New Evidence of Construct Validity Problems for Pettigrew and Meertens' (1995) Blatant and Subtle Prejudice Scale

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Abstract

Given the current debate over the distinction between subtle and blatant prejudice, this study provides new evidence regarding problems with the construct validity of the Pettigrew and Meertens' Blatant and Subtle Prejudice Scale. To assess these issues, an existing data sample of 896 Chilean participants collected in 2010 was reanalyzed. The main analysis method used was a confirmatory factor analysis. The model that best represented the original theory (a model of two correlated second-order factors) had an improper solution due to the unidentified model. The scale has substantial psychometric problems, and it was not possible to distinguish between subtle and blatant prejudice.

Keywords

Blatant and subtle prejudice, psychometric properties, confirmatory factor analysis, cultural adaptation

Introduction

Since the publication of Gordon Allport's *The Nature of Prejudice* in 1954, prejudice has been a prominent topic in both psychosocial theory and research.

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Although the discussion is far from over, there is some consensus regarding the current manifestation of prejudice expression in globalized societies. Prejudice has far from disappeared, but open and extreme expressions of prejudice (for example, "Jim Crow racism," as described by Bobo (1999), based on a belief in the innate inferiority of some out-groups) are clearly in decline (Brown, 1995; Dovidio, 2001; Dovidio & Fazio, 1992; Dovidio & Gaertner, 1998; Fiske, 1998; McConahay, Hardee, & Batts, 1981; McConahay & Hough, 1976; Oskamp & Schultz, 2005; Pettigrew, 1979; Schuman, 1997) because of, among other factors, progress in the field of civil rights and resultant legal changes that have made discrimination not only immoral but also illegal (Dovidio, 2001). However, and unfortunately, currently prejudice is often cloaked in more "civilized" forms, softer and more in keeping with the times we live in ("laissez-faire" racism, to use the terminology of Bobo, 1999). Despite the "softening" trend, these forms of prejudice are no less harmful than others affecting "the lives of people in subtle but significant ways" (Dovidio, 2001, p. 834). Following these arguments, Pettigrew and Meertens (1995, p. 57) proposed a distinction between "traditional forms" (blatant) and indirect forms of prejudice (subtle), the prejudice that resides beneath a veneer of political and social correctness.

Based on Allport's (1954) theoretical framework, those authors argued that blatant prejudice is made up of two factors: (a) fear and a rejection of the out-group and (b) opposition to intimate contact with out-group members. Subtle prejudice, "cold, distant and indirect," is characterized by three distinct features: (a) staunch defense of the in-group's traditional values, together with the perception that minority out-groups will not endorse those values; (b) exaggeration of cultural differences and the use of these differences to justify the out-group's relatively inferior position; and (c) changes in the way emotions are expressed, from more manifest and violent forms (those expressed only in situations where the norms are unclear) to softer and less direct expressions, together with difficulty expressing positive emotions toward the out-group. Taking these possible "expressions" of prejudice as a starting point, Pettigrew and Meertens (1995) proposed a typology of the prejudiced person based on a combination of scores obtained using their Blatant and Subtle Prejudice Scales. The authors identified four categories: *Equalitarians* (Type 1; 33% of the sample) are those who score low on both scales; *Subtles* (Type 2; 50% of the sample) score low on the blatant scale and high on the subtle scale; *Bigots* (Type 3; 17% of the sample) score high on both scales; while the category *Error* (Type 0; <2% of the sample) refers not strictly to a type, but rather scores high on the blatant scale and low on the subtle scale, which is logically inconsistent (as, in this construct, blatant prejudice presupposes any prejudice detected in subtle forms).

Although the distinction between subtle and blatant prejudice enjoys strong theoretical support, the empirical evidence is questionable (Bobo, 1988; Brown, 1995; Devine, Monteith, Zuwerink, & Elliot, 1991; Echebarría & Fernández, 2002; Olson, 2009; Sniderman & Tetlock, 1986; Wetherell & Potter, 1992).

The major criticisms are focused on the following: the scales measuring modern prejudice are afflicted by high levels of social desirability (Olson, 2009); high correlations equal or above .70 have been found between measures of blatant and subtle prejudice (Espelt, Javaloy, & Cornejo, 2006; Hamberger & Hewstone, 1997; Rattazzi & Volpato, 2001, 2003; Rueda & Navas, 1996), which would indicate that these constructs are not clearly differentiated from one another; and dubious interpretation of the four items dealing with the factor of cultural differences. Considering the perception of clear cultural differences as an indicator of subtle racism contradicts the attempt to highlight "the importance of recognizing and respecting intergroup differences as an antidote to the cultural annihilation implied by assimilationist philosophies" (Brown, 1995, p. 226). Item 1, corresponding to this factor, asks: "How different or similar do you think Turks living here are to other Dutch people like yourself (very different, somewhat different, somewhat similar or very similar) in the values that they teach their children?" Respondents scoring high might be doing so either because they positively appraise the fact that ethnic minorities do not lose those values characteristic of their cultural identity (which would not reflect a prejudiced position) or because they reject resistance to cultural assimilation.

