

Spanish adaptation of the Left-Wing Authoritarianism Index

Diego Avendaño, University of Pécs — l3sxuw@pte.hu

Angelo Fasce, University of Coimbra.

Thomas Costello, Emory University.

Jesús Adrián-Ventura, Jaume I University.

Abstract

Notwithstanding long-simmering controversies around the construct, several studies have gathered consistent evidence of authoritarian attitudes among left-wing voters and activists. Recently, Costello et al. (2021) validated, in the English-speaking context, a three-factor scale to measure left-wing authoritarianism, as well as two shortened versions of the same scale (Costello & Patrick, 2021; composed of 39, 25 and 13 items, respectively). In this article, we used three samples (total $N = 2586$) to validate the structural and construct validity of a Spanish adaptation of these three versions. The resulting scales exhibited an analogous three-factor structure, adequate internal consistency, and convergent and discriminant validity regarding sex, religion, moral exporting, conspiracy theories, social and economic conservatism, and right-wing authoritarianism.

Key words: left-wing authoritarianism, extremism, populism, polarization, conspiracy theories.

Historically, authoritarianism had been regarded as a right-leaning concept, with most of the psychological studies over the last seven decades focused on manifestations of authoritarianism in politically conservative individuals and groups. According to this long-standing view, authoritarian individuals would most likely be ideologically conservative, endorsing traditional values, lifestyles and religious orthodoxy, as well as exhibiting positive attitudes toward established authorities and punitive forms of social control (Duckitt, 2010)—a cluster of social attitudes that would represent the expression of motivational goals for attaining collective cohesion and security at the expense of individual autonomy (Duckitt, Bizumic, Krauss, & Heled, 2010). The existence of left-wing authoritarianism, by contrast, has remained a matter of controversy (Conway, Houck, Gornick, & Repke, 2017).

The most widely used model for authoritarianism was developed by Altemeyer (1981), and it comprises three dimensions: *Aggression*, which refers to a disposition to intentionally cause harm to an individual or group, believing that authorities approve it or that it will help preserve such authorities; *Submission*, which refers to the willingness to accept authorities' assertions and actions without further incentive, and the belief that such authorities should be trusted and deserve obedience; and *Conventionalism*, which refers to a strong endorsement of the traditions and norms in one's society. In our view, the observed rightist cast among authoritarian individuals might be a consequence of an ideological bias within this theoretical model. Indeed, recent research has reported substantial authoritarian attitudes among left-wing voters in a wide variety of samples, including those drawn from the United States (Conway, Houck, Gornick, & Repke, 2017; Federico, Fisher, & Deason, 2017; Conway & McFarland, 2019; Manson, 2020) and Europe (Van Hiel, Duriez, & Kossowska, 2006; De Regt, Mortelmans, & Smits, 2011). Additionally, left-wing

authoritarianism may be present in the Spanish-speaking context (Fasce & Avendaño, 2020), with prominent authors observing a “reactionary drift” within Spanish-speaking leftist movements and parties (Ovejero, 2018).

In this article, we carry out the validation of a Spanish adaptation of the Left-Wing Authoritarianism Index, originally developed in English by Costello, Bowes, Stevens, Waldman, and Lilienfeld (2021) and shortened by means of item response theory and machine learning by Costello and Patrick (2021), yielding full (39-items) and abbreviated (25- and 13-items) versions. To this end, we introduce the Spanish-language translation of these measures and investigate their psychometric and construct validation properties in three large samples. Specifically, we use Exploratory Structural Equation Modelling (ESEM) to test the internal structure of the Spanish adaptations, as well as external validity analyses and intergroup comparisons to test the convergent and discriminant validity of the Spanish adaptations (i.e., regarding sex, religion, moral exporting, conspiracy ideation, social and economic conservatism, and right-wing authoritarianism).

Previous measures of left-wing authoritarianism

The first attempt to conceptualize and measure left-wing authoritarianism reported in existing literature was put forth by Altemeyer (1996), who described left-wing authoritarianism as the three dimensions of his right-wing authoritarianism model (i.e., Aggression, Submission, Conventionalism) in service of overturning, rather than defending, the present hierarchy. This approach may have been premature—there is little evidence supporting the idea that authoritarianism among leftists perfectly mirrors authoritarianism among rightists (e.g., presents the same factor structure as among conservatives). In

addition, psychometric shortcomings of Altemeyer's scale on right-wing authoritarianism—exported to his left-wing, parallel version—have been consistently emphasized by researchers in the field (e.g., multi-barreled items and the confounding of ideology and authoritarianism; Duckitt, Bizumic, Krauss & Heled, 2010).

Other scales come from studies in which researchers have developed *ad-hoc* measures of left-wing authoritarianism, focused on specific target populations. For instance, Van Hiel, Duriez and Kossowska (2006) evaluated samples of Flemish political activists from far-left organizations (particularly communist and anarchist organizations), using a bifactor scale comprising leftist forms of authoritarian submission and aggression. De Regt, Mortelmans and Smits (2011) derived items from the European Values Study to develop a three-factor scale to evaluate samples from 13 ex-communist Eastern European countries. Although these two scales showed satisfactory internal consistency and goodness of fit, their main limitations lie in their specificity to post-Soviet populations, such that they might be expected to exhibit low structural and external validity for dissimilar socio-political contexts. As only a handful of Spanish-speaking populations have been governed under the premise of Marxism-Leninism, we did not consider these scales appropriate to measure left-wing authoritarianism in the 24 countries in which Spanish is, nationally or regionally, an official language.

