Construction and Validation of a Scale to Measure Antifeminist Attitudes

Construcción y validación de una escala para medir actitudes antifeministas

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Abstract

Background: One of the consequences of the widespread growth of feminism in the West has been the emergence of reactionary movements. These anti-feminist movements, with intense participation among young men, affirm that feminism seeks to violate male rights while reinforcing sexist and misogynistic ideals. Some people may oppose feminism due to misunderstandings about its goals, while others may hold more deeply rooted beliefs against gender equality. Despite the relevance of the topic, there are few works in general dedicated to tracing the attitudes that sustain antifeminism. Objective: The present study, conducted in Argentina, aims to build and validate an Antifeminist Attitudes Scale in Rioplatense Spanish. Method: The sample consisted of a total of 2171 subjects. A test was conducted to explore factors in one sample, followed by confirmatory analysis in another sample. Convergent validity was assessed by correlating with the Gender Role Identity scale, and gender disparities in antifeminist attitudes were examined. Results: The scale demonstrates an optimal degree of fit, good convergent validity, and a significant difference between men and women about the constructed scale. Results showed that men (vs. women) had higher scores in anti-feminism. Conclusion: The article presents the development and validation of a tool designed to assess antifeminist attitudes.

Keywords: antifeminism, scale, gender, validation.

Resumen

Antecedentes: una de las consecuencias del crecimiento generalizado del feminismo en Occidente ha sido la aparición de movimientos reaccionarios. Estos movimientos antifeministas, con una intensa participación de jóvenes varones, afirman que el feminismo busca violar los derechos masculinos mientras refuerzan ideales sexistas y misóginos. Algunas personas pueden oponerse al feminismo debido a malentendidos sobre sus objetivos, mientras que otras pueden tener creencias más arraigadas en contra de la igualdad de género. A pesar de la relevancia del tema, existen pocos estudios dedicados a rastrear las actitudes que sostienen el antifeminismo. Objetivo: el presente estudio, realizado en Argentina, tiene como objetivo construir y validar una escala de actitudes antifeministas en español rioplatense. Método: la muestra consistió en un total de 2171 sujetos. Se realizó una prueba para explorar factores en una muestra, seguida de un análisis confirmatorio en otra. Se evaluó la validez convergente correlacionando con la escala de identidad de rol de género, y se examinaron las disparidades de género en las actitudes antifeministas. Resultados: la escala demuestra un grado óptimo de ajuste, buena validez convergente y una diferencia significativa entre hombres y mujeres respecto a la escala construida. Conclusión: los resultados mostraron que los hombres (vs. mujeres) obtuvieron puntuaciones más altas en antifeminismo.

Palabras clave: antifeminismo, escala, género, validación.

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Introduction

About antifeminism

At this time, a resurgence of antifeminist mobilizations can be seen in various parts of the world (Kalm & Meeuwisse, 2023). Argentina has experienced a surge in feminism in this century, introducing new concepts in the social field. In the wake of the *Ni Una Menos* movement in 2016, terms such as «deconstruction», «integral sexual education», «sexual harassment», and «legal, safe, and free abortion» have become popularized through social media (Friedman & Rodríguez, 2023). Among the most notable effects of the feminist movement in Argentina are the legislation of the law on legal abortion and the creation of the Ministry of Women, Genders, and Diversity (Anzorena, 2021).

Issues such as the right to abortion, inclusive language, or activism in favor of women's rights have given rise to reactionary positions in the public debate (Ávila, 2023). For this reason, it is common today to see antifeminist activists declare themselves against a «supposed» gender ideology, believing that these are values promoted by an elitist minority (Bonet-Martí, 2021). Likewise, it becomes evident that they declare that feminism has exceeded its demands because, after taking over the institutions, they have silenced all opposition (Hennig, 2018).