Based on the same data but modifying the estimation strategies in the exploratory factor analysis, Coenders, Scheepers, Sniderman, and Verbek (2001) indicate the existence of a factor associated with general prejudice and a second one associated with cultural differences, differing substantially from the structure originally published. They also reveal inconsistencies within the results obtained by the original authors in the two publications related to that research. In 1995, the subtle scale was made up of two factors in two of the samples and had three factors in the other five samples; in 1997, the same scale contained three factors in all seven samples. Coenders et al. (2001) also had concerns with the use of confirmatory factor analysis (CFA) and criticized the fact that the models were estimated separately for each of the seven countries used in the study rather than using a multi-group analysis strategy where group estimations were carried out jointly. In their opinion, the model they presented (a two-factor model) showed a better fit than those proposed by the original authors. This is only partly true because the proposed model in Coenders et al. only showed a moderate fit (comparative-fit index (CFI) = 0.82; goodness-of-fit index (GFI) = 0.85; parsimonious GFI = 4.79; standardized root mean square residual (SRMR) = 0.066). Thus, no empirical distinction could be made between the two types of prejudice.

Advances in civil rights and the illegality of prejudiced behavior achieved in European and Anglo-American contexts and the resulting strategies to measure new forms of prejudice have not been applied in a Latin American context, where the majority of countries do not deem expressions of racism and prejudice illegal—and Chile is no exception. Recently, in mid-2012, Chile enacted a law against discrimination (Law 20.609, commonly called the "Zamudio law"). This law was enacted five months after the fatal beating of Daniel Zamudio, a young

man killed by four young neo-Nazis because of his sexual orientation. This case resonated in Chilean society, stimulating discussions on discrimination against minority groups, including Chile's indigenous people, the gay community, immigrants, and those living in poverty. Two years before the enactment of the "Zamudio Law" (2012), Cárdenas (2010) had conducted one of the most recent reviews of Pettigrew and Meertens' (1995) and Meertens and Pettigrew (1997) Blatant and Subtle Prejudice Scale and one of the most unique confirmatory structure analyses of this scale reported in Latin America. Taking for granted that the scale determines the typology of people with regard to their expressions of prejudice (Bigots, Subtles, Equalitarians, and Error), where context affects the manner in which prejudice is expressed, it is expected that the scale is also sensitive to the Chilean context, as it has been in several European and American countries. Pettigrew and Meertens (2001) pointed out this aspect, stating that the scale has been tested in several countries, although mainly in Europe and the United States. In other words, this scale, assuming that the structure is correct, ought to be applicable in different contexts, showing varying distribution percentages for typologies regarding people's expressions of prejudice. Thus, a non-student Latin American sample was of high interest to confirm or disconfirm the measurement of the blatant and subtle prejudice structure proposed by Pettigrew and Meertens (1995), Meertens and Pettigrew (1997). Cárdenas compared the goodness-of-fit statistics of four models with theoretical support, concluding that the correlated two-factor second-order model had the best fit. The distribution of prejudice types as proposed by Pettigrew and Meertens' (1995) and Meertens and Pettigrew (1997) typology is as follows: Bigots 33.5%, Subtles 37.7%, Equalitarians 25.0%, and Error 3.8% (Cárdenas, 2010). Regarding the correlation between blatant and subtle prejudice, the author determined it to be "moderate," but he did not report any particular figure: "[a] moderate correlation between both scales showing that, in fact, both refer to prejudice measurement, though they might refer to different expressions of prejudice since they measure different but related dimensions of such a construct" (Cárdenas, 2010, p. 122).

As in most of previous research, Cárdenas' (2010) remarks regarding the degree of fit of the data to the models did not concern item wording, blatant and subtle factor correlation or model identification, the latter being a fundamental condition to ensure that the factor solution is unique and therefore valid. If this is not the case, the model cannot be solved (Brown, 2006). In the current study, then, following Coenders et al. (2001) strategy, Cárdenas' data were reanalyzed with the aim of finding new evidence that would challenge the validation regarding the factorial structure of the scale. Thus, using the same data ensures that the new evidence due to the complementary analysis is not explained by specific characteristics of a new sample.

In short, given the current controversy regarding the theoretical construct and the applicability of the subtle and blatant prejudice concepts, the extensive use of the Pettigrew and Meertens' scale (Meertens & Pettigrew, 1997; Pettigrew &

Meertens, 1995), and the conviction that Cárdenas (2010) did not consider all relevant features in the CFA, there remains a need to clarify the following concerns about certain theoretical and measurement issues: confirmation of the prejudice structure proposed by Pettigrew and Meertens (1995) using a Spanish version of their scale in a Latin American environment, confirmation as to whether the structure of blatant and subtle prejudice, mainly measured using student samples, is applicable to the general population, and finally, confirmation of whether there is a unique factor solution that is therefore valid related to the model that has the best theoretical support (the model with two correlated second-order factors ("Blatant" and "Subtle") and five first-order factors). Assessment of the feasibility of measuring the Emotion factor with only two items (as the Emotion factor is measured only by two observable variables, the model would not be identified locally so it would not be estimable) is crucial. It also may be possible to propose new alternative models with theoretical support.

To address some of the above issues, the data used by Cárdenas (2010) were reanalyzed, applying CFA techniques. The following four models with theoretical support were estimated to determine the best-fit solution. Models I, II, and III all enjoy some theoretical support and have been conceived as alternatives to explain the original model (Model IV).

