

Tripartite Scale to Right-Wing Authoritarianism (ACT): Adaptation, Validation to Spanish and Invariances Test in Chile

Escala Tripartita de Autoritarismo de Derecha (ACT): Adaptación, Validación y Pruebas de Invarianza en Chile

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The concept of authoritarianism occupies an important place in social psychology, but most common instruments available have evidenced a series of incongruencies. To move past these problems, the Right-Wing Authoritarianism Scale (RWA) is proposed. The RWA scale considers the three dimensions that are made up of different ideological attitudes, among which, that express support for strategies that privilege collective security, with a base in authority and collective order, at the expense of individual autonomy and free expression. The objective of this study is to adapt and validate an abbreviated version of the RWA. A non-probability convenience sample ($n=341$) composed of residents from diverse regions of Chile is used. The scale was translated from English into Spanish, retro translated and cross-checked by experts. Of the original 36 items, 12 were selected according to their psychometric indicators, semantics and suitability to the context. The results showed good psychometric indicators: reliability indices ($\alpha = 0.86$ and $\omega = 0.92$) and goodness of fit in the CFA that confirmed a three factor structure ($\chi^2 = 69.41$, CFI = 0.98, TLI = 0.98, SRMR = 0.04, RMSEA = 0.04 and AIC = 13871.30). The indicators of the tests for invariance by sex allow us to affirm that the assumptions are not violated up to the strict level. These results support that ACT-12 is a useful instrument for measuring complex sociopolitical phenomena, as they provide evidence of construct validity.

Keywords: right-wing authoritarianism (RWA), ideological attitudes, adaptation, validation, spanish

El concepto de autoritarismo ocupa un lugar importante en la psicología social, pero los principales instrumentos disponibles han evidenciado una serie de incongruencias. En un intento por superarlas se propone la Escala Tripartita de Autoritarismo de Derecha (ACT). La escala ACT considera las tres dimensiones que la componen como actitudes ideológicas diferentes entre sí, que expresan apoyo a estrategias que privilegian la seguridad colectiva, con base en una autoridad y orden colectivo, a expensas de la autonomía individual y libre expresión. El objetivo de este estudio fue adaptar y validar una versión abreviada de la ACT. La muestra ($n=341$) fue no probabilística por conveniencia, compuesta por residentes en diversas regiones de Chile. La escala fue traducida del inglés al español, retrotraducida y cotejada por expertos. Del total original de 36 ítems, fueron seleccionados 12, de acuerdo con criterios psicométricos, semánticos y de adecuación al contexto. Los resultados mostraron buenos indicadores psicométricos: índices de confiabilidad ($\alpha = 0,86$ y $\omega = 0,92$) e índices de ajuste en el AFC que confirmaría la estructura de tres factores ($\chi^2 = 69,41$, CFI = 0,98, TLI = 0,98, SRMR = 0,04, RMSEA = 0,04 y AIC = 13871,30). Los indicadores de las pruebas de invarianza según sexo permitirían afirmar que no se violan los supuestos hasta el nivel de invarianza estricta. Estos resultados apoyan que la ACT-12 es un instrumento útil para medir fenómenos sociopolíticos complejos ya que aporta evidencias de la validez del constructo.

Palabras clave: autoritarismo de derecha (RWA), actitudes ideológicas, adaptación, validación, español

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Since the 1950s, the study of *authoritarianism* has been a relevant construct when seeking explanations of sociopolitical and intergroup behaviour (Bizumic & Duckitt, 2018). Adorno et al. (1950) approached it theoretically, from a psychoanalytic perspective, and proposed to study authoritarian personality from nine covariant traits or dimensions that they operationalised in the F scale. Subsequently, Altemeyer (1981, 1988, 1988, 1996, 1998) took up this model in various versions of his theoretical and empirical proposal embodied in the *Right-Wing Authoritarianism Scale* (hereafter, RWA), in which he sought an alternative to the theory of psychoanalysis that would overcome the psychometric problems of the F scale: Authoritarian Submissiveness, understood as the submissive and uncritical attitude towards the idealised moral authorities of the ingroup, Authoritarian Aggression, consisting of a general aggressiveness directed against various people who are perceived as deserving punishment, and Conventionalism, i.e., adherence to conventional middle-class values (Altemeyer, 1981).