This paper proposes considering antifeminism as a form of prejudice. Prejudice is defined as a negative attitude toward a group or social category, based on stereotyped and overgeneralized beliefs, as noted by Allport (cited in Gomez & Espinosa, 2021). In this sense, antifeminist beliefs project a simplistic and negative view of feminism and its advocates, which often leads to discrimination and the delegitimization of gender equality struggles. In addition, we can understand antifeminism as a construct that shows a clear emphasis as a product of resistance to a threat, real or perceived to the status quo, generated by changes in gender relations due to feminist movements (Maricourt & Burrell, 2022). In this way, we can conceptualize that anti-feminists tend to reject feminism by openly expressing their discontent with the feminist movement, questioning its objectives, and discrediting its achievements (Payarola, 2022). Anti-feminists show a predisposition to deny or reduce the effects of gender inequality, arguing that women have already achieved equality, and that feminism is unnecessary (Castillo et al., 2019). On the other hand, they are characterized by questioning feminist policies, emphasizing that they have gone too far, transforming cisgender men into victims and subjects of discrimination (Bonet-Martí, 2021). Antifeminism is also expressed through the stigmatization of feminism, generating negative stereotypes or ridiculing the movement, often using the Internet as the main means of dissemination (Delgado & Sánchez-Sicilia, 2023). Although this is not a condition for being anti-feminist, people who identify with such beliefs tend to join online groups where openly misogynistic and anti-feminist views on social issues are shared (Habib et al., 2022).

Therefore, although it is possible to think that antifeminism is consistent with sexist behavior and misogynistic thinking, it is not correct to encompass these terms as identical. Because it is usually found that misogynistic thoughts hide behind antifeminism, antifeminism does not necessarily have to contain contempt for women but rather emphasize their denial of the modification of gender roles because of certain prevailing policies (Castillo et al., 2019). An example of this is that not only men consider themselves antifeminists, but women also promote criticism of feminism due to the supposed «male victimization» (Díaz et al., 2023).

Sexism involves an attitude based on the supposed inferiority of women as a group. Glick and Fiske (1997) suggest that sexism takes two forms: hostility and benevolence. Hostility includes openly negative attitudes and behaviors towards women, such as discrimination and contempt. Benevolence, on the other hand, refers to seemingly positive attitudes that involve treating women in a protective or condescending manner. Since feminism challenges the stereotypes associated with women and seeks gender equality, it can generate various prejudiced reactions (Ramírez, 2023). Moreover, gender expectations are socially constructed norms and roles that dictate how people should behave and act according to their gender (Stoebenau et al., 2023). These expectations are related to antifeminism, as those who adhere to this ideology seek to maintain and reinforce traditional gender roles, opposing feminist efforts that promote gender equality and the liberation from these imposed expectations (Maricourt & Burrell, 2022).

Although traditional sexism has been extensively studied and various tools have been developed to measure them (Glick & Fiske, 1997; Villagrán et al., 2020), the current context presents new challenges. These challenges make it necessary to study how people are reacting to the changes proposed by feminism. An example of this is the strengthening of reactionary positions and anti-feminist digital cultures as a response to the media reach that the feminist movement had (Delgado & Sánchez-Sicilia, 2023). This conglomerate of forums and content that circulates on the internet has been called Manosphere (Benassini, 2022).

It has been noted that those who participate in such forums hold a stereotypical view based on a supposed 'must-be' of masculinity and femininity (Delgado & Sánchez-Sicilia, 2023). In recent years, research has been conducted using the concept of precarious manhood (Bosson et al., 2021), which explores the tendency to believe that in relation to women, men must exert more effort to gain and maintain social status. On the other hand, this 'mustbe' gender-related conception has been studied using various tools, including the Gender Role Inventory (GRI), which has been adapted for use in Argentina and measures the tendency to believe in gender role ideology (Ungaretti et al., 2013).

Dashtgard's (2022) study, which developed the Male Supremacy Scale (MSS), found a correlation between adopting an extreme right-wing ideology and the misogynistic ideas that emerge in the Manosphere. The MSS measures different variables that correspond to common factors that appear in the discourse circulating in the Manosphere. Speckhard et al. (2021), designed a questionnaire with 68 items to study adherence to incel ideology. This term corresponds to the involuntarily celibate, who are a group of individuals, primarily men, who identify as unable to find sexual or romantic partners and often express resentment toward those who do succeed in these areas (Ging, 2019). Some incels have developed extreme and harmful attitudes, leading to concerns about radicalization and violence in some cases (Hoffman et al., 2020). The results of this study show that those who consider themselves staunch misogynists are likely to endorse the desire to commit violent acts and are also likely to become more misogynistic through exposure, participation in web forums that validate their points of view (Speckhard et al., 2021). The study also shows that while many incels report experiencing a variety of psychological problems, they are reluctant to seek help from mental health professionals.