Model I has two first-order correlated factors (blatant and subtle prejudice). This model was proposed as the simplest baseline anchorage model. This model is consistent with the original theory developed by Pettigrew and Meertens (1995, 2001) because it distinguishes between blatant and subtle prejudice. However, as this factor structure does not consider the specific domains of the blatant (rejection and intimacy) and the subtle (values, culture, and emotions) scale, only a poor or moderate fit to the data was expected.

Model II has five first-order correlated factors (Rejection, Intimacy, Values, Culture, and Emotions) and is included in view of the controversy regarding the existence of two types of prejudice (blatant and subtle). According to the original theory, higher correlations between the dimensions belonging to the same scale (rejection with intimacy (blatant scale); and between culture, values, and emotions (subtle scale)) were expected.

Model III is a hierarchical model with one second-order factor (prejudice) and five first-order factors (Rejection, Intimacy, Values, Culture, and Emotions). This model partially represents Pettigrew and Meertens' theory. It considers the five dimensions (rejection, intimacy, values, culture, and emotions) proposed by the original authors but explains a general factor of prejudice and not the distinction between blatant and subtle prejudice. This model is justified because it aims to clarify the current discussion on the distinction between two types of prejudice or a general prejudice explained by these five dimensions.

Model IV is a hierarchical model with two correlated second-order factors (blatant and subtle) and five first-order factors. This model is justified because it accurately

represents the theory developed by the original authors, where two forms of expression compose prejudice: blatant and subtle. The first one includes rejection and intimacy factors and the second one, values, culture, and emotion factors. Although it has the best theoretical support among the models estimated, most of the previous studies in different cultural contexts have not been entirely consistent with this factor structure (Cárdenas, 2010; Coenders et al., 2001; Gómez & Huici, 1999; Hamberger & Hewstone, 1997; Rattazzi & Volpato, 2001, 2003; Rodríguez, Herrero, Ovejero, & Torres, 2009; Rueda & Navas, 1996; Villano, 1999).

Despite Models I, III, and IV having been investigated previously by Cárdenas (2010), it was decided to reestimate them to include further evidence related to the original structure of the Blatant and Subtle Prejudice Scale. The new analyses consider the correlation between the blatant and subtle factors (Model I) and the parameter estimates for Model III (not reported) and assess the possibility of improper solutions (Model IV). Although other alternative models could be proposed (as an exploratory strategy), these four models were chosen because the aim of this study was to test the original factor structure proposed by Pettigrew and Meertens (1995, 2001). Thus, the main hypothesis is that the bi-factorial structure of the measure (blatant and subtle factor), consistent with previous investigations, would not be confirmed given the structural problems of the scale.

Method

Participants

This research is a secondary analysis of previously published data by Cárdenas (2010). Cárdenas' consent and collaboration was obtained to conduct a reanalysis of the data. For details about the data collection procedure and the sample characteristics, see Cárdenas and Cárdenas, Gómez, and Yáñez (2011). A total of 896 participants were included in that study, aged 18 to 65 years, living in the Antofagasta Region, Chile. A probabilistic sample was selected using a three-stage sampling method in the cities of Antofagasta, Calama, and San Pedro de Atacama: selection of representative strata (three selected cities); cluster sampling (census districts); and simple random sampling (Cárdenas, 2010). A 95% confidence interval (CI) was used for estimates, and a 4% sampling error was assumed.

Measures

Blatant and Subtle Prejudice Scale (Pettigrew & Meertens, 1995). A Spanish version adapted for the Chilean population (Cárdenas, Music, Contreras,

Yemans, & Calderón, 2007) was used. This scale comprises 20 items: 10 items correspond to subtle prejudice and 10 items to blatant prejudice. From a theoretical point of view, four items on the subtle prejudice subscale correspond to a "Traditional values" dimension (Values), four to a "Cultural differences" dimension (Culture), and two to a "Denial of positive emotions" dimension (Emotions). In the case of the blatant prejudice subscale, six items were included in the "Fear and rejection" dimension (Rejection) and four in the "Loss of intimacy" dimension (Intimacy). This scale differs from other Spanish versions (Rueda & Navas, 1996) with regard to the language (made appropriate for Chilean respondents) and reference out-group used (Bolivian immigrants). Respondents indicated their agreement or disagreement concerning the content of each item on a five-point Likert-type scale with response options 1 (*totally disagree*), 2 (*disagree*), 3 (*neither agree nor disagree*), 4 (*agree*), 5 (*totally agree*).

Data analysis

Item analyses (response frequencies by category, number of missing values, and descriptive statistics for each item) and a reliability (Cronbach's α) assessment were performed. To determine the reliability of the instrument, Nunnally and Bernstein's (1994) criteria were used as reference: $.70 < \alpha < .80$ is acceptable reliability, and $\alpha > .80$ is good reliability. Subsequently, univariate normality was checked using the statistical indicators of asymmetry ($-2 < G_2 < 2$) and kurtosis ($-7 < G_2 < 7$; Russell, 2002).

Multiple imputation was used to address missing values (Baraldi & Enders, 2010). Before applying multiple imputation, questionnaires with six or more incomplete data points were removed ($n = 4$). As a result, an effective sample of 892 respondents (99.6% of the total sample) was used.