Another scale to measure left-wing authoritarianism was developed in Conway, Houck, Gornick and Repke (2017). Conway et al. wrote parallel items from Altemeyer's scale for right-wing authoritarianism, keeping the item structure while changing its domain content to assess the acceptance of liberal authoritarian leaders and the radical endorsement of causes that left-wingers would support, such as environmental protection or abolishing traditional values. This unifactorial scale had satisfactory internal consistency and validity

regarding authoritarianism-related constructs, such as prejudice and dogmatism, in a sample from the United States. The same scale has been used to assess left-wing authoritarianism among Spanish-speaking individuals in Fasce and Avendaño (2020), replicating the previously observed unifactorial structure, with high internal consistency. Nevertheless, as Conway et al.'s scale was designed to be used as a single score for comparison purposes, it does not reflect a domain-specific model of left-wing authoritarianism and reiterates the psychometric problems of Altemeyer's right-wing authoritarianism scale (Nilsson & Jost, 2020).

Costello, Bowes, Stevens, Waldman, and Lilienfeld (2021) have recently made an important contribution on the subject. Across six samples, they developed and tested a novel, multidimensional conceptualization and measure of left-wing authoritarianism in a manner largely consistent with best practices for construct and scale development. Per this model, left-wing authoritarianism comprises three moderately correlated dimensions: *Anti-Hierarchical Aggression*, the disposition to violently overthrow and punish established structures of authority and power; *Anti-Conventionalism*, a sense of moral superiority and desire for ingroup ideological uniformity; and *Top-Down Censorship*, the motivation to wield group authority to coercively and punitively regulate non-conforming and/or characteristically non-left-wing ideology and behaviors. This tripartite structure can be situated within a nomological network reflecting coercive group behavior, cognitive rigidity, overvaluation of status hierarchies, and moral absolutism (Costello et al., 2021), manifested in the endorsement of authoritarian policies and opposition to fundamental civil liberties and rights (Manson, 2020; Fasce & Avendaño, 2021).

In our view, Costello and colleagues' Left-wing Authoritarianism Index constitutes the most comprehensive and well-founded measure of the construct. As such, it is a strong

candidate for tests of cross-cultural validity and might plausibly be expected to shed light on illiberal agendas within left-wing parties and movements outside of the United States (e.g., Campbell & Manning, 2018; Lukianoff & Haidt, 2018). Indeed, Costello and colleagues' conceptualization is in line with the observable socio-political landscape of Spain and Latin America—as well as with that of the Spanish-speaking population of the United States, where the original English version of the scale was validated. For example, there have been widely documented instances of authoritarian behavior reflecting anti-hierarchical aggression, top-down censorship and anti-conventionalism, such as violent protests in Argentina (Clarín, 2017) and boycotts against scholars and conservative politicians in universities (El Mundo, 2019; La Vanguardia, 2019). Hence, we consider the Left-wing Authoritarianism Index to be the best candidate to measure the construct within the current Spanish-speaking context.

Spanish versions of the Left-Wing Authoritarianism Index

Adaptation and back translation of items

The 39-item Left-Wing Authoritarianism Index was translated from English to Spanish by two native speakers of Spanish with a high level of English proficiency, and then compared by a third researcher assisting as a referee. The three translators (from Colombia, Peru and Spain) agreed that the translations were satisfactorily accurate and avoided the use of idioms or country-specific expressions (i.e., so that the scale is fully understandable by any Spanish speaker). Subsequently, for purposes of cross-validation, two native English speakers with a high level of Spanish proficiency back-translated the items to English (these back-translations are displayed in Table S1). Lastly, the first author

of Costello et al. (2021) carefully reviewed the back-translations and approved the adaptation of the contents.

The following items with context-dependent content were slightly adapted to be comprehensible for the Spanish-speaking public outside of the United States:

- In item 4 (“America would be much better off if all of the rich people were at the bottom of the social ladder”), the word “America” was replaced by “my country”.

- In item 12 (“If a few of the worst Republican politicians were assassinated, it wouldn't be the end of the world”), the phrase “Republican politicians” was replaced by “right-wing politicians”.

- In item 25 (“There is nothing wrong with Bible camps”), the expression “Bible camps” was replaced by “Christian camps or retreats for children”. There is no direct translation for this expression, given that spiritual retreats in buildings linked to Christian churches (in particular, to the Catholic Church) are generally more common than camps in Spain and Latin America.

- In item 26 (“I hate being around non-progressive people”), the expression “non-progressive people” was replaced by “conservative people” as there is no clear distinction in the Spanish-speaking context between progressive and non-progressive left-wing movements. In addition, in some countries, the adjective “progressive” is not uniquely linked to left-wing movements, so there are conservative parties that include it in the name—for example, *Alliance for Progress* in Peru and *National Progressive Force* in the Dominican Republic.

- In item 36 (“Fox News, right-wing talk radio, and other conservative media outlets should be prohibited from broadcasting their hateful views”), the phrase “Fox News, right-

wing talk radio, and other conservative media outlets” was replaced by “right-wing television, radio and other media programs”.

- In item 39 (“Neo-Nazis ought to have a legal right to their opinions”), the expression “legal right” was replaced by “right” as the legal framework of each country is highly variable and far-right extremists may already have the legal right to express their opinions. Therefore, we opted for a broader definition of “right”, which also includes moral conceptions and administrative regulations applicable to, among others, universities and mass media.

