

Psychometric properties, factorial structure and construct validity of the Spanish version of the Allophilia Scale

José Francisco Morales* and Alejandro Magallares

School of Psychology. Social & Organizational Psychology Department. Spanish Open University (UNED). Madrid (Spain)

Título: Propiedades psicométricas, estructura factorial y validez de constructo de la versión española de la escala de Alofilia.

Resumen: *Introducción:* La Alofilia puede definirse como las actitudes positivas hacia diferentes exogrupos. El objetivo de este estudio es traducir y validar la escala de Alofilia en población española. *Método:* 960 participantes de todo el territorio nacional formaron parte de la muestra. Se usaron cuestionarios sobre el prejuicio hacia los magrebíes, estrés y empatía para medir la validez convergente y divergente de la escala de Alofilia. *Resultados:* El análisis factorial confirmatorio puso de manifiesto que los ítems ajustaban un modelo de 5 factores que corresponden a las dimensiones propuestas por los autores originales (Afecto, Comodidad, Afinidad, Compromiso, Entusiasmo) y que éstos están relacionados. También se halló que los alphas de Cronbach de las diferentes sub-escalas, así como de la escala total, eran elevados. Además, se encontró que la escala de Alofilia se relacionaba con el prejuicio hacia los magrebíes (cognitivo, emociones y comportamientos), el estrés (interacción, recursos e identidad) y la empatía. *Discusión:* A la luz de estos resultados se concluye que el cuestionario es metodológicamente válido y que puede ser usado por la comunidad científica para medir comportamientos intergrupales cooperativos y participativos y como un complemento a las medidas tradicionales que se centran exclusivamente en el prejuicio y otras actitudes negativas.

Palabras clave: Análisis factorial confirmatorio; empatía; escala de Alofilia; estrés; prejuicio hacia los magrebíes.

Abstract: *Introduction:* Allophilia may be defined as the positive attitudes toward different out-groups. The aim of this study is to translate and validate the Allophilia Scale to Spanish population. *Method:* Participants were 960 individuals from all over Spain. Questionnaires to measure prejudice toward North African people, stress and empathy were used to analyze the convergent and divergent validity of the Allophilia scale. *Results:* Confirmatory factor analysis showed that the items of the questionnaire fit a model with five factors, corresponding to the dimensions proposed by the original authors (Affection, Comfort, Kinship, Engagement, Enthusiasm), and that they were inter-related. Cronbach's alpha of the Allophilia scale and the five factors were high. In addition, it has been found that the different subscales of the Allophilia scale were related with other variables such as prejudice toward North African people (cognitive, emotions and behaviours), stress (interaction, resources, identity) and empathy. *Discussion:* In light of these results, we conclude that the questionnaire is methodologically valid and can be used by the scientific community to measure cooperative and participatory intergroup behaviour as a complement to traditional measures of prejudice and negative intergroup behaviours.

Key words: Allophilia Scale; confirmatory factor analysis; empathy; prejudice toward North African people; stress.

Introduction

"No group is an island" was a motto frequently used by Henri Tajfel both in his writings (1978; 1981) and in his lectures, in a close paraphrase of the well known title of a John Donne's poem ("No man is an island"). Ethnicity, religion, sex, age, nationality, economic position and political ideology, are only some of the boundaries that separate groups from one another. Intergroup boundaries do something more, they constitute the foundation of people's group belongingness and help to define their interests and identities from a group position. Now, self-definition in terms of ethnicity (or, for that case, religion, sex, or any other group-defining characteristic) entails taking on group interests as their own and the fusion of personal identity with group identity. A complementary function of group interests and identities is to distinguish group members from other groups in the social context. From this perspective intergroup relations appear, then, as more prone to generate conflict and confrontation than harmony and cooperation.

Psychological processes, cognitive, affective and behavioural, associated to intergroup relations are postulated in the literature to reflect this lack of harmony and cooperation, despite the fact that the existent data are not entirely in

line with this postulate. It has been shown, for instance, that stereotypes, the cognitive side of intergroup relations, much in contradiction with the popular point of view, may be positive, and that positive stereotypes of an out-group (for example, mathematical ability of Asian American students) increase recall of the superior performance of members of this particular out-group (Pittinsky, Shih, & Ambady, 2000).

