# Construction and Validation of the Scale of Attitudes Towards Lynching

Maria Edna Silva de Alexandre<sup>1</sup> Cleonice Pereira dos Santos Camino<sup>1</sup> Lilian Kelly de Sousa Galvão<sup>1</sup>

<sup>1</sup>Universidade Federal da Paraíba, João Pessoa, Paraíba, Brasil

#### Abstract

The present study aimed to develop and validate the Scale of Attitudes towards Lynching (Escala de Atitudes frente ao Linchamento - EAL). For this purpose, 2 studies were conducted. Study 1 aimed to test the measure's structure-based validity and internal consistency and included 428 undergraduate and graduate students from the 5 Brazilian regions, with a mean age of 26.86 (SD = 7.92). The results of the first study showed adequate psychometric indexes, indicating the bifactorial structure of the construct: crimes against property ( $\alpha = 0.97$ ) and heinous crimes ( $\alpha = 0.97$ ). Study 2 aimed to test the replicability of the bifactorial structure obtained in study 1 and included 481 college students from all Brazilian regions with an average age of 27.47 (SD = 9.23). The results supported the adequacy of the bifactorial solution (GFI = 92, CFI = 97, TLI = 97, RMSEA = 0.08). Overall, the EAL presented satisfactory psychometric characteristics that can support future studies. *Keywords:* lynching, attitudes, scale, validation

#### Construção e Validação da Escala de Atitudes frente ao Linchamento

#### Resumo

A presente pesquisa teve como objetivo desenvolver e validar a Escala de Atitudes frente ao Linchamento (EAL). Para tanto, foram realizados dois estudos. O Estudo 1 teve por objetivo testar a validade baseada na estrutura e consistência interna da medida e participaram 428 estudantes de graduação e pós-graduação, residentes nas cinco regiões brasileiras, com média de idade de 26,86 (DP = 7,92). Os resultados desse estudo evidenciaram índices psicométricos adequados, que indicam a estrutura bifatorial do construto: crimes contra a propriedade ( $\alpha = 0,97$ ) e crimes hediondos ( $\alpha = 0,97$ ). Já o Estudo 2 objetivou testar a replicabilidade da estrutura bifatorial obtida no Estudo 1 e contou com a participação de 481 estudantes universitários, de todas as regiões brasileiras, com média de idade de 27,47 (DP = 9,23). Os resultados deram suporte para a adequação da solução bifatorial (GFI = 92, CFI = 97, TLI = 97, RMSEA = 0,08). Em linhas gerais, a EAL apresentou características psicométricas satisfatórias, podendo subsidiar estudos futuros.

Palavras-chave: linchamento; atitudes; escala; validação

#### Construcción y Validación de la Escala de Actitudes Hacia el Linchamiento

#### Resumen

Esta investigación buscó desarrollar y validar la Escala de Actitudes hacia el Linchamiento (EAL). Con este fin, se llevaron a cabo dos estudios. El estudio 1, tuvo como objetivo probar la validez a partir de la estructura y consistencia interna de la medida. Participaron 428 estudiantes de grado y posgrado, residentes en las 5 regiones brasileñas, con edad media de 26.86 (DS 7.92). Los resultados mostraron índices psicométricos adecuados, indicando la estructura bifactorial del constructo: delitos contra la propiedad ( $\alpha$ = 0.97) y delitos atroces ( $\alpha$ = 0.97). El estudio 2, por otro lado, buscó evaluar la replicabilidad de la estructura bifactorial obtenida en el estudio 1 y contó con la participación de 481 estudiantes universitarios de todas las regiones brasileñas, con una edad media de 27.47 (DS= 9.23). Los resultados respaldaron la adecuación de la solución bifactorial (GFI= 92, CFI= 97, TLI= 97, RMSEA= 0.08). En términos generales, la EAL presentó características psicométricas satisfactorias, pudiendo ser utilizada para futuros estudios.

Palabras clave: linchamiento, actitudes, escala, validación.

## Introduction

Violence, in its multiple forms of manifestation, represents one of the main problems in Brazilian society, permeating the daily experience of the population, either by direct victimization or by the emerging atmosphere of fear and insecurity. The high homicide rates, especially in Brazil's large urban centers, as revealed by the atlas of violence (IPEA & FBSP, 2019), indicate the violation of one of the fundamental human rights: the right to life.