Participants and measures

In each of the three samples, Spanish and Latin American participants were recruited through Twitter and Facebook groups with distinctive political profiles on social conservatism, neoliberalism, feminism, left-wing politics and social justice. We also received help from journalists and YouTubers, who kindly invited their followers to participate. The scales were administered via Google Forms and no rewards were offered in exchange for completing the study. The political heterogeneity of these samples, which include members of the far-left and far-right, provides an additional, if informal, test of the generalizability of Costello and colleagues’ measure and model (which was developed using a mix of online convenience samples and U.S. nationally representative samples). To achieve an adequate level of political heterogeneity, throughout the data gathering process we selected the new groups in which to share the questionnaire based on the descriptive statistics of the Political Orientation variable, to focus on areas of the political spectrum that were underrepresented. As a result, participants’ Political Orientation exhibited proper variability and normal distribution across the three samples (Sample 1: skewness = -0.07,

kurtosis = -0.85; Sample 2: skewness = 0.10, kurtosis = -0.77; Sample 3: skewness = 0.08, kurtosis = -0.76). Moreover, detailed information regarding the nationality of the participants can be found in Table S2.

Sample 1

Sample 1 was composed of 1315 participants: 624 (47%) were men and 691 (53%) were women, with an average age of 29.44 years (SD : 10.59); 886 (67%) self-identified as non-religious (atheist or agnostic) and 429 (33%) as religious (practicing or non-practicing); moreover, 260 (20%) had pre-university education and 1055 (80%) had university education.

Participants indicated their Political Orientation using a 10-point Likert item representing the left-right political spectrum ($M = 5.69$, $SD = 2.48$). To assess its internal structure, in the first sample we only included the 39-item Left-Wing Authoritarianism index (Costello, Bowes, Stevens, Waldman & Lilienfeld, 2021; $M = 75.74$, $SD = 25.55$; $\alpha = 0.94$; Likert: 1-5; M and SD of each item can be found in Table S3).

Sample 2

Sample 2 was composed of 369 participants: 269 (73%) were men and 100 (27%) were women, with an average age of 36.24 years (SD : 12.25); 291 (79%) self-identified as non-religious (atheist or agnostic) and 78 (21%) as religious (practicing or non-practicing); 90 (24%) had pre-university education and 279 (76%) had university education.

In this second sample, we also used the 39-item Left-Wing Authoritarianism index ($M = 80.25$, $SD = 26.51$; $\alpha = 0.95$; Likert: 1-5; M and SD of each item can be found in Table S3) and the 10-point Likert item on Political Orientation ($M = 4.88$, $SD = 2.33$). In addition, we included a 4-item scale on Moral Exporting from Peterson, Smith, Tannenbaum, and Shaw (2009; $M = 11.45$, $SD = 3.37$; $\alpha = 0.59$; Likert: 1-5), understood as

the willingness to actively promote the proliferation of one's own morality to other people (e.g., "When I meet someone who doesn't share the moral values that are important to me, I take the time to explain my views in an effort to convince them that they are worth living by"). Lastly, to measure Conspiracy Mentality among participants, we used a 5-item scale developed in Bruder, Haffke, Neave, Nouripanah & Imhoff (2013; $M = 16.79$, $SD = 4.15$; $\alpha = 0.80$; Likert: 1-5). This scale assesses participants' susceptibility to endorse explanations of social and political phenomena that are based on conspiracy theories (e.g., "I think that events which superficially seem to lack a connection are often the result of secret activities").

Sample 3

Sample 3 was composed of 902 participants: 679 (75%) were men and 223 (25%) were women, with an average age of 34.49 years ($SD: 12.04$); 668 (74%) self-identified as non-religious (atheist or agnostic) and 234 (26%) as religious (practicing or non-practicing); moreover, 256 (28%) had pre-university education and 646 (72%) had university education.

In this third sample, we used the 39-item Left-Wing Authoritarianism Index ($M = 77.80$, $SD = 23.64$; $\alpha = 0.94$; M and SD of each item can be found in Table S3), as well as the 10-point Likert item on Political Orientation ($M = 5.43$, $SD = 2.20$). We also included Everett's (2013) 11-item¹ measure of Social ($M = 21.11$, $SD = 6.13$; $\alpha = 0.85$; Likert: 1-7) and Economic ($M = 12.71$, $SD = 3.60$; $\alpha = 0.67$; Likert: 1-7) Conservatism, where participants indicated the extent to which they felt positive or negative regarding issues such as abortion or welfare benefits. Additionally, to measure Right-Wing

¹ Exploratory Factor Analysis allowed us to discard one problematic item ("fiscal responsibility"; loading < 0.32) from its original 12-item form.

Authoritarianism, we used the 18-item Aggression-Submission-Conventionalism scale (Dunwoody & Funke, 2016; $M = 46.53$, $SD = 8.26$; $\alpha = 0.75$; Likert: 1-5; e.g. “It is necessary to use force against people who are a threat to authority”).

Results

Skewness and kurtosis

Given that particular attention was given to skewness and kurtosis in the original validation of the scale, these parameters were checked in all the three samples. Four items (11, 12, 13, and 21) showed consistent non-normal distributions across the samples (skewness $> |2.0|$ and kurtosis $> |7.0|$). Nevertheless, only one of them (item 21) was included in the 25-item version—and the skewness and kurtosis values of this item were close to the established threshold (highest values were 2.77 and 7.83, respectively)—, while all items included in the 13-item version presented a normal distribution. We attribute these four cases of non-normal distribution to expectable cultural variation between the U.S. and the international Spanish-speaking context, as well as to the particularly extreme content of those items—e.g., item 12 (“It wouldn’t be so bad if some of the worst right-wing politicians were assassinated”) and item 13 (“I would prefer a far-left leader with absolute authority over a right-wing leader with limited power”). Despite this, these four items showed adequate factor loadings in subsequent analyses, thus showing to be meaningful for psychometric purposes.

