Measurement Properties of Sabogal's Familism Scale: Findings from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL) Sociocultural Ancillary Study

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Abstract

Familism is a central Hispanic/Latino cultural value that emphasizes close, supportive family relationships and prioritizing family over the self. One of its best-known measures is Sabogal's Familism Scale (Sabogal, Marin, Otero-Sabogal, VanOss Marin, & Perez-Stable, 1987). Although widely used, this scale's measurement properties are not well understood. This study addressed that gap by examining the factor structure, factorial invariance, convergent and discriminant validity, and internal consistency of Sabogal's Familism Scale using data from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL) Sociocultural Ancillary Study. A diverse population-based sample of Hispanics/Latinos ($N = 5,313$) completed measures that were administered via interview in English or Spanish. Confirmatory factor analyses ($n = 5,310$) revealed that a three-factor model (*familial obligations*, *perceived support from the family*, *family as referents*; Sabogal's original three factors) fit the data well and did not vary across English and Spanish language groups (i.e., factorial invariance). Convergent and discriminant validities were also established; familism correlated positively with other Hispanic/Latino cultural values

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(simpatía, fatalism) and correlated negatively with U.S. acculturation. Internal consistency was acceptable. Sabogal's Familism Scale is recommended for continued use in the study of familism in U.S. Hispanics/Latinos.

Resumen

El familismo es un valor central para la cultura Hispana/Latina que enfatiza las relaciones familiares cercanas, caracterizadas por el apoyo mutuo, y por darle prioridad a la familia por encima del individuo. Una de las medidas más conocidas del familismo es la Escala del Familismo de Sabogal (Sabogal, Marin, Otero-Sabogal, VanOss Marin, y Perez-Stable, 1987). Aunque la escala se usa ampliamente, sus propiedades de medición no se han establecido claramente. Este estudio abordó ese vacío conceptual al examinar la estructura factorial, la invariancia factorial, la validez convergente y discriminante, así como la consistencia interna de la Escala del Familismo de Sabogal utilizando los datos del Estudio de la Salud de la Comunidad Hispana/Estudio de Latinos (HCHS/SOL), Estudio Auxiliar Sociocultural. Una muestra diversa basada en la población estadounidense de Hispanos/Latinos ($N = 5{,}313$) completó varias medidas que se administraron por medio de una entrevista en inglés o español. Los análisis factoriales confirmatorios ($n = 5{,}310$) revelaron que un modelo de tres factores (*obligaciones familiares*, *apoyo percibido de la familia*, *familiares como referentes*), que son los tres factores originales de Sabogal, se ajustaron bien con los datos y no variaron por grupo de idioma (inglés o español); es decir, encontramos evidencia de invariancia factorial. También se estableció la validez convergente y discriminante; el familismo se correlacionó positivamente con otros valores culturales típicamente Hispanos/Latinos (simpatía, fatalismo) y se correlacionó negativamente con la aculturación a los Estados Unidos. La consistencia interna fue aceptable. Se recomienda el uso continuo de la Escala del Familismo de Sabogal para el estudio del familismo en Hispanos/Latinos.

Keywords

Familism; Hispanics/Latinos; psychometrics; confirmatory factor analysis; factorial invariance by language; validity

Familism is a core value of Hispanic/Latino[1] culture (e.g., Gil & Vega, 1996; Knight et al., 2010; Montoro Rodriguez, & Kosloski, 1998; Triandis, Marin, Betancourt, Lisansky, & Chang, 1982). This way of valuing family relationships emphasizes strong identification with nuclear and extended family, having warm, close, and supportive family relationships characterized by mutual help and obligation, and prioritizing family needs over individual preferences (e.g., Campos et al., 2008; Knight et al., 2010; Triandis et al., 1982). Researchers have found familism to be relevant to many outcomes in which relationships play an important role, including family and close-relationship quality, prosocial behavior, educational achievement, and health (Calderon-Tena, Knight, & Carlo, 2011; Campos et al., 2008; Campos et al., 2016; Hernandez, Ramirez Garcia, & Flynn, 2010; Valenzuela & Dornbusch, 1994). Moreover, familism is widely studied. A March 2018 Google Scholar search returned over 12,000 links to articles, book chapters, and books on this topic since

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[1]The term Hispanic/Latino is used throughout this article. The dual term was selected for HCHS/SOL publications after extensive consultation with HSHS/SOL investigators and participants. Per Spanish language usage, the word "Latino" refers to mixed gender groups.

2012. Sabogal, Marin, Otero-Sabogal, VanOss Marin, & Perez-Stable (1987) developed one of the first self-report scales of familism. Their scale is commonly used (e.g., Losada et al., 2006; Lugo Steidel & Contreras, 2003; Montoro Rodriguez, & Kosloski, 1998), but few studies have been focused on its measurement properties (for an exception, see Losada et al., 2008). Our goal was to address this limitation in the research literature by examining the factor structure, factorial invariance, convergent and discriminant validity, and internal consistency of Sabogal's Familism Scale in a large, diverse sample of U.S. Hispanic/Latinos.