Affective intergroup processes are also usually seen in a negative light, and, in fact, intergroup attitudes tend to be studied almost exclusively under the common category of prejudice, as intimated by the vast amount of studies on racism, sexism, ageism, homophobia and a long list of other negatively connoted terms. A good example is provided by Stürmer, Snyder, and Omoto (2005) with respect to empathy. They found that different group memberships made empathy and helping less likely and that even in benign intergroup encounters, helping out-group members was typically inhibited by intergroup discrimination and differentiation.

Privileging the negativity of intergroup affect biases the prevalent research methods of study. Indeed, standard measures of prejudice focus only on "factors of dislike and report on changes in relative degrees of intergroup dislike" despite that, at least in principle, "intergroup attitudes", as any attitude, "can range from dislike to neutrality to affinity". This bias brings about a faulty study of (eventual) intergroup likes in that they are seen "as shades of dislike" (Pittinsky, Montoya, Tropp, & Chein, 2007; p. 126), excluding, somewhat paradoxically, the very possibility of positive intergroup

*** Correspondence address [Dirección para correspondencia]:**

J. Francisco Morales, Departamento de Psicología Social y de las Organizaciones, Facultad de Psicología UNED, C/ Juan del Rosal, 10, 28040 Madrid (Spain). E-mail: jmorales@psi.uned.es

attitudes. The assumption underlying this biased methodological stance, namely, that positive and negative attitudes are opposite ends of a unidimensional space, is, therefore, untenable: positive and negative attitudes do not correlate negatively, they are differently activated and they predict different behaviours (Pittinsky & Simon, 2007).

Allophilia is proposed as a way to overcome the negative bias of the study of intergroup relations. Theoretically, this negative bias is an undesirable side effect of the assumption of a one-dimensional model, a model that focuses exclusively on hate, dislike, mistrust or prejudice of out-groups. A two-dimensional model would be more realistic, given that people can also have positive attitudes toward out-groups. Then, Allophilia turns out to be a "complementary approach (with an) ... emphasis and examinations of shades of liking - positive attitudes beyond neutrality" stemming from the recognition that "affinity between groups can be distinct from the absence of dislike" (Pittinsky et al., 2007; pp. 126-127). Allophilia is necessary to grasp the "full range" of attitudes and behaviours toward out-group members (Pittinsky, Rosenthal, & Montoya, 2010).

For all these reasons, Pittinsky, Rosenthal, and Montoya (2011) developed the Allophilia scale. They found five components or facets of Allophilia that people can have to varying degrees: Affection (having positive feelings toward members of the other group), Comfort (feeling comfortable and at ease with members of that other group), Kinship (feeling a close connection with members of the other group), Engagement (being motivated to get to know members of the other group) and Enthusiasm (feeling impressed and inspired by members of the other group). Affection, Comfort, Kinship and Enthusiasm are related to affective evaluations of the out-group while Engagement deals with behavioural evaluations. An important difference between Comfort and Enthusiasm should be noted, in that the first indicates low negative arousal while Enthusiasm reflects intensive positive emotions.

Several studies have shown the usefulness of the Allophilia scale to predict positive intergroup attitudes and behaviours. In a study, participants high in Allophilia supported significantly social policies to recognize multiracial individuals as a minority group in society and, in addition, an interaction between Allophilia and adherence to the value of equality was found, suggesting that simply valuing equality is not enough to determining assistance in support policy and that positive attitudes (Allophilia) are also needed to that goal (Pittinsky & Montoya, 2009). In another study, performed in Israel on Arab and Jewish citizens to explore the degree of "Support for the coexistence", participants were asked: "Do you think that Israel should be a society in which Arab and Jewish citizens would show mutual respect and enjoy equal opportunities?" Allophilia was significantly more important in the prediction of coexistence than the absence of prejudice, and this held both for Arabs and Jewish participants. Among the difficulties for coexistence is notorious the fact that people underestimate significantly the degree in

which the other group likes their group. Specifically, most Jewish and Arab citizens believe that most people of their group are not liked by the other group. However, a significant majority of Jewish and Arab citizens say that they like the other group. This difference between perceived attitudes and own attitudes is significant both for Arab and Jewish citizens (Pittinsky, Ratcliff, & Maruskin, 2008).