According to Duckitt et al. (2010), contemporary literature has highlighted the importance of RWA in explaining individual differences in social, collective and intergroup behaviour; it is also a reliable measure and provides evidence of validity, as it has functioned as a good predictor of other variables with which it was expected to be closely related, such as political orientation (left-right spectrum), religiosity, ethnocentrism and generalised prejudice (Altemeyer, 1981, 1988; McFarland & Adelson, 1996).

However, subsequent advances in scientific research have also opened up flanks of criticism. The main one relates to the conceptualisation of authoritarianism as a single dimension, in which personality traits coexist. Research subsequent to Altemeyer's suggests that authoritarianism does not correspond to a personality type, but rather to attitudes and social values, i.e., personality could influence authoritarianism, but it would not be a direct expression of it. Subsequent work (Duckitt, 1989; Duckitt & Fisher, 2003; Kreindler, 2005; Stellmacher & Petzel, 2005; Zakrisson, 2005) has consistently identified covariation of three sets of attitudes: conventionalism, authoritarian aggression and authoritarian submission.

In relation to the first criticism, a second one arises, concerning the unidimensionality of the RWA, proposed by Altemeyer (Duckitt et al., 2010). According to Manganelli Rattazzi et al. (2007), the RWA would be two-dimensional, since the dimensions Authoritarian Aggression and Authoritarian Submission would correspond to one, while Conventionalism would be a second. The same results were obtained in the validation of the RWA in the Argentine context (Etchezahar, 2012). Other studies suggest that authoritarian social attitudes are multidimensionally organised (Bizumic & Duckitt, 2018; Duckitt et al., 2010; Duckitt & Bizumic, 2013; García-Sánchez et al., 2022). On the other hand, criticism has also been directed at the length of the items, which involve, at the same time, ideas related to different dimensions, generating ambiguity when clarifying which one they belong to (Cárdenas & Parra, 2010; Duckitt et al., 2010).

Tripartite Right-wing Authoritarianism Scale (ACT)

Among the proposals based on the RWA that seek to improve these deficiencies, the Tripartite Authoritarianism Scale (ACT; Duckitt et al., 2010) stands out. Unlike Altemeyer's (1981) proposal, the ACT proposes a measure of authoritarianism using social attitude items, which are grouped into three attitudinal dimensions that show different ways of expressing support (or opposition) to strategies that privilege collective security, based on collective authority and order, at the expense of individual autonomy and free expression. These are: Authoritarianism (attitudes favouring coercion and punitive social control), Conservatism (attitudes favouring respect for and obedience to the existing order) and Traditionalism (attitudes favouring traditional norms, values and lifestyles) (Duckitt & Bizumic, 2013; Duckitt et al., 2010).

Among the considerations taken into account to ameliorate the weaknesses of the RWA were: (a) clear definitions of the construct, including both pro and con items in the validation; (b) excluding items expressing anti-gay prejudice, as they could spuriously influence relationships with other conceptually distinct variables, and (c) excluding, for the same reason, items on religiosity; however, following findings of empirical evidence on the relationship between authoritarianism and religious fundamentalism, some items in the Traditionalism subscale were included (Duckitt et al., 2010).

According to Duckitt et al. (2010), the results of the validation of the ACT in five samples in four countries (New Zealand ($n_1 = 334$ and $n_2 = 209$) Israel ($n = 106$), United States ($n = 67$), Romania ($n = 237$) showed that the scale proved to be highly reliable and in each study the item-test correlations suggested a high degree of unidimensionality for each dimension and, at the same time, the correlation between the ACT dimensions was low, although each correlated significantly with the total scale, which would be consistent with its multidimensionality.

Confirmatory factor analysis (CFA) showed good fit indices for the three-factor scale. To this end, several versions of the scale were tested, adding and deleting items until the construct was adequately measured. A subsequent study in New Zealand and Serbia conducted by Duckitt & Bizumic (2013) presented additional evidence in support of the multidimensionality of the scale and also sought to address the failure to test for invariance in the earlier validation process. The authors considered the demonstration of factorial invariance to be an important precondition for cross-national and cross-cultural research comparisons and thus an essential prerequisite for scales and constructs intended to have cross-national and cross-cultural applicability (Duckitt & Bizumic, 2013). Despite evidence of the scale's reliability in the various contexts tested, authors have indicated that the scale may not be a universal measure (Duckitt & Bizumic, 2013; Duckitt et al., 2010). This suggests the need to test a wide range of items and explore which model best fits the local context. The structure of the scale, in its long version, comprises 36 items, distributed into 12 items in each dimension. The short version of the scale has 18 items (6 for each of the dimensions).

