# *Evidências de validade da escala brasileira de atitudes sociais de estudantes perante a política*

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#### Resumo

Objetivou-se apresentar as evidências de validade e confiabilidade de uma escala brasileira para medir atitudes políticas de estudantes brasileiros de nível superior ante seus comportamentos políticos. O estudo teve uma amostra de abrangência nacional (N = 445), com estudantes brasileiros oriundos de distintos estados. Os resultados indicaram uma estrutura empírica sustentável (teste de Kaiser-Meyer-Olkin — KMO = 0,81), com indicadores psicométricos considerados adequados à mensuração das atitudes políticas. Três fatores empíricos foram identificados: grau de conhecimento sobre política (15 itens, cargas fatoriais entre 0,31 e 0,82, alfa = 0,82, *eigenvalue* = 5,07 e variância explicada = 18,78 %), afetos relativos à política (7 itens, cargas fatoriais entre 0,41 e 0,58, alfa = 0,72, *eigenvalue* = 3,17 e variância explicada = 11,73 %) e intenções de comportamento político (2 itens, cargas fatoriais entre 0,70 e 0,72, alfa = 0,80, *eigenvalue* = 1,8 e variância explicada = 6,8 %). Conclui-se que os resultados fortalecem a estrutura fatorial original da escala e mostram sua utilidade para a identificação de atitudes sociais ante comportamentos políticos.

Palavras-chave: psicologia política, comportamento político, evidências de validade, atitudes políticas.

### Evidencias de validez de la escala brasileña de actitudes sociales de estudiantes ante la política

#### Resumen

El objetivo de la presente investigación fue presentar las pruebas de confiabilidad y validez de una escala brasileña para medir las actitudes políticas de los estudiantes universitarios brasileños ante su comportamiento político. El estudio contó con una muestra nacional (N = 445) de estudiantes brasileños de diferentes Estados. Los resultados indicaron una estructura empírica sustentable (KMO = .81), con indicadores psicométricos que se consideran adecuados para la medición de las actitudes políticas. Específicamente, se identificaron tres factores empíricos: nivel de conocimiento sobre la política (15 ítems, cargas factoriales entre .31 y .82, alfa = .82, *eigenvalue* = 5.07 y varianza explicada = 18.78 %), sentimientos acerca de la política (7 ítems, factoriales de .41 y .58, alfa = .72, *eigenvalue* = 3.17 y varianza explicada = 11.73 %) e intenciones del comportamiento político (2 ítems, factoriales de .70 y .72, alfa = .80, *eigenvalue* = 1.8 y varianza explicada = 6.8 %). Se llegó a la conclusión de que los resultados apoyan la estructura factorial original de la escala y muestran su utilidad en la identificación de las actitudes sociales ante la conducta política.

Palabras clave: psicología política, comportamiento político, evidencias de validez, actitudes políticas.

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## Evidence of the validity and accuracy of the Brazilian social attitude of students scale towards politics

#### Abstract

The objective of this study was to present the validity and reliability evidences of a Brazilian scale to measure the political attitudes of Brazilian higher education students regarding their political behavior. The study had a nationwide sample (N = 445), with Brazilian students from different states. The results indicated a sustainable empirical structure (KMO = 0.81), with psychometric indicators considered adequate to the measurement of political attitudes. Three empirical factors were identified: degree of political knowledge (15 items, factorial loads between 0.31 and 0.82, alpha = 0.82, eigenvalue = 5.07 and explained variance = 18.78%), feelings about politics (7 items, factorial loads between 0.41 and 0.58, alpha = 0.72, eigenvalue = 3.17 and explained variance = 11.73%) and intentions of political behavior (2 items, factorial loads between 0, 70 and 0.72, alpha = 0.80, eigenvalue = 1.8 and explained variance = 6.8%). It is concluded that the results strengthen the original factorial structure of the scale and show its utility for the identification of social attitudes regarding political behaviors. *Key words:* political psychology, political behavior, evidence of validity, political attitudes.