The Familism Construct and Measurement Properties of Sabogal's Familism Scale

Familism has been conceptualized as a multidimensional construct comprised of attitudinal, behavioral, and structural components (e.g., Valenzuela & Dornbusch, 1994). Attitudinal familism refers to beliefs and attitudes regarding how family relationships *should* be. Strong agreement that family members should be close and assist when needed is an indicator of attitudinal familism. Behavioral familism refers to actions that prioritize family. For example, integrating family members into one's everyday life via frequent visits or other forms of communication is an indicator of behavioral familism. Structural familism refers to aspects of one's physical or social context that facilitate attitudinal and/or behavioral familism. Family members — parents, adult children, and extended family — living in multigenerational households or in close proximity reflect structural familism (Valenzuela & Dornbusch, 1994). Across all of its dimensions, familism conceptually centers on strongly identifying with family and having close-knit family relationships characterized by obligation, emotional support, and taking family into account when making important decisions (e.g., Losada et al., 2006; Montoro Rodriguez, & Kosloski, 1998; Sabogal et al., 1987; Triandis et al., 1982).

Sabogal et al. (1987) developed their scale to measure attitudinal familism, which is the dimension of familism that is least likely to vary by factors outside an individual's control (e.g., family separation due to recent immigration). At the time of Sabogal et al. work, a first wave of research on Hispanics/Latinos was emerging in response to the growing numbers of Hispanic/Latinos in the U.S., the consciousness raising activities of the civil rights era, and the inclusion of this ethnic group in the U.S. Census. Guided by the findings of other research (Bardis, 1959; Triandis et al., 1982), Sabogal's 14-item Familism Scale is intended to capture the beliefs and attitudes regarding nuclear and extended family that are central to Hispanic/Latino familism: obligation to family, family as a primary source of social support, and consideration of family opinions when making important decisions. The scale was developed and tested using convenience samples of U.S. Hispanic/Latinos of Mexican, Cuban, and Central American backgrounds and non-Hispanic/Latinos of European American background primarily recruited from academic institutions in California.

Sabogal et al. (1987) created their scale to have three factors. They reported principal components factor analyses with varimax rotation for three factors that they named: *familial obligations* (six items), *perceived support from the family* (three items), and *family as referents* (five items). Subsequent researchers have frequently combined the three subscales

into a total familism scale score (e.g., Campos et al., 2008; Losada et al., 2006; Morcillo et al., 2011; Sayegh & Knight, 2011). In support of that practice, a recent study using a structural equation modeling approach found that the scale was comprised of one latent construct, rather than the original three factors, in a multi-ethnic sample (Hispanic/Latino, European, East Asian background) of undergraduates (Campos et al., 2014). Another group of researchers who conducted a confirmatory factor analysis on the scale found it to have three factors (Losada et al., 2008). The Losada et al. (2008) study found that only nine of the original 14 Sabogal Familism Scale items fit a three-factor structure; the five eliminated items mostly addressed obligations to extended family. The Losada et al. (2008) study also differed from previous studies examining this scale's psychometric properties in that their much smaller sample was from Spain, and had a mean age of 60, and all were caregivers for a family member suffering from dementia. Notably, the two samples from these studies differ in many ways and neither focused exclusively on U.S. Hispanic/Latinos.

The scant research to date on the scale's psychometric properties and the common practice of using a total scale score indicate that additional testing of Sabogal's Familism Scale's factor structure is necessary for determining the most appropriate use of the scale in U.S. Hispanic/Latino samples. Without this information, important distinctions within the construct may be obscured and researchers may be led in misguided future directions. For example, the link of *perceived support from the family* and/or *family as referents* with outcomes may depend on the outcome studied (e.g., prosocial behavior among young adults or caregiving in the context of chronic illness by older adults). On the other hand, the two subscales may capture two sides of one coin that co-occur in people's everyday lives. In both cases, the observed variation may be important for understanding familism and its link to relevant outcomes.

All of Sabogal's Familism Scale items were originally developed in English or Spanish. The final 14 items were translated and pretested in both languages. Sabogal et al. (1987) described a process commonly used by researchers at the time involving double translation and pre-testing to carefully ensure that the scale worked equally well in both languages; factorial invariance by language was not reported and may not have been tested (Borsboom, 2006). Tests of factorial invariance assess whether a scale measures the same construct across a specified set of groups. This is important because measures that differ across groups may do so because group members do not experience and perceive questionnaire content in the same way (Corral & Landrine, 2010). Assessing factorial invariance is particularly critical for the study of familism because a measure that performs differently across groups poses a risk for erroneous conclusions. For example, mean-level differences could be interpreted as lower familism values driven by changes that occur with U.S. acculturation but may more accurately reflect that the familism construct itself has changed. This would be the case if, for example, with more time in the U.S., the familism construct continued to include perceiving family as a first source of support but also included new content—family being supportive of one's decision-making—rather than considering family as a referent for decision-making. The wide use of this scale, including with Spanish monolinguals, indicates a pressing need to formally test factorial invariance across English and Spanish language groups.

Convergent and discriminant validities were not reported in Sabogal et al. (1987). These two types of validity, which respectively assess two ways that a measure should be substantively associated with related constructs, can provide critical evidence that a scale indeed assesses an intended construct (Campbell & Fiske, 1959). The current study sought to test for these types of validity. The cultural values of simpatía and fatalism, which respectively emphasize positive emotion expressivity and the perceived role of fate in determining life events (e.g., Cuellar, Arnold, & Gonzalez, 1995; Triandis, Marin, Lisansky, & Betancourt, 1984), were used to test for convergent validity. A measure of U.S. acculturation, which may capture the acquisition of cultural values that are incompatible with familism, was used to test for discriminant validity.