A validation of the Allophilia scale in Italy was performed by Alfieri and Marta (2011) who managed to replicate the factor structure of the original scale and found high correlations with other variables. Since no adaptation of the scale has been done to date in Spain, at least to our knowledge, we set out to validate a Spanish-language version of the Allophilia Scale (Pittinsky et al., 2011). The adaptation of the Allophilia Scale is a complex task that requires careful planning to ensure its content maintenance, psychometric properties, factorial structure and construct validity for the Spanish population (Muñiz, Elosua, & Hambleton, 2013). For this reason, the goal of this research is to translate and validate the Allophilia Scale into Spanish to make possible the use of this instrument by the Spanish-speaking scholarly community.

The first stage was the items' analysis and then the evidence of reliability. The next step was to perform an Exploratory Factor Analysis (EFA) and a Confirmatory Factor Analysis (CFA) to verify the factorial structure proposed by Pittinsky et al. (2011). For convergent validity, a typical ethnic group, traditionally very close to the Spanish population over the years, namely, North African people, was selected and participants' positive thoughts and emotions and approach behaviours toward them, along with a scale to measure empathy, were used. Divergent validity was explored through a scale to measure stress toward North African people and negative emotions toward this group. The North African people, that would include individuals from Morocco and Sahrawis, were selected because is one of the most studied groups in the field of Social Psychology in Spain (Molero, Navas, & Morales, 2003).

Method

Participants

The participants consisted of 960 individuals (520 women and 440 men) aged between 18 and 40 years ($M = 27.03$, $SD = 7.14$). All the participants were students at Spain's *Universidad Nacional de Educación a Distancia* (Spanish Open University, UNED). All of them voluntarily agreed to participate in the study.

Procedure

Information on the study was posted on the virtual courses taught by the researchers in this study in order to request participation by students from the UNED that may be interested. The students in the final sample had to com-

plete the questionnaires through *Qualtrics*, an online survey environment. Because of the circumstances of the university where the study was performed, data was obtained from all the provinces in Spain. Mainly, participants came from Madrid and Barcelona, although no differences were found in the variables we measured regarding the origin of the students. All participants were Spanish and students from other nationalities were excluded of the final analyses.

The Allophilia scale (Pittinsky et al., 2011) was adapted to Spanish using the translation/back-translation methodology as stipulated by many authors (Gudmundsson, 2009) and the norms of the International Test Commission (Hambleton, 2005).

The first Spanish translation of the original scale was performed by one of the authors. This Spanish translation was independently reviewed by an additional evaluator, who worked with the first translator to reach an agreed-upon translation of the items, especially those which posed the most difficulty from the semantic and/or grammatical standpoint. Subsequently, a bilingual English translator back-translated the agreed-upon Spanish-to-English translation with no knowledge of the original scales in English in order to preserve the reliability of the back-translation. The scale translated into English and the original scale reached 100% grammatical agreement. Items can be seen in Table 1.

Table 1. Items of the Allophilia Scale: English and Spanish version.

English	Spanish
Affection	Afecto
1 In general, I have positive attitudes about African Americans	En general, tengo actitudes positivas hacia los magrebíes
2 I respect African Americans	Respeto a los magrebíes
3 I like African Americans	Me caen bien los magrebíes
4 I feel positively toward African Americans	Tengo sentimientos positivos hacia los magrebíes
Comfort	Comodidad
5 I am at ease around African Americans	Me siento a gusto con los magrebíes
6 I am comfortable when I hang out with African Americans	Me siento cómodo saliendo con los magrebíes
7 I feel like I can be myself around African Americans	Siento que puedo ser yo mismo con los magrebíes
Kinship	Afinidad
8 I feel a sense of belonging with African Americans	Tengo un sentido de pertenencia con los magrebíes
9 I feel a kinship with African Americans	Siento lazos de familiaridad con los magrebíes
10 I would like to be more like African Americans	Me gustaría parecerme más a los magrebíes
Engagement	Compromiso
11 I am truly interested in understanding the points of view of African Americans	Estoy realmente interesado en comprender los puntos de vista de los magrebíes
12 I am motivated to get to know African Americans better	Estoy motivado a conocer mejor a los magrebíes
13 To enrich my life, I would try and make more friends who are African Americans	Para enriquecer mi vida, me gustaría hacer más amigos magrebíes
14 I am interested in hearing about the experiences of African Americans	Estoy interesado en conocer las experiencias de los magrebíes
Enthusiasm	Entusiasmo
15 I am impressed by African Americans	Me impresionan los magrebíes
16 I feel inspired by African Americans	Los magrebíes me sirven de inspiración
17 I am enthusiastic about African Americans	Me siento entusiasmado hacia los magrebíes