Structural validity

Mirroring Costello et al. (2021), we used Exploratory Structural Equation Modeling (ESEM) as a confirmatory test to examine each of the three scale versions across the three samples. We used Mplus (version 7) to test if the three-factor structure found in the original

scale (i.e., Anti-Hierarchical Aggression, Anti-Conventionalism, and Top-Down Censorship) satisfactorily explained the structure of the Spanish versions. Following the development of the original scale, we used the WLSMV estimator and target rotation, with each item “targeted” to load onto its intended factor while allowing cross-loadings onto the other two factors. To evaluate model fit, we took into consideration the most used cut-off values for acceptable goodness of fit indices: Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) close to 0.95 or greater, and Root Mean Square Error of Approximation (RMSEA) close to 0.06 or below (Brown, 2015). Although we report the chi-square test, it should be noted that its sensitivity to sample size often makes it prone to reject valid models based on the detection of any trivial misspecification, thus increasing type II error (Sarlis, Satorra, & van der Veld, 2009)—hence, we address it with caution.

Table 1

Fit indices of the three versions of the scale across the three samples.

		χ^2 (df)	$\chi^2 p$	TLI	CFI	RMSEA [90% CI]
LWA-39	Sample 1	2352.69 (627)	< 0.001	0.96	0.97	0.046 [0.044 – 0.048]
	Sample 2	1070.16 (627)	< 0.001	0.98	0.98	0.044 [0.039 – 0.048]
	Sample 3	1764.08 (627)	< 0.001	0.95	0.96	0.045 [0.042 – 0.047]
LWA-25	Sample 1	1007.70 (228)	< 0.001	0.97	0.98	0.051 [0.048 – 0.054]
	Sample 2	487.43 (228)	< 0.001	0.98	0.98	0.057 [0.050 – 0.063]
	Sample 3	854.79 (228)	< 0.001	0.96	0.97	0.055 [0.051 – 0.059]
LWA-13	Sample 1	143.47 (42)	< 0.001	0.99	0.99	0.043 [0.035 – 0.051]
	Sample 2	89.10 (42)	< 0.001	0.98	0.99	0.055 [0.039 – 0.071]
	Sample 3	143.71 (42)	< 0.001	0.98	0.99	0.052 [0.043 – 0.061]

As can be seen from Table 1, ESEM analyses revealed excellent fit indices for the three factors described in the original 39-item LWA index on each of the three samples, thus confirming the three-factor structure in the Spanish version of the scale (factor loadings for each item are displayed in Table 2). Moreover, ESEM also revealed excellent

fit indices for both the 25-item and the 13-item short versions (factor loadings for these shortened forms are reported in tables S4 and S5). We observed 4 items (14, 15, 19, 23) with factor loadings below 0.30 in the Anti-Conventionalism factor in Sample 1. However, as this pattern did not replicate in the other two samples, we opted for retaining these items.

Table 2

Item loadings of the 39-item version of the Left-Wing Authoritarianism Index.

Item	Sample 1			Sample 2			Sample 3		
	AHA	AC	TDC	AHA	AC	TDC	AHA	AC	TDC
1	0.83	0.28	-0.06	0.92	0.31	-0.32	0.39	0.71	-0.09
2	0.82	0.31	-0.08	0.86	0.39	-0.34	0.42	0.67	-0.08
3	0.63	0.07	0.13	0.62	-0.05	0.24	0.47	0.18	0.20
4	0.68	0.21	0.11	0.69	0.15	0.06	0.50	0.36	0.09
5	0.63	0.14	0.00	0.77	-0.33	0.25	0.68	-0.16	0.09
6	0.74	0.15	-0.02	0.58	0.23	-0.04	0.53	0.34	-0.04
7	0.60	0.04	0.02	0.61	-0.12	0.02	0.53	-0.10	-0.17
8	0.44	-0.10	0.07	0.47	-0.07	0.05	0.48	-0.08	-0.09
9	0.58	0.04	0.17	0.58	0.03	0.13	0.74	-0.15	0.05
10	0.64	0.04	0.12	0.53	0.23	0.11	0.46	0.12	0.19
11	0.50	0.22	0.11	0.52	0.07	0.37	0.43	0.19	0.31
12	0.58	0.32	0.03	0.62	0.02	0.14	0.72	0.02	0.06
13	0.52	0.34	0.11	0.41	0.17	0.28	0.45	0.15	0.28
14	0.11	0.20	0.63	0.10	0.44	0.32	0.09	0.33	0.44
15	0.15	0.19	0.49	0.00	0.65	0.03	-0.05	0.56	0.14
16	0.45	0.43	0.19	0.20	0.63	0.17	0.32	0.50	0.19
17	0.28	0.37	0.36	0.19	0.55	0.10	0.09	0.55	0.26
18	0.30	0.31	0.38	0.22	0.53	0.10	0.28	0.42	0.14
19	0.30	0.29	0.40	0.17	0.56	0.19	0.13	0.52	0.26
20	0.48	0.49	0.07	0.22	0.55	0.18	0.50	0.34	0.10
21	0.44	0.51	0.04	0.19	0.50	0.25	0.55	0.25	0.13
22	0.40	0.42	0.22	0.22	0.66	0.04	0.33	0.45	0.23
23	0.26	0.23	0.43	0.28	0.46	0.01	0.16	0.45	0.21
24	-0.05	0.37	-0.09	-0.22	0.43	0.10	0.04	0.18	0.04
25	-0.03	0.62	-0.18	-0.16	0.68	-0.01	0.05	0.49	0.04
26	0.35	0.44	0.21	0.01	0.72	0.12	0.39	0.39	0.14
27	-0.02	-0.25	0.76	0.21	-0.25	0.71	0.11	-0.42	0.77
28	-0.17	0.06	0.95	-0.11	0.25	0.72	-0.21	0.09	0.92

