

UTILIZING THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE (SDQ) AS A SCREENING INSTRUMENT  
IN COMMUNITY-AND POPULATION-BASED SAMPLES OF LATINO YOUTH

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## ABSTRACT

**Background:** More research is needed in unique Hispanic-Latino communities regarding prevalence of pediatric behavioral disorders as well as culturally patterned manifestations of disorder. While the Strengths and Difficulties Questionnaire (SDQ) serves as a foremost instrument around the world for behavioral health screening in pediatric clinics, little information exists regarding subscale reliability in Latino immigrant or continental populations.

**Methods:** Surveys including the parent-response SDQ were administered to Mexican immigrant mothers (n=208) of 3-17yo children and adolescents visiting Vista Community Clinic, a community health clinic in southern California. Vista survey responses were compared to parent-SDQ data in multiple subgroups from the National Health Interview Survey (NHIS) 2004 data set, with subgroups including “non-Hispanic whites (n=3363),” “Hispanic Americans (HA) (n=1716),” “US-born HA (n=1439),” “English-language-interview HA (n=762),” “Spanish-language-interview HA (n=520),” “all recent immigrants in the past 10 years (n=619),” and “Hispanic-Latino immigrants in the past 10 years (n=277).” Analysis included demographics, confirmatory factor analysis (CFA) of multiple literature-based SDQ factor constructs with factor loadings, and measurement invariance testing including chi-square difference testing of factor loadings and item thresholds, factor intercorrelations (FI), composite reliability (CR) coefficient, and average variance explained (AVE).

**Results:** Similarities within a ~5% margin were seen across samples for prevalence of abnormalities on SDQ behavioral subscales. For the traditional five-factor SDQ model, CFA showed only marginal model fit across samples (RMSEA ~0.05, CFI and TLI ~0.90), but did show similar factor loadings and directionality across all samples. Stronger model fit was seen for bifactor models incorporating a 25-item ‘General Difficulties’ factor (RMSEA<0.05, CFI>0.95, TLI~0.95), and a trifactor model incorporating the traditional five factors, externalizing and internalizing factors, and the ‘General Difficulties’ factor showed the highest significance (RMSEA <0.027, CFI >0.97, TLI >0.95), albeit in larger samples. Factor intercorrelations were high (>0.5) across multiple SDQ factors including ‘conduct symptoms’ and ‘emotional symptoms,’ and CR and AVE were smallest in ‘peer problems’ (AVE ~0.25-0.5).

**Conclusion:** Although no CFA evidence fully disproved utilization of the SDQ survey for Hispanic-Latino youth in community health screening settings, broader constructs with larger values of variables-per-factor performed stronger across all cultural groups and sample sizes, possibly due to the intercorrelations between five-factor subscales nested with ‘externalizing’ and ‘internalizing’ categories or due to the presence of a ‘General Difficulties’ factor. This improved fit for broader factor constructs has relevance for both clinical and epidemiologic screening settings.

## THUMBNAIL SKETCH:

### What is already known on the subject:

- It is often difficult to achieve an accurate understanding of pediatric mental illness distribution and prevalence in minority groups including unique Latino groups, often due to sample size study constraints as well as small catchment populations.
- The Strengths and Difficulties Questionnaire (SDQ) can theoretically serve as an efficient behavioral screening tool for these populations. But despite authoritative recommendations to validate the SDQ in various Latino immigrant and continental groups, little information exists regarding SDQ subscale reliability in these populations.
- The SDQ has recently encountered challenges to its traditional five-factor model, with some suggesting ‘externalizing’ and ‘internalizing’ behavioral constructs as well as aggregate ‘General Difficulties’ constructs as more accurate model interpretations.

### What this study adds:

- Across all subpopulations studied, this data indicates borderline acceptable model fit with the traditional five-factor SDQ structure that improves significantly when CFA is applied to a model

including 'Externalizing' and 'Internalizing' categories as well as 'General Difficulties.' A previously unstudied 'trifactor' model fit might fit the data even better in future studies.

- This study shows large factor intercorrelations between traditional five-factor subscales that comprise 'externalizing' and 'internalizing' behavior constructs, suggesting that traditional model fit problems are at least partially due to these intercorrelations.
- As a result of these intercorrelations, this study indicates that broader SDQ factor constructs might be more useful when engaging in initial clinical screening as well as population surveys of unique Latino groups.