Among the range of violence observed in the Brazilian context, the practice of lynching has raised special attention, both for its barbaric nature and for the prevalence of this practice, since at least one case occurs every day. For purposes of operational definition, lynching is referred to here as a set of acts of physical violence, perpetrated by a group of people against an individual or group accused of having committed a crime. In this sense, although the phenomenon of virtual lynching is recognized as a variation of what can be understood as lynching, delimited to exposure and public humiliation in social networks (Mercuri & Lima-Lopes, 2020), we chose to work with lynching that occurs in the sphere of "real" everyday life, based on physical aggression. Lynching expresses the existence of an extralegal means of doing justice, materialized in the popular "taking the law into one's own hands" (Alexandre, Galvão, & Scardua, 2019; Martins, 2015; Sinhoretto, 2002; Soto, 2016; Zizumbo-Colunga & Fuerte-Celis, 2020).

It is worth pointing out the difficulty in mapping lynching and producing accurate statistics about its occurrence, since it is a type of violence that is not defined as a crime in the Brazilian penal code, and is often reported by police authorities as homicide, without considering the specificities of lynching. In this context, journalistic reports are one of the main documentary sources that allow investigators to classify it as a lynching case, bringing a greater wealth of details about the crime. Therefore, there are several indications of underreporting of lynching cases in Brazil\_(Alexandre et al., 2019; Martins, 2015; Soto, 2016).

However, the estimate is alarming and reveals a kind of extra-official system of promoting justice, having its own rituals, where there is no proportionality between the crime committed and the punishments administered, since in "popular justice" everyone can pay with his or her life, regardless of the crime the victim is being accused of. Concerning this ritualistic dimension, the relevant literature has registered a true horror show, in which the lynching mob, besides capturing the victims and beating them, administers additional "protocols" of violence such as eye gouging, castration, shooting, lacerating, quartering, even going so far as incinerating the body, even while the victim is still alive (Alexandre et al., 2019; Cerqueira & Noronha, 2004; Martins, 2015; Sinhoretto, 2002, 2009; Soto, 2016).

These are archaic practices, in contrast to modern times in which there are already justice systems that, despite their various limitations, assign the responsibility for resolving disputes to the State, thus avoiding the brutal character of popular justice. Despite its flaws, such as the numerous cases of police violence (Azevedo, 2017; Tommasi, 2014), the application of justice using the formal State mechanisms currently available is certainly still the system that best converges towards a project of a viable society. Therefore, it should be noted that the constant occurrences of lynching in Brazil, more than feeding the criminal statistics, require urgent reflection on the maintenance of the democratic rule of law, since such practices deny the right to an official trial, anticipating conviction (Alexandre et al., 2019).

Therefore, by disregarding official instances, the attempt to resolve conflicts by taking justice into one's own hands significantly distorts the notion of justice and configures an action of revenge (Alexandre et al., 2019; Soto, 2016). This practice transcends even the primitive notion of "an eye for an eye and a tooth for a tooth", since lynching does not even allow for the prerogative of proportionality of punishment. This means that all those suspected of committing a crime can pay with their lives, indicating a process of objectification of human life, in which a group arbitrarily decides on the worthiness of an individual's life, denoting serious human rights violations.

Given the barbaric connotation of lynching, the popular approval of this practice stands out, since some people regard it as a more effective type of justice, such as revealed in the study by Alexandre et al., (2019). In addition to one's acceptability of lynching, which can indicate the willingness to commit this crime, there is also a behavioral dimension, where it is possible to find a proliferation of audiovisual records of lynchings openly circulating on the Internet, on social networks, or channels such as YouTube. In these, we can verify the participation of men, women, and even children, who actively contribute to the rituals of violence (Rodrigues, 2013).

The attitude of supporting lynching and participating in acts of this nature demands reflection on what mobilizes the population's adherence. Therefore, the specialized literature has shown that there are multifactorial explanations for this phenomenon, such as: disbelief in official justice (which is perceived as inoperative or ineffective); the feeling of impunity; the population's need to feel that they are directly participating in the application of punishment, (because they believe the rituals of official justice lack transparency); the use of lynching as a way to exemplify the consequences for those accused of disobeying social norms; lynching as the result of an impulsive action; and the prevalence of primitive and pre-conventional moral judgments in the population, associated with a primitive notion of justice (Alexandre et al., 2019; Cerqueira & Noronha, 2004; Martins, 2015; Rodrigues, 2013; Sinhoretto, 2002, 2009; Soto, 2016; Zizumbo-Colunga & Fuerte-Celis, 2020).

