The Validation of the Spanish Adaptation of the Protective Factors Survey

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Children of Latino immigrants comprise a large and rapidly expanding ethnic group of children in the United States (U.S.). Currently, Latinos, who comprise persons from Central America, Cuba, Dominican Republic, Mexico, and South America, represent 14.8 percent of the total U.S. population (U.S. Census Bureau, 2006). Given that Latinos represent a substantial population in the U.S., there are a growing number of Latino families being served by child abuse prevention agencies (DHHS, 2011; Pew Hispanic Center, 2010). Latino immigrants face heightened risk of child maltreatment because of familial stressors associated with acculturation and immigration (Dettlaff, Earner, & Phillips, 2009). In fact, Latino children are more likely to experience substantiated cases of maltreatment than White, non-Latino children (Church, Gross, & Baldwin, 2005). Language barriers further compound the unique service needs of Latino families involved in the child welfare system. In 2010, for example, nearly 75 percent of Latino households spoke a language other than English at home (U.S. Census Bureau, 2011).

As with most government-funded and nonprofit agencies, child abuse prevention programs are required to measure program outcomes. Within the child abuse prevention field, there are few validated instruments in Spanish to measure participants' needs, resources, and progress. The lack of available tools raises concerns related to the cultural, functional, metric, and linguistic equivalence of existing translations of surveys, which ultimately lead to methodological bias (Peña, 2007). These concerns are especially relevant because most instruments that assess well-being are standardized with English-speaking populations, and not with other language groups.

The present study addresses this problem by examining a Spanish adaptation of the Protective Factors Survey (PFS), a tool increasingly used by child abuse prevention programs. The original version of the PFS, a validated instrument, measures five family-level protective

factors against child abuse: Family Functioning/Resiliency (FF); Concrete Supports (CS); Social Supports (SS); Nurturing and Attachment (NA); & Knowledge of Parenting/Child Development (KOP/CD) (Counts, Buffington, Chang-Rios, Rasmussen, & Preacher, 2010). Each of these items measures attitudes and behaviors (see Appendix A for a complete list). An important note is that the KOP/CD items are not expected to correlate with one another, that is, there is no theoretical reason for the items to conform to a factor structure (Bollen & Lennox, 1991). For this reason, the KOP/CD items are excluded from the analyses in this study. The purposes of this study are to determine 1) whether the S-PFS is metrically invariant across participating agencies; 2) whether the S-PFS is stable across time, that is, metrically invariant from Time One to Time Two; 3) whether subscales of the S-PFS are correlated; and 4) whether the S-PFS is a valid and reliable measure of family functioning among Spanish-speaking families.

Background and Rationale

The Protective Factors Survey (PFS) was developed to help evaluate the effectiveness of child maltreatment prevention programs by measuring factors that protect the family from negative trajectories (see Table 1). Through the course of several years of field-testing, the PFS was found to be a valid and reliable tool. The subscales were negatively related to stress, depression, and risk for child maltreatment, and positively related to adaptive coping and caregiver health (Counts et al., 2010).

Table 1. PFS Factors and Operational Definitions in English and Spanish

Factor	Operational Definition
Family Functioning/ Resiliency Funcionamiento/ Resiliencia de la Familia	Having adaptive skills and strategies to persevere in times of crisis. Family's ability to openly share positive and negative experiences and mobilize to accept, solve, and manage problems. Poseer habilidades adaptivas y estrategias para perseverar en tiempos difíciles. La habilidad de la familia de compartir abiertamente experiencias positivas y negativas, y movilizarse para aceptar, resolver y manejar problemas.
Social Emotional Support Apoyo Social-Emocional	Perceived informal support (from family, friends, and neighbors) that helps provide for emotional needs. La percepción de la presencia de apoyo informal (de familia, amigos y vecinos) que satisface las necesidades emocionales.
Concrete Support Apoyo Financiero	Perceived access to tangible goods and services to help families cope with stress, particularly in times of crisis or intensified need. La percepción de acceso a bienes y servicios tangibles que ayudan a la familia a sobrellevar el estrés, particularmente en tiempos difíciles o en tiempos de alta necesidad.
Child Development/ Knowledge of Parenting Conocimientos de Crianza/ Desarrollo de Niños.	Understanding and using effective child management techniques and having age-appropriate expectations for children's abilities. El entendimiento y el uso efectivo de estrategias de crianza y expectativas adecuadas para cada edad según las habilidades del niño.
Nurturing and Attachment Crianza y Apego	The emotional tie along with a pattern of positive interaction between the parent and child that develops over time. El hilo emocional en combinación con un modelo de interacciones positivas entre el padre y el niño, que se desarrolla a lo largo del tiempo.

