest level of invariance across gender in non-indigenous populations (e.g., Atienza, Balaguer, & García-Merita, 2003; Moksnes et al., 2014). It is possible that forced acculturative changes may impact the way Mapuches evaluate their life satisfaction.

This study aimed to investigate the SWLS measurement equivalence among native Chilean men and women who differ in their acculturative experiences. Specifically, the study objectives were to examine the SWLS invariance (1) between the acculturated and bicultural types, as well as (2) between men and women within the acculturated and bicultural types. It was our goal to contribute to the understanding of the role acculturation and gender may play in the psychological assessment of ethnic minorities, an essential challenge in multicultural psychology (Leong, Leung, & Cheung, 2010).

Method

Participants and Procedure

Three self-report questionnaires were given to a purposive sample of 800 adult Chileans who self-identified as Mapuches, 400 of whom were recruited in Temuco, Araucanía region, while 400 were recruited in Santiago, Metropolitan region. The resulting sample mainly consisted of people between the ages of 35 and 54 (45.3%), women (63.7%), and residents of urban zones (81.8%). The majority of participants were of a low or middle-low socioeconomic level, suggesting that most of those sampled were economically disadvantaged and, according to their age, they had experienced the consequences of the cultural repression.

All participants reported being fluent in Spanish. Among bicultural Mapuches, all were also fluent in Mapudungún, the Mapuche language. Participants responded to the questionnaires in public places known to have a high presence of Mapuches (e.g., popular markets and bus stations in the case of Temuco, and ethnically diverse communes in the case of the Metropolitan region). The pollsters read the instructions and the items of the questionnaires, recording the answers given by the participants. The study protocol was approved by the Bioethics Committee of the Agricultural and Forestry Sciences School at the Universidad de La Frontera, and no material remuneration was provided in exchange for participation.

Measures

Life Satisfaction Scale (SWLS). In this study, a version of SWLS translated into Spanish by Schnettler, Miranda, Sepúlveda, and Denegri (2011) was used. In Appendix A, the translated items of the SWLS are shown along with the original English. The scale includes five items with response options ranging from "*completely disagree*" (1) to "*completely agree*" (6).

Mapuche Acculturation Scale (MAS). An abbreviated version of this scale (Saiz et at., 1998) developed by Schnettler et al. (2009) was used in this study. Based on a bidirectional acculturation model (Keefe & Padilla, 1987), MAS evaluates the respondent's involvement in the Mapuche culture (MAS-M subscale) as well as in the mainstream Chilean culture (MAS-C subscale) according to four content areas (language, social interaction, customs, and personal and family identity). The response format provides two options: "Yes" (1) or "No" (0). Following the work of Saiz et al. (1998), the average of each participant's responses to MAS-M (13 items) and MAS-C (7 items) was calculated. Then, these scores were divided into highs and lows using the central point of the response scale (.5) as a cut-off. The cross-tabulation of these two dichotomous variables generated four acculturative types: marginal (low involvement in both cultures), non-acculturated (high involvement in the Mapuche culture and low involvement in mainstream Chilean culture), acculturated (low involvement in the Mapuche culture and high involvement in mainstream Chilean culture) and bicultural (high involvement in both cultures). The MAS has been found to possess adequate psychometric properties in different Mapuche populations (e.g., Saiz, 2003).

Demographic survey. Each participant was asked about their self-identification as Mapuche, as well as their gender, age, region and area of residence, the educational level of the head of the household, and the family ownership of household goods.

Data analysis

Main statistical analyses were conducted in R statistical software (R Core Team, 2017). In the preliminary analyses, Mardia's test revealed a non-normal multivariate distribution of SWLS items. After dichotomizing the MAS-M and MAS-C scores, the reliability of the cut-off points was examined using Livingston's K^2 coefficient (Gempp & Saiz, 2014).

The statistical models were analysed through confirmatory factor analysis (CFA) using the lavaan package (Rosseel, 2012). The unifactorial model of SWLS was examined for each of the six groups of interest: acculturated, bicultural, acculturated men, acculturated women, bicultural men, and bicultural women. An adequate fit of the unifactorial baseline model in all groups was required for the subsequent evaluation of the SWLS invariance across these groups. We also evaluated the model's reliability for the six groups using the average variance extracted (AVE) and the composite reliability (CR). An AVE greater than .50 and CR greater than .70 were indicative of appropriate construct consistency (Fornell & Larcker, 1981).

Next, multigroup confirmatory factor analyses (MG-CFA) were employed to examine SWLS invariance according to three relevant comparisons: acculturated vs. bicultural, men vs. women within the acculturated group, and men vs. women within the bicultural group. In order to accomplish this, a sequence of four progressively more restrictive models was tested following the guidelines of Byrne (2008). These analyses allowed for the evaluation of the configural

(M0), metric (M1), scalar (M2), and strict (M3) models in a progressive manner (Vandenberg & Lance, 2000). These models were estimated using robust methods (Satorra & Bentler, 2011). Specifically, maximum likelihood estimation with robust standard errors (MLM) was used.