Another aspect pointed out by the literature refers to the type of crime lynching victims are accused of. Thus, it is observed that heinous crimes, such as murder and sexual assault, cause more social commotion than those against property, such as theft and destruction of public or private property. This suggests that feelings of empathy with a particular type of crime may generate a greater inclination toward pro-lynching attitudes and even to engage in actual lynchings. It is also noteworthy that additional rituals of violence are most often observed in lynchings motivated by heinous crimes (Alexandre et al., 2019; Martins, 2015; Sinhoretto, 2002, 2009).

This differentiation seems to constitute an important criterion, as well as the other aspects reported, capable of discriminating the behavior of individuals and social groups in relation to this type of violence. Despite this theoretical assumption, there are still no instruments that can objectively evaluate it, nor studies on this evaluation. However, such undertaking would be of great contribution to the advancement of studies in the area. With the purpose of filling this gap, the present study aimed to develop and validate the Scale of Attitudes towards Lynching (Escala de Atitudes frente ao Linchamento - EAL), developed to assess attitudes towards lynching according to the type of crime, i.e., heinous crimes and crimes against property. For this purpose, 2 studies were conducted, presenting the construction of the scale and the empirical evidence of validity and internal consistency (Primi, Muniz & Villemor-Amaral, 2009).

## Study 1- Construction of the EAL

Study 1 aimed to report the construction of the EAL, based on the items developed from the reviewed literature, and test its validity and accuracy parameters. To obtain the final version of the scale, we sought to verify the content-based validation (Primi et al., 2009), performing an analysis of judges on the semantics of the items. Finally, validity based on the internal structure was analyzed (Primi et al., 2009) from a factor analysis and the internal consistency of the instrument.

## Method

### Participants

A total of 428 students participated in this study, including 250 undergraduate and 178 graduate students, mostly women (66.6%), with a mean age of 26.86 years (SD= 7.92), of which 48.4% were white,

37.6% brown, 11.4% black, 1.9% yellow, and 0.7% indigenous. As for the region of residence, 72.9% of participants lived in the Northeast, 15.4% in the South-east, 5.8% in the South, 3.7% in the Midwest, and 1.6% in the North of Brazil.

As for family income, 25.2% said they received up to 2,000 Brazilian reais, 20.3% up to 3,000 reais, 19.4% up to 5,000 reais, 15.9% up to 1,000 reais, 9.6% up to 10,000, and 9.6% above 10,000 reais. As for the political orientation of the participants, 55.8% considered themselves leftists, 13.3% centrists, 6.1% rightists, and 24.8% reported having no political orientation.

## Instrument

The preliminary version of the EAL had 22 items, which were elaborated to represent 2 possible sets of situations in which lynching is practiced and that can trigger different behaviors: crimes against property and heinous crimes. The constructed items were submitted to the analysis of 5 judges, who were masters and PhDs in Social Psychology. A minimum criterion of 80% of agreement between the judges was adopted to verify the apparent validity and the adequacy of each item to its respective category. Next, 4 items that did not meet the pre-established criteria were excluded, leaving the first version of the EAL with 18 items.

This version was submitted to a content-based evaluation, which included a semantic analysis of the items by a group of 10 participants with different levels of education, aiming to verify the understanding of the items and the format of the response scale. Women comprised 60% of the participants, while 40% were men, 3 had completed elementary school, 3 had completed high school, and 4 had completed college. The mean age of participants was 31.5 (SD=8.24) years, and 100% lived in the Northeast region of Brazil.

The instrument consisted of a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5), with the following structure: "indicate to what extent you agree that lynching should be applied when someone robs a bank; …when men rape women". Such procedure revealed a satisfactory understanding by the respondents. In addition to the EAL, participants also completed an instrument on sociode-mographic information.