## **BACKGROUND**

Despite the fact that an estimated 21% of United States children and adolescents meet the diagnostic criteria for a mental health disorder, only roughly 20% of these children receive mental health and substance abuse services [1]. These access disparities are more prevalent in marginalized groups such as ethnic minorities and refugees. As one example, 88% of Latino children are estimated not to receive the mental health services they need [2], even though they show overrepresentation in the US child welfare system when compared with other ethnic groups [3]. Among Hispanic-Latino recent immigrant and border communities – a population slated to increase over the coming decades [4] – these access disparities are even more striking. Data suggests that Mexican agricultural workers with diagnosed psychiatric disorders maintain an even lower percentage of service utilization than the ~25% utilization seen in other Mexican-origin adults with these disorders [5]. In primary care pediatric settings, it is well-established that children from Hispanic-Latino border regions face increased risk for psychiatric disorders such as depression, substance abuse, and suicidal ideation, increased vulnerability to trauma, stigmatization, and socioeconomic insecurity, and increased barriers against obtaining high-quality health services [2-3].

The American Academy of Pediatrics has developed formal community [6] and primary care [7] recommendations for increasing recognition and management of pediatric mental health disorders. However, due structural and logistically barriers associated with community mental health screening in resource-constrained settings with unique populations [7], it is often difficult to achieve an accurate understanding of mental illness distribution and prevalence in these areas. Additionally, these studies

must overcome multiple methodological difficulties, including but not limited to: robust dimensional analysis of behavioral symptoms despite sample size constraints; accurate quantification of immigrant or refugee status in these communities; and consideration of within-group ethnocultural diversity in these communities [8]. In spite of all these difficulties, however, multiple authorities have recommended that these studies continue in order to facilitate best practices in these areas. In a recent review, the author of the Child Behavior Checklist [9] stated that psychometric comparison studies in common pediatric assessment tools are warranted between immigrant or refugee children in host countries with children indigenous to these host countries, as well as comparisons of assessment tool responses in intra-ethnic home and host country populations. Additionally, a US Surgeon General report recommended more research in individualized Hispanic-Latino communities, both involving epidemiological information in these unique populations as well as unique symptom clusters not usually included in household-based surveys [2].

With these details in mind, a number of measurement tools have been tabled as adequate screening tools for broad developmental-behavioral categories in children [10]. The Strengths and Difficulties Questionnaire (SDQ), a 25-item youth behavioral assessment tool [11-12], currently ranks as a foremost instrument around the world for behavioral screening in children and adolescents [13]. Much of its utility derives from its applicability to various community health settings, as it is brief compared to other dimensional tools such as the Child Behavior Checklist, relatively comprehensive with subscales that identify broad behavioral concerns (emotional symptoms, conduct problems, hyperactivity-inattention, peer problems), and user-friendly to respondents by including a subscale for 'prosocial' attributes that emphasize personal strengths [14]. Versions of the SDQ are available in over 60 languages, and SDQ psychometric properties have been extensively analyzed in childhood [15] and adolescent populations [9, 16].

However, recent evidence has called into question the traditional SDQ five-factor structure across populations. Multiple studies in Western countries including the United States have documented that a three-factor structure might fit the data better, consisting of 'externalizing problems' including overlapping conduct and hyperactivity-inattention items, 'internalizing problems' including overlapping emotional and peer symptoms, and a retained 'prosocial' score [17-20]. Other studies incorporate multilevel and complex data, such as a 'bifactor' construct in which respondent items load simultaneously onto the traditional five behavioral subscales as well a sum 'general problems' score that incorporates all questions at once [21]. Some studies of the SDQ include country-dependent [20,22] and age-dependent [19] modifications, and studies in multiple non-Western populations have indicated variations in SDQ behavioral 'factor' categories and/or statistical loadings of questions onto these categories [23-27]. A comparative study of ethnic Norwegian adolescents in Oslo with ethnic minority subsamples indicated problems with factor loadings, unidimensionality, variance, and reliability in a total of four of the five SDQ subscales, with the study authors ultimately recommending sole use of the total SDQ score over any subscale score in the ethnic minority subsamples [28].