#### INTRODUCTION

The phenomenon of political behavior is highly complex, and has become an increasingly common object of study in the field of social psychology. The investigation of the phenomenon of change related to political behavior has become the object of empirical study, especially regarding decision making and political participation. Much has been said about how much and how social and political attitudes influence political behavior.

Social and human sciences, such as political science, psychology, sociology, and public policy management, have long debated about the origin of personal beliefs and mental models related to individual behavior, either alone or in interaction with social groups. An important part of this literature shows that attitudes can be important facilitators of certain types of behaviors manifested by individuals and social groups (Aarts, Verplanken & Van Knippenberg, 1998; Ajzen, 2002b). Beliefs and personal and organizational values constantly relate to the shaping of attitudes. So, in order to understand the incidence of this phenomenon it is of great importance to carry out the analysis of human and social dynamics.

It is emphasized that the concept of attitudes is a complex theoretical and empirical demarcation, since it assumes that individuals shape their opinions about a given object, and they begin to take an action, specifically toward this object, according to their beliefs and knowledge about it (Carneiro, Torres, & Ekman, 2016). Thus, different circumstances or contingencies may cause a particular attitude to be manifested.

Attitude refers, in this perspective, to the predisposition or to the mental state that influences an individual to take an action in which he will engage (Gagné & Medsker, 1996). It encompasses information about the object, beliefs and personal values, although these are more general concepts, while attitude is necessarily more specific and oriented towards certain purposes and objectives.

So, the concept of attitudes seems to be appropriate to the study of how people understand, evaluate and guide themselves towards an object called 'politics'. Therefore, considering that one of the cornerstones of a democratic society is its political participation, the development of scientific measures that show construct validity of their concepts and are accurate to the diagnosis of citizens' attitudes towards politics becomes of fundamental value. This is due to the fact that attitudes towards a given object (in this case, politics) tend to serve as a basis for reactions triggered when there is a contact with it.

To consider attitude as a synonym of predisposition implies interpreting it as a theoretical construct or as an analytical abstraction which also refers to elements that are not real and that cannot be observed (Camino, 1996; Díaz, 2004). Thus, attitude is fundamental to the shaping of political behavior, since it allows giving meaning to this object and sharing beliefs about it.

Attitudes, however, tend to serve as a reference framework within which behaviors directed towards the attitudinal object occur (Altman, 1981, Diaz, 2004, Farr 2001, Myers 1999). Therefore, the diagnosis of social attitudes towards politics is very relevant, especially when considering the gap in the Brazilian scientific literature of some measures that have similar nature and already offer evidences of validity. According to Pereira, Torres and Barros (2004), most of the instruments available in the literature deal with a construct called "democratic attitudes". For these authors such instruments do not have indicators of validity and reliability, such as the Scale of Fundamental Principles of Democracy (Prothro & Grigg, 1960) and the Pro-Democracy Guidance Index (Miller, Hesli & Reisinger, 1995; Reisinger, Miller, Hesli &, Maher, 1994). Hence, the importance of this work is the propositional sense of testing a measure and its construct validity.

It is believed here that, through the empirical investigation of attitudes towards politics, it is possible to have an idea of the behavior that individuals adopt in their daily life, including their role as citizens. It is based on the theoretical premise that attitudes are fundamental to the analysis and comprehension of political thinking, capable of influencing political behavior (Ekman, & Amna, 2012; Gomes & Maheirie, 2011).

Politics deals with all decisions that rule our lives, and not only those that are taken within the restricted scope of what is traditionally understood as politics. According to Prothro and Grigg (1960), the term 'politics' is used in the broadest sense of the term, meaning not only the scope taken conventionally as public to the human relations, but covers the various scopes where relations of power and collective deliberation take place.

Attitude is an implicit concept, hard to be operationalized in a measure (Fazio &, Olson, 2003). Historically, the three-dimensional model prevailed over how attitudes can be divided by its affective, cognitive and behavioral components (Oskamp & Schultz, 2005; Nascimento, Torres &, Pimentel, 2011). More recently, these components have been treated differently between them, maintaining, according to the case, an interdependence relationship. Attitude refers to a construct shaped from a stimulus that is decoded in cognitive, affective and behavioral processes, capable of generating cognitive, affective and behavioral responses (Oskamp & Schultz, 2005; Kraus, 1995; Rodrigues, Assmar & Jablonski, 2012). It refers to a psychological tendency that is expressed by the evaluation of a particular entity with some degree of favorability and unfavorability (Eagly & Chaiken, 1993).