Regarding the relationship with other constructs, the scientific literature has reported a high and consistent relationship between authoritarianism and social dominance orientation (SDO; Cárdenas, Lay et al., 2010; Cárdenas, Meza et al., 2010; Cohrs & Asbrock, 2009; Duckitt, 1993; Etchezahar et al., 2014; Van Hiel et al., 2007). While authoritarianism expresses the value of establishing or maintaining collective security, indicating the degree of submission to the ingroup, SDO focuses on relationships of dominance and intergroup superiority (Duckitt, 2001; Etchezahar, 2012).

On the other hand, authoritarianism varies according to individual differences, for example, men report higher levels of authoritarianism than women (Boehnke & Rippl, 1995; Duncan et al., 1997; Peterson & Zurbriggen, 2010). For their part, Ávila-Batista et al. (2019) suggest a possible differential functioning of the items according to the sex of the participants in their instrument Escala de Attitudes towards Authoritarianism Scale (ESCAUT), which is based on the theoretical developments of Duckitt et al. (2010) and validated for the Brazilian population.

The present study

The study of political and psychosocial phenomena involves the need for refined, up-to-date instruments adapted to the particular socio-historical conditions of each population, in the context of studies on the maintenance and perpetuation of social inequalities.

The general objective of this study was to adapt and validate a brief version of the ACT for the Chilean population. In this way, this work will contribute to making available to those researching in Spanish an instrument that has not yet been validated and that considers in its structure improvements to the defects evidenced, both in the original Altemeyer RWA scale and in the aforementioned validations into Spanish; in addition to providing a brief instrument that can be answered in less time and thus be used in research in conjunction with other variables.

Method

This research is part of a larger questionnaire of the Anillos de Investigación en Ciencias Sociales y Humanidades Soc 180007 (PIA-ANID) project.

Participants

The non-probabilistic, snowball convenience sample consisted of 341 participants, 133 men (39%) and 208 women (60.9%). Ages ranged from 18 to 74 years ($M = 28.9$; $SD = 12.1$). Of the total sample, 37.5% resided in the Metropolitan Region, 22.2% in the Maule Region, 15.5% in Valparaíso, 5% in O'Higgins, 2.6% in Antofagasta and 17.2% in 5 other regions of Chile. Of the total, 4.2% corresponds to foreigners and 95.8% to Chileans.

The invitation to participate was made by members of the research team via email and social networks (Whatsapp, Instagram and Facebook), with a link to a questionnaire hosted on the Survey Monkey© platform.

Inclusion criteria were being over 18 years of age and living anywhere in Chile for more than 6 months.

Instruments

Tripartite Right-wing Authoritarianism Scale (ACT)

The full 36-item version of the ACT (Conservatism-Traditionalism-Authoritarianism; Duckitt et al., 2010) was applied. The scale has 3 dimensions: conservatism (i.e., "What our country needs is discipline, that everyone follows our leaders in unity"); traditionalism (i.e., "Old-fashioned" customs and values still show us the best way to live"); authoritarianism (i.e., "We must fight the negative elements that are causing problems in our society"). The response format was presented as a 6-point Likert scale (1 = *completely disagree* and 6 = *completely agree*). Higher scores indicate higher levels of right-wing authoritarianism.

The ACT was translated from English into Spanish by two bilingual experts. Subsequently, these results were translated into English by a translator (native English speaker) and both versions were cross-checked, thus validating both the content and the semantic relevance from the original language of the scale into Spanish. For this purpose, the checklist for quality control of translation and item adaptation proposed by Hambleton and Zenisky (2011) was taken into account, which includes general translation questions and specific questions on format, grammar and cultural considerations.