Little information exists regarding SDQ subscale reliability in Latino immigrant or continental populations. No current studies have validated five-factor SDQ structure in Central or South America, nor analyzed differences in unique Latino communities such as immigrant or indigenous groups.

Psychometric validation studies have specifically been recommended for the SDQ in US Latino immigrant communities [9]. Previously published US studies with Hispanic-Latino SDQ responses [16, 29] do not stratify based on number of years of residence in the United States, nor by Hispanic-Latino ethnic subgroup or relevant community health variables such as socioeconomic status, level of education, profession, or neighborhood data such as zip code. As part of a larger survey of maternal and child behavioral health among immigrant and refugee groups in the San Diego area, we administered surveys including the parent-response SDQ to Mexican immigrant mothers of children and adolescents visiting Vista Community Clinic, a community health clinic in southern California. Our purposes were the

following: 1) to test the validity of parent-SDQ factor structures in this community-based immigrant population using confirmatory factor analysis (CFA); 2) to compare this community's factor structure to national population-based SDQ data for diverse Hispanic-Latino communities; and 3) to assess for variable-specific measurement invariance across these groups based on differences in ethnicity, language preference, and years of residence in the United States.

## **METHODS**

Data for the Vista Community Clinic component of the study was collected from 2012-2013 by Spanish-fluent interviewers from University of California San Diego School of Medicine with approval from clinic administration, as part of an IRB-approved project from UC San Diego on maternal and child behavioral health in minority groups in the San Diego area. Study participants were recruited from the Vista Clinic main site in the waiting room, and were provided with a prepared script regarding nature, benefits, and risks of the study as well as information regarding the independence of the study from benefits or financial assistance provided by the clinic itself. Interested participants were invited to sign a consent form, with inclusion criteria of Hispanic-Latino ethnicity, recent immigration to the United States in the last ten years, residence in the Vista clinic catchment area, and identification as a mother of one or more living children from ages 3 to 17 years per recommended SDQ age range [14]. For purposes of anonymity, no personal identifiers regarding immigration were collected. Interviews were conducted in Spanish in a private location identified as comfortable to the participant, including the 25-item Strengths and Difficulties Questionnaire, the Center for Epidemiologic Studies Depression Scale (CES-D) – a 20-item measure for depressive symptoms [30] used in multiple ages [31-33], genders [34-35], and crosscultural populations [36-38] including Hispanic Latinos [34,39] as a community health screening instrument for depressive symptoms – and a short survey taken from the US CDC-administered Behavioral Risk Factors Surveillance System (BRFSS) on intimate partner violence [40]. Participants who completed the surveys were provided with a \$10 gift card to Walmart or Target. Children who were identified as being at risk for behavioral and emotional psychiatric disorders based on SDQ 'borderline' or 'abnormal' criteria for

subscales were referred to Vista Community Clinic pediatricians per AAP recommendations [7], and mothers who were identified as at risk for psychiatric disorders based on CES-D or BRFSS responses were referred to Vista Community Clinic physicians and/or on-site social work services.

Frequencies and descriptive statistics were tabulated in SPSS 21 for Vista Community Clinic data, including child age, gender, percent noted as abnormal on SDQ five-factor subscales (emotional symptoms, conduct problems, hyperactivity, peer problems, prosocial per classic cutoff scores [14]) and three-factor subscales (externalizing behaviors = conduct + hyperactivity  $\geq 11$  total; internalizing behaviors = emotional symptoms + peer problems  $\geq 9$  total; prosocial issues  $\geq 6$  total), % with mothers flagged with a CES-D depression score  $\geq 16$  per classical criteria [30] - as well as more stringent criteria including  $\geq 24$  [38] and  $\geq 27$  [41] to identify probable presence of disorder - and frequencies of intimate partner violence (IPV) history (history of any prior IPV, history of IPV  $< 5$ yr ago, history of physical IPV, history of sexual IPV) in the sample. Correlation tables between SDQ subscores and background variables were tabulated in SPSS. Additional demographic data for the Vista sample such as socioeconomic status, level of education, primary language, profession, and zip code was reported below but was not included in final correlation analysis due to lack of heterogeneity in participant responses.