29	0.04	-0.03	0.69	0.26	-0.15	0.67	0.10	-0.20	0.73
30	0.11	-0.17	0.66	0.38	-0.05	0.35	0.19	-0.14	0.50
31	0.06	-0.19	0.69	-0.01	0.05	0.49	0.01	0.01	0.57
32	0.32	0.09	0.38	0.20	0.14	0.42	0.37	0.05	0.35
33	0.07	0.36	0.60	0.00	0.31	0.64	-0.04	0.33	0.68
34	-0.01	0.12	0.76	0.00	0.24	0.64	-0.03	0.11	0.72
35	0.26	0.14	0.56	0.25	0.17	0.54	0.23	0.18	0.53
36	0.25	0.40	0.43	0.14	0.29	0.56	0.22	0.27	0.55
37	-0.33	0.47	0.05	-0.13	0.04	0.32	-0.14	0.04	0.30
38	-0.47	0.65	0.30	-0.25	0.15	0.74	-0.20	0.21	0.62
39	-0.42	0.55	0.46	-0.18	0.14	0.72	-0.28	0.23	0.70

Note: AHA (Anti-Hierarchical Aggression) is composed of items 1-13; AC (Anti-Conventionalism) is composed of items 14-26; TDC (Top-Down Censorship) is composed of items 27-39

Internal consistency

Means, standard deviations, Cronbach's alpha and correlations for each version of the scale across the three samples are reported in Table 3. The three factors showed good internal consistency in all cases, with Cronbach's alpha values ranging from 0.85 to 0.90 in the 39-item version, from 0.83 to 0.88 in the 25-item version, and from 0.74 to 0.82 in the 13-item version. Moreover, the factors of the 25- and 13-item forms were strongly correlated with their respective full versions (correlation coefficients ranging from 0.92 to 0.97, $p < 0.001$).

Table 3.

Means, standard deviations, Cronbach's alphas, and correlations with the full factors across the three samples.

Sample 1	LWA-39			LWA-25			LWA-13		
	AHA	AC	TDC	AHA	AC	TDC	AHA	AC	TDC
Alpha	0.89	0.89	0.85	0.88	0.87	0.84	0.81	0.82	0.79
Mean (<i>SD</i>)	20.39 (8.41)	25.94 (10.25)	29.40 (10.33)	14.03 (6.39)	17.49 (7.71)	20.34 (8.14)	7.51 (3.63)	9.34 (4.68)	10.80 (5.01)
Correlation with full factor	-	-	-	0.97	0.95	0.97	0.93	0.93	0.92
Sample 2	LWA-39			LWA-25			LWA-13		
	AHA	AC	TDC	AHA	AC	TDC	AHA	AC	TDC
Alpha	0.89	0.90	0.88	0.87	0.87	0.87	0.80	0.80	0.80
Mean (<i>SD</i>)	22.07 (8.45)	29.32 (10.80)	28.86 (10.51)	15.54 (6.50)	19.98 (7.84)	19.96 (7.96)	8.16 (3.66)	10.89 (4.69)	10.45 (4.76)
Correlation with full factor	-	-	-	0.97	0.96	0.97	0.94	0.93	0.92
Sample 3	LWA-39			LWA-25			LWA-13		
	AHA	AC	TDC	AHA	AC	TDC	AHA	AC	TDC
Alpha	0.85	0.89	0.86	0.83	0.85	0.84	0.74	0.76	0.77
Mean (<i>SD</i>)	21.41 (7.25)	27.84 (9.82)	28.55 (9.79)	15.06 (5.64)	19.19 (7.09)	19.94 (7.52)	7.95 (3.24)	10.38 (4.31)	10.69 (4.61)
Correlation with full factor	-	-	-	0.96	0.96	0.97	0.92	0.92	0.92

Note: AHA = Anti-Hierarchical Aggression; AC = Anti-Conventionalism; TDC = Top-Down Censorship.

Convergent and discriminant validity

To assess the convergent and discriminant validity of the three Spanish versions of the scale, we carried out six predictions based on well-established background knowledge about left-wing authoritarianism:

1) Based on Manson (2020; $d = -0.26$), we predicted that Left-Wing Authoritarianism is higher among women.

2) Based on Fasce & Avendaño (2020; $d = -0.76$), we predicted that Left-Wing Authoritarianism is higher among non-religious individuals.

3) Based on Costello et al.'s (2021) results on social vigilantism ($r > 0.30$)², we predicted that Left-Wing Authoritarianism is positively associated with Moral Exporting.

4) Based on Costello et al. (2021; effect sizes ranging from 0.08 to 0.20), we predicted that Left-Wing Authoritarianism is positively associated with Conspiracy Mentality.