Social Dominance Orientation Scale (SDO)

Social dominance orientation was measured through the 16-item version of the scale created by Pratto et al. (1994) and validated in Chilean population by Cárdenas, Meza et al. (2010). The scale has two dimensions: on the one hand, Group Dominance, which accounts for support for oppression and aggressive behaviour between groups with the aim of promoting their subordination (i.e., "If certain groups were kept in their place we would have fewer problems"); and on the other hand, Opposition to Equality, which represents the rejection of equality between groups, based on beliefs rooted in the existence of natural hierarchies (i.e., "We should increase social equity" (inverse item). Responses were presented in a 6-point Likert format (1 = *strongly disagree* and 6 = *strongly agree*). This scale was used as an indicator of convergent validity. The scale obtained for this application an internal consistency coefficient of 0.81 (Cronbach's alpha). The internal consistency coefficients for the scale dimensions were 0.66 (Group Dominance) and 0.81 (Opposition to Equality). Higher scores indicate higher levels of social dominance orientation.

In addition, socio-demographic variables such as gender (male/female) and age (measured in years of age) were included.

Procedure

Those who decided to participate voluntarily were asked to accept the conditions set out in an informed consent form, in which both anonymity and confidentiality were guaranteed. This study was approved by the Ethics Committee of Valparaíso University.

Data were collected between June and September 2021. A pilot test of the questionnaire was applied to 20 people between 18 and 25 years old, Chileans, residents of the Maule region (*n women=10, n men=10*), who volunteered to participate through a call at the Faculty of Psychology of the University of Talca; the purpose of the pilot test was to verify the clarity of the items.

Analysis Plan

An adjustment was made to the number of items in order to obtain a reduced version of the ACT and to enhance and maximise the metric properties of the instrument (Muñiz & Fonseca-Pedrero, 2019). Descriptive (mean, standard deviation, skewness and kurtosis) and multivariate normality (Mardia test) analyses were performed.

The reliability analysis, to measure the internal consistency of the scale and its dimensions, was assessed through Cronbach's α and McDonald's ω , since the latter, working with factor loadings and being less sensitive to the number of items (as is Cronbach's α) makes the calculations more stable to reflect the true level of reliability (Ventura & Caycho, 2017). Inter-item and total item correlations were performed. Then, a CFA was performed to verify the three-factor structure, which was contrasted with all other possible models. Model parameters were estimated using the robust maximum likelihood method (MLR).

The indices used to assess model fit were χ^2 (Absolute Fit Indicators), CFI (Bentler-Bonett Comparative Index), TLI (Tucker Lewis Index), RMSEA (Root of Standardised Mean Square Residual) and SRMR (Root of Standardised Mean Square Residual). In addition, AIC (Akaike Information Criterion) was used. Values for CFI and TLI are expected to be greater than 0.95, while for SRMR values should be between 0 and 0.05, and for RMSEA values should be less than 0.07 (Hooper et al., 2008; Steiger, 2007). AIC was used to compare the four models tested (Byrne, 2001), with the best model having the lowest AIC. Convergent validity was analysed using Pearson's linear correlations (r) between ACT and SDO. Finally, sex invariance tests were carried out by comparing the models using the scaled χ^2 test (Satorra & Bentler, 2001) in order to test the comparability of the scale in different groups; The delta χ^2 of the compared models is expected to be $p > 0.05$; in case they were statistically significant, differences in fit indicators are examined ($\Delta CFI = \Delta \geq 0.010$; $\Delta RMSEA = \Delta \geq 0.015$). Only questionnaires with complete responses were included in this study.

Descriptive analyses were performed with SPSS 28 (IBM Corp., 2021) and R software version 3.4.2 (R Core Team, 2015) was used for confirmatory factor analysis and invariance analysis.

Results

From the total of 36 items, a final selection of 12 items was made, four in each dimension (the items and the original items in English can be found in the Annex). For this, a qualitative and quantitative analysis was carried out. The adjustment criteria were based on the correlations obtained between each item and the total score of the dimension to which it corresponds. All the selected items obtained scores higher than 0.5, and in each dimension, those with the highest correlation with the total score of the dimension were chosen. For the Authoritarianism dimension, the item-to-total correlations ranged from 0.63 to 0.74. For the Conventionalism dimension, item-total correlations ranged between 0.50 and 0.67. Finally, item-total correlations for the Traditionalism dimension ranged between 0.55 and 0.64.