Population-based comparison data included multiple subgroups of the 2004 National Health Interview Survey (NHIS), a nationally representative CDC survey of amount and distribution of illness in the United States [42]. This dataset included parent-administered 25-item SDQ questionnaires with impact supplements in the 2004 survey year, along with background variables that paralleled our survey such as child age, gender, race and ethnicity, language of interview, place of birth, number of years of residence in the United States, and presence of probable serious mental illness in the parent respondent based on the K6 assessment included in the NHIS for mental illness [43]. Initial inclusion criteria for NHIS 2004 child cases consisted of presence of completed SDQ questionnaires. NHIS data not subjected to listwise deletion due to incomplete data was then subdivided and analyzed separately in categories including

“non-Hispanic whites,” “Hispanic Americans,” “Hispanic Americans born in the United States,” “Hispanic Americans with language of interview in English,” “Hispanic Americans with language of interview in Spanish,” “all recent immigrants in the past 10 years,” and “Hispanic-Latino immigrants in the past 10 years” in addition to the Vista cohort sample.

Confirmatory factor analysis was performed on all subsamples using MPLUS Editor 7 for Mac OS X [44], utilizing methods derived from previous studies of SDQ factor structure [21,28], including studies of factor structure and measurement invariance in immigrant populations [21,25]. Due to the presence of categorical data, data were analyzed according to a weighted-least-squares approach (WLSMV estimator) [44]. Fit indices were reported for CFA tests utilizing the classical five-factor SDQ model, as well as multiple models from the literature incorporating externalizing and internal behavior factor constructs [17-21] including a model consisting solely of externalizing and internalizing behavior factors as defined by the SDQ website [14]. Bifactor models were also tested, including the previously validated ‘five-factor model + general difficulties score’ [21] as well as other bifactor models that combined ‘externalizing-internalizing’ factor constructs with ‘general difficulties’ scores. An additional hypothesized model was tested that simultaneously included all five traditional factors, externalizing and internalizing behavior constructs, and a ‘general difficulties’ score. Fit indices included chi-square/df/p values, RMSEA with confidence interval, CFI, TLI, and WRMR [44-46]. Standardized factor loadings were tabulated for all five-factor and bifactor models.

To assess for measurement invariance between unique ethnic and immigrant groups in the dataset, chi-square difference scores were calculated between population-based and community-based subsamples for the traditional five-factor SDQ score, using the difference between chi-square of the model with item threshold and equality constraints minus the chi-square of the model with all parameters freely estimated [28]. Factor intercorrelations for the five factors were tabulated for all subsamples using MPLUS TECH4 [44], and the composite reliability coefficient (CR) and average explained variance (AVE)



[47] were calculated for the five-factor model in order to assess for convergent validity. Per literature guidelines [28,47], CR of  $\geq 0.70$  and AVE  $\geq 0.50$  were required in order to ascertain that the factor subscale accounted for a significant proportion of data variance.

## **RESULTS**

Table 1 displays demographic characteristics of NHIS population-based samples and Vista community-based samples, showing similarities within a  $\sim 5\%$  margin across samples for prevalence of abnormalities on SDQ behavioral subscales. Similar proportions within a  $\sim 5\%$  margin were additionally seen across all samples in terms of level of severity of responses ('not true, somewhat true, certainly true') for each individual variable (e.g. SDQ1, SDQ2, etc). These proportions were not tabulated in study findings for purposes of brevity. One variable (SDQ22, 'steals from home, school, or elsewhere') was thrown out due to skewed variable severity ( $< 1\%$  prevalence of 'certainly true' responses in most samples), an occurrence that has previously been documented in the literature [21]. Gender demographics were proportionate across all samples ( $\sim 1:1$ ), and child age was proportionate across population-based samples regardless of ethnicity ( $\sim 2-3:1$  10-17yo : 3-9yo children). Proportion of severe cases on parental psychological risk assessments (CES-D in Vista community sample, K6 in NHIS population sample) remained similar across all samples. Other Vista clinic demographic data showed uniformity and was therefore absent from further analysis, as socioeconomic status data showed near-unanimous income below the United States poverty line, education level near-unanimous at high school education or lower, and neighborhood location within the Vista Community Clinic zip code.