Returning to the questionnaire developed by Speckhard et al. (2021) to study incels, Hargreaves and Mooney (2023) conducted a study examining this phenomenon of psychopolitical variables. The results of this study indicate that misogyny and Right-Wing Authoritarianism positively predict adherence to incel ideology (Hargreaves & Mooney, 2023).

In the Spanish-speaking context, and moving away from the Manosphere theme, García et al. (2016) have designed the Instrument for Measuring Knowledge and Attitudes towards Feminism. This instrument aims to measure knowledge of feminism and attitudes towards it. According to this study, the greater the knowledge about feminism, the more positive the attitude towards it.

However, scales specifically measuring antifeminist attitudes, constructed within our context, are not yet reported. Therefore, the present work aims to approach the topic by potentially creating a scale to delineate and quantify the understanding of this phenomenon, which would be useful in our environment. Antifeminist attitudes play a significant role in shaping public discourse, reinforcing gender inequalities, and influencing policy decisions. A scale tailored to our social and cultural realities would provide critical insights into the prevalence and intensity of these attitudes. This, in turn, would inform interventions aimed at promoting gender equality and fostering a more inclusive society.

Our hypotheses are as follows: 1) the structure of the scale will be unidimensional given the thematic congruence of the items. 2) It will positively correlate with adherence to Gender Ideology. 3) There will be a significant difference between men and women.

Method

Research Design

The work was based on a non-experimental crosssectional design. In addition, to achieve the proposed objectives, a single-group ex post facto prospective study was conducted (Montero & León, 2007) with the purpose of analyzing the relationships between antifeminism and gender role ideology.

Sample

The sample consisted of 2117 individuals residing in Argentina, who were contacted in August 2023. The gender distribution was 50.9% (n = 1214) women and 40.9% (n = 865) men, while non-binary individuals accounted for 3.1% (n = 68) of the sample. The age range spanned from 18 to 78, with a mean age of 50.99 (SD = 16.13). Notably, the sample included participants from different regions of Argentina and with varying levels of education, ranging from incomplete primary education to university and postgraduate levels.

Instruments

Antifeminist Attitudes Scale (Escala de Actitudes Antifeministas; AAF). It was constructed to measure subjects' attitudes towards the foundations and values of antifeminism (see full version in Appendix). To develop the scale, a set of 16 questions in spanish has been created that use terms and concepts introduced by 21st-century feminism, such as 'deconstruct', 'patriarchy', 'gender policies', and 'masculine deconstruction', which have gained significant social relevance in recent years in Argentina (Friedman & Rodríguez, 2023). The items reflect the ideals and thoughts held in Antifeminist Attitudes through statements associated with rejecting feminism, the belief that men are socially disadvantaged (e.g., «La justicia suele favorecer a las mujeres» [«Justice tends to favor women»], «El feminismo se trata de oprimir a los hombres» [«Feminism is about oppressing men»]) and that it is dangerous for their legal and personal security to engage with women. Following De Minzi and De Ciuffardi's (2004) proposal, items were formulated in both positive and negative directions in a 50% proportion for each case. This approach aims to control the tendency to respond positively (acquiescence) or negatively (negativism). Each item is assessed using a 5-point Likert scale ranging from 1 = totalmente en desacuerdo [totally disagree] to 5 = totalmente de acuerdo [totally agree]. Higher scores indicate stronger antifeminist attitudes.

Gender Role Ideology Inventory (GRI). This scale measures prejudiced attitudes based on beliefs about the alleged inferiority of women as a group (Moya et al., 2006) (e.g., *«Es natural que hombres y mujeres desempeñen tareas diferente»* [«It is natural for men and women to perform different tasks»], *«Es más apropiado que la madre cambie los pañales del bebé que el padre»* [«It is more appropriate for the mother to change the baby's diapers than the father»]). In this study, the Argentine adaptation by Ungaretti et al. (2013) was used, consisting of 12 items, with five Likert-type response values ranging from ranging from 1 = totalmente en *desacuerdo* [totally disagree] to 5 = totalmente *de acuerdo* [totally agree]. Higher scores indicate stronger beliefs about gender role ideology.