5) Based on Conway, Houck, Gornick, and Repke's (2017) results on support for political liberalism ($r = 0.59$), Conway and McFarland's (2019) results on support for the Republican Party (effect sizes ranging from -0.24 to -0.40), Costello et al. (2021; effect sizes ranging from -0.23 to -0.60), and Fasce and Avendaño (2020; effect sizes ranging from -0.58 to -0.59), we predicted that Left-Wing Authoritarianism is negatively associated with Social and Economic Conservatism.

6) Based on Fasce and Avendaño (2020; $r = -0.32$), and Manson (2020; $r = -0.28$), we predicted that Left-Wing Authoritarianism is negatively associated with Right-Wing Authoritarianism.

As expected by our first and second predictions, in the three samples, levels of left-wing authoritarianism were consistently higher among women (for the 39-item version of the scale: $d = 0.25, 0.71, \text{ and } 0.50$, respectively) and non-religious participants (for the 39-item version of the scale: $d = 0.34, 0.39, \text{ and } 0.41$, respectively). In Table 4, we report both zero-order and partial correlations controlling for Political Orientation between the 39-item version of the scale and the predicted variables—equivalent tables for the 25- and 13-item versions, with very similar results in terms of effect size and statistical significance, can be found in tables S6 and S7. In Sample 2, after controlling for Political Orientation, the full

² Being conceptually related to Moral Exporting, social vigilantism is defined as one's tendency to propagate one's own beliefs, perceived as superior, onto more 'ignorant' others (Saucier & Webster, 2010).

Left-Wing Authoritarianism scale was positively correlated to Moral Exporting ($r = 0.22, p < 0.001$), whereas the Anti-Hierarchical Aggression factor was positively correlated to Conspiracy Mentality ($r = 0.25, p < 0.001$). In Sample 3, Left-Wing Authoritarianism showed negative simple correlations with Social Conservatism ($r = -0.55, p < 0.001$), Economic Conservatism ($r = -0.60, p < 0.001$), and Right-Wing Authoritarianism ($r = -0.30, p < 0.001$). All these results were in line with our predictions and, consequently, suggest robust convergent and discriminant validity for the Spanish version.

Table 4.

Zero-order and partial correlations between the 39-item Left-Wing Authoritarianism Index and the predicted variables

		LWA-39	AHA-39	AC-39	TDC-39
Sample 2	Moral Exporting	0.15* (0.22*)	0.16* (0.22*)	0.12 (0.20*)	0.12 (0.15*)
	Conspiracy Mentality	0.05 (0.14*)	0.15* (0.25*)	-0.05 (0.03)	0.05 (0.10)
	Social Conservatism	-0.55* (-0.26*)	-0.37* (-0.11*)	-0.67* (-0.41*)	-0.38* (-0.14*)
Sample 3	Economic Conservatism	-0.60* (-0.33*)	-0.41* (-0.16*)	-0.59* (-0.26*)	-0.54* (-0.37*)
	Right-Wing Authoritarianism	-0.30* (-0.04)	-0.19* (0.03)	-0.44* (-0.20*)	-0.15* (-0.06)

Note: LWA = Total score of the Left-Wing Authoritarianism Index, AHA = Anti-Hierarchical Aggression, AC = Anti-Conventionalism, TDC = Top-Down Censorship. Partial correlation coefficients between parentheses (controlling for Political Orientation). Values in bold survived Bonferroni correction for multiple comparisons at the $p < 0.05$ threshold. * $p < 0.01$.

Discussion

Across three large samples, we have examined the validity of three Spanish adaptations of the Left-Wing Authoritarianism Index. Exploratory structural equation modeling revealed that these versions exhibit psychometric properties analogous to the original English scale, such as a three-factor structure and optimal levels of internal consistency. We also report evidence of convergent and discriminant validity regarding associations with sociodemographic variables (sex and religiosity), moral exporting, conspiracy mentality, social and economic forms of conservatism, and right-wing authoritarianism. We believe that the full, 39-item version might be useful in studies whose aim is to explore the conceptual boundaries of LWA in the Spanish-speaking context, since it is still an under-researched construct. However, we also recommend researchers to administer the short versions in a variety of research contexts, as they can provide reliable measurement in data collection processes that might involve time constraints.

We would like to remark on some limitations of the reported results. Firstly, these samples were composed of a higher number of university-educated and non-religious participants—and males, in the second and third samples. These asymmetries should be taken into consideration in the future to assess if they affected our results. Secondly, there is high variability between Spanish-speaking countries. In this regard, as most of the participants in our three samples stem from Spain (sample 1 = 70%; sample 2 = 77%; sample 3 = 79%)—a Western, Educated, Industrialized, Rich, and Democratic country (WEIRD; Henrich, Heine, & Norenzayan, 2010)—the extrapolation of these results to non-WEIRD populations should still be addressed with caution. Future studies on potential

disparities in left-wing authoritarianism among Spanish-speaking countries would be very welcome.

Concluding remarks

Left-wing authoritarianism has seen growing scientific scrutiny in recent years. In this article, we have validated three Spanish adaptations, with different lengths, of the Left-Wing Authoritarianism Index. These Spanish versions show an analogous factor structure, proper internal consistency, and convergent and discriminant validity. We encourage researchers to use these scales in socio-psychological studies in order to measure authoritarian attitudes among samples of left-wing voters. Such studies would help to shed light on the current sources of illiberalism in Spanish-speaking countries, including left-wing populism, identity politics and hybrid regimes.