When testing the CFA models, the maximum-likelihood estimation method was used, and the following GFIs were considered: absolute (χ^2/df, SRMR, root mean square error of approximation (RMSEA), CFI, and Tucker–Lewis index (TLI)). The goodness-of-fit criteria suggested by Schreiber, Nora, Stage, Barlow, and King (2006) and Marsh, Hau, and Wen (2004) were used: $\chi^2/df < 3$ (< 5); CFI > 0.95; TLI > 0.95; SRMR < 0.08; RMSEA < 0.08.

Regarding the factor loadings, in order to be considered an acceptable indicator, a loading had to be statistically significant ($p < .05$; Byrne, 2013), and the cut-off point for the magnitude of standardized loadings should be > .30 (Brown, 2006). Statistical analyses were conducted using IBM SPSS 20 and Mplus 6.12 statistical software.

Results

The final sample was made up of 892 Chilean participants (M age = 38.2 years, $SD = 13.5$), of which 58.4% were women ($n = 521$) with a mean age of 38.8 years

($SD = 13.4$) and 41.6% were men ($n = 371$) with a mean age of 37.3 years ($SD = 13.6$).

Item analysis, reliability, and correlation between scales

The distribution of responses to the questionnaire items showed adequate fit for univariate normality. Values ranged from -1.26 to 0.94 ($SE = 0.082$) for asymmetry and from -1.29 to 0.60 ($SE = 0.16$) for kurtosis. Responses were adequately distributed, covering all the options for the majority of the items. The percentage of omissions was low, ranging from 0.2% to 2.9%. Items 1, 4, 14, 16, and 20 had negative asymmetrical distributions of responses.

The reliability coefficient for the total scale was good ($\alpha = .81$). The reliabilities obtained for the blatant ($\alpha = .67$) and subtle ($\alpha = .71$) prejudice subscales were moderate to acceptable. The correlation between the blatant and subtle subscales was high and significant ($r = .60$, $p < .01$). The item analysis of the blatant subscale revealed the inadequacy of Item 20; its removal would considerably increase the reliability of this subscale to .76 (Table 1). Moreover, this item shows a negative item-test correlation ($r = -.34$); thus, it would measure something different from that intended in the test, or measure it in a different direction. In the case of the subtle subscale, the removal of Items 1 and 19 increased its reliability (Table 1). The corrected item-total correlations, in terms of absolute value, ranged between .31 and .56 for the blatant subscale and between .11 and .52 for the subtle subscale. In accordance with the typology suggested by the original authors, based on the combination of the scores obtained on the Blatant and Subtle Prejudice Subscales, the sample employed presents the following profiles: 38.8% would fall into the Bigots category, 37.9% are Subtles, 20.6% Equalitarians, and 2.7% could be classified in the Error category.

Confirmatory factor analysis

Estimating Model I (two correlated first-order factors), a considerably high correlation, $r = .79$, 95% CI $= .74$, $.85$, was obtained between the blatant and subtle dimensions. Given its simplicity, this figure is not shown. All factor loadings (λ_{ij}) were significant at $p < .001$. Loading magnitudes (standardized solutions are reported in this section) ranged between $\lambda_{19\ 2} = .09$ and $\lambda_{11\ 2} = .70$. Factor loadings associated with the subtle factor tended to be lower than those related with the blatant prejudice factor. The factor associated with subtle prejudice yielded two rather low loadings, $\lambda_{19\ 2} = .09$ and $\lambda_{1\ 2} = .16$, both below .30. Model fit was moderate; the chi-square statistic was significant; $\chi^2/df = 5.98$, as well as CFI $= 0.78$ and TLI $= 0.75$, with the obtained values outside the bounds of acceptability. However, SRMR $= 0.066$, and RMSEA $= 0.075$ indicated a modest fit.

Table 1. Internal consistency reliabilities by subscale.

Subscale	Item	M	SD	Cronbach's α if item deleted
Blatant	2	2.90	1.31	.64
	4	2.22	1.24	.65
	7	3.13	1.44	.65
	8	2.88	1.37	.64
	9	2.92	1.23	.64
	10	2.68	1.31	.61
	13	2.59	1.32	.66
	15	2.45	1.27	.61
	17	2.57	1.37	.62
	20	4.13	1.27	.76
Subscale				.67
Subtle	1	3.87	1.10	.72
	3	3.09	1.30	.68
	5	2.65	1.25	.68
	6	3.47	1.31	.67
	11	3.35	1.25	.67
	12	3.09	1.16	.67
	14	3.68	1.14	.71
	16	3.74	1.20	.68
	18	3.82	1.43	.70
	19	3.08	1.33	.74
Subscale				.71
Total				.81

When estimating Model II (Figure 1), which proposes five correlated first-order factors, all model parameters were adequately identified, and no inappropriate estimates were obtained. This model yielded better fit indices than the previous one. Factor loadings were all significant ($p < .001$). The loading of Item 20 ($\lambda_{10\ 1} = -0.48$) was found to be negative.