Since the PFS's release in 2006, the developers have received numerous requests for a reliable and valid Spanish translation that was both culturally and linguistically appropriate. In response, in 2012, FRIENDS contracted with the University of Kansas Center for Public

Partnerships and Research (CPPR) to develop a Spanish adaptation of the PFS (S-PFS). Based on feedback and suggestions from the field, CPPR designed a study to develop a culturally and linguistically relevant Spanish version of the PFS and to evaluate the S-PFS's validity and reliability.

Once the translation was completed and test sites were recruited, CPPR implemented a planned missing pretest/posttest design to test the stability and validity of the S-PFS with three validation instruments, including the Child Abuse Potential Inventory (CAP), Difficult Life Circumstances (DLC), and the Family Resource Scale (FRS).

Method

Participants

Participating agencies. Between June 2012 and April 2013, agencies were recruited through several means: National electronic-mail listservs (e.g., Community-Based Child Abuse Prevention), regional and national conferences (e.g., American Evaluation Association, Network for Action), and webinars. Interested agencies contacted CPPR staff members who determined whether the agencies were eligible for participation. Of the 40 agencies that expressed interest, only seven agencies participated due to the study's selection criteria and stringent Institutional Review Board (IRB) approval process. To be eligible for participation, agencies agreed to complete a one-hour training on the rights of human subjects and survey administration procedures, to provide 12 hours of direct service, and to serve a minimum of 10 clients who speak Spanish as their primary language. Participating agencies represent the states of Washington, Texas, New York, Michigan, Iowa, Georgia, and Oregon. Participating agencies received a $50 Amazon gift card before and after data collection.

Participating individuals. The participating agencies recruited participants. Eligible participants included any caregiver receiving at least 12 hours of parenting-related services (e.g., parenting education classes) who expressed a willingness to complete the survey packet at Time One and Time Two. A total of 141 surveys from six agencies were collected during Time One, while 148 surveys from six agencies were collected during Time Two. Table 1 provides the demographic characteristics of the sample.

Study participants received an average of 30.6 hours of service delivery (*SD*=5.4, range 13-36 hours). The most common services were parent education (65.0%), home visitation (34.4%), parent support group (32.9%), family resource center (26.4%), parent-child interaction (21.4%), and adult education (20.7%). As Table 2 indicates, the evaluation sample was primarily female (86.5%) and Latino (92.1%). Nearly two-thirds of participants were 35 years of age or younger (62.0%), identified Mexico as their country of origin (75.4%), and were in a partnered relationship (70.8%). Most participants received a high school education or less (75.5%), and earned $30,000 or less annually (69.2%).

Table 2. Selected Demographics of Participants

	N	%	*M*
Sex	133	--	--
Female	115	86.5	--
Male	18	10.8	--
Ethnicity	140	--	--
African American	1	0.7	--
Hispanic/Latino	129	92.1	--
White, non-Hispanic	9	6.4	--
Multiracial	1	0.7	--
Country of Origin	138		
Mexico	104	75.4	--
United States	8	5.8	--
Puerto Rico	5	3.6	--
El Salvador	4	2.9	--
Other	17	12.3	
Income	133	--	--
<$15,000	44	33.1	
$15,000-30,000	48	36.1	--
$30,001+	35	26.4	--
Marital Status	137	--	--
Partnered*	97	70.8	--
Single/Separated**	40	29.2	--
Education	131	--	--
Elementary or Junior High School	37	28.2	--
Some High School	32	24.4	--
High School Diploma	30	22.9	--
Vocational Training and Above	32	24.5	
Age	133	--	33
<35 years of age	75	62.0	--
Child Protective Services Involvement			
No	121	89.0	--
Yes	11	8.1	--
Unsure	4	2.9	--
Hours of Service Delivery	49	--	30.6
Types of Governmental Assistance	139		
Food Stamps	65	46.8	--
Medicaid	74	53.2	--
Head Start/Early Head Start	27	16.3	--