The Present Study

Sabogal's Familism Scale is one of the most widely used self-report measures of familism (e.g., Losada et al., 2006; Lugo Steidel & Contreras, 2003; Montoro Rodriguez, & Kosloski, 1998) but few studies have been focused specifically on its measurement properties and no study that we know of has specifically focused on its measurement properties in U.S. Hispanic/Latinos. The goal of this research was to evaluate the psychometric properties of this attitudinal familism measure in a large, diverse sample of U.S. Hispanic/Latinos. We expected:

a. confirmatory analyses of the factor structure to reveal the three original factors (Sabogal et al., 1987) or a single factor (Campos et al., 2014; Losada et al., 2006);

b. factorial invariance (i.e., configural invariance and metric invariance) across the Spanish and English versions of the scale;

c. evidence of convergent validity with measures of relevant constructs (i.e., simpatía and fatalism);

d. evidence of discriminant validity with measures of relevant constructs (i.e., U.S. acculturation);

e. adequate internal consistency in the overall sample and across the Spanish and English versions of the scale.

Method

The Hispanic Community Health Study/Study of Latinos (HCHS/SOL) is a multi-site cohort study of the prevalence, incidence, and risk and protective factors for chronic diseases among Hispanics/Latinos ages 18–74 ($N = 16,415$). Participants were recruited from four field centers: San Diego, CA; Bronx, NY; Chicago, IL; and Miami, FL. For information about the sampling strategy and approach for the HCHS/SOL baseline study, see LaVange et al. (2010) and Sorlie et al. (2010), respectively. Demographics and acculturation measures were obtained from the HCHS/SOL baseline assessment, and familism, simpatía, and fatalism measures were obtained from separate assessments taken as part of the HCHS/SOL Sociocultural Ancillary Study ($n = 5,313$).[2] Ancillary study recruitment began during the second wave of the baseline assessment; all HCHS/SOL participants were eligible if they

were able and willing to complete a second visit within nine months of the baseline study exam. The HCHS/SOL Sociocultural Ancillary Study sample is considered a representative sub-sample of HCHS/SOL participants, with the exception that participation was lower in some higher socioeconomic strata (Gallo et al., 2014). Measures were administered by face-to-face interview. Standardized reviews of randomly selected interview voice recordings were conducted periodically to ensure adherence to study protocol and accurate administration of measures. Participants received modest monetary compensation for their time. All procedures were approved by Institutional Review Boards at each participating site and all participants provided written informed consent.

Measures

Demographics—Participant demographic information included self-reported age, sex, Hispanic/Latino background[3], number of years living in the U.S., income, and highest level of education. Language preference (i.e., Spanish or English) was indexed by the language in which a participant chose to complete the study interview. For additional HCHS/SOL demographic information please see Daviglus et al. (2012).

Unweighted sample characteristics are reported in Table 1 ($n = 5,313$). The mean age of the overall sample was 46.64 (38.3% were between 18–44 years), with participants who preferred English being approximately eight years younger on average than participants who preferred Spanish (39.11 years versus 48.43 years). There were more women than men (61.7% women). The majority of participants were born outside of the U. S. (82.7%) and Spanish was the most frequently preferred language (78.5%). Consistent with U.S. demographics, the largest proportion of the sample was of Mexican background (39.2%) followed by Puerto Rican (16.6%) and Cuban backgrounds (14.6%). Also consistent with U.S. demographics, a large proportion of the sample reported an annual income less than $40,000 (77.9%). The education level of the sample ranged from less than high school to more than high school and was evenly distributed across these categories. As Daviglus et al. (2012) report, 15.3% of the baseline sample had a college degree.

Familism—The full Sabogal et al. (1987) Familism Scale was administered. Participants rated each of the 14 items on a 5-point Likert scale to indicate agreement or disagreement (1 = *strongly agree*; 5 = *strongly disagree*). The items represent the measure's three attitudinal familism subscales: (a) *familial obligations*, six items (e.g., "One should help economically with the support of younger brothers and sisters"); (b) *perceived support from the family*, three items (e.g., "When one has problems, one can count on the help of relatives"); and (c) *family as referents*, five items (e.g., "Much of what a son or daughter does should be done to please the parents"). Item ratings were reversed scored so that higher scores indicated higher familism.

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[2]The full details of selection and recruitment procedures for the HCHS/SOL Sociocultural Ancillary Study are detailed in Gallo et al. (2014).
[3]Participants were asked the following question during screening: "Do you consider yourself to be Hispanic/Latino?" They were also informed that "the populations of interest for HCHS/SOL are persons or descendants of persons from Cuba, Mexico, Puerto Rico, and Spanish-speaking countries in the Caribbean and Central and South America."

Measures for Testing Convergent Validity

Simpatía: A 10-item version of the Texas Christian University Simpatía Scale was used (Griffith et al., 1998; Merz et al., 2016; Sotomayor-Peterson, Figueredo, Christensen, & Taylor, 2012; Sotomayor-Peterson et al., 2013). Participants rated the importance of each item when interacting with other people (e.g., "show good manners and be polite no matter what"; "make others feel comfortable"; "control your emotions"; "avoid conflict at all costs") on a 5-point Likert scale (1 = *not important*; 5 = *extremely important*). Simpatía scores were derived by summing item responses (score range of 0–40); higher scores indicated higher simpatía ($M = 26.51$). The internal consistency ($a = .75$ overall; $a = .75$ in Spanish; $a = .77$ in English), one-factor structure, language invariance, and other psychometric properties of the Simpatía Scale in the HCHS/SOL Sociocultural Ancillary Study sample are reported in Merz et al. (2016).