Instruments

To measure positive attitudes toward North African people the Allophilia scale (Pittinsky et al., 2011) was used. This scale consists of 17 items scored on a 6-point Likert scale (from 1, “strongly disagree”, to 6, “strongly agree”). According to the authors that originally developed this instrument, this scale has five cardinal factors: Affection ($\alpha = .91$), defined as a positive feeling experienced toward an out-group; Comfort ($\alpha = .86$), that is, feeling at ease with out-groups members; Kinship ($\alpha = .91$), in the sense of sharing something or experiencing a sense of belonging with the out-group; Engagement ($\alpha = .92$), conceived as seeking contact with the out-group; and, finally, Enthusiasm ($\alpha = .91$), that is, having a favorable impression of out-group members. In addition, it was found that the different subscales were positively related to each other (Pittinsky et al., 2011).

To measure prejudice toward North African people the Prejudice Attitude Test (PAT) developed by Rojas-Tejada, Navas-Luque, Pérez-Moreno, Cuadrado-Guirado, & Lozano-Rojas (2012) was used. This scale consists of 20 items scored on a 6-point Likert scale. The scale contains four factors. The cognitive component of the prejudice has 8 items ($\alpha = .82$). An example of this subscale is “How do you think is the government and political system of North African people?” (from 1, “very bad”, to 6, “very good”). Higher scores on this subscale reflect greater positive thoughts toward North African People. Positive emotions has 3 items ($\alpha = .68$). An example of this subscale is “How much respect North African people make you feel?” (from 1, “nothing”, to 6, “a lot”). Higher scores on this subscale reflect greater positive emotions toward North African People. Negative emotions has 3 items ($\alpha = .89$). An example of this subscale is “How uncomfortable North African people make you

feel?” (from 1, “nothing”, to 6, “a lot”). Higher scores on this subscale reflect greater negative emotions toward North African People. Finally, the behavioural component of the prejudice has 4 items ($\alpha = .88$). An example of this subscale is “Would you like to have North African people as friends?” (from 1, “not at all”, to 6, “of course”). Higher scores on this subscale reflect greater approach behaviours toward North African People.

To measure stress toward North African people the Acculturation Stress Scale (ASA) developed by Ramírez, Ruiz, Torrente, & Rodríguez (2012) was used. This scale consists of 18 items scored on a 6-point Likert scale (from 1, “not stressed at all”, to 6, “completely stressed”). The scale contains three factors. The interaction stress subscale has 6 items ($\alpha = .92$). An example of this subscale is “How would make you feel to see North African people living on your building?”. Higher scores on this subscale reflect greater stress toward North African People related to interact with them. Competition stress has 6 items ($\alpha = .94$). An example of this subscale is “How would make you feel the increase of the unemployment rate of Spaniards because of the presence of North African people in the market place?”. Higher scores on this subscale reflect greater stress toward North African People related to compete with them to obtain resources. Finally, the identity stress has 6 items ($\alpha = .86$). An example of this subscale is “How would make you feel to see Spanish culture change because of the presence of North African living in Spain?”. Higher scores on this subscale reflect greater stress toward North African People related to losing their identity as Spaniards.