*Partnered represents married and partnered participants. **Single/Separated represents single, divorced, widowed, and separated participants.

Procedure

Technical assistance for participating agencies. Before and during data collection, agencies received ongoing technical assistance via webinar, email, and phone contact regarding the procedures for gaining approval to conduct research with human subjects, completing training on research with human subjects, and administering the surveys. Prior to data collection, all test sites received print and electronic copies of the survey manual, frequently asked questions, and the survey packets.

Survey administration. Program staff from the participating agencies administered the S-PFS survey packets during face-to-face interactions in individual or group settings. Agencies were required to gather the IRB-approved informed consent statements from caregivers to participate in the study. Participants completed the survey packets during Time One and Time Two between September 2012 and July 2013. The average length of time between pretest and posttest was 40 days (*SD*=26.02, range 12-146 days).

Measures

Agencies received a survey packet with four instruments to complete at pre- and posttest: the S-PFS, the Family Resource Scale (FRS), Difficult Life Circumstances (DLC), and the Child Abuse Potential Inventory (CAP).

S-PFS. In both the original PFS (Counts et al., 2010) and revised S-PFS, the survey begins with demographic questions completed by staff members familiar with the participating caregivers. These questions relate to the date of administration, the services offered by the agency, and the total hours of service delivery. The participant demographics section asks about the caregiver's family composition, country of origin (S-PFS only), race/ethnicity, income, governmental assistance, housing status, and marital status. Following the demographic items,

participants were asked to respond to a series of 20 statements about their family using a seven-point frequency or agreement scale in the original PFS.

In addition to asking about the caregiver's country of origin, CPPR made other changes to the S-PFS after receiving feedback from internal CPPR colleagues, direct service providers, and parent-consumers. Between July and September 2012, CPPR convened two committees to translate, revise, and provide feedback on the S-PFS using rigorous translation methods (Harkness, 2003; WHO, 2009). The first committee was a nationally representative group of bilingual/bicultural parent-consumers and direct service providers from child maltreatment prevention programs. The second committee was a team of internal CPPR researchers and bilingual/bicultural colleagues who provided measurement expertise, resolved discrepancies between the first and second committees, and held final decision-making authority. Ultimately, the efforts made by both committees resulted in seven translation drafts and several changes to the S-PFS.

Based on feedback from the two committees, the S-PFS under review in this study added two items to CS ("I go to the hospital for routine medical care" and "My household bills [telephone, electricity] are canceled because I cannot afford them") and two items to KOP/CD ("It is hard to know what to do as a parent" and "I am confident in my role as a parent"). In addition, the S-PFS exclusively uses a seven point frequency scale (never to always).

Difficult Life Circumstances. The revised Difficult Life Circumstances (DLC) scale is a 30-item self-report checklist used by child abuse prevention programs (Johnson, Booth, Bee, & Barnard, 1989). The original and revised DLC measures how life stressors such as substance abuse, physical abuse, emotional abuse, financial matters, community-based supports, and housing impact the parent-child relationship. Upon completion, survey respondents receive a

"low risk" or "high risk" designation based on total number of items selected by participants. In the original version, "low risk" is comprised of five or fewer stressors while "high risk" is comprised of six or more stressors. To date, the revised DLC does not offer cutoff scores. Among English-speaking groups, the original DLC demonstrates adequate test-retest reliability (r=.40-.70), and construct, concurrent, and convergent validity. At this time, there is no reliability or validity information available for Spanish-speaking groups or for the revised DLC.