Attitudes can be regarded as "learned predispositions to respond in a way consistently favorable or unfavorable in relation to a given object" (Fishbein &, Ajzen, 1975, p.6). Attitudes, therefore, can be understood as evaluations that are made on people, objects and ideas, in which positive or negative reactions make the human being as a constant observer of what he sees (Wallace, Paulson, Lord &, Bond, 2005). Attitudes involve three components: (1) cognitive, consisting of thoughts and opinions on a given objective (objective appraisal of the object), (2) affective, that are emotional reactions (values) to the object that generates the attitude, and (3) conative (behavioral intentions), in other words, actions that are capable of eliciting observable behaviors.

Social experience plays an important role in shaping attitudes. The way in which attitudes are formed by cognitive, affective, and conative experiences is being studied by social scientists, considering that not all attitudes are shaped in the same manner (Glasman & Albarracin, 2006; Tamayo, Pimenta, Rolim, Rodovalho & Castro, 1996).

The previous experiences, as well as the knowledge repertoire about the object, are capable of generating an influence on the type of a consolidated attitude. Historically, attitudes have been understood as predictors of behavior. According to Díaz (2004), the structuralist perspective refers to the reactions of people towards politics, searching for the differences between what is expected and the existing consensus about certain political aspects. Pereira, Lima and Camino (2001), investigated empirical relations between personal values and democratic attitudes and they identified that adherence to the religious values was associated with a negative attitude toward democracy, whereas this attitude was positively related to post-materialist values. Ajzen and Fishbein (1980) have referred to the theory of planned behavior, in which subjective norms and thoughtful control over behavior, as well as behavior itself, are fundamental dimensions to the genesis of attitudes.

To scientifically investigate an attitude it is necessary, firstly, to check what are the beliefs and convictions that a person has about a particular subject. Also, it is important to know what he/she can or cannot understand, and how broad or narrow / limited his/her perspective is.

Furthermore, the description of attitudes should consider knowing what an individual thinks about an issue, what he feels about it, or on which perspective he substantiates his convictions. Thus, the psychological and sociological content of attitudes represents, historically, the interest of social researchers to understand the bases of their genesis and consolidation, and the effects they have on human behavior, both for the individual himself or in social interaction.

When analyzing the literature on political behavior, several variables are found commonly associated with the national and international scenario. Thus, the idea of politics is rooted in meeting the demands, needs and collective interests of citizens and other social segments (such as organizations, for example) in order to comply with the general will in detriment of the private desires.

An important part of the political movement incorporates elements of moral nature related to the sphere of values and what ought to be (Carneiro, Torres & Ekman, 2016). Politics, according to Rousseau (1978), refers to a type of activity or of human praxis, closely related to a power that aims to promote equality for the existence of freedom. Politics refers to the set of means to achieve the desired effects, ensuring the (social) order. Political action is present in various moments of life, whether it is on a private or public aspect.

Politics refers to the action of governing and using power to defend citizenship rights (Bobbio, Matteucci & Pasquino, 1986). Then, in order to live together in society, it is necessary to develop actions aimed to the planning and integration of endeavors directed to the promotion of citizenship. Politics means having a coherent and necessary way of organizing society, involving the search for power control (Bobbio, 2000).

The literature points out that a fundamental purpose of politics is to maintain public order, defense of the national territory and the social well-being of the population. Therefore, it is essential to have well-trained managers to exercise the representativeness of people's interests, in order to provide the necessary conditions for survival and interaction.

Some basic premises are necessary for the shaping of beliefs and perceptions favorable to political action: general agreement with the idea of collectivity and the representativeness of collective interests; acceptance or discussion of decisions to be made, as well as the projects to be implemented; and constant dialogue among all sections of the population, which must feel politically represented.