## Procedure

The research was approved by the Research Ethics Committee of the Universidade Federal de Campina Grande under CAAE number 42666915.7.0000.5182 and respected ethical procedures involving research with human beings, as recommended by Resolution 510/2016 of the National Health Council (Brazil, 2016). The instruments were applied individually, online, using a Google Docs form, where the items of the scale were randomly inserted. Subsequently, the link was disseminated in groups of undergraduate and graduate students using social networks such as Facebook and WhatsApp, and remained available for response for 30 days.

### Data analysis

Data were analyzed using SPSS, version 25, which allowed for descriptive statistics (mean, standard deviation, and frequencies), exploratory factor analysis, and internal consistency of the measure – Cronbach's alpha. For the exploratory factor analysis, we used the principal axes factoring (PAF) extraction method, first without setting the number of factors and without rotation, and then by setting the extraction of 2 factors, according to the theoretical constitution that supported the formulation of the items.

The oblimin rotation was used, considering that there were 2 dimensions (latent traits) supposedly intercorrelated in the composition of the lynching attitudes construct. As criteria for factor extraction, we adopted eigenvalues equal to or greater than 1 (Kaiser criterion), graphical distribution of eigenvalues (Cattell criterion), parallel analysis (Horn criterion), with 1000 simulations in the same database, and for item retention in the factor, we adopted the minimum value of 0.40 in factor loadings as cutoff point.

## Results

Initially, observing the results of the adequacy of the correlation matrix [KMO=0.95 and Bartlett's Test of Sphericity,  $\chi^2$  (153)=13940.923 p<0.000], we found that it was susceptible to correlation. Thus, we ran exploratory factor analysis, with PAF, without fixing the number of factors or the rotation. The decision on the number of factors to be extracted was based on several criteria, i.e., Kaiser's criterion, which identified 2 factors with eigenvalues greater than 1 (ranging from 1.65 to 13.64), jointly explaining 84.96% of the total variance; Cattell's criterion (graphic distribution of eigenvalues); which also suggested a two-factor structure; parallel analysis (Horn's criterion), considered a more robust method (Garrido, Abad, & Ponsoda, 2013), which after 1,000 simulations on the same database, also demonstrated the appropriateness of retaining 2 factors.

From these results, a new PAF of the EAL was performed, this time fixing the extraction of two factors, using oblimin rotation, requiring a minimum saturation of |0.40|, positive or negative, for item retention on the factor. All items had satisfactory factor loadings, leaving the scale with the 18 items proposed, grouped into 2 factors that together explained 84.96% of the variance.

Although the exploratory factor analysis had gathered 8 and 10 items per factor, considering the principle of parsimony, necessary especially in the research context, in which several measures are used (Borsa, Damásio, & Bandeira, 2012), we chose to reduce the set of items of this scale, making it easier and more convenient to apply. Thus, we aimed at retaining an identical number of items in each factor, selecting those with the highest saturations and which best represented the construct semantically, without redundancy of items that reflected the same type of situation.

This procedure resulted in a 12-item measure, equally divided for each factor, which were submitted to a new PAF [KMO= 0.95; Bartlet=  $\chi^2$  (66) = 7766,616; p < 0.001]. The criteria for factor retention corroborated the two-factor structure. Table 1 presents the items, factor loadings, communalities, variances, eigenvalues, and consistency indicators.

In the aforementioned table, all items saturated in the factors for which they were previously constructed, according to theoretical expectation. It should also be emphasized that all items proposed reached the minimum saturation to be retained in one of the factors. The internal consistency analysis (Cronbach's alpha) of the EAL indicated a coefficient of  $\alpha = 0.96$ , a value considered almost perfect for this type of analysis.

Factor I aggregated 6 items, with saturations ranging from 0.744 (Item 05. *When politicians misuse public money*) to 0.983 (Item 03. *When someone robs a bank*), has an eigenvalue of 9.19, explained 76.62% of the variance and presented an internal consistency coefficient of  $\alpha = 0.97$ . We decided to name this factor 'Crimes against Property', considering that the items that compose it portray occurrences of this nature.

Factor II, on the other hand, gathered 6 items, whose saturations ranged from -0.744 (Item 07. On occasions when spouses kill their partners) to 0.990 (Item 08. On situations in which parents sexually abuse their children), presented an eigenvalue of 1.35, explained a variance of 11.28%, and internal consistency,  $\alpha = 0.97$ . We called it 'Heinous Crimes', because its respective items refer to situations that report crimes of this nature.