Family Resource Scale. The Family Resource Scale (FRS), a 31-item self-report 5-point scale, measures a family's resources, which are rated as not at all adequate (1) to almost always adequate (5) (Dunst & Leet, 1986). The FRS has five subscales, including Growth & Support, Necessities & Health, Physical Necessities & Shelter, Intrafamily Support, and Personal Resources. In addition to obtaining a total FRS score, subscale scores are calculated by tallying responses in the respective subscales. These subscales measure a family's access to resources such as food, shelter, transportation, healthcare, and time for family and self. Although reliability and validity are not available for the Spanish version, the English FRS demonstrates acceptable internal consistency using Cronbach's alpha (.92), split-half reliability using Spearman-Brown's formula (.95), test-retest reliability (.52), and concurrent validity with personal wellbeing and maternal commitment (.57, .63, respectively; Dunst, 1986a, b).

Child Abuse Potential Inventory. The Child Abuse Potential Inventory (CAP), a 160-item agree/disagree questionnaire, helps assess whether caregivers are at-risk or suspected for child abuse (Milner, 1986). The CAP is available in several languages and contains 10 subscales, six of which relate to 77 child physical abuse items. These six subscales include Distress, Rigidity, Unhappiness, Problems with Child and Self, Problems with Family, and Problems from Others. The responses are tallied to generate subscale scores and an overall abuse scale score.

The remaining 83 questions relate to three validity scales (response distortion indexes), which are not included in this study. The English CAP demonstrates strong split-half reliability (.93-.98) and internal consistency using Kuder-Richardson-20 coefficients (.85-.96) among various genders, ages, educational levels, and ethnic groups. The CAP demonstrates moderate construct validity between abuse scores and childhood physical abuse (.48) and predictive validity between abuse scores and subsequent abuse/neglect substantiations (.34). Regarding the reliability and validity of CAP translations, meta-analyses across the translations yield high internal consistency values of .88 and .91 when comparing the general population to maltreating parents, and similar construct validity values between the English version and the translated versions (Milner & Crouch, 2012).

Research Design

We designed this project as a planned missing pretest-posttest study to reduce the burden placed on caregivers who participated in this study. In planned missing designs, participants only complete a proportion of questions from each validation measure. In this study, participants completed survey A, B, or C, resulting in a 66% overlap of the items between survey A, B, and C. Planned missing designs allow researchers to use the long form of validation measures while minimizing burdens placed on caregivers and participating agencies (Little, 2013). Planned missing designs use data imputation techniques to handle the missing values associated with planned missingness (Brown, 2006).

Statistical Approach

Using the fixed factor method of scale setting, we conducted multiple-group confirmatory factor analyses (CFA) with a data analysis program, lavaan 0.4-14 (Rosseel, 2012), to determine the internal structure of the S-PFS. Before conducting these analyses, we screened the data for

outliers, multivariate normality, and missing data. Although data screening indicated multivariate normality, missing data was present across all items, ranging from 0 percent to 60 percent.

Results

Measurement Invariance

S-PFS results from Time One were used to examine measurement invariance. The first model fit a CFA model to all of the S-PFS subscales with the exception of the KOP/CD items. As indicated above, there was no theoretical reason to expect these items to conform to a factor structure. This model had acceptable fit, $\chi^2(113) = 209.986$, $p < .001$, CFI = 0.898, TLI = 0.877, RMSEA = 0.079 (90% CI: 0.062-0.095), SRMR = 0.100, which indicates that the model reflects the data to an acceptable degree. Models with acceptable to good fit have TLI/CFI values > .90 and SRMR/RMSEA values < .08. Investigation of the model parameters indicated that the factor loadings of the newly added CS items (#23 and 24) were either close to zero or negative, indicating that these items do not contribute to the operational definition of CS, and should be removed to improve model fit.