The strongest correlations among dimensions were between Values (from the subtle prejudice subscale) and Rejection (from the blatant prejudice subscale), $r_{I\ III} = .78$, 95% CI $= .71$, .85, and between Rejection and Culture (from the subtle subscale), $r_{I\ IV} = .72$, 95% CI $= .67$, .77. Moreover, a significant correlation was observed between Intimacy (from the blatant prejudice subscale) and Culture (subtle subscale), $r_{II\ IV} = .37$, 95% CI $= .29$, .45, and between Culture and Values, $r_{III\ IV} = .69$, 95% CI $= .62$, .76. The factors yielding the lowest
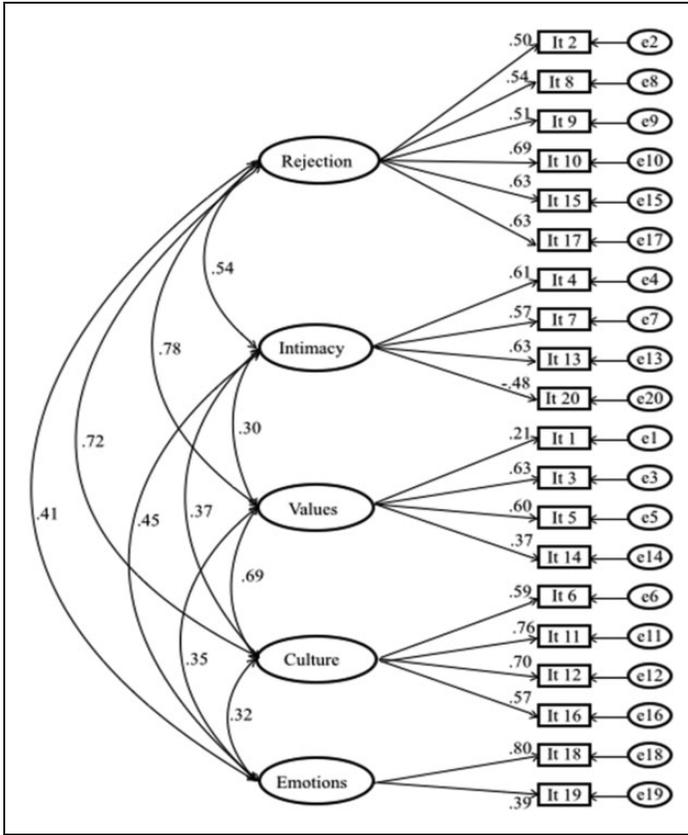
Figure 1. Model II (five first-order correlated factors). Standardized solution with ML estimation.
ML: maximum-likelihood.

correlations with one another were Emotions (subtle subscale) with Culture, $r_{IV\,V} = .32$, 95% CI $= .23$, $.41$; Emotions with Values, $r_{III\,V} = .35$, 95% CI $= .24$, $.46$; and Values with Intimacy, $r_{III\,II} = .30$, 95% CI $= .20$, $.40$. As regards fit indices, the chi-square statistic was significant, probably because of the sample size. The coefficient $\chi^2/df = 3.41$, CFI $= 0.90$, SRMR $= 0.046$, and RMSEA $= 0.052$, all within the limits that permit acceptance of the model. TLI $= 0.88$ showed a slight decrease, being situated below the bounds of acceptability (Table 2). Taking into account the obtained values for the GFIs as a whole, the model can be considered within the limits of acceptability.

On estimating Model III, with one second-order factor (prejudice) and five first-order factors (Rejection, Intimacy, Values, Culture, and Emotions), all the

Table 2. Goodness-of-fit statistics for each model.

Model	χ^2	χ^2 / df	CFI	TLI	SRMR	RMSEA
Model I: 2 first-order factor	$X^2_{169} = 1010.25$	5.98	0.78	0.75	0.066	0.075
Model II: 5 first-order factor	$X^2_{160} = 545.18$	3.41	0.90	0.88	0.046	0.052
Model III: 1 second-order factor	$X^2_{165} = 585.61$	3.55	0.89	0.87	0.050	0.053
Model IV: 2 second-order factor	$X^2_{166} = 656.86$	3.96	0.87	0.85	0.059	0.058

CFI = comparative-fit index; TLI = Tucker–Lewis index; SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation.

parameters were found to be adequately estimated, and no inappropriate estimates were obtained (Figure 2). All loadings were significant ($p < .05$), with only one loading under the expected cut-off point (Item 1 with value = .21). Goodness-of-fit statistics for the proposed model are shown in Table 2. Undoubtedly, because of the influence of sample size, the chi-square statistic was significant. The ratio χ^2/df was 3.55; RMSEA = 0.053, and SRMR = 0.050 were within the acceptable limits. The CFI = 0.89 and TLI = 0.87 were under the acceptable values. The general prejudice factor accounts for 95% of Rejection variance. The general factor also explains 83% and 77% of the Culture and Values factors, respectively, and to a lesser extent Intimacy (53%) and Emotions (38%). Considering GFIs and factor loadings, it can be stated that Model II presents a better fit than Model III.