To measure empathy the Empathic Concern of the Interpersonal Reactivity Index (IRI) by Davis (1983) was used (Spanish Version: Pérez-Albéniz, de Paúl, Etxeberria, Montes, & Torres, 2003). This subscale consists of 8 items scored on a 6-point Likert scale ($\alpha = .74$). An example of this scale is “I would describe myself as a pretty soft-hearted person” (from 1, “strongly disagree”, to 6, “strongly agree”). Higher scores on this subscale reflect greater empathy.

Finally, sex and age were asked to the participants.

Data analysis

Before performing the EFA and AFA, a series of prior calculations were obtained. In the first place, it was analyzed whether our data matched a normal distribution or not. To do so, it was decided to measure the asymmetry and kurtosis of the items of the Allophilia Scale. The values for asymmetry and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution (George & Mallery, 2010). Then, it was decided to analyze the multicollinearity of the variables in our study. Multicollinearity is said to exist among explanatory variables when there is some kind of linear dependence or a strong correlation among them. To do this, it is common to calculate Bartlett’s sphericity test and the Kaiser-Mayer-Olkin measure of sampling adequacy (KMO). The sphericity test is interpreted

as follows: if the null hypothesis is accepted ($p > .05$) it means that the variables are not intercorrelated and therefore it does not make much sense to perform a factorial analysis (Reise, Waller, & Comrey, 2000). For the KMO measure, it is recommended that the value should fall between the range of 0 and 1, but closer to 1 (Beavers et al., 2013).

The next step, in order to analyse the psychometric properties of the Allophilia Scale, was to calculate the Cronbach’s alphas, a coefficient used to measure the reliability of a measurement scale, of both the scale as a whole and the subscales (Cronbach & Shavelson, 2004). According to Kline (2000), the reliability between .70 and .90 is good and between .91 and .99 excellent.

Once the checks about normality and multicollinearity had been completed, an EFA using the maximum likelihood method with Varimax rotation was conducted (Schmitt, 2011). The factors were extracted with own values higher than 1, as recommended by the experts (Tabachnick & Fidell, 2007). Finally, a CFA was conducted to clarify the factorial structure of the Allophilia Scale. To study the models’ fit, we did not use the Chi-squared test because it is very sensitive to the sample size and is not advisable when there are more than 400 cases, as it is always significant. Instead, given the large amount of goodness of fit indexes available, we chose some that are well known and recommended, such as the Normed Fit Index (NFI) the Comparative Fit Index (CFI) and the Residual Mean Squared Error Approximation Index (RMSEA). Values higher than .95 on the NFI and CFI and lower than .05 on the RMSEA indicate good fit (Kline, 2011). Additionally, Browne & Cudeck (1993) postulate that a fit less than or equal to .08 is reasonable in the case of the RMSEA. Finally, the Akaike Information Criterion (AIC) to compare the different models to each other was used. Lower AIC values indicate higher parsimony (Akaike, 1974). The sample size was enough given that the relationship between the number of subjects and the number of items was greater than 45:1 (Bentler & Chou, 1987). In addition, gender invariance was estimated.

Finally, it was analyzed the construct validity of the adapted version of the Spanish version of the Allophilia Scale. For this purpose, it was analyzed the relation between this questionnaire and prejudice toward North African people, stress and empathy, using Pearson’s correlations.

AMOS software (Arbuckle, 2011) for the CFA, and SPSS software (v. 22.0, SPSS Inc, Chicago, IL) for the rest of the analyses, were used.

Results

Item’s analysis

According to the analyses performed, the items of the Allophilia Scale matched a normal distribution (values of between -2 and +2 for all the 17 items on the scale). In our case, the Bartlett’s sphericity test was 13434.49 (136 gl) with

$p < .01$, and the KMO value was .94, which is largely acceptable. In addition, means and standard deviations of the items can be seen in Table 2.

Table 2. Mean, standard deviation, asymmetry and kurtosis of the items of the Allophilia Scale.