Data availability statement

The data and Supplementary Materials are openly available at: <https://osf.io/xa7g6/>

References

- Altemeyer, B. (1981). *Right-wing authoritarianism*. Winnipeg: University of Manitoba Press.
- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge: Harvard University Press.
- Brown, T. (2015). *Confirmatory factor analysis for applied research*. New York: Guilford publications.
- Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy Mentality Questionnaire. *Frontiers in Psychology*, 4, 225. doi: 10.3389/fpsyg.2013.00225
- Campbell, B., & Manning, J. (2018). *The rise of victimhood culture: Microaggressions, safe spaces, and the new culture wars*. London: Palgrave Macmillan.
- Clarín (2017). *Hubo fuego, golpes y tensión Incidentes frente a la Catedral, tras la marcha por el Día de la Mujer*. Retrieved from: https://www.clarin.com/sociedad/incidentes-frente-catedral-marcha-dia-mujer_0_ByiWIMCql.html
- Conway, L., & McFarland, J. (2019). Do right-wing and left-wing authoritarianism predict election outcomes?: Support for Obama and Trump across two United States presidential elections. *Personality and Individual Differences*, 138, 84-87. doi: 10.1016/j.paid.2018.09.033
- Conway, L., Houck, S., Gornick, L., & Repke, M. (2017). Finding the Loch Ness Monster: Left-Wing Authoritarianism in the United States. *Political Psychology*. doi: 10.1111/pops.12470

- Costello, T., Bowes, S., Stevens, S., Waldman, I., & Lilienfeld, S. (2021). Clarifying the Structure and Nature of Left-Wing Authoritarianism. *Journal of Personality and Social Psychology*. In press.
- Costello, T., & Patrick, C. (2021). Development and Initial Validation of Two Brief Measures of Left-wing Authoritarianism: A Machine Learning Approach. doi: 10.31234/osf.io/tz2py
- De Regt, S., Mortelmans, D., & Smits, T. (2011). Left-wing authoritarianism is not a myth, but a worrisome reality. Evidence from 13 Eastern European countries. *Communist and Post-Communist Studies*, 44(4), 299–308. doi: 10.1016/j.postcomstud.2011.10.006
- Duckitt, J. (2010). Right Wing Authoritarianism. In J. M. Levine & M. A. Hogg, (Eds.), *Encyclopedia of group processes and intergroup relations*, (pp. 706-707). California: SAGE Publications.
- Duckitt, J., Bizumic, B., Krauss, S. W., & Heled, E. (2010). A tripartite approach to right-wing authoritarianism: The authoritarianism-conservatism-traditionalism model. *Political Psychology*, 31(5), 685-715. doi: 10.1111/j.1467-9221.2010.00781.x
- Dunwoody, P., & Funke, F. (2016). The aggression-submission-conventionalism scale: Testing a new three factor measure of authoritarianism. *Journal of Social and Political Psychology*, 4(2), 571-600. doi: 10.23668/psycharchives.1741
- El Mundo (2019). *Boicot de feministas a un profesor universitario en Cataluña: "Me llamaron machista y transfóbico sin haber hablado"*. Retrieved from: <https://www.elmundo.es/espana/2019/12/21/5dfd51a0fdddf9e958b4660.html>
- Everett, J. (2013). The 12-item social and economic conservatism scale (SECS). *PloS ONE*, 8(12), e82131. doi: 10.1371/journal.pone.0082131

- Fasce, A., & Avendaño, D. (2020). Opening the can of worms: A comprehensive examination of authoritarianism. *Personality and Individual Differences*, 163, 110057. doi: 10.1016/j.paid.2020.110057
- Fasce, A., & Avendaño, D. (2021). Civil liberties at the crossroads: Libertarian and illiberal attitudes among politically charged online groups. Pre-print.
<https://doi.org/10.31234/osf.io/7kb5v>
- Federico, C., Fisher, E., & Deason, G. (2017). The authoritarian left withdraws from politics: Ideological asymmetry in the relationship between authoritarianism and political engagement. *The Journal of Politics*, 79(3), 1010-1023. doi: 10.1086/692126
- Henrich, J., Heine, S., & Norenzayan, A. (2010). The weirdest people in the world?!. *Behavioral and Brain Sciences*, 33(2-3), 61-83. doi: 10.1017/S0140525X0999152X
- La Vanguardia. (2019). *Álvarez de Toledo, increpada al llegar a un acto constitucionalista en la UAB*. Retrieved from:
<https://www.lavanguardia.com/politica/20190411/461588654145/cayetana-alvarez-de-toledo-increpada-protestas-acto-constitucionalista-uab.html>
- Lukianoff, G. & Haidt, J. (2018). *The Coddling of the American Mind: How Good Intentions and Bad Ideas Are Setting up a Generation for Failure*. New York: Penguin Press.
- Manson, J. (2020). Right-wing Authoritarianism, Left-wing Authoritarianism, and pandemic-mitigation authoritarianism. *Personality and Individual Differences*, 167, 110251. doi: 10.1016/j.paid.2020.110251
- Nilsson, A., & Jost, J. (2020). The authoritarian-conservatism nexus. *Current Opinion in Behavioral Sciences*, 34, 148-154. doi: 10.1016/j.cobeha.2020.03.003
- Ovejero, F. (2018). *La deriva reaccionaria de la izquierda*. Barcelona: Página Indómita.