## Table 1.

Factorial Loadings, Commonalities (H<sup>2</sup>), Eigenvalues and Percentage of Variance for the 12 items of the EAL

	Factor Loadings			
Itoma	Factor I Crimes	Factor II	h²	
Items	Against Propriety	Heinous Crimes		
03. When someone robs a bank.	.983	.051	.895	
02. In situations where someone steals a vehicle.	.961	.038	.869	
06. When someone robs a large supermarket chain.	.960	.020	.893	
04. In situations where someone robs a church.	.928	018	.888	
01. When someone destroys private property.	.887	072	.889	
05. When politicians take public money.	.744	103	.679	
08. In situations where parents sexually abuse their children.	071	.990	.924	
09. When men rape women.	003	959	.916	
10. In situations where priests or ministers sexually abuse children.	029	957	.876	
12. In situations where someone kills lesbians, gays, bisexuals,	033	948	853	
transvestites and transsexuals.				
11. When someone commits mass shootings in schools.	.131	821	.853	
07. On occasions when spouses kill their partners.	.157	740	.747	
Number of items	6	6		
Eigenvalues	9.19	1.35		
% Variance explained	76.62	11.28		
Cronbach's alpha of factor $(\alpha)$	0.97	0.97		
Cronbach's alpha of the scale $(\alpha)$	0.96			

Note. Factor loadings starting at 0.40 were considered satisfactory for interpreting the factor;  $h^2 = \text{communalities}$ .

In summary, the factors presented an easily interpretable structure, in line with the literature, as well as satisfactory internal consistency indices. However, it is necessary to verify whether this factor structure is adequate by comparing it with the one-factor model. These aspects motivated study 2, which will be presented next.

### Study 2- Confirmatory Analysis of the EAL

The objective of study 2 was to gather additional empirical evidence of validity based on the internal structure and accuracy of the EAL, from an independent sample. Thus, we sought to test, by means of a confirmatory factor analysis, the replicability of the two-factor structure obtained in study 1 and to compare it with the one-factor solution.

### Method

#### Participants

A total of 481 students participated in this study, 304 undergraduate and 177 graduate students, most of

them women (65.5%), with a mean age of 27.47 (SD= 9.23) years, and 45.5% considered themselves white, 38% brown, 12.1% black, 3.1% yellow; and 1.2% indigenous. Regarding the region of residence, 78% of the participants lived in the Northeast, 13.9% in the Southeast, 3.5% in the South, 2.7% in the Midwest, and 1.9% in the North of Brazil.

As for family income, 22.9% said they made up to 2,000 Brazilian reais, 21.6% up to 3,000 reais, 20% up to 5,000 reais, 13.5% up to 1,000 reais, 9.6% up to 10,000 reais, and 6% over 10,000 reais. As for the political orientation of the participants, 50.7% considered themselves leftists, 16.6% centrists, 6.7% rightists, and 26% said they had no political orientation.

## Instrument and Procedure

The instruments used in study 2 were the same described in study 1: The 12-item EAL 12 and the list of sociodemographic information. For data collection, the same procedures described in the previous study were followed.

## Data Analysis

Two statistical programs were used: SPSS and AMOS (both version 25). With the former, descriptive analyses were performed and reliability indicators (Cronbach's alpha) were calculated; the latter was used to perform the confirmatory factor analysis, taking into account the covariance matrix between items and adopting the ML (Maximum Likelihood) estimator.

To obtain the fit of the suggested model and compare it with the one-factor model, the following indicators were considered:  $\chi^2/df$ , accepting values lower than 5 for an adequate model fit (Hair et al., 2009; Kline, 2015); the Goodness-of-Fit Index (GFI), the Comparative Fit Index (CFI), and the Tucker Lewis Index (TLI), where values equal to or greater than 0.90 indicate good fit, the Root Mean Square Error Approximation (RMSEA), whose recommended values should be 0.06 or lower, and up to 0.10 is acceptable. We also used the Standardized Root Mean Square Residual (SRMR), in which values lower than 0.10 were indicative of good fit quality. The chi-square difference  $(\Delta \chi^2)$ per degree of freedom (df) was employed to compare the tested models, considering that significant values indicate better fit; we also used for model comparison, the indices based on the Theory of Information, the Akaike Information Criterion (AIC) and the Baves Information Criterion (BIC), in which the lower the values in these indices, the more adequate is the model (Hair et al., 2009; Kline, 2015).