Political science, according to Bobbio (2000), consists, essentially, of the study of political phenomena and structures, which must be conducted with methodological rigor and a systematic examination of the facts. According to the author, it is necessary to apply scientific methodology to the study of political science through the search for rational arguments of analysis and investigation.

In the meantime, the understanding of individual and social variables becomes of fundamental value to the analysis of individuals' and groups' posture and behavior about politics. One of these variables refers to the attitudes of individuals towards politics. Does a more favorable attitude toward politics tend to be related to the individual's engagement with social movements, or even to struggle for the effective fulfillment of their rights? Or furthermore, a more unfavorable attitude is related to the fact that, for example, an individual annuls his vote in the elections? Finally, these and others questions can be formulated considering the fundamental premise that beliefs and perceptions of individual nature and related to the context could determine the type of behavior or action manifested by individuals around their greater or lesser participation or political engagement. In a democratic society, such as Brazil, political behavior is of fundamental importance to the scientific analysis of how citizens adhere to norms and social roles and how they elaborate social representations about the political participation on the national trends. Faced with this, it is of fundamental value to construct and test, in terms of their validity evidence, measures that have constructive validity and are accurate to identify more or less favorable attitudes towards politics.

Based on the above, the aim of this paper is to describe the stages of construction and exploratory psychometric validation of the Brazilian scale to empirically identify and measure, social attitudes towards politics. Its purpose is to present the evidence for construct validity and accuracy of the scale, by reporting the measure's reliability indexes. It is expected, therefore, to fill a gap in the literature on this topic, which until now has lacked valid and reliable psychometric measures according to the precepts recommended by the theory on validity evidence.

#### **METHOD**

#### Design

This is an exploratory research. As it deals with the presentation of all the procedures for the construction and psychometric validation of the Brazilian Scale of Attitudes towards Politics, a cross-sectional descriptive design was chosen, with a temporal cut-off point for data collection together with a convenience and accessibility sample of Brazilian students, as it will be described below.

The Brazilian Scale of Social Attitudes towards Politics was constructed on the basis of reports of empirical research on the topic of 'social and political attitudes', as well as on the psychological literature on political behavior. As it has been traditionally observed, attitude variables show positive correlations with behavior.

#### Participants

The study was conducted with 445 students from the Brazilian's public university under analysis. The advantage of social media was the broad scope to select participants. These came from Administration, Public Policy Management, Sociology, Law and other courses of the mentioned University. The sample was characterized by accessibility and convenience, resulting in a very homogeneous profile in its composition. It should be noted that the sample met the statistical criteria of generalization and psychometric validation proposed by Tabachnick and Fidell (2001).

It was observed that the sample was very homogeneous with regard to the participation of men (50.8%) and women (49.2%), with predominance of people attending part-time to complete their graduation course (78.8%). It was also verified that 48.3% reported talking sporadically about politics and only 11.5% stated that they had a daily dialogue about it. It was also identified that 83.3% affirmed that they were not currently engaged in any political movement. For 76.1% of the participants the main source of access to politics news is through various websites, and for 77.9% of the respondents, politics is of great importance in their lives.

#### Instrument

## Measurement construction, semantic validation and validation by judges

The construction of the instrument took place in a series of workshops in which the theoretical references, objectives, research problems, concepts and methodology were introduced to guide the activity. The purpose of these workshops was to gather revisions and suggestions to the items of the questionnaire, based on the discussion about the topic in this study.

After a detailed analysis of the instrument of attitudes towards politics and a critical evaluation of nine judges, experts and university professors linked to the Departments of Public Policy, Sociology, Psychology, Political Science and Administration, the instrument was reformulated and revised again before its final version be drawn up. It should be noted that the items were elaborated and improved considering the 12 criteria and quality rules in the construction of items established by Pasquali (1999) and AERA (2014), in addition to the reflections elaborated by Asch (1971), Friedman, Carlsmith and Sears (1970) and Fishbein and Azjein (1975) in the discussion of the dilemmas faced in the use of measures to survey and to analyze the concept of attitudes in the social sciences.