Sociodemographic Questionnaire. It was designed ad hoc to gather information about the sociodemographic characteristics of the sample. It included the following variables: gender, place of residence, age, and level of education attained.

Procedure

Data collection was conducted through a selfadministered assessment instrument on a virtual platform, using SurveyMonkey. The survey consisted of a set of questions that had to be answered by the respondents. They were briefly explained the objective of the work without mentioning the hypotheses or explicitly stating what each scale measures. The survey was distributed through social networks such as Facebook. This method ensures the confidentiality of participants, preserving their anonymity throughout the research process.

Individuals who participated in this research did so voluntarily and anonymously after providing their consent. Additionally, they were provided with detailed information that the disclosure of their data would be strictly for academic and scientific purposes, in compliance with National Law 25 326 on the protection of personal data.

Data Analysis

Based on the consulted literature, a pool of 16 questions reflecting antifeminist attitudes was assembled. To ensure content validity, Aiken's V calculation was performed. Outliers were detected using robust methods (Leys et al., 2019). The Mardia's test (1970) was employed to check for multivariate normality.

The sample was divided into two subsamples. In a subsample one, consisting of 1000 participants, an Exploratory Factor Analysis (EFA) was conducted. The Kaiser-Meyer-Olkin (KMO) index and Bartlett's sphericity test were calculated to assess the adequacy of factor analysis. The MINRES method was used for component extraction based on a polychoric matrix. Finally, items with a factor loading below .40 and those exhibiting standardized residuals greater than 2.58 were eliminated.

Alternatively, subsample two was utilized for Confirmatory Factor Analysis (CFA). The Weighted Least Squares Mean and Variance adjusted (WLSMV) method was employed for this analysis. To assess the model fit, χ^2 , CFI, TLI, RMSEA, and SRMR values were considered. Finally, a factorial invariance analysis was conducted to check the consistency of the model by comparing groups based on the gender variable. Additionally, reliability analysis was conducted in both subsamples using Cronbach's alpha coefficient, the Omega coefficient, and the ordinal alpha. Convergent validity was assessed through the average variance extracted (AVE). All these analyses were conducted using the statistical software R, utilizing packages from the R Core Team (2023).

Results

Content Validity

The construction of the items in the antifeminist attitudes scale was based on a bibliographic review of qualitative studies addressing antifeminist beliefs and stereotypes. This approach allowed for the identification of common beliefs and discourses associated with antifeminist attitudes in the local context. After reviewing the literature on the subject, a total of 16 items were proposed based on statements about macho and antifeminist attitudes and beliefs. Information gathered from research articles and content distributed through Manosphere networks was used to formulate the items. To verify content validity, a panel of five experts was asked to evaluate the relevance and clarity of the items. Aiken's V measures how well survey items align with the intended construct as validated by experts (Aiken, 1985). The items were required to have an Aiken's V value of at least .70 to be considered suitable (Charter, 2003). Items that did not meet this criterion

were discarded. Therefore, four items were rejected, resulting in a total of 12 items being retained. Table 1 shows these results.