### *CFA and Factor Loadings of SDQ Subscales across Subsamples*

For the traditional five-factor SDQ model, CFA showed only marginal model fit across samples (Table 2), with the RMSEA cutoff score averaging at the borderline of acceptable fit ( $\sim 0.05$ ) and other CFI and TLI cutoff scores averaging slightly below acceptable fit ( $\sim 0.90$ ). Factor loadings across all samples (Table 3) showed reasonably good factor loadings or higher ( $> 0.40$ ), aside from the single 'gets along better with

adults' item which showed unacceptably low loadings ( $<0.30$ ) in population-based Latino samples. In the Vista sample that had the smallest sample size of all populations studied ( $n=208$ ), as well as the Spanish-language-interview Hispanic sample with a smaller sample size ( $n=520$ ), this five-factor model was not found to be positive-definite and was thus unable to be identified as significant. Despite this finding, however, factor loadings in these samples still showed similar magnitude and directionality to other samples. Other previously validated factor structures showed similar or worse model fit across all samples (Table 2), including the two-factor structure for 'externalizing' (conduct+hyperactivity) and 'internalizing' (emotion+peer problem) behaviors [14] as well as multiple three-factor structures from the literature incorporating both externalizing and internalizing factors as well as a separate 'prosocial' factor with reverse-coded variables [14,17,20].

With model respecification that included the five factors plus an additional 'General Difficulties' factor [43] incorporating all 25 item responses at once as variables (Table 4), model fit improved above the acceptable level for cutoff scores among most samples ( $RMSEA<0.05$ ,  $CFI>0.95$ ,  $TLI\sim 0.95$ ). All subsamples except the smallest two displayed concordant factor loadings and directionality (Table 5), while the smallest two samples (which were non-positive-definite) showed discordant loadings on only one factor each (recent immigrant  $<10$ yr 'prosocial,' Vista clinic 'conduct'). In this model, the highest loadings on the 'general difficulties' factor related primarily to reverse-coded items, including the 'prosocial' factor. When the 'General Difficulties' bifactor respecification was applied to externalizing-internalizing factor structures from the literature (Table 4), model fit experienced similar improvement from the traditional five-factor model while still retaining statistically significant structure among all sample sizes. Externalizing and internalizing symptoms showed robust factor loadings (Table 6), with the only main exception being the Vista sample which showed internalizing symptoms purely based around emotional symptoms rather than prosocial symptoms.

Table 7 displays the most complex model respecification in the entire study, including factor constructs for all five traditional child behavioral subscales concurrently with externalizing, internalizing, and 'general difficulties' scales. Although this model was only positive-definite in one out of the eight subsamples – the subsample with the largest sample size (n=3363) – it had the most significant CFI and RMSEA of any model fit test in the entire study (CFI 0.986, RMSEA <0.027). Additionally, other non-positive-definite subsamples in Table 7 still retained similarly high fit indices. Factor item loadings differed significantly across subsamples (Table 8). Factor loadings with the most uniformity across sample (coefficient >0.4 for most to all items) included the 'emotion' and 'hyperactivity' items, while the most questionable factor loading was the 'externalizing' factor, which generally retained very few loadings across samples. The 'general difficulties' factor had high loadings which generally corresponded to all items except for emotional items. Among the samples of recent immigrant groups, the 'general difficulties' factor showed no identifiable pattern in factor loadings in the NHIS sample, while the Vista sample loadings were uniformly high.

### Tests of Measurement Invariance

Table 9 displays results from chi-square difference testing across subsamples for the five SDQ factors from the traditional model, as well as from the aggregate total of all factors. While significant differences were seen across all subsamples, the largest intergroup differences were seen between NHIS whites and all NHIS Hispanics, and the smallest differences were seen between '<10yr immigrants of different ethnicities vs. <10yr Hispanic-Latino immigrants of different ethnicities' and 'Hispanic-Latino immigrants <10yrs vs. Vista sample.' The 'peer problems' factor had the largest chi-square difference across all subsamples. Table 10 displays factor intercorrelations (phi coefficient), with all five factors shown to be significantly intercorrelated with one another. In particular, the 'conduct-hyperactivity,' 'conduct-peer,' and 'conduct-prosocial' intercorrelations were particularly high (often >0.7), and the 'emotional-conduct' and 'emotional-peer' intercorrelations were significantly higher than expected (often >0.6). Composite reliability coefficients (Table 11) generally showed acceptable to good values (CR > 0.7), but the average

explained variance generally showed marginal values (AVE~0.5) across many samples. Significantly lower values seen in the 'peer problems' factor (AVE ~0.25-0.5), meaning that <50% variance could be explained by the 'peer problems' factor itself.