#### Final version of the questionnaire

The final version of the questionnaire of social attitudes towards politics, for its first exploratory application as proposed in this study, had three dimensions of analysis: the degree of knowledge about the object (in this case, politics), emotions or affections aroused by such object and the behavioral intent related to it. The first hypothesized theoretical factor, *Degree of policy knowledge*, identifies what this phenomenon means or represents to the individual. It refers to the individual's perception about their definitions, importance, usefulness and relationships with the formulation of the community's shared desires (meeting collective needs). The items were associated to a Likert frequency scale, anchored at 11 points, in which 0 (zero) corresponded to "Never" and 10 (ten) to "Always".

The second factor, *Feelings about politics*, refers to the kind of sentiment generated by politics on individuals. The literature reports sensations concerning the little popular participation in democratic decisions linked to the perception of alienation or discredit regarding the importance of politics. Feelings of ignorance and anger are also considered in this theoretical hypothesized factor. There is often confusion between what politics is and what political parties are. Positive or pleasant, as well as negative or unpleasant feelings were transformed into items. These items were also associated to a Likert-type 11 points frequency scale, identical to the one described previously.

The third and final evaluation agent hypothesized to be empirically tested, corresponds to the *intentions of political behavior*. This refers to the respondent's perception of what he does or would do in relation to his political participation and to his greater or lesser political engagement. Items related to participation in actions that legitimize political thinking were elaborated in the case of self-assessment, because the individual evaluates how his initiatives and behaviors are encouraged or rejected by his attitudes. The items were also grouped on a Likert-type frequency scale, anchored at 11 points, in which 0 (zero) corresponded to "Never" and 10 (ten) to "Always".

As regards to the semantic analysis and validation of the questionnaire, the necessary providences to eliminate ambiguities and biases were implemented. According to Pasquali (1999), the items of the instrument were analyzed for their accuracy, reliability, clarity, parsimony and objectivity. A detailed analysis of the instrument instructions was carried out, also with the expert judges, in order to avoid ambiguities, biases or errors in the analysis of the general guidelines which could hinder filling out the questionnaire.

The final validation by judges was carried out with nine experts, professors from the University of Brasilia, who were directly involved in research activities related to political behavior or in studies about social and cognitive processes related to the origin and change of attitudes. The validation allowed adjusting some items for the parsimony of the language, in addition to promoting the modification of general orientations of the scale in order to facilitate the understanding for the future interviewee. A letter of awareness was also drawn up, together with the instrument, in order to encourage the prospective respondent to participate in the survey, as well as explaining the objectives of this study.

After the semantic validation procedures and the analysis by judges, the beginning of the data collection was planned. Data collection was performed entirely online.

#### Procedure

The instrument was digitized in electronic format and was made available through Google Docs. As the principal objective of this work was to analyze the evidence of validity of the constructed measure, the electronic data collection was chosen, thus allowing greater amplitude and sample generalization, potentially reaching a greater number of people.

Initially, both the dissemination and the link for participation in the research were made available by the researchers on informal social networks. Concomitantly, a list of e-mails was obtained from undergraduate students of Public Administration enrolled in the virtual learning environment (VLE) of the University that was the locus of this research.

In order to obtain a greater scope for responses to the questionnaire, it was also decided to expand the data collection to graduates of the Departments of Sociology, Political Science, Public Policy Management, Law and Administration. This methodological decision was taken because they were departments whose topics of debate tackled the genesis and formation of political behavior. Those departments include this theme through the content of their courses, lectures, extension activities, academic community and others actions. That is why the research team chose to expand the sample size of the study.

A personal e-mail was sent to the likely respondents of the survey, containing a link to the attitudes instrument with a letter of awareness whose content was intended to motivate his/her participation. The e-mails of these students were obtained from the departments and secretaries of the University where they were enrolled.

The letter of awareness described the objectives of the research, also stressing the importance of spontaneous participation, the relevance and necessity of the responses to be consistent with the respondent's honest opinion. Another essential aspect of the letter of awareness was the confidentiality guarantee regarding the respondents' expressed opinions.