Table 1

Results of the expert judgment

Item	Criterion	Mean	SD	Aiken's V	Inf Lim.	Sup Lim.
Pienso que el género es un invento	clarity	4.20	.40	.80	.58	.92
que favorece a las minorías.	relevance	4.00	.63	.75	.53	.89
Las políticas de género sirven para	clarity	1.80	.40	.20	.08	.42
consolidar la igualdad entre los géneros.*	relevance	1.40	.49	.10	.03	.30
La sociedad estaba mucho mejor antes	clarity	4.20	.75	.80	.58	.92
de las políticas de género.	relevance	4.20	.75	.80	.58	.92
Pienso que se debe cerrar el Ministerio	clarity	3.00	.89	.50	.30	.70
de la Mujer, género y diversidad.*	relevance	2.60	.49	.40	.22	.61
El gobierno debe invertir más en	clarity	4.80	.40	.95	.76	.99
políticas de género.	relevance	5.00	0	1.00	.84	1.00
El Ministerio de la Mujer, género y	claridad	1.80	.75	.20	.08	.42
diversidad contribuye a garantizar la igualdad de género en Argentina.*	relevance	1.40	.49	.10	.03	.30
Creo que las mujeres son perjudicadas por el	clarity	4.00	0	.75	.53	.89
patriarcado en los distintos aspectos de su vida social.	relevance	5.00	0	1.00	.84	1.00
Considero que las políticas de género son	clarity	4.20	.98	.80	.58	.92
una moda que usan los políticos.	relevance	4.00	.89	.75	.53	.89
El gobierno debe generar las condiciones	clarity	2.20	.75	.30	.15	.52
propicias para una mayor igualdad de género.*	relevance	2.20	1.17	.30	.15	.52
Los hombres deben tener cuidado al	clarity	4.20	.75	.80	.58	.92
relacionarse con las mujeres.	relevance	4.00	.63	.75	.53	.89
Es recomendable relacionarse sólo	clarity	4.20	.75	.80	.58	.92
sexualmente con las personas del sexo opuesto.	relevance	4.00	.63	.75	.53	.89
Creo que el feminismo es positivo porque	clarity	4.60	.49	.90	.70	.97
vino a deconstruir nuestras actitudes sexistas.	relevance	5.00	0	1.00	.84	1.00

Item	Criterion	Mean	SD	Aiken's V	Inf Lim.	Sup Lim.
La justicia suele favorecer	clarity	4.40	.49	.85	.64	.95
a las mujeres.	relevance	4.00	.63	.75	.53	.89
El feminismo se trata de oprimir	clarity	4.40	.80	.85	.64	.95
a los hombres.	relevance	5.00	0	1.00	.84	1.00
La justicia está corrigiendo situaciones	clarity	4.60	.49	.90	.70	.97
históricamente injustas para con las mujeres.	relevance	4.60	.49	.90	.70	.97
Pienso que la deconstrucción masculina es	clarity	4.20	.40	.80	.58	.92
fundamental para el nuevo tipo de sociedad que estamos creando.	relevance	4.60	.49	.90	.70	.97

Note: * are items with values of Aiken's V eliminated because they do not reach the criterion of being greater than .7

Outliers and Multivariate Normality

Since outliers can generate inappropriate results for factor analysis, both univariate and multivariate outlier analyses have been carried out. The MAD (Median Absolute Deviation) method robustly detects outliers in univariate data using the median and absolute deviations (Leys et al., 2019), while the MCD (Minimum Covariance Determinant) method robustly identifies outliers in multivariate data by selecting a subset that minimizes covariance and utilizing the Mahalanobis distance (Domanski, 2020).

The MAD results yielded a total of 20 univariate outliers. On the other hand, the MCD results detected a total of 77 multivariate outliers. Those outliers were eliminated, forming a sample of 2075 cases.

The Mardia test (1970) demonstrated that the sample has a distribution that violates the assumption of multivariate normality. In the following, procedures were taken that take this characteristic into account to achieve adequate results.

Factorial Validity

Exploratory Factorial Analysis

First, the exploratory factor analysis was carried out on the subsample of 1000 participants, taking the

12 items that were approved by the jury. Taking into account the polychoric matrix, it was found that the inter-item bivariate correlations did not reflect an r greater than .90, so they do not present multicollinearity problems (Tabachnick & Fidell, 2012). The results of the KMO sampling adequacy index for the scale were .97, while individually the items had indices that ranged between .94 and .98, which are considered adequate (Pizarro & Martínez, 2020). The result of Bartlett's sphericity test of ($\chi^2(66) = 72.696$; p < 1) demonstrates that the items are intercorrelated, making the matrix ideal for factor analysis. So, the data from this study is ideal for detecting factor structures. On the other hand, reliability was measured by calculating Cronbach's alpha, which gave a good result ($\alpha = .93$) as did the Omega coefficient ($\omega = .94$). At the same time, the ordinal alpha was measured, the result of which was .95. Measuring ordinal alpha is important since Cronbach's alpha usually underestimates reliability and, at the same time, is the most appropriate result to calculate on ordinal scales (Contreras & Novoa-Muñoz, 2018). Finally, in terms of convergent validity, it gave good results for the value of the AVE (.65) since according to Hair et al. (2011) an AVE > .50 is considered adequate.