Model IV, with two second-order factors (blatant and subtle) and five first-order factors (Rejection, Intimacy, Values, Culture, and Emotions), gave rise to inappropriate estimations because of local identification problems—only two indicators to identify the "emotion" factor and only two factors to explain the "blatant" second-order factor (Figure 2). The solution was deemed inadmissible after yielding two-factor loadings (standardized solution) above 1.00—1.04 for Item 19 with rejection factor and 1.03 for rejection (first-order factor) with blatant (second-order factor). The correlation between blatant and subtle prejudice was .88 (95% CI = .80, .96). To force an admissible solution, following Little, Linberger, and Nesselroade (1999), equality constraints were placed on the emotions indicators (Items 18 and 19) and on the blatant indicators (rejection and intimacy). As a result, proper estimates were obtained in those cases, but the correlation between blatant and subtle factors increased from .88 to 1.07 (Figure 3), again an improper solution. The GFIs essentially remained equal to those obtained in the first solution (Table 2). Taking into account the obtained values as a whole, the model can be considered within the limits of
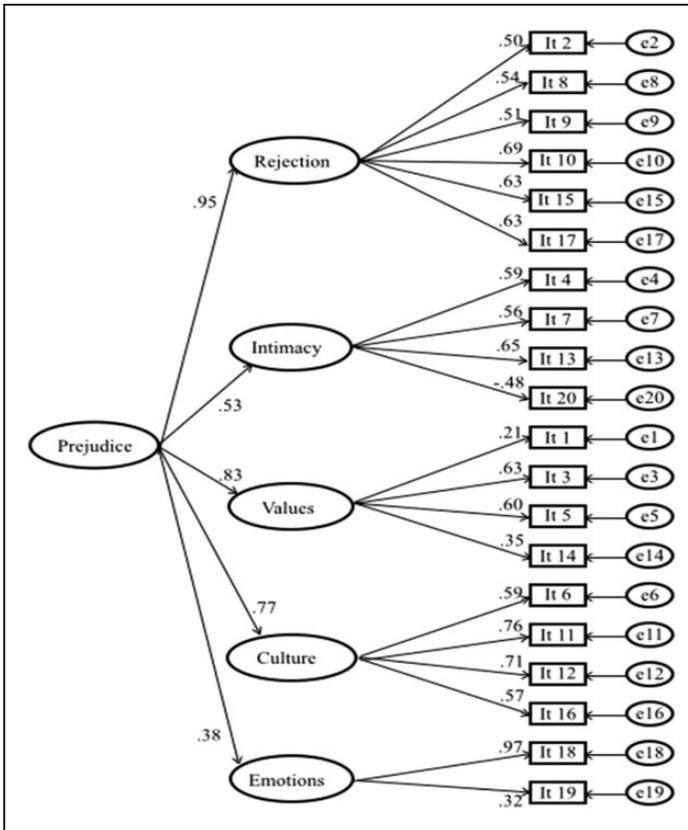
Figure 2. Model III (one second-order factor (prejudice) with five first-order factors (Rejection, Intimacy, Values, Culture, and Emotions)). Standardized solution with ML estimation.

ML: maximum-likelihood.

acceptability. However, the fit of this model was poorer than Models II and III. As an inadmissible solution was obtained, care should be taken when interpreting the results for Model IV.

Discussion

Even given a decrease in the more harmful expressions of prejudice and that softer forms of such attitudes are more common, there still remains a problem with regard to the weak empirical evidence for the latter. Pettigrew and Meertens' (1995) two forms of expressing prejudice, subtle and blatant, are not supported by empirical evidence.
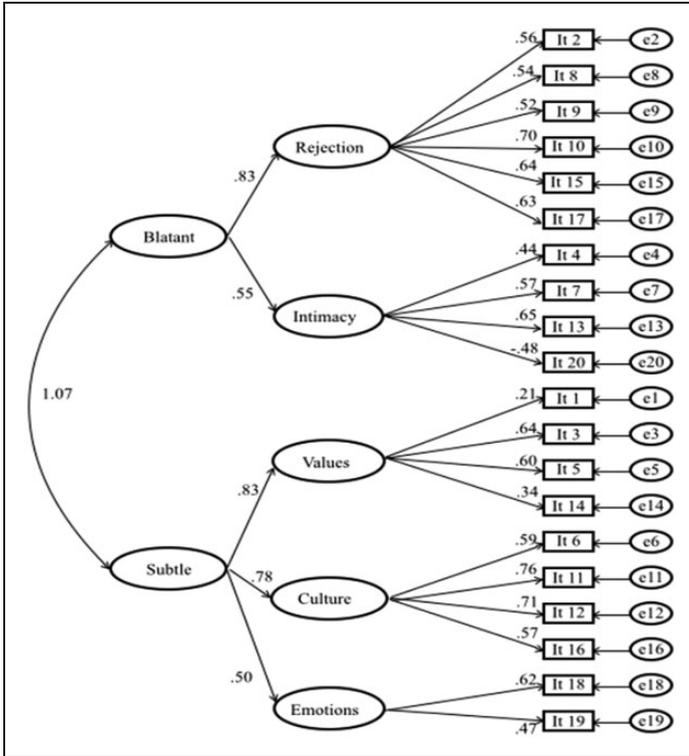
Figure 3. Model IV (two second-order correlated factors (prejudice) and five first-order factors (Rejection, Intimacy, Values, Culture, and Emotions)). Standardized solution with ML estimation.
ML: maximum-likelihood.