Fatalism: Fatalism was measured using six of the eight items from the Fatalism subscale of the Multiphasic Assessment of Cultural Constructs – Short Form (MACC-SF; Cuellar et al., 1995). This six-item version was created based on analyses of HCHS/SOL Sociocultural Ancillary Study data that demonstrated that the six-item version outperformed the original, which showed poor psychometric properties and internal consistency (Gutierrez et al., 2016). Participants indicated whether each item was true or false (e.g., "it is more important to enjoy life now than to plan for the future"; "it doesn't do any good to try to change the future because the future is in the hands of God"). A total score was then derived by summing item responses (range 0–6); higher scores indicated higher fatalism ($M = 3.86$). Gutierrez et al. (2016) reported that confirmatory factor analyses showed that the six-item version used here was comprised of one factor and did not vary across the English and Spanish versions of the scale. Internal consistency was not optimal but still acceptable ($a = .64$ overall; $a = .62$ in Spanish; $a = .65$ in English) and still useful for assessing convergent validity because validity can exceed reliability (e.g., Gosling, Rentfrow, & Swann, 2003).

Measures for Testing Divergent Validity

U.S. Acculturation: A modified version of the Short Acculturation Scale for Hispanics was used (SASH; Marin, Sabogal, Van Oss Marin, Otero-Sabogal, & Perez-Stable, 1987). A full description of this modified SASH can be found in Morales-Arellano et al. (2015). Ten items assessed language use (e.g., "In general, what language do you read and speak?"; "In which language do you usually think?") and ethnic social relations (e.g., "Your close friends are …"; "You prefer going to social gatherings/parties at which the people are …"). Participants rated each item on a 5-point Likert scale (1 = *Only Spanish/All Hispanic/Latino*; 5 = *Only English/All non-Hispanic/non-Latino*). While this linear scaling does not fully capture the complexities of acculturation processes, it is nonetheless a useful way of understanding predictable cultural changes (Cuellar, Arnold, & Maldonado, 1995). Scores on the Language Use and Ethnic Social Relations subscale scores were computed by averaging item ratings; higher scores indicated higher levels of U.S. acculturation (Language Use, $M = 1.83$; range 1–5; Ethnic Social Relations, $M = 2.26$; range 1–5). This SASH version was internally consistent in Spanish (Language Use, $a = .85$; Ethnic Social Relations, $a = .71$) and English (Language Use, $a = .80$; Ethnic Social Relations, $a = .65$) in the HCHS/SOL sample (e.g.,

Morales-Arellano et al., 2015), but the English language version of the Ethnic Social Relations was below the preferred .70 level.

Data Analysis Plan—Confirmatory factor analysis (CFA) was used to examine the factorial structure of Sabogal's Familism Scale[4]. The two possible models were specified a priori and tested using maximum likelihood mean adjusted (MLM) estimation to correct for non-normality and missing data as implemented by MPlus software (Muthén & Muthén, 2014). First, a three-factor model representing the *familial obligations*, *perceived support from the family*, *family as referents* subscale scores was tested using the entire sample. Second, a one-factor model representing the total familism score was tested using the entire sample. The overall fit of each target model was determined by inspecting statistical and descriptive fit. The Satorra-Benter Scaled χ^2 (S-B χ^2; Satorra & Bentler, 2001), a test of model fit when data are multivariately non-normal was used. As recommended by Bentler (2007), additional descriptive fit indices were also employed. First, the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990) was used as an absolute index of overall model fit; values .08 indicate acceptable model fit. Second, the Standardized Root Mean Residual (SRMR; Hu & Bentler, 1999) was used as an absolute descriptive index of overall model fit; values .08 indicate acceptable model fit. The relative fit of the three-factor and one-factor models was compared using RMSEA and SRMR, where values < .015 indicated no difference between nested models (Chen, 2007; Cheung & Rensvold, 2002). This was done because the chi-square difference tests (S-Bχ^2; Satorra, 2000) that have been traditionally used to statistically determine whether nested models fit as well as the comparison model, with a non-significant S-Bχ^2 value ($p > .05$) reflecting that the nested model fits as well as the comparison model, have similar limitations to overall likelihood ratio S-Bχ^2 tests (Kelloway, 1995). Both are biased against invariance with large sample sizes (i.e., higher statistical power; MacCallum, Browne, & Cai, 2006).

The best-fitting factor structure was then selected to test for invariance across language groups. To examine the multigroup invariance of the familism measure in the language groups (English and Spanish), a series of nested models were fit to the data following the methods of Vandenberg and Lance (2000). At each step, models became more restrictive. Separate models for each language were simultaneously estimated, with equality constraints imposed upon relevant model parameters between groups. The configural invariance model, which is the least restrictive, tested whether the factor structure was equivalent across participants who preferred to respond in English and Spanish, with no equality constraints imposed. The metric invariance model tested whether each item loaded equivalently onto the same factor by constraining each item's factor loading to equivalence between language groups. Finally, a factor variance-covariance invariance model was tested to determine if each factor variance and covariance was equivalent across English and Spanish responders. The overall fit of each model was determined using the S-Bχ^2, RMSEA, and SRMR. Change in model fit between nested models was also tested by inspecting statistical (S-Bχ^2) and descriptive (RMSEA, SRMR) indices.