Items	Mean	SD	Assymetry	Kurtosis
1	4.10	1.27	-.48	-.22
2	4.88	1.17	-1.17	1.18
3	3.99	1.20	-.44	.01
4	3.88	1.25	-.31	-.31
5	3.76	1.29	-.21	-.45
6	3.58	1.34	-.13	-.51
7	3.75	1.44	-1.95	-.76
8	2.37	1.24	.66	-.24
9	2.34	1.22	.66	-.22
10	2.05	1.10	.93	.45
11	3.99	1.46	-.40	-.66
12	3.83	1.41	-.31	-.61
13	3.40	1.43	-.06	-.80
14	3.97	1.39	-.44	-.49
15	2.95	1.26	.22	-.50
16	2.27	1.16	.68	-.01
17	2.34	1.16	.64	.08

Note: Items from 1 to 6.

Reliability

The Cronbach's alpha of the complete scale (17 items) was estimated. The overall reliability of the scale was .95. In addition, the reliability of the 5 subscales were calculated. The Cronbach's alpha of subscale Affection (4 items) was .91, Comfort (3 items) was .90, Kinship (3 items) was .85, Engagement (4 items) was .92 and Enthusiasm (3 items) was .87.

Factorial structure

In the first place, an EFA was conducted. According to the obtained results, five components were yielded in the fi-

nal solution. These components explained 81.68% of the total variation, with saturations as shown in Table 3.

Table 3. Rotated component matrix of the Allophilia Scale.

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1	.81	.20	.13	.14	.20
2	.84	.25	.01	.01	-.04
3	.80	.20	.16	.18	.26
4	.78	.21	.22	.18	.30
5	.47	.23	.20	.21	.52
6	.55	.25	.23	.23	.61
7	.36	.25	.06	.24	.75
8	.12	.09	.19	.84	.20
9	.19	.22	.23	.83	.13
10	.13	.17	.46	.65	.06
11	.23	.86	.14	.12	.10
12	.28	.82	.24	.17	.15
13	.26	.64	.42	.21	.21
14	.28	.78	.29	.15	.17
15	.11	.35	.77	.12	.04
16	.15	.20	.78	.41	.09
17	.18	.23	.73	.39	.16

The first component, Affection, explains 23.33% of the variation and it includes items 1 to 4. The second component, Engagement, explains 18.48% of the variation and it includes items 11 to 14. The third component, Enthusiasm, explains 15.25 % of the variation and it includes items 15 to 17. The fourth component, Kinship, explains 14.93% of the variation and it includes items 8 to 10. Finally, the fifth component, Comfort, explains 9.67% of the variation and it includes items 5 to 7.

Once the EFA was conducted, a CFA was made. A model with five factors (Affection, Comfort, Kinship, Engagement, Enthusiasm) for the 17 item scale was tested. The scale showed acceptable fit indices (NFI: .95; CFI: .96; RMSEA: .08; AIC: 741.79). Figure 1 shows the model parameters. The structure found mirrors the version proposed by Pittinsky et al. (2011).