The results of the Parallel Analysis, Velicer's MAP, and the VSS complexity 1 criterion indicate that

the items reflect a unifactorial model. At this point, it is worth mentioning that although the VSS complexity 2 proposes a two-factor structure, we have chosen to follow the unifactor model given the evidence that supports it (Zygmont & Smith, 2014). Although the item «Los hombres deben tener cuidado al relacionarse con las mujeres» presents a factor loading of less than .40 (see Table 2), it was decided to maintain it for the final model since it theoretically corresponds to the construct studied. Finally, no item presented standardized residuals greater than 2.58.

Table 2

Factorial properties of the scale

Items	Carga Factorial
Pienso que el género es un invento que favorece a las minorías.	.86
La sociedad estaba mucho mejor antes de las políticas de género.	.92
El gobierno debe invertir más en políticas de género.	.93
Creo que las mujeres son perjudicadas por el patriarcado en los distintos aspectos de su vida social.	.86
Considero que las políticas de género son una moda que usan los políticos.	.92
Los hombres deben tener cuidado al relacionarse con las mujeres.	.38
Es recomendable relacionarse solo sexualmente con las personas del sexo opuesto.	.60
Creo que el feminismo es positivo porque vino a deconstruir nuestras actitudes sexistas.	.91
La justicia suele favorecer a las mujeres.	.75
El feminismo se trata de oprimir a los hombres.	.90
La justicia está corrigiendo situaciones históricamente injustas para con las mujeres.	.57
Pienso que la deconstrucción masculina es fundamental para el nuevo tipo de sociedad que estamos creando.	.85

Confirmatory Factor Analysis

Table 3 shows the different goodness-of-fit indexes of the confirmatory factor model for the AAF. In terms of reliability, it showed very good results both in Cronbach's alpha ($\alpha = .93$) and the Omega coefficient ($\omega = .94$). In addition, the ordinal alpha was. 95 Regarding convergent validity, the AVE is .63, which is considered adequate. As can be seen in Table 4, the CFI and TLI values are above .90, so the unifactor model fits the data well and has a good quality of fit (Jordan, 2021). At the same time, the SRMR value is less than .05, which shows that the model fit is optimal (Hu & Bentler, 1999). The RMSEA value is .072, demonstrating an adequate value, since it is below .08 (Bentler, 1992; Byrne, 2016). The last of the goodness-of-fit values is the chi-square (χ^2), which is significant (p < .05) indicating that the model does not fit adequately. However, the fact that it is not implies a very demanding criterion and depends on the size of the sample (Byrne, 2016).

Table 3	
AAF Confirmatory Factor Analysis	7

	χ^2	df	р	CFI	TLI	SRMR	RMSEA
AFF	348.693	53	.00	.99	.99	.029	.072

Note: Structural equation modeling was used for the analysis; χ^2 = Chi-square; df = degrees of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation.

Convergent Validity

Correlation Analysis

To verify the convergent validity, the GRI scale has been used, which measures the prejudiced attitude based on beliefs about the supposed inferiority of women, indicating that the higher the score, the greater the prejudice on the gender role. To check the normality of the Kolmogorov-Smirnov variables, he determined that all scales have a p < .01. The

calculation of Spearman's Rho showed a significant correlation between the variables (r = .60; p < .001) (see Table 4).

Table 4

Correlation matrix

	GRI	
AAF	.60*	
Note: * < .001		

Comparison According to Gender

To specify the characteristics of the scale according to gender, a comparison of medians was carried out using the Mann-Whitney U (see Table 5). We find that the comparison is significant for both AFF (U = 76710; p < .001) and GRI (U = 101534;

p < .001). Regarding the AAF, it can be interpreted that men (Mdn = 41; Range = 47) maintain a higher median score than women (Mdn = 31; Range = 44). Similarly, for GRI, men (Mdn = 25; Range = 41) have higher scores than women (Mdn = 20; Range = 41).