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[4]Per the HCHS/SOL measurement-validation group's decision for measurement papers, CFA analyses were conducted using the unweighted sample.

After the best-fitting factor structure and language invariance were determined, convergent and discriminant validity were tested with the simpatía, fatalism, and U.S. acculturation measures. The correlations reported serve as our estimates of effect size (Cohen, 1988; Hemphill, 2003).

Results

Descriptive Analyses

The means and standard deviations for each Sabogal Familism Scale item in the overall sample are presented in Table 2.

Factor Structure: Three-factor versus One-factor Models

Fit indices for the three- and one-factor models for the overall sample are presented in Table 3. Both models fit adequately according to the descriptive fit indices. A S-Bχ^2 test revealed that the three-factor model fit better statistically, and the descriptive fit indices similarly indicated that the three-factor model fit better. For the three-factor model, all standardized factor loadings were generally large and statistically significant (values ranged from [a] .49 to .62 for the *familial obligations* factor; [b] .49 to .79 for the *perceived support from the family* factor; and [c] .46 to .64 for the *family as referents* factor). Cronbach's alphas for each factor (subscale) were .71 for *familial obligations*, .64 for *perceived support from the family*, and .68 for *family as referents*. Interfactor correlations were all positive and fairly large in magnitude: (a) *familial obligations, perceived support from the family* [$r = .71$], (b) *familial obligations, family as referents* [$r = .52$], and (c) *perceived support from the family, family as referents* [$r = .41$].

Factorial Invariance: Spanish and English Language Groups

As shown in Table 3, the three-factor model fit adequately in both language groups and fit better, both statistically and descriptively, than the one-factor model. As shown in Table 2, all standardized factor loadings were generally large and statistically significant in both English and Spanish. Interfactor correlations were all positive and medium-to-large in magnitude for English and Spanish language groups: (a) *familial obligations, perceived support from the family* [$r = .63/.75$]; (b) *familial obligations, family as referents* [$r = .34/57$]; and (c) *perceived support from the family, family as referents* [$r = .34/.44$].

To test for the equivalence of factor loadings (metric invariance) across language groups, multiple confirmatory factor analyses (CFA) were conducted. Table 3 presents fit indices for the configural (representing the baseline models "aggregated" for each group) and metric invariance models across language preference group for the three-factor model. The metric invariance model fit reasonably well overall and neither statistically nor descriptively differed from the configural invariance model. This suggests that the factor loadings are invariant across the language groups; that is, the association between each item and each Familism factor is the same regardless of language used to complete the scale. Similarly, the factor variance-covariance invariance model fit reasonably well overall. While statistical differences were noted between this model and the less-constrained metric invariance model, this model did not differ descriptively from the metric invariance model (all descriptive fit

values < .01). This suggests that the factor variances and covariances for the three factors of the Sabogal's Familism Scale are equivalent across language groups.

Convergent and Discriminant Validity Analyses

Correlations between the three Sabogal Familism Scale subscales and measures of simpatía, fatalism, and U.S. acculturation are presented in Table 4. As expected, familism was generally positively correlated with simpatía and fatalism. The magnitude of the correlation coefficients was interpreted according to established convention where correlations lower than .10 or .20 are small, correlations from .20 to .30 are medium, and correlations greater than .50 are large (Cohen, 1988; Hemphill, 2003). The strongest correlations were found for simpatía with all three familism subscales (*r* range from .11 – .27). The correlations of fatalism with the three familism subscales were modestly positive but were smaller in magnitude than those observed for simpatía (*r* range from .01 – .11), although both overlapped at .11. In contrast, both facets of U.S. acculturation—language use and ethnic social relations—were negatively correlated with all three familism subscales (*r* range from −.01 to −.29), with the strongest correlations emerging for the *family as referents* subscale. In sum, the overall correlation pattern was in the expected directions.

Internal Consistency

Cronbach's alphas for each of the three Sabogal Familism Scale subscales were as follows: *familial obligations* = .71, *perceived support from the family* = .64, and *family as referents* = .67, in the overall sample; and .68/.72 for *familial obligations,* .74/.61 for *perceived support from the family*, and .59/.68 for *family as referents* by English/Spanish language groups. For the overall scale, Cronbach's alpha was .78 in the overall sample.

Discussion

This study provides new evidence that Sabogal's Familism Scale has a three-factor structure, factorial invariance across English and Spanish versions, convergent and discriminant validity, and internal consistency in the acceptable range in a large, multi-site sample of US Hispanics/Latinos. Consistent with Sabogal et al.'s (1987) original findings, we found evidence for three distinct factors of familism: *familial obligations*, *perceived support from the family*, and *family as referents*. All three factors positively correlated with other Hispanic/Latino cultural values and negatively correlated with U.S. acculturation. Moreover, our findings drew from a large sample of U.S. Hispanics/Latinos whose diversity captures many aspects of Hispanic/Latino heterogeneity. Altogether, these results support the continued use of Sabogal's measure in research on familism.