Five model fit indices were calculated: the Satorra-Bentler x^2, the comparative fit index (*CFI*), the Tucker-Lewis index (*TLI*), the standardized root mean square residual (*SRMR*) and the root mean square error of approximation (*RMSEA*) with a confidence interval of 90%. These indices were interpreted according to the goodness-of-fit criteria proposed by Marsh, Hau, and Wen (2004): CFI and TLI > .95, *SRMR* and RMSEA ≤ 0.08, indicate an adequate model fit.

In the sequential assessment of the models, the test of difference between models, based on the Satorra-Bentler x^2 and Δ*CFI* with a cut-off, point of 0.01 (Cheung & Rensvold, 2002), was used to determine if a more restrictive model showed a worse fit than the previously-examined, less restrictive model (Milfont & Fischer, 2010). If a poor fit was detected, we proceeded to evaluate the partial invariance of the most restrictive model. The partial invariance entails releasing some parameters according to the model of invariance being examined, i.e., factor loadings, intercept, and residuals for evaluating metric, scalar, and strict invariance, respectively. This was evaluated by the modification indices obtained from the Lagrange test (Sörbom, 1989).

Results

Preliminary analyses

Livingston's K^2 coefficients revealed that the dichotomization of both MAS scores was reliable: MAS-M = .99 and MAS-C = .97. When cross-tabulating these two dichotomized scores, the following distribution of acculturative types was obtained: marginal or non-acculturated (*n* = 15, 1.9%), acculturated (*n* = 331, 41.3%) and bicultural (*n* = 454, 56.8%). As was expected, the high frequency of respondents in the acculturated and bicultural types is similar to previously re-ported results (Saiz, 2003; Saiz et al., 1998). Due to their low frequency, non-acculturated and marginal participants were not considered in subsequent analyses.

Unifactorial structure of each group

The CFA revealed that the unifactorial model of the SWLS showed adequate fit (CFI and RMSEA) and satisfactory reliability (AVE and CR) in each of the six groups (see Table 1). The standardized factorial loadings, as well as their means and standard deviations, are also shown in Table 2.

Invariance between acculturated and bicultural participants

Table 3 shows the goodness-of-fit indices for the models M0 to M3 when examining SWLS invariance between the acculturated and bicultural groups by using MG-CFA. Support was found for the configural (M0), metric (M1), scalar (M2), and strict model (M3). For all the comparisons, the S-Bx^2 model difference test and the Δ*CFI* showed that the most restrictive model did not show a significantly worse fit when compared to the previous one. These results indicate that the SWLS obtained the maximum level of invariance (strict invariance) between acculturated and bicultural Mapuches.

Invariance between acculturated men and women

The results shown in Table 4 revealed adequate fit levels for M0 to M3 and that the addition of successive and increasing restrictions did not result in a worse fit in each model compared to the previous model. These findings provide favourable evidence for the presence of SWLS strict invariance among acculturated men and women.

Invariance between bicultural men and women

The results in Table 5 support the existence of configural (M0), metric (M1), and scalar (M2) invariance of the

Table 1   Model fit and reliability for the six groups.

	Model fit					Model reliability	
	S-B x^2 (5)	*p*-value	CFI	RMSEA	90% CI for RMSEA	AVE	CR
Acculturated	9.897	.113	.993	.057	[.000, .116]	.583	.880
Bicultural	17.593	.004	.981	.091	[.047, .139]	.548	.864
Acculturated							
Men	2.215	.819	> .999	< .001	[.000, .103]	.648	.896
Women	10.698	.058	.986	.080	[.013, .123]	.566	.873
Bicultural							
Men	13.245	.021	.973	.095	[.045, .148]	.585	.881
Women	11.241	.047	.983	.082	[009, .147]	.526	.853

Table 2 Means (M), standard deviations (SD) and standardized factor loadings (λ) for SWLS items in the six groups.

| | | | | | | | Acculturated | | | | | | Bicultural | | | | | |
| | Acculturated | | | Bicultural | | | Men | | | Women | | | Men | | | Women | | |
Items	M	SD	λ	M	SD	λ	M	SD	λ	M	SD	λ	M	SD	λ	M	SD	λ
1	4.52	1.10	.77	4.56	1.05	.74	4.45	1.17	.83	4.52	1.07	.74	4.53	1.05	.77	4.60	1.06	.73
2	4.23	1.17	.74	4.26	1.09	.72	4.18	1.14	.75	4.25	1.19	.75	4.21	1.04	.78	4.28	1.11	.69
3	4.64	1.18	.83	4.69	1.13	.83	4.57	1.25	.85	4.65	1.16	.81	4.62	1.10	.86	4.70	1.14	.79
4	4.69	1.11	.79	4.72	1.12	.76	4.68	1.22	.80	4.76	1.05	.79	4.65	1.10	.73	4.72	1.09	.79
5	4.38	1.58	.72	4.42	1.44	.68	4.32	1.61	.75	4.42	1.56	.71	4.36	1.15	.71	4.45	1.45	.66

Table 3 Goodness-of-fit indices and model comparison for models testing SWLS measurement invariance between acculturated and bicultural groups (n_1=454, n_2=331).