On assessing such evidence, there are some noteworthy problems related to the structuring and wording of the items proposed by the authors. Thus, the item "Many other groups have come to the Netherlands and overcome prejudice and worked their way up. Turks should do the same without any special favour" (from the subtle scale, Intimacy) includes two statements that are not necessarily interrelated. The first refers to "groups" without specifying which groups. Moreover, it generates a value judgment by stating that these groups have managed to overcome the prejudice they suffered. The second statement asserts that the reference group, in this case Turks, should follow the same path. The assumption that Turks should engage in the conduct of other "groups" gives rise to confusion insofar as there is no clear specification of the groups or behaviors to which it is referring. The same case occurs with the statement of Item 3 from the Value factor (subtle scale): "It is just a matter of some people not trying hard enough. If Turks would only try harder they could be as well off as Dutch

people." In this item, is it possible to distinguish three different assumptions that are not necessarily related: (a) not all the people make their best effort to get ahead (agree or disagree?); (b) Turks do not strive to get ahead (agree or disagree?); and (c) the Dutch have a good quality of life (agree or disagree?). Although it is possible to independently evaluate each of the statements, in the question, it is assumed that all of these three assumptions are closely related. Item 20 from the Intimacy factor (blatant scale), "Suppose that a child of yours had children with a person of different color and physical characteristics than your own. Do you think you would be very bothered, bothered a little, or not bothered at all, if your grandchildren did not physically resemble the people on your side of the family?" is written in a form that contravenes some of the most fundamental norms of item construction: the whole formulation of the statement is quite confused because it includes an assumption giving rise to a question containing a second assumption that is unrealistic. Therefore, some respondents may associate "a person of different color and physical characteristics than your own" with races they find physically attractive, whilst others could associate them with races they find unattractive. This item gave rise to a negative factor loading in all the models estimated ($-.36$, Model I; and $-.48$ Models II, III, and IV) probably due to the problems mentioned above. It is important to consider criticism of those items on the subtle scale concerning Culture because when respondents scored high on these questions, the items may in fact be measuring openness and the validation of cultural differences rather than prejudice.

The existence of the two types of expression of prejudice proposed by Pettigrew and Meertens (1995) and Cárdenas (2010) cannot be established with any clarity using CFA. The strong correlation between the blatant and subtle scales ($r = .78$, Model I) already has been described in previous studies conducted in different cultural contexts (Espelt et al., 2006; Hamberger & Hewstone, 1997; Rattazzi & Volpato, 2001, 2003). Related to this issue, of interest are the results published by Rueda and Navas (1996). They found high correlations between the two scales but also that the intensity of the correlation varied depending on the target group (Gypsies, $r = .64$; Maghrebies, $r = .75$, and Africans, $r = .55$). These results account for the instability of the scale factor structure. Rather, the indication is that there is a general prejudice factor (one-dimensional construct) explained in terms of five dimensions, especially those of Rejection, Values, and Culture, and to a lesser extent Emotions and Intimacy (Model III) or five correlated prejudice dimensions (Model II). In the latter model, the strongest correlations were found between factors belonging to different subscales; this result also disconfirms the thesis that subtle and blatant aspects are two different forms of expressing prejudice. These results are consistent with those published by Rattazzi and Volpato (2003). In that study, expert judges evaluated how socially desirable the items were. The items judged as most socially desirable were four subtle items and two blatant items; one blatant item and two subtle items were rated as socially acceptable;

two blatant items and two subtle items were rated as socially undesirable; and four blatant items were rated as the most socially undesirable. These results also support the idea of the difficulty of distinguishing between the two scales.

The model with two second-order factors (subtle and blatant prejudice) with five first-order factors (Model IV), which enjoys strong theoretical support, cannot be evaluated as it is not identified locally and results in improper estimations. As noted by Brown (2006, p.187), "a measurement model should not be deemed acceptable if the solution contains one or more parameter estimates that have out-of-range values." The Emotions factor is only associated with two indicator variables. If at least one observable variable is added (in other words, if one item is added to measure the Emotions factor), the model would be identified so it could be correctly estimated. But considering that the goal was to assess the fit of the model proposed by the original authors, the strategy mentioned by Little et al. (1999) was followed by placing equality constraints between the two indicators (Items 18 and 19) of the Emotions factor and between the first-order factors Rejection and Intimacy. Thus, the model could be estimated, but care should be taken when interpreting the results.

The results obtained in the CFA suggest the following two surmisals regarding the two types of prejudice:

1. The blatant subscale items do not clearly reflect explicit attitudes. It may be reasonable for these items not to do so because no one would respond affirmatively to them (for example, "I would expel all immigrants who come to my country"; "I would put all illegal immigrants in prison"; "I find it unacceptable for any foreigner to live or work in my country"), but the risk involved is that these items' wording slides toward the "subtle" pole, which undoubtedly hinders the differentiation between the two scales, leading to high correlations between the factors of the different subscales.
2. Given the difficulty of designing items that capture the difference between blatant and subtle prejudice, the measurement of these types of prejudice would be much more reliable through more indirect strategies. Dovidio (2001) devotes particular attention to the correspondence between implicitly and explicitly racist attitudes. A review of 27 studies from 19 research projects with a total sample of 1562 participants yielded a moderate correlation between the two measures ($r = .24$). The conclusion drawn is that explicitly (conscious) and implicitly (unconscious) racist attitudes are only weakly related. These two aspects do not necessarily contradict the view that there are two differentiated forms of expressing prejudice, blatant and subtle; rather, they illustrate the difficulty of demonstrating that difference in the present study with the instrument used.