### Results

In view of the findings of Study 1, we decided to test, first, the two-factor model (crimes against property and heinous crimes) and, later, the one-factor model, to compare it with the one that was proposed. The fit indicators for the 2 models tested are shown in Table 2.

According to Table 2, the two-factor model is considered the best fit, since it is statistically superior to the one-factor model (Dx<sup>2</sup>(2) = 2402.32, p < 0.001). It is worth noting that in the two-factor model, an inspection of the MIs (Modification Indices) for the saturations (Lambdas,  $\lambda$ ) and the measurement errors (Deltas,  $\delta$ ) indicated that it would be advisable (MI =51.30) to correlate the measurement errors of 7 items (*when partners kill their partners*) and 8 (*situations when parents sexually abuse their children*). It is emphasized that all items of the instrument showed saturation (factor weights,  $\lambda$ ) statistically different from zero ( $\lambda \neq 0$ ; z > 1.96; p < 0.05); the corresponding structure can be observed in Figure 1.

After checking the fit of the two-factor model of the measure of attitudes towards lynching, we sought to identify the internal consistency indices (Cronbach's alphas,  $\alpha$ ) of each factor. We observed that the factor 'crimes against property' has  $\alpha = 0.96$  and 'heinous crimes',  $\alpha = 0.96$ .

#### Discussion

The objective of these 2 studies was to construct the EAL, seeking to gather evidence of its validity based on structure and internal consistency. We believe that the objective was achieved by the studies undertaken. The first analysis sought to perform a factor analysis, resulting in the final version of the EAL composed of 12 items, grouped into two factors, proving to be a parsimonious measure. The exploratory factor analyses and reliability analyses showed satisfactory psychometric indices, which indicate the two-factor structure of the construct.

The second study, on the other hand, showed additional empirical evidence for factor analysis and internal consistency of the EAL, so that confirmatory factor analysis provided support for the adequacy of the two-factor structure. This was also confirmed by the comparison analyses of the two-factor solution with the one-factor solution, where the proposed model was statistically significant.

Table 2.

Fit Indicators of the Tested EAL Models

Models	$\chi^2$ (df)	GFI	CFI	TLI	RMSEA (90%CI)	SRMR	AIC	BIC	$\Delta \chi^2 (df)$
Unifactorial	2640.498(54)	0.36	0.68	0.61	0.31 (0.306-0.326)	0.01	2688,498	2788,719	-
Bifactorial	238.169(52)	0.92	0.97	0.97	0.08 (0.075-0.98)	0.035	290,169	398,741	2402.32(2)*

Note. N(481);  $\chi^2$  = chi-square; df = Degrees of freedom; GFI = Goodness-of-Fit Index; CFI = Comparative Fit Index; TLI = Tucker Lewis Index; RMSEA = Root-Mean-Square Error Approximation, 90%CI = 90% Confidence Interval; SRMR= Standardized Root Mean Square Residual; \*p < 0.001.

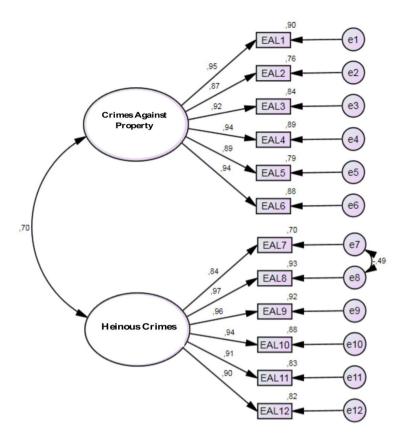


Figure 1. Factorial Structure of the Scale of Attitudes towards Lynching (EAL).

The findings of the two studies corroborate the theoretical indications of the relevant literature (Alexandre et al., 2019; Martins, 2015; Sinhoretto, 2002/2009), showing that the distinction of attitudinal positions towards lynching according to the type of crime, whether against property or in relation to those considered heinous, can also be empirically proven. With the validation of this measure, new studies may be conducted in the area, in a standardized way, using a simple instrument that is easy to interpret and consistently measures what is proposed, proving to be adequate for research purposes.