The fit of the three-factor model was descriptively and statistically superior to the one-factor model. This pattern is consistent with theorizing that attitudinal familism in Hispanic/Latinos is made up of distinct beliefs that families should be obligated to one another, be a first source of social support to each other, and taken into consideration in the course of important decision making. For this reason, we recommend that data analyses be conducted separately by subscale as a best practice use of this measure. Findings that show differences by subscale may lead to important insights about the familism construct and related

outcomes. For example, in the original study by Sabogal et al. (1987), the authors found that regarding family as a first source of support changed least with higher U.S. acculturation. However, we recognize that it is also possible that a pattern of results may be revealed to be the same across subscales. In that scenario, researchers can subsequently choose to streamline the reporting of their results by consolidating the subscale scores into one overall score. This decision should then be briefly mentioned in the main body of a paper or via footnote. In all cases, however, best practice norms should involve first conducting data analyses on this measure using the three subscale scores.

The recommendation that analyses should be done with the three subscales, but that subsequent reporting of results can use overall scores if results are the same across subscales, is supported by the finding that the one-factor model fit the data adequately. Campos et al. (2014) also found that Sabogal's Familism Scale items comprised one latent construct. That study, however, was conducted with a convenience sample of young adult undergraduates of European, East Asian, or Hispanic/Latino background in the U.S. Notably, Sabogal et al. (1987) indicated that they found a different factor structure for their European American and Hispanic/Latino samples (although details were not reported). It is possible that the factor structure of this measure varies in non-Hispanic/Latino cultural groups. Future studies should address this possibility. At this time, however, researchers using this measure in samples that include non-Hispanic/Latinos should examine the factor structure for their particular sample before proceeding to hypothesis testing.

Results showed measurement invariance for English and Spanish versions of the scale. This is an important extension of the original Sabogal et al. (1987) work. Evidence that the measurement properties of a scale do not vary by language—that familism remains the same construct whether a respondent completes the measure in English or in Spanish—is a key element of psychometric validation. It may also be particularly important for familism. First, researchers frequently seek to answer questions about familism in Hispanic/Latino samples that may be either Spanish or English dominant. Second, cultural values are expected to change over the course of adaptation to new sociocultural environments (Berry & Sam, 1997); thus, it is important that changes in mean levels of familism that occur with U.S. acculturation do not reflect that the construct itself changes for Hispanic/Latinos who are highly U.S. acculturated.

Internal consistency for the three subscales was adequate but not strong. Nonetheless, the Cronbach's alphas observed in this study were comparable or higher in this sample than in the original Sabogal et al. (1987) study (*familial obligations*, α=.68-.72 as compared to original α=.59; *perceived support from the family*, α=.61-.74 as compared to original α=.70; *family as referents*, α=.59-.68 as compared to original α=.60). The internal consistencies were also comparable to Knight et al. (2010) and Montoro Rodriguez & Kosloski's (1998) familism scales. We note, however, that two of the subscale alphas fell below the preferred .70 level. This may partly reflect the known tendency for the Cronbach index to be lower with fewer items (e.g., Tavakol & Dennick, 2011); the *perceived support from the family* subscale, for example, consists of three items.

How do these findings compare to the other published examination of the psychometric properties of the Sabogal Familism scale conducted by Losada et al. (2008)? Those authors also found evidence for three factors but had to drop five items from the original scale to do so. In contrast, the results of the present study suggest that all original 14 items can be retained. The five items dropped by Losada et al. (2008) primarily addressed obligations to extended family, but it is difficult to infer much from this distinction because the two samples are so different. Losada et al. (2008) studied a much smaller sample in Spain and their sample included only caregivers for a family member with dementia, a situation widely recognized to be severely stressful. In contrast, we studied a heterogeneous sample of U.S. Hispanic/Latinos. Familism values may or may not differ across U.S. Hispanic/ Latinos, people from Latin American nations, and people from Spain, but the extant evidence indicates that the full 14-item Sabogal Familism scale, and its three factors, can be used with U.S. Hispanic/Latino samples.

In our view, the focus of this measure on the attitudinal dimension of familism is particularly useful to study because people's beliefs offer a window for understanding how they view their world and what they expect from it. In turn, expectations are known to connect to psychological processes (e.g., social support, social integration) with implications for life outcomes, including relationship quality and health (e.g., Bowlby, 1977; Griffin & Ross, 1991; Merz et al., 2016). Attitudinal familism is also the dimension of familism least likely to vary due to external circumstances (e.g., separation from family due to one's job or recent immigration). Moreover, attitudinal familism is easily measured by self-report. However, it would also be useful to have measures of behavioral and structural familism that could be subjected to rigorous psychometric testing so that researchers can examine if and how the dimensions differ. Such measures could help researchers tease apart whether specific dimensions of familism account for particular outcomes of interest. For example, does Hispanic/Latino health benefit equally from (a) beliefs that family should be supportive and (b) physical proximity to family members who can enact support? Are there conditions under which one familism dimension is more beneficial than another? For example, is structural familism most beneficial in the context of chronic illness because that's when tangible social support is most needed?