The second model fit a CFA model to the four subscales of the S-PFS and all items besides #23 and #24. This model had good fit, $\chi^2(84) = 148.097$, $p < 0.001$, CFI = 0.929, TLI = 0.911 RMSEA = 0.074 (90% CI: 0.054-0.093), SRMR = 0.072, and fit better than the first model, $\Delta\chi^2(29) = 61.889$, $p = 0.0004$. In the second model, all of standardized factor loadings besides one loading were greater than 0.65 (see Table 3), which are moderate to high values. These results indicate that the items adequately represent the construct being measured, which provides support for content validity. Each of the subscales at Time One correlated between 0.49 and 0.90, which offers further support for content validity, that is, there were positive and

moderate to strong correlations between the subscales. The strongest correlation was CS and SS (0.904).

After fitting the second model to Time One data, we fit the same model to Time Two data. This model had good fit, $\chi^2(84) = 156.55$, $p < 0.001$, CFI = 0.899, TLI = 0.874, RMSEA = 0.077 (90% CI: 0.058-0.095), SRMR = 0.095. Although the second model does not fit Time Two data as well as Time One data, the results in the next section confirm that the S-PFS survey has longitudinal invariance. The results demonstrate that the items adequately represent the constructs, with loadings ranging from 0.450 to 0.876. Further, each of the subscales at Time Two correlated between 0.378 and 0.777, which are moderate correlations. As with the Time One results, CS and SS had the highest correlation (0.777). Taken together, these results provide support for content validity. In Table 3, the factor loadings, correlations between constructs, and model fit indices are reported.

Table 3. Standardized Factor Loadings, Factor Correlations, and Model Fit Indices for Confirmatory Factor Analyses: The Final Model

Loadings	Time One				Time Two			
	FF	SS	CS	NA	FF	SS	CS	NA
PFS1	0.814				0.741			
PFS2	0.670				0.665			
PFS3	0.807				0.741			
PFS4	0.727				0.619			
PFS5	0.786				0.845			
PFS6		0.799				0.890		
PFS7		0.863				0.734		
PFS10		0.848				0.798		
PFS8			0.798				0.804	
PFS9			0.872				0.839	
PFS11			0.746				0.823	
PFS17				0.450				0.499
PFS18				0.785				0.599
PFS19				0.662				0.538
PFS20				0.876				0.817

Correlations

	Time One				Time Two			
	FF	SS	CS	NA	FF	SS	CS	NA
FF	1.000				1.000			
SS	0.777	1.000			0.566	1.000		
CS	0.645	0.904	1.000		0.499	0.777	1.000	
NA	0.634	0.492	0.501	1.000	0.666	0.408	0.378	1.000

Model fit indices

	Time One	Time Two
CFI	0.929	0.899
TLI	0.911	0.874
RMSEA	0.074, 90% CI: {0.054, 0.093}	0.077, 90% CI: {0.058, 0.095}
SRMR	0.072	0.095

Note. Loadings and correlations in boldface are statistically significant at α = .05. FF = Family Functioning/ Resiliency; NA = Nurturing and Attachment; SS = Social Support; CS = Concrete Support.

Longitudinal Invariance Testing

When testing for invariance across time, strong invariance constraints held (equal factor loadings and item intercepts), indicating that the measurement structure of the S-PFS did not differ between pre- and posttest. That is, the S-PFS measures the same protective factors, regardless of when the S-PFS is administered, as evidenced by the small changes (<.01) to the CFI fit index from Time One to Time Two (Cheung & Rensvold, 1999). Finding metrical invariance is important in establishing the stability of a measure over time, which allows agencies to trust that the S-PFS can measure changes in factors that result from their interventions.

Further, the latent means and variances were different between pre- and posttest, which is expected (see Table 4). In fact, the latent means were higher at Time Two for each subscale, which indicates that participants improved their scores from Time One to Time Two.