All the procedures to be followed for the correct completion of the scale were previously defined, in order to minimize possible biases of the respondent's analysis and, thus, to avoid errors in filling out the instrument. Tests were carried out by the research team with the instrument and with the registration of responses in the database, in order to prevent errors of any kind. The contents of the e-mail and the instrument - self-explanatory and self-applicablewere carefully analyzed, making them parsimonious and comprehensible for the analysis and subsequent judgment of the respondents.

#### Data Analysis

The responses of all the participants to the research instrument were automatically recorded in an electronic data file. Afterwards, they were imported into the SPSS software (Statistical Package for the Social Sciences), version 22.0, to the analysis of research data.

Initially, the data were submitted to exploratory and descriptive statistical analysis. The occurrence of univariate and multivariate outliers was identified and their influence on the pattern of the responses obtained was also evaluated. From 461 cases, there was a reduction to 445 (16 outliers), which became the final sample of the study.

In order to identify univariate extreme cases, the variables were transformed into standardized score (Z). The criterion for exclusion of responses equal to or greater than 3 was adopted (p < 0.001, two-tailed). Specifically, in extreme multivariate cases, statistical analysis was performed based on the Mahalanobis distance (a = 0.001). It should be noted that all stages of analysis of this work were performed with and without extreme univariate and multivariate cases, in order to identify eventual differences in the final results that such data could produce. The final sample was made up of 445 cases.

Evidences of the scale's validity were analyzed using exploratory factor analysis. Since this is the first attempt for internal validation of the constructed measure, it was decided not to carry out the confirmatory factor analysis at this moment.

The analysis of the empirical structure started with the evaluation of the main components, as well as the analysis of the multicollinearity and matrix factoriness (through the analysis of sample size, intercorrelations size - above 0.32, distribution of eigenvalues, scree plot, Bartlett's sphericity test-AIC, with p <0.001, and KMO) and parallel analysis. Subsequently, factor analysis (PAF) was performed.

Later, the PAF method was used, with oblique rotation (direct oblimin), in order to verify the correlations between the factors. Factor scores were also calculated. It should be noted that there are different types of criteria for determining the number of factors, which can be reduced to three: statistical criteria (hypothesis tests), conventional criteria and the relevance of the component or factor (Pasquali, 1999).

These three previous criteria were added to other criteria for factorial determination of the matrix: eigenvalues > 1,

a minimum of 3% of the explained variance, scree plot, determination of factorial load(>0.30), correlation analysis between factors, internal consistency (Cronbach's alpha) and interpretability of the solutions found.

#### Ethical considerations

Each participant responded to a structured Informed Consent Term (ICT), containing information about the research, the way of contacting the professionals responsible for it and clarifications about non-mandatory and possible interruption of their participation in the research.

#### RESULTS

This section presents the results of the procedures adopted for the exploratory factor analysis. It includes the psychometric evidence of the measure as well as its reliability and precision parameters.

The results showed that, in the factorial solutions of the scale extracted from the matrix without extreme cases, there was an increase of both the total explained variance and the *eigenvalue* of the components. It was also observed, even when comparing the results obtained with and without the extreme cases identified, that the positions of the items in the scale were modified, thus increasing the size of the factorial loads.

The indexes of internal consistency of factors increased in relation to the analysis with extreme cases, but the KMO remained almost unchanged in its final value, being decided, then, by the analysis and interpretation of the results obtained with the elimination of the univariate and multivariate extreme cases. It should be noted that this extreme case elimination procedure could be performed because the sample was considered large and broad, allowing the elimination of these cases without compromising the final number of participants. It should be emphasized that there was no significant loss of data to the point of making the proposed statistical analyzes unfeasible.

The graphical analysis of the scree plot, made through the principal components, indicates that the correlation matrix is factorizable, with KMO = 0.81 and indication of up to 7 factors. It was also verified that the first factor stood out from the others in terms of its *eigenvalues* and its percentage of the explained variance. The 7 factor solution, obtained through the analysis of the principal components, suggested a little parsimonious factorial structure. Some components were not even theoretically defendible (Pasquali, 1999).