Model	S-Bx^2	df	CFI	TLI	SRMR	RMSEA	90% CI for RMSEA LL	UL	Model contrast	ΔS-Bx^2 (df)	ΔCFI
M0	26.861***	10	.986	.973	.023	.078	.043	.115	--	--	--
M1	30.559***	14	.986	.983	.027	.063	.032	.093	ΔM1 – M0	3.698 (4)	.000
M2	34.784*	18	.986	.987	.028	.054	.026	.081	ΔM2 – M1	4.225 (4)	.000
M3	36.393*	23	.989	.992	.032	.043	.011	.068	ΔM3 – M2	1.609 (5)	.003

Note: M0 = model testing configural invariance; M1 = model testing metric invariance; M2 = model testing scalar invariance; M3 = model testing strict invariance. $^*p < .05$. $^{***}p < .001$

Table 4 Goodness-of-fit indices and model comparison for models testing SWLS measurement invariance among acculturated: Men vs. women (n_1=104, n_2=227).

Model	S-Bx^2	df	CFI	TLI	SRMR	RMSEA	90% CI for RMSEA LL	UL	Model contrast	ΔS-Bx^2 (df)	ΔCFI
M0	12.163	10	.995	.992	.021	.043	.000	.114	--	--	--
M1	15.681	14	.996	.996	.035	.030	.000	.093	ΔM1 – M0	3.518 (4)	.001
M2	22.427	18	.991	.992	.041	.043	.000	.092	ΔM2 – M1	6.746 (4)	.005
M3	25.100	23	.995	.997	.046	.026	.026	.077	ΔM3 – M2	2.673 (5)	.004

Note: M0 = model testing configural invariance; M1 = model testing metric invariance; M2 = model testing scalar invariance; M3 = model testing strict invariance.

SWLS between bicultural men and women. The subsequent model, strict invariance (M3), differed significantly from the previous model (M2) as revealed by the Satorra-Bentler x^2 model difference test, although the ΔCFI index was within the acceptable range proposed by Cheung and Rensvold (2002). The Lagrange test showed that the residual variance of Item 3 was not invariant between bicultural men and women. A partial strict invariance model (M3P) was then estimated, releasing the constraint associated with this item residual variance parameter. This new model showed an adequate fit and did not differ significantly from the pre-

vious model (M2). The residual variance of Item 3 in M3 among bicultural women was greater (0.476, *SE* = 0.065) than among bicultural men (0.299, *SE* = 0.050).

Discussion

The purpose of this study was to evaluate the measurement invariance of SWLS across acculturative groups and gender in Mapuches, a native indigenous Chilean group. Findings provided support for the strict invariance of the SWLS among the acculturated and bicultural and also

Table 5 Goodness-of-fit indices and model comparison for models testing SWLS measurement invariance among bicultural: Men vs. women (n_1=182, n_2=272).

Model	S-Bx^2	df	CFI	TLI	SRMR	RMSEA	90% CI for RMSEA LL	UL	Model contrast	ΔS-Bx^2 (df)	ΔCFI
M0	24.565**	10	.979	.957	.029	.097	.049	.146	--	--	--
M1	27.591*	14	.981	.974	.031	.075	.032	.117	ΔM1 – M0	3.026 (4)	.002
M2	35.671**	18	.978	.975	.037	.074	.037	.109	ΔM2 – M1	8.080 (4)	- .003
M3	48.066**	23	.969	.973	.043	.077	.046	.108	ΔM3 – M2	12.395 (5)*	- .001
M3P	43.018**	22	.973	.976	.041	.073	.039	.105	ΔM3P – M2	7.347 (4)	- .005

Note: M0: model testing configural invariance; M1: model testing metric invariance; M2: model testing scalar invariance; M3: model testing strict invariance; M3P: model testing strict partial invariance with Item 3 residual variance freely estimated. *p < .05. **p < .01

among acculturated men and women. Moreover, results supported a partial strict invariance among bicultural men and women. This partial strict invariance was explained by the residual variance of Item 3 being higher for women than for men. Such a result does not appear to be a consequence of construct bias (van de Vijver & Poortinga, 1997), but instead, a deficient wording of the item in Spanish, which included the adjective "satisfied" only in its masculine form ("satisfecho") (see Appendix A).