Regarding the possibilities of studies using the EAL, we believe that it can be useful for correlational and experimental studies, along with other measures aimed at understanding the factors that help explain one's acceptability of lynching. For example, subjects that are highly pro-lynching are believed to have low levels of moral judgment, low empathy, conservative ideological inclinations, and lower levels of concern for human rights (Alexandre et al., 2019; Camino et al., 2007; Hoffman, 2007). Therefore, the EAL has not only empirically represented the theoretical assumptions,

but it may also methodologically contribute to research designs on this theme.

Despite the notorious contributions of the EAL, it is possible to point out some limitations in the studies conducted for its construction and validation. Initially, it should be pointed out that the samples, despite including participants from all regions of the country, are composed exclusively of college students, which may not be so representative of the Brazilian population. Another issue that may indicate a potential limitation is the fact that it is a self-report measure, in which the answers may be influenced by social desirability, especially in a topic that involves moral issues, as is the case of lynching.

It is also important to highlight the need for greater ideological variability in the sample, since 50% of the sample called themselves leftist and the other half divided between those who considered themselves centrists or had no defined political orientation. This is an important aspect to consider, since political orientation can influence the development of social attitudes towards certain phenomena, such as lynching. In this sense, it is recommended that such aspects be better controlled in future studies. Therefore, it is necessary to test the adequacy of the EAL in different groups of the Brazilian population, with special attention to possible variations due to sociodemographic characteristics. Another aspect of major relevance would be the development of implicit measures that seek to measure attitudes towards lynching, thus avoiding social desirability.

Furthermore, we also suggest that further studies be conducted to gather validity evidence based on the relationships with convergent external variables, such as police violence and measures of concern for human rights. It would also be interesting to try to identify accuracy indices other than alpha to verify the psychometric properties of the instrument with other analyses and more representative samples of the population. In the present study, the alpha values were very high, which reflects the excellent internal consistency of the instrument, while it may also reveal some potential redundancy of the items in the saturation factors, thus deserving a detailed verification in further analyses to resolve doubts and reach the best version of the scale.

# References

- Alexandre, M. E. S., Galvão, L. K. de S., & Scardua, A. (2019). Representações Sociais e Julgamentos Morais de Estudantes Universitários sobre Linchamentos. *Psicologia: Teoria e Pesquisa*, 35, e3554. doi. org/10.1590/0102.3772e3554
- Azevedo, E. F. (2017). A Polícia e suas Polícias: Clientela, Hierarquia, Soldado e Bandido. *Psicologia: Ciência e Profissão, 37*(3), 553-564. doi. org/10.1590/1982-3703000192015
- Borsa, J. C., Damásio, B. F., & Bandeira, D. R. (2012). Adaptação e validação de instrumentos psicológicos entre culturas: algumas considerações. *Paidéia, 22*, 423-432. doi.org/10.1590/S0103-863X2012000300014
- Brasil (2016). Resolução 510/2016: Diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Brasília: Ministério da Saúde/Conselho Nacional de Saúde, Brasília, 07 de abril.
- Camino, C., Galvão, L., Quirino, G., Roazzi, A., & Martin, W., L. B. (2007). Direitos humanos, atitude institucional e simpatia ideológica em universitários brasileiros. Revista Estudos

de Psicologia, 12(3), 199-211. Doi.org/10.1590/ S1413-294X2007000300002.