The results published by Pettigrew and Meertens (1995, p. 57) and later by Rueda and Navas (1996) largely focus on the distribution of prejudice according

to the typology rather than on the forms of prejudice (traditional or indirect). Their results differ from those obtained in the present study. In Pettigrew and Meertens (1995), Bigots, Subtles, Equalitarians, and Error accounted for 17%, 50%, 33%, and <2% of the total sample, respectively; in that of Rueda and Navas, the distribution was Bigots 1.5%, Subtles 29%, Equalitarians 69.5%, and Error 0%. This last figure, as well as Bigots at 1.5%, could be explained by the sample employed (160 participants including school students aged 16–17 and university students: first-year psychology and second-year social work students, with a mean age of 20.3 years, $SD = 3.5$). However, subsequent studies on Spaniards' attitudes about immigration (Cea & Valles, 2008, p. 308) have revealed a different picture, where 37% were defined as "recalcitrant" toward immigration (reluctance to share one's neighborhood with immigrants, denial of immigrants' social rights and citizenship, image of immigration as a bad thing), 34% showed an ambivalent attitude, and 29% were openly tolerant (immigration constitutes a gain for society, favorable attitude toward penalizing racism, nothing against sharing life with immigrants). In the present study, the distribution was markedly different: 38.8% were Bigots, 37.9% Subtles, and 20.6% Equalitarian; the Error category accounted for 2.7% of the sample. These results, then, reveal that the participants in this study show a greater tendency for blatant prejudice than the participants in the samples used by the original authors. However, as the results of this and previous studies (Coenders et al., 2001; Gómez & Huici, 1999; Hamberger & Hewstone, 1997; Rattazzi & Volpato, 2003; Rueda & Navas, 1996; Villano, 1999) have not been consistent with the distinction between the two forms of prejudice expression reported by the original authors, it is not applicable to the prejudice typology suggested by Pettigrew and Meertens (1995, 2001).

In our view, these differences are likely due to the following reasons. First, there is a possibility that, as pointed out by Arcuri and Boca (1999), the more subtle indications of prejudice give way to more blatant attitudes as the reference group becomes geographically closer, where the perception of fear is presumably greater. In this case, with the reference group being directly related to the social fabric of this geographical region, and given the history of conflict between the two countries (Chile and Bolivia), it would be understandable to find manifestly more prejudiced behaviors. Second, in the Chilean context of this research, there was no anti-discrimination law until 2012 so that discrimination was not officially condemned as in other societies. In the United States, for example, "in part because of changing norms and the Civil Rights Act and other legislative interventions that have made discrimination not only immoral but also illegal, overt expressions of prejudice have declined significantly over the past 35 years" (Dovidio, 2001, pp. 833–834).

The high degree of phenotypic similarity between the inhabitants of northern Chile and the Bolivian people is likely to lead to more obvious attempts at differentiation to avoid being categorized as belonging to an "undesirable"

category. Explicit and direct rejection are used as markers for intergroup differentiation (Tajfel, 1982). Considering that the typology of prejudiced respondents suggested by the original authors' results could not be established given the impossibility of distinguishing between the two types of prejudice in this research, the interpretation of these results must be considered incomplete and inaccurate. The results could be interpreted rather as a continuum between two poles represented by the presence/absence of prejudice. Thus, special attention should be given to the Error category as defined by the original authors (scoring high on the blatant scale and low on the subtle scale). It would not be the result of a theoretical contradiction but rather that the items assigned to the subtle scale do not differ from those in the blatant scale with regard to what they intend to measure.

The problems described above regarding the items used in this study, together with the non-identification of the model that presents the best theoretical support, suggest the need to improve the measure by rewording the items, avoiding ambiguities and redundancy, and increasing the number of items in the Emotion factor (subtle scale). Thus, the model could be identified, attaining the necessary condition to obtain a proper CFA solution. After structuring a new questionnaire without the problems mentioned above, as proposed by Cunningham, Preacher, and Banaji (2001), evaluation of the convergent validity of the prejudice construct is suggested, correlating the direct measure of the new questionnaire with an indirect measure of bias (priming or by implicit attitudes). At the same time, having confirmed the structure of both expressions of prejudice (subtle and blatant), it would also be interesting to analyze whether or not this structure is maintained in different populations (e.g., sex, age, socioeconomic level, educational level, and political views).

Despite the importance of the findings obtained, there were certain limitations. As the scale was translated into Spanish, there could be differences in relation to the original meaning of the items. Most of the validation studies of this scale have used samples of university students. This sample comprised adults between 18 to 65 years. In countries where the scale has been applied, anti-discrimination laws exist. When applying this scale in Chile, no anti-discrimination law was enacted yet.

The analysis should be replicated in other contexts in which the social and legal contexts of blatant discrimination are more emphasized. Finally, future research should also explore the possibility that the out-group at the receiving end of expressions of prejudice may influence the way in which the prejudice is manifested.

Declaration of Conflicting Interests

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