## **DISCUSSION**

The purpose of this study was to utilize the SDQ to assess the prevalence of high-risk pediatric behavioral cases in this community, and to examine the validity of the parent-SDQ factor structure across this community as well as various nationally representative Hispanic-Latino population groups that varied by number of years of residence in the United States as well as language preference. We found similar prevalences across SDQ subscales for all samples, as well as evidence of borderline validity of the traditional SDQ five-factor model across subsamples, as fit indices and factor loading values showed uniformly similar results (RMSEA ~0.50, CFI and TLI ~0.90) across different cultural groups. Even in groups where the sample size did not permit positive-definite MPLUS output, we still saw uniformly similar factor loadings, directionality, and model fit indices when compared with other samples. These results affirm prior studies that confirmed the SDQ five-factor structure in Hispanic-Latino youth as a whole. Data from the self-report National Comorbidity Survey Adolescent Supplement in individuals aged 13-18 years indicated a similar five-factor structure across US Hispanic and non-Hispanic white ethnicities. Our data additionally affirms factorial invariance between Hispanic-Latino and white populations of younger children, and our results from parent-response surveys display no immediately apparent differences in survey item responses in recent immigrant parents when compared with Hispanic and non-Hispanic white parent comparison groups with differing levels of education and language competence [16]. Therefore, even though CFA model fit was only borderline acceptable on fit indices across samples, no evidence from this study fully disproves the utilization of the SDQ survey for Hispanic-Latino youth in community health screening settings.

An ancillary aim of this study was to test whether studies from smaller sample sizes – including a small subgroup of a population study as well as a community-based sample from a university pilot study – required a screening survey assessing more broad domains of psychopathology in order to achieve validated results. We found that more broad constructs with a larger value of variables-per-factor (e.g. the combined externalizing-internalizing-general difficulties bifactor construct as the best example) performed stronger in smaller sample sizes, both in terms of retaining high model fit indices (RMSEA, CFI, TLI, WRMR) and in terms of retaining positive-definite results on MPLUS analysis across all groups. It is possible that the incorporation of the ‘externalizing-internalizing’ factor model accounts for this improvement. Conduct and hyperactivity symptoms showed very strong factor intercorrelations in all study populations, and it is possible that combined conduct and hyperactivity issues - or at least a subset of cases with these issues – should be considered as “externalizing” cases separate from ‘conduct’ and ‘hyperactivity’ subscales on their own, encompassing similar symptoms but possibly showing different prevalence, management, and prognostic outcomes as a whole in different cultural subgroups. Another reason for improved model fit with broader constructs could be due to incorporation of the ‘general difficulties’ factor into analysis, which has led to similar model fit improvement in other studies [21]. Although reverse-coded and ‘prosocial’ items contributed to much of the loadings in the ‘general difficulties’ factor, incorporation of this factor might also account for children who simultaneously exhibited ‘ext-or-int + peer problems’ at once or ‘externalizing + internalizing behaviors’ at once, and thus improve the model fit due to incorporation of these cases into the model. When examining the factor loadings across subsamples, the ‘general difficulties’ factor showed more uniform factor loadings across all 25 items in the NHIS white group as compared to the Hispanic-Latino groups, although all groups had a number of factor loadings in the ‘general difficulties’ factor comprised from subscales other than reverse-coded scales.