Table 4. Model Fit for Testing Longitudinal Invariance

Model	$\chi2$	df	*p*	RMSEA (90% CI)	CFI	TLI	$\Delta\chi2$	df	*p*	ΔCFI
Configural Invariance	635.53	362	<.001	.068 (.059-.077)	.869	.842	--	--	--	--
Weak Invariance	650.85	373	<.001	.068 (.059-.076)	.867	.844	15.32	11	.168	.002
Strong Invariance	657.57	384	<.001	.066 (.057-.075)	.869	.851	6.72	11	.822	-.002
*Latent Mean Invariance**	699.93	388	<.001	.070 (.062-.079)	.850	.832	42.37	4	<.001	.019
*Latent Variance Invariance***	681.11	388	<.001	.068 (.060-.076)	.859	.842	23.54	4	<.001	.010

Criterion Validity

Predictive validity.

An autoregressive panel model (all S-PFS pretest scores predict all posttest scores) provides evidence for the predictive validity of the S-PFS. Predictive validity is present when a

selected measure is strongly correlated to the same measure later in time. The results from the autoregressive panel model demonstrated that all S-PFS pretest subscale scores predict all S-PFS posttest subscale scores to a moderate degree (see Table 5). Pretest subscale scores on the S-PFS accounted for between 39% and 68% of the variance in posttest scores, leaving 32% to 61% of the variance unexplained by the pretest score alone. These values are similar to those found in the English version (Counts et al., 2010). Regarding the individual KOP/CD items, the results from the autoregressive panel model indicated that the pretest scores predict posttest scores to a small or moderate degree, with effect sizes ranging from 14% to 43%, meaning that 57% to 86% of the variance is not explained by the pretest score. We suspect that the KOP/CD items exhibit smaller effect sizes for two reasons: 1) These items do not correlate well with each other over time; and 2) these items include measurement error, which decreases the size of factor loadings (Little, 2013). In contrast, the subscales (latent variables) do not have measurement error, which increases the size of the factor loadings (see Table 5). Although the KOP/CD items demonstrate weaker predictive validity than the subscales, these items do not contribute to the four-factor structure of the S-PFS, and therefore do not influence the overall predictive validity of the S-PFS.

Table 5. Autoregressive Parameters

Subscale	Standardized Parameter	r^2
FF	0.63	0.39
SS	0.74	0.55
CS	0.66	0.43
NA	0.82	0.68
KOP/CD #12*	0.66	0.43
KOP/CD #13	0.47	0.22
KOP/CD #14	0.65	0.42
KOP/CD #15	0.38	0.14
KOP/CD #16	0.58	0.34

* Based on the results from the final model, the developers replaced the previous #12 with #22.

Concurrent validity.

As indicated above, the confirmatory factor analyses and the autoregressive panel model provide support for the internal consistency, stability, content validity, and predictive validity of the S-PFS. To investigate whether the S-PFS has concurrent validity, participants completed the DLC, CAP, and FRS. Concurrent validity occurs when new measures (S-PFS) correlate with previously validated measures.

Due to the amount of missing data, correlations between the S-PFS and validation measures could not be assessed in an SEM framework. Instead, 30 multiple imputations with Amelia (Honaker, King, & Blackwell, 2013) were used to handle missing data. Some subscales were not computed due to large amounts of missing data. For each imputed dataset, scale scores on the S-PFS, FRS, CAP, and the DLC were computed. Then correlations between scales were computed on each imputed data set and pooled across data sets. At Time One and Time Two, S-PFS subscales were expected to have moderate, positive correlations with the FRS subscales, Growth & Support (GS) and Physical Necessities & Shelter (NS); to have small, negative correlations with the CAP subscale, Rigidity (R), and moderate, negative correlations with

Problems with Others (PO); and to have moderate, negative correlations with the DLC total score. We anticipated these relationships given the similar operational definitions of the FRS's GS, NS, and CAP's PO with S-PFS's FF, SS, CS, and NA, the dissimilar operational definitions of R and the DLC with the S-PFS subscales. The results were as expected, which offers support for the concurrent validity of the S-PFS (see Table 6 and 7). Overall, the findings of predictive and concurrent validity provide support for the S-PFS's criterion validity.