Table 5

Comparison according to gender

	Me	edian		
	Male (<i>n</i> = 851)	Female (<i>n</i> = 1156)	U	р
AFF	41	31	76710	<.001
GRI	25	20	101534	<.001

Factorial Invariance

An analysis of different groups was carried out taking gender as a variable to analyze whether the model represented adequate levels of factorial invariance. Due to their low proportion to the sample, non-binary people have not been considered, so the analysis of factorial invariance was done on the male and female genders. Table 6 shows the results of the multi-group analysis, in which changes in CFI and RMSEA were used to assess factorial invariance. It was found that these changes were within appropriate ranges, with $\Delta CFI \ge -.01$ according to Cheung and Rensvold (2002) and $\Delta RMSEA \ge .015$ according to Chen (2007), so we can affirm that the factorial invariance between groups is maintained even when the rigor is increased (Elosua, 2005). Also, a factorial invariance analysis was also conducted based on age

ranges: 18-20, 21-29, 30-39, 40-49, 50-59, and 60 or older. The results obtained were similar to those of the invariance by gender, demonstrating that factorial invariance is maintained despite the age factor (see Table 6).

Table 6

Model Fitting and Model Comparison for Gender

		Invariance	e analysis for gene	ler		
Model	χ^2 WLSMV	df	RMSEA	CFI	ΔRMSEA	ΔCFI
Configural	244.5859	108	.049	.98		
Weak	312.6983	119	.046	.98	000	.00
Strong	349.0507	130	.046	.98	.000	.00
Strict	389.4678	142	.052	.97	.000	.00
		Invarian	ce analysis for ag	e		
Model	χ^2 WLSMV	df	RMSEA	CFI	ΔRMSEA	ΔCFI
Configural	364.37	216	.051	.99	.000	.00
Weak	412.63	249	.050	.98	000	.00
Strong	472.20	282	.050	.98	.000	.00
Strict	541.46	318	.051	.98	.001	00

Note: df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; Δ CFI = change in the Comparative Fit Index; Δ RMSEA = change in the Root Mean Square Error of Approximation.

Descriptive statistics of psychometric instruments

Table 7 shows the descriptive values of the variables. We see that while the GRI had a mean of

23.9 (SD = 9.4), the AAF had a mean of 34.9 (SD = 15.2).

Table 7Descriptive statistics of AAF and GRI

	α	Scale range	M (SD)	Asymmetry	Kurtosis	Min-Max	95% IC
AAF	.92	1-5	34.9 (15.2)	004	-1.46	12-60	[34 - 35.83]
GRI	.84	1-5	23.9 (9.4)	.71	21	12-53	[23.3 - 24.4]

Discussion

The results demonstrate that the AAF is a unifactorial instrument with an acceptable goodnessof-fit (see Table 4) in addition to presenting good internal consistency (see Table 8), which allows it to be implemented to study and measure the beliefs of the antifeminist attitudes in the Argentine context. Furthermore, the study indicates good convergent validity, since greater adherence to these attitudes is positively correlated with a belief about the supposed inferiority of women as a group (GRI, see Table 6). A full version of the scale with its values can be seen in the appendix (Table 8). Notably, men measured significantly higher than women on this scale.

As can be appreciated, the items in the AAF explicitly refer to feminism and the fields in which it has gained relevance (legal matters, sexuality, deconstruction of masculinity, etc.). These phenomena are perceived by anti-feminist individuals as supposed threats to the integrity of men and as advocating preferential treatment for women. All of this stems from the belief that feminism has turned society into a pyramid system in which men are relegated to the base of the pyramid, proposing the idea that cisgender men are the true victims of society (Zehnter et al., 2021).

In addition to the belief that feminism is an encroachment on men's rights, there is also the belief that men are socially disadvantaged, with life being more difficult and unjust for the male condition (Delgado & Sánchez-Sicilia, 2023). In summary, this belief in male disadvantage suggests that men, due to certain ingrained ideals associated with their social role (parenthood, security, provision, etc.), are unfairly mistreated by society, while women purportedly enjoy social privilege (Payarola, 2022). Furthermore, it could be hypothesized that individuals with prejudices against feminism have a biased or insufficiently informed perspective. Learning more about the proposals and implications of feminism could contribute to a more positive view of it (García et al., 2016).