- Cerqueira, R. T., & Noronha, C. V. (2004). Cenas de linchamento: reconstruções dramáticas da violência coletiva. *Revista Psicologia em Estudo, 9*(2), 163-172. Doi http://dx.doi.org/10.1590/ S1413-73722004000200003.
- Garrido, L. E., Abad, F. J., & Ponsoda, V. (2013). A new look at Horn's parallel analysis with ordinal variables. *Psychological Methods*, 18, 454-474. doi:10.1037/a0030005
- Hoffman, M. L. (2007). Empathy and moral development: implications for caring and justice. University Press.
- IPEA, & FBSP (2019). Atlas da violência 2019. Brasília: Rio de Janeiro: São Paulo: Instituto de Pesquisa Econômica Aplicada; Fórum Brasileiro de Segurança Pública. Recuperado em: http:// www.ipea.gov.br/atlasviolencia/download/19/ atlas-da-violencia-2019
- Kline, RB. (2015). *Principles and practice of structural equation modeling*. New York: Guilford publications.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Análise multivariada dos da-dos* (6a ed.). Porto Alegre: Bookman.
- Martins, J. de S. (2015). *Linchamentos: a justiça popular no Brasil.* Editora Contexto.
- Mercuri, Karen Tank, & Lima-Lopes, Rodrigo Esteves de. (2020). Discurso de Ódio em mídias sociais como estratégia de persuasão popular. *Trabalhos em Linguística Aplicada*, 59(2), 1216-1238. Epub September 16, 2020.https://dx.doi.org/10.1590/010 31813760991620200723
- Primi, R., Muniz, M., & Nunes. C. H. S. S. (2009). Definições contemporâneas de validade de testes psicológicos. Em: C. S. Hutz (Org.). Avanços e polêmicas em avaliação psicológica (pp. 243-265). São Paulo: Casa do Psicólogo.
- Rodrigues, D. (2013). Círculo da punição: o linchamento como cena de acusação e denúncia criminal. DILEMAS: Revista de Estudos de Conflito e Controle Social, 6(4), 625-643. Recuperado de http:// revistadil.dominiotemporario.com/doc/DILE-MAS-6-4-Art4.pdf

- Sinhoretto, J. (2002). Os justiçadores e sua justiça: linchamentos, costume e conflito. São Paulo: IBCCRIM.
- Sinhoretto, J. (2009). Linchamentos: insegurança e revolta popular. Revista Brasileira de Segurança Pública, 4(3), 72-92. Recuperado de http://www.observatoriodeseguranca. org/files/artigo%20jaqueline. pdf.
- Soto, W. H. G. (2016). Uma sociologia dos linchamentos no Brasil. História, Ciências, Saúde--Manguinhos, 23(1), 227-229. doi.org/10.1590/ S0104-59702016000100016
- Tommasi, L. (2014). "Guerra ao tráfico", violência policial e os limites da democracia brasileira. *Revista do Instituto de Estudos Brasileiros*, (59), 397-404. doi. org/10.11606/issn.2316-901X.v0i59p397-404
- Zizumbo-Colunga, D., & Fuerte-Celis, M. P. (2020). The Political Psychology of Lynching: WhatsApp Rumors, Anti-Government Appeals, and Violence. *Paper prepared for the 2020 Annual Meeting of the American Political Science Association*, 1-39. doi. org/10.33774/apsa-2020-1xrmc.

Recebido em: 05/06/2020 Reformulado em: 27/01/2021 Aprovado em: 23/06/2021

# Acknowledgments:

Agradecemos ao Conselho Nacional de Desenvolvimento Científico e Tecnológico – CNPq pelo financiamento da pesquisa.

About the authors:

**Maria Edna Silva de Alexandre** is a PhD student in Social Psychology at the Universidade Federal da Paraíba. Master in Social Psychology from the Universidade Federal da Paraíba. Psychologist graduated at the Universidade Federal de Campinas Grande.

ORCID: https://orcid.org/0000-0003-3610-7208 *E-mail:* psicologasocialedna@gmail.com / psicologasocialedna@gmail.com

**Cleonice Pereira dos Santos Camino** is a Full Professor at the Universidade Federal da Paraíba. PhD in Psychology from the Université Catholique de Louvain. Master in Psychology from the Université Catholique de Louvain. Psychologist graduated at the Universidade Católica de Pernambuco. ORCID: https://orcid.org/0000-0002-5756-7214 *E-mail:* cleocamino@yahoo.com.br

Lilian Kelly de Sousa Galvão is a Professor at the Universidade Federal da Paraíba. Master and PhD in Social Psychology from the Universidade Federal da Paraíba. Psychologist graduated at the Universidade Federal da Paraíba. ORCID: https://orcid.org/0000-0002-5354-7291 *E-mail:* liliangalvao@yahoo.com.br

Contact:

Curso de Psicopedagogia, CCHLA Cidade Universitária João Pessoa, Paraíba, Brazil CEP: 58051-900

Psico-USF, Bragança Paulista, v. 27, n. 4, p. 613-621, out./dez. 2022