Table 6. Pretest Correlations between S-PFS and Validation Measures

	FRS			CAP		DLC Total
	GS1	NS1	IS1	RI1	P01	Score
FF1	0.38**	0.22*	0.29*	-0.13	-0.30*	-0.60*
SS1	0.41**	0.21*	0.25*	-0.02	-0.28*	-0.64*
CS1	0.47**	0.28*	0.27*	-0.02	-0.30*	-0.56*
NA1	0.37**	0.19*	0.35*	-0.10	-0.22*	-0.56*

** p < .001 * p< .05; *Note:* Correlations between the DLC and the S-PFS were only available at pretest from one of the test sites due to large amounts of missing data from all other test sites.

Table 7. Posttest Correlations between S-PFS and Validation Measures

	GS2	NS2	IS2	RI2	P02
FF2	0.37**	0.30*	0.36**	-0.22*	-0.22*
SS2	0.46**	0.23*	0.26*	-0.23*	-0.22*
CS2	0.35**	0.17*	0.11	-0.13	-0.12
NA2	0.41**	0.24*	0.43**	-0.15	-0.20*

** p < .001 * p< .05

Reliability

We computed internal consistency estimates (Cronbach's alpha) to establish the reliability of the S-PFS using structural equation modeling. Cronbach's alpha values evaluate the extent to which items in a subscale represent the same construct. Values between .70 and .90 indicate adequate to excellent internal consistency (Kline, 1998). All but one of the S-PFS subscales at Time One and Time Two exhibited very good to excellent internal consistency: FF

(0.88, 0.82, respectively), SS (0.91, 0.81), and CS (0.85, 0.86). Both Time One and Time Two NA demonstrated good internal consistency (0.79, 0.65). Although Time Two NA's internal consistency alpha value (0.65) is below Kline's threshold for good internal consistency, alpha values represent the lower bound of reliability. An alternative measure of reliability (Omega) demonstrates good internal consistency for NA at Time Two (0.73). Similar to the results from this study, results from the English PFS field tests demonstrated adequate internal consistency, with values above 0.80 for all subscales besides CS.

Summary

The purposes of this study is to determine 1) whether the S-PFS is metrically invariant across participating agencies; 2) whether the S-PFS is stable across time, that is, metrically invariant from Time One to Time Two; 3) whether subscales of the S-PFS are correlated; and 4) whether the S-PFS is a valid and reliable measure. The findings support the four research questions. As with the English version, the S-PFS conforms to a four-factor structure at Time One and Time Two, and is stable across time. These results indicate that the items adequately represent the construct being measured, which provides support for content validity. Each of the subscales at Time One correlated between 0.378 and 0.904, which offers support for content validity, that is, there were positive and moderate to strong correlations between the subscales. The tool also demonstrates criterion validity as indicated by correlations between S-PFS's subscales, the DLC, and subscales from the FRS and CAP (concurrent validity), and the ability of pretest scores to predict posttest scores (predictive validity). As noted previously, the KOP/CD items exhibited weaker predictive validity and should be interpreted with caution because these items do not contribute to the overall four-factor structure of the S-PFS. Finally, the S-PFS exhibits adequate reliability for all but one subscale (NA at Time Two). Overall, the

results indicate that the S-PFS is a valid and reliable tool that is stable over time. Despite the study's limitations, which are outlined below, the S-PFS is recommended for public use.

Limitations

The limitations in this study primarily relate to the research design. Due to the large amounts of missing data, there was not enough data to complete analyses with all of the validation tools, which limits our ability to test for validity. Another limitation is that we do not know whether the S-PFS is equivalent to the English PFS because the English PFS was not administered along with the S-PFS.