It is important to acknowledge certain limitations in this study. The data collection was conducted through an online application process based on self-selection. This circumstance may introduce bias in the findings, limiting the diversity of perspectives represented in the sample. Furthermore, although the analysis suggests that the AAF maintains a unifactorial structure, it is essential to consider that intentional and heterogeneous samples can influence the factorial structures of tests (Tabachnick & Fidell, 2012). Therefore, future studies should include tools that assess the degree of knowledge the sample has about feminism, which would not only allow for measuring the level of antifeminist attitudes but also for understanding the conceptions and ideas individuals hold about feminism to justify their stances.

Moreover, anti-feminist discourse is reinforced by social media and content consumption in online communities where feminism is questioned (and ridiculed), and a discourse promoting violence against women and the reinforcement of misogynistic attitudes is radicalized (Benassini, 2022). This study has the limitation that male participants were not asked about their interest in or participation in misogynist and manosphere-related virtual groups. Thus, further studies could explore social media consumption or gather samples from users in antifeminist forums, as seen in other studies (e.g., Dashtgard, 2022; Hargreaves & Mooney, 2023; Speckhard et al., 2021). Additionally, this study is limited by the fact that only one measure and gender were examined as part of the construct validity. Further elaborations, such as self-esteem, political orientation and sense of efficacy, should be explored in relation to attitudes toward feminism.

Lastly, we can say that, unlike more classical forms of sexism studied by Glick and Fiske (1997), anti-feminism occurs within the context of strengthening reactionary stances and anti-feminist digital cultures (Delgado & Sánchez-Sicilia, 2023). The AAF can be a useful tool to investigate this emerging phenomenon in the Ibero-American context, identifying patterns, underlying factors, and potential areas for intervention. In this regard, it can be utilized to inform policies and programs that address underlying concerns and promote a greater understanding and acceptance of feminist principles.

Conclusion

The AAF proves to be a valid and reliable instrument for assessing antifeminist attitudes. The creation of this scale addresses the need to understand the extent of anti-feminist attitudes within the population. It is essential to become aware of the reactionary effects that impact progressive movements such as feminism. This scale facilitates reflection through academic research on how individuals perceive anti-feminism in our context.

Conflict of Interest

The authors declare no conflict of interest.

Ethical Responsibility

The guidelines established by the American Psychological Association for ethical conduct in research involving human subjects (American Psychological Association, 2010) were always followed, as well as the ethical principles of the Declaration of Helsinki (World Medical Association, 2013).

Authorship contributions

MAR: review, selection, analysis and interpretation of the results, as well as revision and drafting of the manuscript.

LCJ: review, selection, analysis and interpretation of the results, as well as revision and drafting of the manuscript.

ND: review, selection, analysis and interpretation of the results, as well as revision and drafting of the manuscript. JAB: review, selection, analysis and interpretation of the results, as well as revision and drafting of the manuscript.

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Appendix

Table 8

Escala de Actitudes Antifeministas

Items			Values		
Pienso que el género es un invento que favorece a las minorías.	1	2	3	4	5
La sociedad estaba mucho mejor antes de las políticas de género.	1	2	3	4	5
El gobierno debe invertir más en políticas de género. R.	1	2	3	4	5
Creo que las mujeres son perjudicadas por el patriarcado en los distintos aspectos de su vida social. R.	1	2	3	4	5
Considero que las políticas de género son una moda que usan los políticos.	1	2	3	4	5
Los hombres deben tener cuidado al relacionarse con las mujeres.	1	2	3	4	5
Es recomendable relacionarse sólo sexualmente con las personas del sexo opuesto.			3	4	5
Creo que el feminismo es positivo porque vino a deconstruir nuestras actitudes sexistas. R.	1	2	3	4	5
La justicia suele favorecer a las mujeres.	1	2	3	4	5
El feminismo se trata de oprimir a los hombres.	1	2	3	4	5
La justicia está corrigiendo situaciones históricamente injustas para con las mujeres. R.		2	3	4	5
Pienso que la deconstrucción masculina es fundamental para el nuevo tipo de sociedad que estamos creando. R.	1	2	3	4	5

Note: Items with the notation «R» must be reversed, causing the order of the values to be reversed.