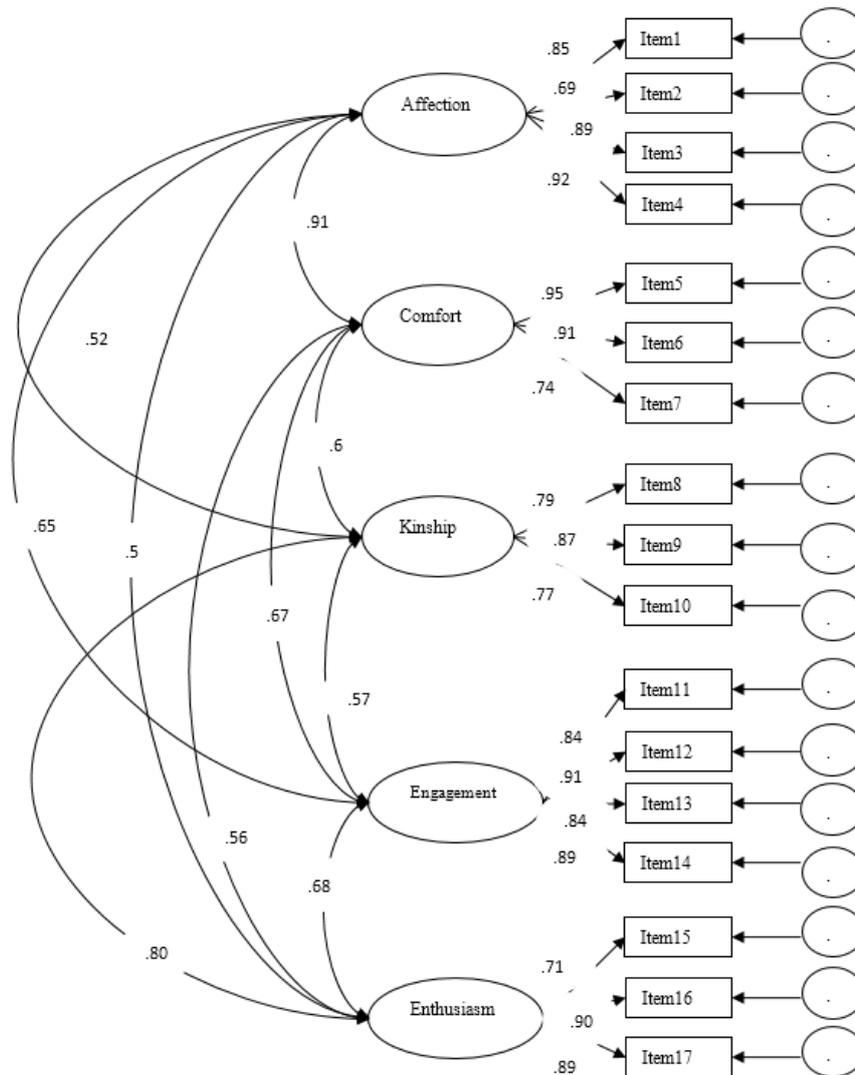


Figure 1. Results of confirmatory factor analysis. Standardized Solution.

The alternative models did not show acceptable fit. For example, the second order model showed worse fit indexes (NFI: .92; CFI: .92; RMSEA: .10; AIC: 1243.71) than the first order model with five factors. Finally, the model with just one factor showed even worse fit indexes (NFI: .66; CFI: .67; RMSEA: .20; AIC: 4782.85).

Invariance across gender was tested. The five factor model had acceptable fit indexes (NFI: .95; CFI: .96; RMSEA: .05; AIC: 964.69) showing that no gender differences were found in the Allophilia scale.

Construct validity

Pearson’s correlations among the Allophilia Scale and its five subscales (Affection, Comfort, Kinship, Engagement, Enthusiasm) with prejudice toward North African people

(cognitive, positive and negative emotions, and behaviours), stress (interaction, resources, identity) and empathy were calculated. As it can be seen in Table 4, both the Scale as a whole and its subscales were positively related with positive thoughts and emotions toward North African people and with approach behaviours toward this group. In addition, the Allophilia Scale as a whole and its subscales were positively related with empathy. These results show the convergent validity of the scale and the factors of the questionnaire. Finally, the Allophilia Scale and the rest of its subscales were negatively linked to the three subscales of the stress questionnaire and to negative emotions toward North African people. These results show the divergent validity of the scale and the factors of the questionnaire. All the correlations found were highly significant.

Table 4. Correlations of the variables of the study.

Variables	Affection	Comfort	Kinship	Engagement	Enthusiasm	Allophilia
Cognitive	.41**	.41**	.41**	.40**	.43**	.50**
Positive emotions	.64**	.59**	.44**	.62**	.52**	.70**
Negative emotions	-.58**	-.62**	-.39**	-.41**	-.34**	-.58**
Behaviour	.68**	.71**	.50**	.65**	.54**	.76**
Interaction	-.56**	-.58**	-.34**	-.45**	-.31**	-.57**
Competition	-.54**	-.55**	-.34**	-.52**	-.38	-.59**
Identity	-.53**	-.56**	-.37**	-.53**	-.40**	-.60**
Empathy	.30**	.234**	.11**	.30**	.14**	.28**
Mean	4.21	3.69	2.24	3.80	2.52	3.37
SD	1.08	1.24	1.03	1.28	1.06	.93

** $p < .01$

Discussion

Therefore, given these results, the goal of this study, to translate and validate the Allophilia scale into Spanish, was fulfilled. As it was pointed out before, we firstly showed that the reliability of both the total scale and the subscales were appropriate given the Cronbach's alphas found. Secondly, it was confirmed the factorial structure proposed by Pittinsky et al. (2011) in Spanish population. Finally, we obtained evidence of construct validity because it has been shown that the five factors of the Allophilia Scale (Affection, Comfort, Kinship, Engagement, Enthusiasm) are related to prejudice toward North African people, stress and empathy. For all these reasons, we believe that based on the information presented in the preceding sections, the Spanish version of the Allophilia scale can be safely used to measure cooperative and participatory intergroup behaviour.