Since Sabogal et al. (1987), other measures of attitudinal familism have been developed (e.g., Gaines et al., 1997; Knight et al., 2010; Lugo Steidel & Contreras, 2003; Montoro Rodriguez & Kosloski, 1998; Villarreal, Blozis, & Widaman, 2005). All share much in common with Sabogal's Familism Scale. At least two are characterized by the same three factors—obligations, support, and referents (Knight et al., 2010; Montoro Rodriguez & Kosloski, 1998)—and show internal consistency patterns that are comparable to the Sabogal scale. Other measures were developed to be most appropriate for less acculturated Hispanics/Latinos (i.e., Lugo Steidel & Contreras, 2003), applicable to a wide range of Hispanics/Latinos (i.e., Villarreal et al., 2005), or to measure a broad form of familism that is not Hispanic/Latino specific (Gaines et al., 1997). Many other measures were developed for specific studies (e.g., Gil, Wagner, & Vega, 2000) or to assess closely related constructs (e.g., Fuligni, Tseng, & Lam, 1999). In short, researchers have a wide array of options for measuring attitudinal familism but more work still needs to be done. Future studies need to compare measurement properties across scales and examine the breadth and depth of the

familism construct in Hispanic/Latino and non- Hispanic/Latino populations. It is possible that there is a common familism core across these measures, but there may also be important differences that particular scales capture. Researchers, however, can continue to confidently rely on Sabogal's Familism scale in research on U.S. Hispanic/Latino populations.

The study of familism in Hispanics/Latinos developed from early efforts to document similarities and differences in family relationships of people of European and Latino/Hispanic background in the United States (Keefe, 1984; Keefe, Padilla, & Carlos, 1979; Triandis et al., 1982). In the years since then, researchers have often relied on ethnicity as a proxy for familism rather than directly measuring it (e.g., Almeida, Molnar, Kawachi, & Subramanian, 2009). We hope these new findings encourage researchers to measure familism. Familism is a central value of Hispanic/Latino culture, but the centrality of familism at the group level does not imply that all Hispanics/Latinos personally hold familism values (Rumbaut, 1997). Much may also be learned by studying Hispanics/Latinos who are low in attitudinal familism. For example, low familism in one family member may strain family relationships or family members who acculturate to the independent norms of the U.S. together may find pathways other than familism for managing their social relationships (Rumbaut, 1997).

The strengths of the present study included the large, heterogeneous sample of Hispanics/Latinos of six different backgrounds, ages that ranged from the late teens to the early seventies, and a large sample of men ($n = 2035$). The inclusion of men and older adults is notable because previously studied samples typically included few men and familism is less studied in older adults than in younger people (e.g., Campos et al., 2014; Sabogal et al., 1987 but see Losada et al., 2008). This study also had limitations. The sample is only representative of the four geographic regions studied and did not assess specific immigrant documentation status, a social factor that may affect familism values or people's ability to live up to their personally held familism values. One of the measures studied for evidence of convergent validity (fatalism) had internal consistency scores that were lower than optimal. We also recognize that it is possible that familism varies in ways that were beyond the scope of this paper to explore (e.g., gender, social class, specific Hispanic/Latino background). Finally, familism is also relevant to non-Hispanics/Latino populations (e.g., Campos et al., 2014; Schwartz et al., 2010), but we were not able to study non-Hispanics/Latinos. We are optimistic that these limitations can be addressed with future studies.

The goal of this work was to move research on familism forward by examining the measurement properties of the Sabogal Familism Scale using data from the Sociocultural Ancillary Study of the Hispanic Community Health Study/Study of Hispanics/Latinos (HCHS/SOL). We hope researchers will be encouraged by the findings of this study to measure familism values directly and consider using this measure in their research. If so, we envision a future that will generate a more nuanced understanding of familism and its relevance for relationship quality, psychological well-being, and even physical health.

Acknowledgments

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Public Impact Statement

The way family is valued in Hispanic/Latino cultures — emphasizing close, supportive family relationships and placing family first — is associated with many positive outcomes, including for relationships and health. This study examined how to best use one of the most well-known measures of those family values, Sabogal's Familism Scale, to advance the study of familism values in diverse groups of English and Spanish speaking U.S. Hispanics/Latinos.

Table 1.

Unweighted sample characteristics for the total sample and by language (N = 5,313)

	Total Sample		Spanish Language		English Language	
Age[1]	46.64	(13.65)	48.43	(12.78)	39.11	(14.58)
Women	3278	61.7%	2738	63.7%	561	55.2%
Hispanic/Latino background						
Dominican Republic	531	10.0%	460	10.7%	74	7.3%
Central America	551	10.4%	521	12.1%	32	3.1%
Cuba	775	14.6%	732	17.0%	43	4.2%
Mexico	2080	39.2%	1765	41.1%	315	31.0%
Puerto Rico	880	16.6%	437	10.2%	443	43.6%
South America	348	6.6%	323	7.5%	27	2.7%
> one background	122	2.3%	54	1.3%	83	8.2%
Income						
$ < 10,000	888	16.7%	744	19.0%	144	15.1%
$ 10,001–20,000	1673	31.5%	1429	36.5%	244	25.6%
$ 20,001–40,000	1577	29.7%	1285	32.8%	292	30.7%
$ 70,001–75,000	556	10.5%	364	9.3%	192	20.2%
$ > 75,000	178	3.4%	98	2.5%	80	8.4%
Education						
< High school	1874	35.3%	1655	39.4%	243	24.2%
High school/GED	1368	25.8%	1090	26.0%	278	27.6%
> High school/GED	1939	36.5%	1455	34.6%	485	48.2%
Years in United States						
< 10	1247	23.5%	1220	28.6%	22	2.2%
10	3138	59.1%	2801	65.6%	324	31.9%
US Born	917	17.3%	246	5.8%	670	65.9%
Spanish language	4166	78.5%				

[1]$M(SD)$.

All other sample characteristics are reported as percentages.