Therefore, the factor analysis of the main axes (PAF) was carried out, forcing the solution with 6, 5 and 4 factors. The empirical structure found, showed that all the items of

the last factors belonged, concurrently, to the other factors, sharing a factorial load between them. There was a strong correlation between the factors, that indicates other factorial solutions for the scale, aiming to reach a more coherent and parsimonious empirical structure.

In the forced solution of 3 factors, also through PAF, with oblique rotation and listwise treatment of missing data, a more parsimonious empirical structure was found. The factorial loads ranged from .82 to .31. It was decided not to withdraw items with loads close to .30, as they were considered minimally acceptable, according to Fabrigar, Wegener, MacCallum & Strahan (1999) and Hair, Black, Babin and Anderson (2010). The first factor, called degree of policy knowledge, consisting of 15 items, corresponds to the respondents' assessment of what politics is. The Alpha was .82, with its eigenvalue of 5.07 and shared variance of 18.78%. More specifically, this empirical factor refers to the degree of information that the respondents have about the characteristics of politics; in other words, its importance to the progress of a democratic society, as well as the reactions individuals have when mentioning the term 'politics'. The significance of politics for maintaining of the concept of society, as well as its relation to the concept of democracy, was also included in these items.

The second empirical factor, *feelings about politics* with 7 items, has presented an Alpha of .72, with an *eigenvalue* of 3.17. The factor refers to what, in the opinion of the respondents, leads individuals to become involved with politics. Dimensions concerning to the passion for politics, as well as what drives people to engage in it, are addressed in this factor. Table 1 shows its evidences of validity.

The third factor, *intentions of political behavior*, was composed of 2 items, with an alpha of .80. This factor deals with perceptions about the use of politics for personal purposes, meeting the precepts expected in political thought, which emphasize the fulfillment of the collective interests of society. Table 1 illustrates all the information found.

It should be noted that the three factors include favorable or unfavorable attitudes towards politics. The two constant items in the third factor have polarities or facets with negative content (Pasquali, 1999), but they are complementary to the previous factors. Attitude, a human variable, is measured in terms of positive or negative reactions towards the object, as found in this research.

New suggestions are made below. However, due to the statistical and relevance criteria for the analysis of the subject, it was decided to keep these items in a structure with those three factors. The scale, therefore, shows indications of validity that allow its application in a larger context, and the identification of the individuals' social attitudes towards politics.

Table 1

Factorial load of the degree of policy knowledge, feelings about politics and intentions of political behavior dimensions.

Description of variables	Factorial load		
	Factor 1	Factor 2	Factor 3
Politics is important to the development of Brazil as a nation.	.82		
Politics is important for the development of a country.	.72		
The effective participation of citizens is important in matters related to political decision- making.	.60		
Politics refers to the art of governing and using power to uphold the rights of citizenship.	.56		
Politics must serve democracy.	.54		
It is through politics that people can access their rights as citizens.	.51		
The function of politics is to defend collective interests of society.	.48		
It is through politics that we can have a democracy.	.46		
Politics in Brazil is in a scenario far from the real services for the interests of civil society.	.44		
Access to information is a factor that determines people's participation in politics.	.44		
Politics refers to the capacity of societies to make people cooperate towards a goal estab- lished between them.	. 41		
To understand that politics goes beyond the National Congress makes people engage more.	.37		
Politics is part of people's lives.	.33		
In Brazil, people confuse politics with political parties.	.31		
The most common feeling about politics is impotence.	.31		
People get involved in politics because they believe in its importance.		.58	
The Brazilian political scenario lives a moment of respect and appreciation of ethics.		.56	
The function of politics is to meet the welfare needs of the population.		.55	
People get involved in politics for passion		.53	
People are dedicated to politics because they understand that it's fundamental to human life.		.50	
Engagement is the most common feeling toward politics.		.47	
In Brazil, I believe that people know how important politics is to their lives.		.41	
Anyone who engages in politics does so for personal reasons, and takes advantage of it.			.72
In Brazil, people engage in politics to satisfy their own interests.			.70
Number of items	15	7	2
% Shared Variance	18.78	11.73	6.8
Eigenvalue	5.07	3.17	1.8
Internal Consistency	.82	.72	.80

N=445

#### DISCUSSION

The objective of this study was to construct and validate, empirically and in an exploratory way, the Brazilian Scale of Attitudes towards Politics. It is formulated that this purpose has been achieved. All validation procedures (semantics, by judges and empirical) have been reported, and the results can be considered positive in relation to the evidences found in terms of validity.