Descriptive Statistics

Table 1 shows the descriptive statistics for each of the selected scale items (means, standard deviations, skewness and kurtosis indices). The means of all items are below the theoretical midpoint (i.e., 3.5 points), with relatively similar levels of dispersion, fluctuating between 1.34 and 1.96. The skewness is positive for all items, i.e., the data are clustered to the left of the distribution and thus represent intermediate to low levels on the authoritarianism scale, while the kurtosis analysis presents a platykurtic distribution for most items with the exception of C4, T1 and T2. In general, it is noticeable that the items slightly deviate from a normal distribution. The assumption of multivariate normality was assessed using Mardia's test, and there is no evidence to assume that the data are normally distributed ($skewness = 1605.05$, $p < 0.001$; $kurtosis = 33.62$, $p < 0.001$); for this reason, the CFA was performed with the robust maximum likelihood estimator.

Table 1
Descriptive Statistics of the ACT Items (N=341)

Item	<i>M</i>	<i>DE</i>	Asymmetry	Kurtosis
C1: Obedience and respect for authority are the most important virtues for children to learn.	2,61	1,65	0,64	-0,83
C2: Our country will be great if we show respect for authority and obey our leaders.	2,28	1,50	1,01	0,05
C3: The real keys to a "good life" are respect for authority and obedience to those in charge.	2,29	1,34	0,90	0,17
C4: The authorities must be obeyed because they are in the best position to know what is good for our country.	2,13	1,34	1,14	0,72
T1: The new ways of life, the radical and sinful behaviour of many young people may one day destroy our society.	2,04	1,52	1,34	0,61
T2: Poor quality magazines and radical literature are poisoning the minds of young people in our community.	1,91	1,40	1,59	1,64
T3: It is important to preserve traditional values and moral standards.	2,38	1,56	0,97	-0,13
T4: People should pay less attention to the Bible and other outdated forms of religious guidance and instead develop their own personal standards of what is moral and immoral (R).	2,41	1,61	0,89	-0,36
A1: Being nice to slackers or criminals will only encourage them to take advantage of your weakness, so it is better to use a firm, hard hand with them.	3,14	1,85	0,32	-1,33
A2: Our prisons are an appalling disgrace. Criminals are people who deserve more humane treatment, rather than so much punishment (R).	3,10	1,80	0,35	-1,20
A3: The way things are going in this country, it will take a "heavy hand" to straighten out the troublemakers, criminals and perverts.	3,30	1,90	0,18	-1,43
A4: The death penalty is barbaric and will never be justified (R).	2,65	1,96	0,70	-1,13

Note: M = mean; SD = standard deviation.

Reliability

The reliability analysis of the ACT scale showed an internal consistency of 0.87 (Cronbach's α). When measuring internal consistency per dimension, these values ranged from 0.79 (Traditionalism) to 0.86 (Conservatism). Furthermore, the three dimensions of the scale have adequate correlations with each other in a range between 0.46 and 0.69 (Table 2). The reliability obtained on the basis of the factor loadings (McDonalds' ω) is 0.919, fluctuating between 0.59 and 0.81 for the dimensions.

Table 2
Reliability and Correlations between ACT-12 Dimensions

Dimension and scale	α	C	T	A
Conservatism (C)	0,86	1	0,69	0,55
Traditionalism (T)	0,79		1	0,46
Authoritarianism (A)	0,80			1
ACT-12	0,87			

Confirmatory Factor Analysis

The CFA showed that the three-factor correlated model was the most robust in terms of fit, also confirmed by AIC. This was contrasted with the one-factor model and the two-factor model in all combinations (Table 3).

Table 3
Model Comparison from Confirmatory Factor Analysis

Model	$\chi^2 (gl)$	RMSEA [90%IC] [90%IC]	SRMR	TLI	IFC	AIC
3 ACT-12 factors	69,41 (51) *	0,04 [0,01-0,06]	0,04	0,98	0,98	13871,30
Unifactorial	349,09 (54) ***	0,15 [0,14-0,17]	0,11	0,69	0,75	14271,08
2 factors (C & T v/s A)	180,32 (53) ***	0,10 [0,08-0,11]	0,07	0,97	0,89	14022,03
2 factors (C and A v/s T)	248,74 (53) ***	0,12 [0,11-0,14]	0,09	0,80	0,84	14118,50
2 factors (A and T v/s C)	274,98 (53) ***	0,13 [0,11-0,14]	0,09	0,77	0,82	14146,37

Note. *p < 0.05, **p < 0.01, ***p < 0.001.