Spanish is a gendered language (Prewitt-Freilino, Caswell, & Laakso, 2012). Although Spanish makes the grammatical distinction between genders, it also allows for the use of the masculine gender both exclusively (referring only to men) and inclusively (referring to both men and women in a collective sense). It is possible that the bicultural women interpreted item 3 as exclusively masculine and, thus, responded in a confusing way, thereby increasing the error variance of the item. This is also possible considering that adjectives are genderless in Mapudungún (Zúñiga, 2006) and bicultural women tend to be particularly sensitive to the gender role differentiation due to their hierarchical position in the traditional Mapuche culture (Warren, 2009).

Kroll, Dussias, Bogulski, and Kroff (2012) have acknowledged that for bilinguals, both languages are active while processing information, in this case both Spanish and Mapudungún for our bicultural participants. Moreover, the authors have stated that competing languages could cause interference, becoming a potential source of errors. There is also evidence that the testing language could deteriorate performance (e.g., Faulkner-Bond & Sireci, 2015) and/or response consistency (Bowen, Govender, & Edwards, 2016) in multilanguage contexts. It is possible that Mapuche bicultural women, due to a higher sensibility of their own culture, could have experienced the aforementioned phenomena associated with bilingualism.

To resolve the deficient wording of Item 3, it is recommended that the response process of bicultural women to this item be examined, for instance, through cognitive interviews (Miller, Willson, Chepp, & Padilla, 2014). Two possible solutions could be rewriting the item so that it includes both genders (e.g., "Estoy satisfecho/a con mi vida"), or using a masculine version (e.g., "Estoy satisfecho con mi vida") and a feminine version (e.g., "Estoy satisfecha con mi vida") separately when administering the SWLS. Regardless, any modifications made to Item 3 should be empirically tested before being incorporated into the scale.

This study showed several strengths. First, this is, to our knowledge, the first research study examining the invariance of SWLS within an indigenous population, while also taking into account their acculturative heterogeneity. Second, although the Mapuches are usually considered a population that is difficult to access for researchers, a substantial sample size (n = 800) was achieved in this study, which increased the statistical power of the analyses. Third, some authors (e.g., Little, 2013) argue that it may be unreasonable to assume random error invariance across groups and, for this reason, some researchers tend to omit the examination of the strict invariance. This study addressed all levels of invariance, including the most restrictive one. Finally, in general, multi-national/cultural studies examining measurement invariance fail to propose and substantiate specific cultural explanations when a lack of invariance is found. The present study overcomes this limitation by providing a reasonable linguistic explanation for the lack of strict invariance associated with Item 3 of the SWLS. Nevertheless, this explanation still needs to be empirically tested.

Despite its strengths, there are some limitations to the current study. First, the sample cannot be considered representative as the participants were selected purposely and the study targeted only specific geographic areas. Second, all participants were adults, so it is not possible to generalize findings to other age groups. Third, the sample included more women than men and more residents of urban than rural areas. This implies that the results of the study would be more valid for those subgroups with a greater presence in the sample. Using a random sample could enable researchers to overcome the previous limitations. Finally, all instruments were administered in Spanish, even though a significant proportion of participants reported being fluent in both Spanish and Mapudungún. It would be interesting for future research to examine whether the SWLS holds its invariance in Mapudungún. Once this invariance has been demonstrated, following the recommendations of the International Test Commission (2013), future studies should offer bilingual participants the possibility of responding to the SWLS in the language they are most comfortable with.

The findings presented here provide a starting point for further examination of the measurement equivalence of SWLS among acculturally diverse indigenous peoples. We also encourage future research to explore the invariance, taking into account the age of the participants and their geographical area of residence (e.g., urban vs. rural).

In conclusion, this study demonstrated the SWLS measurement equivalence within a Chilean indigenous population, while taking into consideration acculturative types and gender differences within each type. The study also highlighted the importance of being cautious with the wording of survey items when administered in multilanguage contexts, particularly in the assessment of bicultural groups.

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Appendix A: English- and Spanish- language versions of the SWLS

Items	English	Spanish
1	In most ways my life is close to my ideal.	En muchos aspectos, mi vida se acerca a mi ideal.
2	The conditions of my life are excellent.	Mis condiciones de vida son excelentes.
3	I am satisfied with my life.	Estoy satisfecho con mi vida.
4	So far I have gotten the important things I want in life.	Hasta ahora he obtenido las cosas importantes que he deseado en mi vida.
5	If I could live my life over, I would change almost nothing.	Si pudiera vivir mi vida de nuevo, no cambiaría nada.