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Appendix A: A List of Protective Factors and Items

Protective Factor	Item
Family Functioning/Resiliency	1. In my family, we talk about problems.
	2. When we argue, my family listens to "both sides of the story."
	3. In my family, we take time to listen to each other.
	4. My family pulls together in times of stress.
	5. My family is able to solve our problems.
Social Emotional Support	6. I have others who will listen when I need to talk about my problems.
	7. When I am lonely, I have several people I can talk to.
	10. If there is a crisis, I have people I can talk to.
Concrete Support	8. I would know where to go if my family family needs food or housing.
	9. I know where (or with whom) to go if I have financial difficulties.
	11. I know where to go if I need help finding a job.
	23*. *I go to the emergency room for routine medical care.*
	24*. *My utilities (phone, electric) at home are shut off because I cannot pay my bill.*
Knowledge of Parenting/ Child Development	12. *There are times when I don't know what to do as a parent.*
	13. I know how to help my child learn.
	14. My child misbehaves just to upset me.
	15. I praise my child when he/she behaves well.
	16. When I discipline my child, I lose control.
	21. It is hard to know what to do as a parent.*
	22*. I am confident in my role as a parent.
Nurturing and Attachment	17. I am happy being with my child.
	18. My child and I are very close.
	19. I am able to soothe my child when he/she is upset.
	20. I spend time with my child doing what he/she likes to do.

*Denotes items that were added to the S-PFS. The italics font indicates items that were not included in the final model.

Appendix B: English and Spanish Items of the Protective Factors Survey

	Nunca Never	Casi Nunca Almost Never	Pocas Veces A Few Times	A Veces Sometimes	Muchas Veces Many times	Casi Siempre Almost Always	Siempre Always
1. En mi familia, hablamos acerca de los problemas. In my family, we talk about problems.	1	2	3	4	5	6	7
2. Cuando discutimos, mi familia escucha ambas partes de la historia. When we argue, my family listens to "both sides of the story."	1	2	3	4	5	6	7
3. En mi familia, tomamos tiempo para escucharnos los unos a los otros. In my family, we take time to listen to each other.	1	2	3	4	5	6	7
4. Mi familia se apoya en momentos de estrés. My family pulls together in times of stress.	1	2	3	4	5	6	7
5. Mi familia soluciona todos nuestros problemas. My family is able to solve our problems.	1	2	3	4	5	6	7
6. Tengo personas que me escuchan cuando necesito hablar de mis problemas. I have others who will listen when I need to talk about my problems.	1	2	3	4	5	6	7
7. Cuando me siento solo/a, tengo a varias personas con las que puedo hablar. When I am lonely, I have several people I can talk to.	1	2	3	4	5	6	7
8. Yo sé a dónde ir si mi familia llegara a necesitar comida o alojamiento provisional. I would know where to go if my family needs food or housing.	1	2	3	4	5	6	7
9. Yo sé a dónde (o con quién) ir para conseguir ayuda si tuviera dificultades financieras. I know where (or with whom) to go if I have financial difficulties.	1	2	3	4	5	6	7
10. Si existe una crisis, tengo personas con quienes contar. If there is a crisis, I have people I can talk to.	1	2	3	4	5	6	7

11. Yo sé a dónde ir para recibir ayuda si necesito conseguir un trabajo. I know where to go if I need help finding a job.	1	2	3	4	5	6	7
12. Me siento segura/o en mi papel como madre/padre. I am confident in my role as a parent.	1	2	3	4	5	6	7
13. Sé cómo ayudarle a mi hijo/a a aprender. I know how to help my child learn.	1	2	3	4	5	6	7
14. Mi niño/a se porta mal sólo para hacerme enojar. My child misbehaves just to upset me.	1	2	3	4	5	6	7
15. Yo elogio a mi niño/a cuando se porta bien. I praise my child when he/she behaves well.	1	2	3	4	5	6	7
16. Cuando disciplino a mi niño/a pierdo el control. When I discipline my child, I lose control.	1	2	3	4	5	6	7
17. Soy feliz cuando estoy con mi niño/a. I am happy being with my child.	1	2	3	4	5	6	7
18. Mi niño/a y yo somos muy unidos. My child and I are very close.	1	2	3	4	5	6	7
19. Puedo tranquilizar a mi niño/a cuando está enojado/a. I am able to soothe my child when he/she is upset.	1	2	3	4	5	6	7
20. Yo paso tiempo con mi niño/a haciendo lo que le gusta. I spend time with my child doing what he/she likes to do.	1	2	3	4	5	6	7