- Peterson, B., Smith, J., Tannenbaum, D., & Shaw, M. (2009). On the “exporting” of morality: Its relation to political conservatism and epistemic motivation. *Social Justice Research*, 22(2-3), 206-230. doi: 10.1007/s11211-009-0101-8
- Saris, W. Satorra, A., & van der Veld, W. (2009). Testing Structural Equation Models or Detection of Misspecifications?. *Structural Equation Modeling: A Multidisciplinary Journal*, 16(4), 561–582. doi: 10.1080/10705510903203433
- Saucier, D., & Webster, R. (2010). Social vigilantism: measuring individual differences in belief superiority and resistance to persuasion. *Personality and Social Psychology Bulletin*, 36, 19-32.
- Van Hiel, A., Duriez, B., & Kossowska, M. (2006). The Presence of Left-Wing Authoritarianism in Western Europe and Its Relationship with Conservative Ideology. *Political Psychology*, 27(5), 769–793. doi: 10.1111/j.1467-9221.2006.00532.x

Appendix

Spanish adaptation of the Left-Wing Authoritarianism Index

Item

1. Los ricos deben ser despojados de sus pertenencias y estatus.
 2. Los ricos deberían ser forzados a renunciar a prácticamente toda su riqueza.
 3. Si pudiera rehacer la sociedad, pondría en lo más bajo a las personas que actualmente tienen los mayores privilegios.
 4. Mi país estaría mucho mejor si todas las personas ricas estuvieran al final de la escala social.
 5. Cuando cambien las tornas respecto a los opresores situados en la cima de la sociedad, disfrutaré viéndolos sufrir la violencia que ellos mismos han infligido a tantos otros.
 6. La mayoría de los ejecutivos ricos de Wall Street merecen ser encarcelados.
 7. Las constituciones y las leyes son sólo otra forma para que los poderosos destruyan nuestra dignidad e individualidad.
 8. El sistema actual es irreparable.
 9. Necesitamos reemplazar el orden establecido a través de cualquier medio necesario.
 10. La violencia política puede ser constructiva cuando sirve a la causa de la justicia social.
 11. Ciertas personas de nuestra sociedad deben pagar por la violencia ejercida por sus antepasados.
 12. No sería para tanto si algunos de los peores políticos de derechas fueran asesinados.
 13. Preferiría un líder de extrema izquierda con autoridad absoluta antes que un líder de derechas con poder limitado.
 14. La ley debería exigir a las escuelas enseñar a los niños sobre nuestra historia de racismo, clasismo, machismo y homofobia.
 15. Todos aquellos que se oponen al matrimonio homosexual son homófobos.
 16. En el fondo, casi todas las personas de derechas son racistas, sexistas y homófobas.
 17. Aquellos que están tan preocupados por el terrorismo deberían prestar más atención a los chiflados de extrema derecha a los que apoyan.
 18. Las “formas y valores tradicionales” deben ser abolidos.
 19. Los valores morales radicalmente progresistas pueden salvar nuestra sociedad.
 20. La gente de derechas es imbécil.
 21. No me imagino siendo amigo de una persona de derechas.
 22. La derecha es moralmente inferior a la izquierda.
 23. Es importante que destruyamos los valores nacionalistas e imperialistas de occidente.
 24. Suelo escuchar a periodistas y medios de comunicación conservadores (R).
 25. No hay nada malo en los campamentos y retiros cristianos para niños (R).
 26. Odio estar rodeado de personas conservadoras.
 27. Las aulas de los centros de enseñanza deberían ser lugares seguros que protejan a los estudiantes de ideas perturbadoras.
 28. Las autoridades universitarias tienen razón al prohibir discursos de odio en el campus.
 29. Debería tener el derecho a no ser expuesto a puntos de vista ofensivos.
 30. Para tener éxito, el entorno laboral debe garantizar que los empleados se sientan a salvo de la crítica.
-

-
31. Debemos apoyar a líderes fuertes que tengan la voluntad de acabar con los prejuicios y la intolerancia.
 32. Cuando protegemos la "libertad de expresión", estamos defendiendo los derechos de los machistas, racistas y homófobos a costa de las personas oprimidas.
 33. Estoy a favor de permitir que el gobierno cierre páginas y blogs de derecha que promuevan ideas disparatadas y llenas de odio.
 34. Los colegios y universidades que permiten oradores que defienden opiniones intolerantes deben ser condenados públicamente.
 35. Acabar con la desigualdad es más importante que defender el supuesto "derecho" a la libertad de expresión.
 36. Los programas de televisión, radio y otros medios de comunicación de derechas deberían tener prohibido retransmitir sus puntos de vista intolerantes.
 37. Los libros que contienen racismo o lenguaje racista no deberían ser censurados (R).
 38. No apoyo que se censure a aquellos que tienen puntos de vista machistas, homófobos o racistas (R).
 39. Los neonazis deberían tener derecho a defender sus opiniones (R).
-

Note: In the full scale: Anti-Hierarchical Aggression (AHA) = items 1-13; Anti-Conventionalism (AC) = items 14-26; Top-Down Censorship (TDC) = items 27-39. In the 25-item version: AHA = items 1, 2, 3, 4, 5, 6, 7, 9, 20; AC = items 14, 15, 16, 17, 18, 19, 20, 21, 31; TDC = items 27, 28, 29, 30, 31, 33, 34, 35, 38. In the 13-item version: AHA = items 1, 4, 5, 9, 20; AC = 15, 17, 18, 20, 33; TDC = items 27, 28, 30, 33, 35. (R) = reversed encoded.