Three empirical factors were identified. One concerning the degree of knowledge about politics, another concerning the type of emotions or sentiments aroused by this subject, and a third factor referring to the behavioral intentions, in line with the literature presented before. The 'attitude' construct is difficult to measure, and its independence (or interdependence) from other phenomena, such as emotions and observable behavior, needs to be better investigated scientifically. The findings of this study corroborate, in part, the results found by Camino (1996) and Pereira, Lima and Camino (2001). Similar concepts available in the literature, such as democratic attitudes (Pereira, Torres & Barros, 2004), revealed a unifactorial measure. This finding reflects the difficulty of operationalizing the attitude construct in terms of the development of metrics associated with its assessment.

The reliability coefficient obtained indicates that the scale could be improved. It is necessary to carry out later replications to include items more deeply related to the psychological properties of attitudes with emphasis on the conative intention in the face of this phenomenon.

The perception about the results suggests that a democratic positioning of the participants on the object was obtained, not its psychological dispositions, a foundation of the attitude concept. It should be pointed out that it was not expected to obtain a high coefficient, since it deals with a complex construct which is difficult to operationalize and goes beyond the scope of an exploratory study. New evidence of validity should be tested in other samples, seeking generality of the measure studied here.

Another limiting aspect is the likely influence of ideologies or positions for or against the object called "politics". One of the hypotheses may be the influence of social desirability.

The Scale of Attitudes toward Politics is a precise, reliable, and valid measure that allows the investigation of some of the issues related to the formation of social attitudes and their likely influence on political behavior. Such relationship needs to be empirically tested.

The instrument showed, in its final version, items with favorable and unfavorable content related to social attitudes. The adoption of unfavorable and favorable items on the same scale, although advised by the theoreticians (Pasquali, 1999), does not seem to have reached the expected final effect, since these items did not contribute significantly to the instrument and obtained even the smallest factorial loads and commonalities. It is suggested that such items could be reformulated, since they carry strong expressions such as 'personal interests' or 'take advantage', which can create biases in individual decisions.

A suggestion for future studies refers to the formulation of a measurement instrument specifically aimed to identify psychosocial factors that potentially inhibits favorable attitudes. Such instrument should add a symbolic dimension of the term 'politics', aiming to measure the degree of involvement of the respondent with actions of political nature in his community.

In addition, some items should be added aiming to measure to what extend each respondent shares favorable beliefs about politics. The qualitative methodology can even be an interesting tool in this sense, since it could be used to deepen the investigation of variables related to negative attitudes and behaviors towards politics.

It is suggested that the extension of the concept of attitudes towards a social object, such as politics, will allow a more complex and detailed analysis of political behavior. However, this concept needs to be explored in other studies, with different sample profiles, in order to verify the generality of the results, the consistency and stability of the empirical structures found in this research. Assuming limitations, it was verified that the conceptual confusion in the research field of attitudes has been constant in the studies on the area, making difficult its empirical operationalization. There are distinct conceptual perspectives of research in social psychology and political psychology (such as democratic attitudes and pre-democratic attitudes, among others) that seek to investigate attitudes. However, such concepts are not fully aligned with the instruments and measures associated with them. There are cases in which such instruments evaluate below or beyond what is proposed in the concept.

For future studies, the replication of the instrument in different countries is suggested, in order to give scope and consistency to the measure that was found. It is also suggested to undertake a conceptual and empirical investigation of a possible relationship among others variables such as political behavior, political engagement, political cognition, social cognition and feelings aroused by political behavior.

It is necessary to improve the attitudinal measure described in this paper. Confusion between politics and political parties can also be explored through new items. Other procedures of data analysis, such as structural equation modeling (confirmatory factor analysis) and discriminant analysis, comparing other concepts and measures, should also be tested.

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