Table 2.

Item-level descriptive statistics and unstandardized (standardized) factor loadings from English and Spanish baseline models (N = 5,310)

	$M(SD)^a$	English		Spanish	
		Loading	$M(SD)^b$	Loading	$M(SD)^b$
Familial Obligations					
Item 1. One should make great sacrifices in order to guarantee a good education for his/her children.	4.51(0.62)	1.00 (0.47)	1.53 (0.64)	1.00 (0.50)	1.49 (0.61)
Item 2. One should help economically with the support of younger brothers and sisters.	4.17(0.71)	1.32 (0.59)	1.86 (0.71)	1.48 (0.62)	1.83 (0.71)
Item 3. I would help within my means if a relative told me that she/he is in financial difficulty.	4.17(0.66)	1.24 (0.62)	1.76 (0.61)	1.35 (0.60)	1.85 (0.67)
Item 4. One should have the hope of living long enough to see his/her grandchildren grow up.	4.47(0.60)	0.90 (0.50)	1.49 (0.57)	1.08 (0.51)	1.54 (0.61)
Item 5. Aging parents should live with relatives.	4.14(0.84)	1.31 (0.42)	2.14 (0.99)	1.49 (0.55)	1.79 (0.78)
Item 6. A person should share his/her home with uncles, aunts, or first cousins if they are in need.	3.87(0.87)	1.30 (0.47)	2.12 (0.85)	1.61 (0.55)	2.14 (0.87)
Perceived Support from the Family					
Item 7. When someone has problems she/he can count on help from his/her relatives.	4.21(0.60)	1.00 (0.87)	1.88 (0.72)	1.00 (0.76)	1.77 (0.56)
Item 8. When one has problems, one can count on the help of relatives.	4.13(0.69)	1.02 (0.81)	1.94 (0.76)	1.15 (0.74)	1.85 (0.68)
Item 9. One can count on help from his/her relatives to solve most problems.	3.46(1.06)	0.94 (0.56)	2.50 (1.02)	1.20 (0.48)	2.55 (1.07)
Family as Referents					
Item 10. Much of what a son or daughter does should be done to please the parents.	3.34(1.16)	1.00 (0.53)	3.00 (1.13)	1.00 (0.66)	2.58 (1.15)
Item 11. The family should consult close relatives (uncles, aunts) concerning its important decisions.	3.19(1.14)	0.90 (0.51)	2.89 (1.09)	0.89 (0.58)	2.79 (1.15)
Item 12. One should be embarrassed about the bad things done by his/her brothers and sisters.	2.88(1.18)	0.80 (0.43)	3.31 (1.12)	0.72 (0.46)	3.08 (1.19)
Item 13. Children should live in their parents' house until they get married.	3.43(1.16)	0.64 (0.33)	3.27 (1.15)	0.83 (0.56)	2.41 (1.10)
Item 14. One of the most important goals in life is to have children.	3.61(1.11)	0.73 (0.38)	2.78 (1.15)	0.81 (0.56)	2.30 (1.08)

Note.

[a]Ratings from 1 (strongly disagree) to 5 (strongly agree).

[b]Ratings from 1 (strongly agree) to 5 (strongly disagree).

Table 3.

Goodness of Fit Statistics for Confirmatory Factor Analysis (CFA) Models

	Model	S-B χ^2	Df	p	SRMR	RMSEA	SRMR	RMSEA	S-B χ^2	df	p
1.	Three-factor	866.17	74	<.001	.056	.045	.021	.020	730.88	3	<.001
	English	258.89	74	<.001	.063	.050	.019	.022	321.59	3	<.001
	Spanish	761.97	74	<.001	.056	.047	.019	.017	474.41	3	<.001
2.	One-factor	1814.80	77	<.001	.077	.065	--	--	--	--	--
	English	487.90	77	<.001	.082	.072					
	Spanish	1439.95	77	<.001	.075	.064					
3.	Configural	1088.08	148	<.001	.058	.049	--	--	--	--	--
4.	Metric	1107.27	159	<.001	.059	.049	.001	.000	11.30	11	.42
5.	Factor Variance/Covariance	1189.68	165	<.001	.071	.048	.012	.001	87.55	6	<.001

Note. S-B χ^2 = Satorra-Bentler chi-square. Df = degrees of freedom. SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation.

Table 4.

Correlations Between the Three Sabogal Familism Scale Subscales and Measures of Simpatía, Fatalism, and U.S. Acculturation for the Overall Sample, Spanish Responders, and English Responders

	Familial Obligations	Perceived Support from the Family	Family as Referents
Simpatía			
Overall Sample	.26 *	.22 *	.11 *
Spanish Responders	.26 *	.16 *	.11 *
English Responders	.27 *	.24 *	.18 *
Fatalism			
Overall Sample	.04 *	.03	.11 *
Spanish Responders	.03	.01	.10 *
English Responders	.07 *	.07 *	.10 *
U.S Acculturation, SASH Language Use			
Overall Sample	−.06 *	−.04 *	−.29 *
Spanish Responders	−.05 *	−.02 *	−.22 *
English Responders	−.03	−.03	−.11 *
U.S Acculturation, SASH Ethnic Social Relations			
Overall Sample	−.06 *	−.06 *	−.22 *
Spanish Responders	−.04 *	−.05 *	−.17 *
English Responders	−.05	−.06	−.08 *

Note.

*
p < .05