The results of the ACF for the 12-item version showed the best fit indices and the lowest AIC. The factor weights of the 12-item version of the scale range from medium-high to high and vary between 0.59 and 0.81 (Table 4).

Table 4
Factor loadings

Item	Dimension	Factorial loading
1	C	0,80
2	C	0,77
3	C	0,81
4	C	0,72
5	T	0,70
6	T	0,75
7	T	0,80
8	T	0,60
9	A	0,77
10	A	0,70
11	A	0,78
12	A	0,59

Note: Standardised factor loadings are presented. All factor loadings are significant ($p < 0.001$).

Convergent Validity

The results of the linear correlations between ACT and SDO report a direct and significant association ($r = 0.50$, $p < 0.01$). Similarly, high and significant correlations are obtained between ACT and the two dimensions of SDO: Group Dominance ($r = 0.57$, $p < 0.001$) and Opposition to Equality ($r = 0.32$, $p < 0.001$).

Invariance Tests

Table 5 shows the results of a multi-group CFA to test for measurement invariance on the 12-item short scale, set on the basis of the sex variable (males and females).

Table 5
Tests of Invariance by Sex

Model	$\chi^2(gl)$	IFC	RMSEA [90% CI].	Comparison	$\Delta\chi^2$ (Δgl)	ΔCFI	$\Delta RMSEA$
				Criteria	$p > 0,05$	$\Delta \geq 0,010$	$\Delta \geq 0,015$
M2. Metric or weak invariance	136,10 (111)	0,978	0,042 [< 0,001 - 0,064]	M2 v/s M1	9,39 (9) $p = 0,40$	0,003	0,001
M3. Scalar or strong invariance	144,85 (120)	0,981	0,039 [< a 0,001- 0,061]	M3 v/s M2	8,14 (9) $p = 0,52$	-0,003	0,003
M4. Invariance strict	158,99 (132)	0,978	0,040 [< a 0,001 -0,061]	M4 v/s M3	14,24 (12) $p = 0,29$	0,003	-0,001

Note. χ^2 = Chi-square, gl = degrees of freedom, Δ = delta or difference between the models compared. For differences in χ^2 we used χ^2 scaled with Satorra-Bentler method.

These reveal that the unrestricted model (M1) obtained good measurement fit indices, which allows us to argue that the model's assumptions of measurement invariance are not violated. Then, comparing the values of the unrestricted model (M1) with the M2 model with factor loadings estimated as equal between the groups yielded indices that do not violate the assumptions of metric or weak level invariance. After this, the scalar or strong invariance test was performed, which obtained good fit indices, when comparing M2 with M3 or intercept, maintaining, in the same way, this level of invariance. Finally, when testing for strict invariance by comparing M4 with M3, i.e. the residuals of the items estimated as equal, the assumptions of strict invariance are not violated. In conclusion, the evidence would indicate that the measurement model is invariant between men and women.

Discussion and Conclusions

The results obtained in the adaptation and validation of the abbreviated version of the ACT show that it is an instrument that exhibits good indices of fit when measuring right-wing authoritarianism in the current Chilean context. The factor structure of the ACT-12, although not equivalent to the original scale in item extension, is consistent with the three-dimensionality of the original scale, proposed by Duckitt et al. (2010) and Duckitt and Bizumic (2013), by demonstrating good fit indices when contrasted with the one- and two-factor structures, which presented a poor fit. On the other hand, invariance tests indicated that the internal structure of the instrument would be adequate to compare the measure between two groups established on the basis of the sex variable.