It is important to remark that the internal consistencies obtained in our Spanish sample (Affection, .91, Comfort, .90, Kinship, .85, Engagement, .92, Enthusiasm, .87) were very similar to the ones obtained by the original authors (.91, .86, .91, .92, .91, respectively). In addition, it was found that the different subscales were positively related to each other, as shown by the analyses performed, as the original authors did (Pittinsky et al., 2011)

The biased negative approach to the study of intergroup behaviour, insofar as it focuses exclusively on prejudice and dislike, advocates negative, defensive ways to overcome intergroup tension and conflict, that is, ways based solely on the real or perceived elimination of intergroup boundaries. It will, for example, favour the fostering of intergroup contact, much in the old-fashioned psychosocial tradition, or will recommend to create superordinate identities, or will suggest to forget about people's group belongingness and to stress instead their individual characteristics or, finally, it will appeal to goals and/or threats that can be shared by both groups. The underlying assumption is that good intergroup relations are only possible if prejudice reduction and an eventual elimination of intergroup boundaries are going to happen. The defensive character of all these ways to overcome intergroup tension and conflict is evident in their asking for the suppression of people's group identity and the subsequent damage to an essential part of their very self.

Alternatively, Allophilia does not look at intergroup hate and prejudice but acknowledges the fact that many people are fond of a foreign people and culture and many young people love to get to know elderly people (Pittinsky, 2008). Allophilia research has found support to many instances of good intergroup relations, as in the case of Jews and Arab citizens of Israel (Pittinsky et al., 2008). As a global measure of intergroup liking, Allophilia diverges from standard models of intergroup relations not only on conceptual grounds, but also in its predictive ability of positive intergroup behaviours. Take the following example proposed by Pittinsky (2008). Imagine a given school where racial prejudice has been eliminated. Admittedly, there will hopefully be an absence of daily intergroup fights between students from both groups. But the simple elimination of racial prejudice will not foster cooperative tasks between the groups or the sharing of leisure activities. Allophilia would make cooperation much more likely. And, what is equally important, the groupality of every student in the school would be preserved.

A conclusion from the above considerations could be that positive evaluations are deserving attention as distinct from negative evaluations, especially if positive, rather than negative, intergroup relations are looked for. The unidimensional model used by most social psychologists, in which people may have much dislike or mistrust or prejudice or less of it or even, none at all, appears, then, as unrealistic and must be replaced by a "more realistic model", one that is two-dimensional model. People can also have positive attitudes toward that same other group that they dislike—even at the same time.

This study has at least three limitations. In the first place, as it has been said in the method section, the sample was made up of university students. We believe that it would have been worthwhile to use participants from other social strata or with lower educational levels in order to make the sample as heterogeneous as possible. However, it is important to remark that the students of the UNED have some special characteristics, some of them working and with an average age superior to a "normal" student, that made them more similar to the general population than other university samples. In the second place, we have not measured if participants knew directly individuals from North Africa.

According to the contact hypothesis under appropriate conditions interpersonal contact is one of the most effective ways to reduce prejudice between majority and minority group members (Brown & Hewstone, 2005). Future studies should address this issue. In the third place, we did not choose the same questionnaires that the originals authors used to measure construct validity. However, it is important to remark that the scales finally used to analyze the construct

validity of the Spanish version of the Allophilia scale measured very similar variables adapted to the Spanish reality.

Despite these limitations, we believe that the Spanish version of the Allophilia Scale (Pittinsky et al., 2011) could be an appropriate tool for measuring cooperative and participatory intergroup behaviour. We think this instrument may be useful for all researchers in the Spanish-speaking community who are interested in studying Allophilia.

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