The 12-item version of the ACT would constitute a scale that combines good fit indices and an adequate extension and semantic relevance to Spanish, which could be used in instruments that seek to investigate relationships with other measures. Although the selection of the 12 items is only partially concordant with the short version of 18 items proposed by the authors, the selection in this research was theoretically supported by the existence of variations in the measurements in the different countries in which it was applied, due to the different socio-cultural contexts. The authors of the TCA themselves acknowledge that the pattern identified as reliable and provides evidence of validity for the tripartite authoritarianism scale in New Zealand, the United States and Israel may not be universal (Duckitt et al., 2010). Measurements in Romania (Duckitt et al., 2010) and later in Serbia (Duckitt & Bizumic, 2013), despite showing adequate psychometric indicators, yielded certain differences that could be explained by the particular socio-political conditions of each country. From this arose the need to test a larger number of items and choose the best model in terms of internal structure.

For this same reason, in this adaptation of the ACT-V12, the indication of the original scale regarding the inclusion of items, both for and against, of the different ways in which individual autonomy must be subordinated to the requirements of collective authority and order (Duckitt et al., 2010) was only partially taken into account. In the Authoritarianism dimension this indication was fulfilled, while in Traditionalism one item was included against and three in favour, and in Conservatism only items in favour of the construct were included. This was done because in this research we privileged the finding of better reliability, item-total correlations and fit of the model to the data.

Despite the psychometric evidence in favour of the ACT-V12, it has some limitations. The first is related to the sample used in this study, which was non-probabilistic, making it difficult to generalise the results to the general population. Then, it is necessary to consider the criticisms of attitude studies, related to the conformity with social desirability and the positive correction of judgments at the time of responding, in order to achieve a favourable image on the part of the subjects (Petty & Wegener, 1998); hence, it is necessary to read the results of these instruments in relation to others of a different nature. A next limitation is that the model was not cross-validated in a different sample; similarly, the absence of measures that serve as indicators of divergent validity is considered to be another limitation. Future studies would need to be able to incorporate these aspects into their design.

The results of this validation constitute a further link in the process of constructing a future scale of authoritarianism that takes into account particular aspects of the socio-historical conditions in Latin America and in particular in Chile.

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Annex A

ACT-12 Scale (short version)

Conservatism

1. Obedience and respect for authority are the most important virtues children should learn. [*Obedience and respect for authority are the most important virtues children should learn.*]
2. Our country will be great if we show respect for authority and obey our leaders. [*Our country will be great if we show respect for authority and obey our leaders.*]
3. The real keys to the "good life" are respect for authority and obedience to those who are in charge. [*The real keys to the "good life" are respect for authority and obedience to those who are in charge.*]
4. The authorities should be obeyed because they are in the best position to know what is good for our country. [*The authorities should be obeyed because they are in the best position to know what is good for our country.*]

Traditionalism

5. The radical and sinful new ways of living and behaving of many young people may one day destroy our society. [*The radical and sinful new ways of living and behaving of many young people may one day destroy our society.*]
6. Trashy magazines and radical literature in our communities are poisoning the minds of our young people. [*Trashy magazines and radical literature in our communities are poisoning the minds of our young people.*]
7. It is important to preserve traditional values and moral standards. [*It is important that we preserve our traditional values and moral standards.*]
8. People should pay less attention to the Bible and the other old-fashioned forms of religious guidance, and instead develop their own personal standards of what is moral and immoral (R). [*People should pay less attention to the Bible and the other old-fashioned forms of religious guidance, and instead develop their own personal standards of what is moral and immoral (R).*]

Authoritarianism

9. Being kind to loafers or criminals will only encourage them to take advantage of your weakness, so it's best to use a firm, tough hand when dealing with them. [*Being kind to loafers or criminals will only encourage them to take advantage of your weakness, so it's best to use a firm, tough hand when dealing with them.*]
10. Our prisons are an appalling disgrace. Criminals are people who deserve more humane treatment, rather than so much punishment (R). [*Our prisons are a shocking disgrace. Criminals are unfortunate people who deserve much better care, instead of so much punishment (R).*]
11. The way things are going in this country, it's going to take a lot of "strong medicine" to straighten out the troublemakers, criminals, and perverts. [*The way things are going in this country, it's going to take a lot of "strong medicine" to straighten out the troublemakers, criminals, and perverts.*]
12. Capital punishment is barbaric and will never be justified (R). [*Capital punishment is barbaric and never justified (R).*]

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