This study confirms the relevance of broader SDQ factor constructs for both clinical and epidemiologic purposes. From a clinical perspective, when one incorporates the ‘externalizing+internalizing’ as well as

'general difficulties' paradigms into a unified model for screening in low-risk primary care pediatric settings, one satisfies recent recommendations to utilize broader psychological domains during initial low-risk screening [10] as well as traditional recommendations to include a SDQ factor that accounts for aggregate 'total difficulties' [14,21]. Additionally, when one considers factor intercorrelations such as the  $>0.8$  'conduct-hyperactivity' intercorrelations, one must recognize that five-factor subscales might diagnose an individual as high-risk on one subscale and miss a high-risk diagnosis from an intercorrelated subscale due to borderline or sub-clinical results on the other scale, possibly due to individual item response variations across cultural groups. This increases the possibility of misdiagnosis, and a more broad initial screening categorization of disorder might help to flag 'high-risk cases' that can then undergo more extensive battery testing. From an epidemiologic perspective, the EI models screen for more generalized categories of symptoms, with lower numbers of factors and a higher numbers of variables per factor than the five-factor classical model, thus lessening the sample size required to detect changes in epidemiological studies [48]. Many mental health epidemiologic studies of 'enclave' minority communities such as refugees or indigenous groups are hindered by datasets with small sample sizes due to budget or logistical constraints, and this broader behavioral categorization might prove to be a useful tool that requires less N but can still identify culturally unique manifestations of child behavioral disorders with less resources required.

Limitations of this study include lack of adequate sample size to distinguish factor loading differences in higher-order models. In the trifactor model, for instance, we see that conduct, hyperactive, peer, and prosocial symptoms in moderate to large sample sizes all loaded highly onto the 'General difficulties' scale, while the 'emotional symptoms' scale did not nest within that specific factor. While it is possible that this factor loading evidence indicates that 'externalizing behaviors' generally encompass peer problems as well, our lack of high sample sizes in minority subgroups leads us unable to extrapolate any further information. Another limitation of this study includes a lack of robust neighborhood data that enables us to differentiate between residence clusters such as apartment complexes in the community

sample. Neighborhood characteristics [8] have been noted in the literature to influence social and behavioral characteristics in children, and factor analysis of child behavioral problems may have differed depending on factors such as number of children per residence cluster, family income or education per residence cluster, or crime rate per residence cluster. Finally, the cultural homogeneity of the Vista community sample may have influenced small variations in factor loadings, such as the homogeneity seen in some 'General Difficulties' factor loadings when compared to NHIS samples. Many of the individuals in the Vista sample come from southern Mexican communities, many of whom are indigenous-origin and with lower levels of education compared to more affluent communities that emigrated to the United States for other reasons. If the child exhibited behavioral symptoms that were severe enough to affect family cohesion or maternal stress, it is possible that this educational or cultural background may have influenced item-response patterns towards a more homogenous pan-positive perception of child symptoms. Ultimately, however, as recommended by the author of the Child Behavior Checklist [9], further studies are needed to elucidate idiosyncratic individual- and community-based variation in the SDQ factor structure among Latino communities – from urban to rural, from 'modernized' to indigenous, from immigrant to resident. This comparison of a small community-based sample to national data serves as only a first step in that process.

**Table 1: Sample and Subsample Demographics**

Population	NHIS non-Hispanic whites	NHIS Hispanics	NHIS US-born Hispanics	NHIS HL (English interview)	NHIS Hispanics (Spanish interview)	NHIS ≤10yr US Immigrants (all ethnic)	NHIS ≤10yr Hispanic-Latino Immigrants	Vista Clinic community sample
<b>Sample Size</b> (n=8904 total)	N=3363	N=1716	N=1439	N=762	N=520	N=619	N=277	N = 208
<b>Child Age</b> • 3-9yo • 10-17yo	486 (14.5%) 2877 (85.5%)	737(42.9%) 979(57.1%)	644(44.8%) 795(55.2%)	312 (40.9%) 450 (59.1%)	222(42.7) 298(57.3)	204(33%) 415(67%)	94(33.9%) 183(66.1)	157 (75.4%) 51 (24.5%)
<b>Child Gender (M, F)</b>	1776 (52.8) 1587 (47.2)	905(52.7%) 811(47.3%)	754(52.4%) 685(47.6%)	399 (52.4%) 363 (47.6%)	291(56%) 229(44%)	315(50.9%) 304 (49.1%)	151(54.5%) 126(45.5%)	108 (51.9%) 100 (48.1%)
<b>SDQ 5-Factor Subscale (+)<sup>1</sup></b>	9.2% Emot 8.6% Cond 11.4%Hyp 9.1% Peer 2.2%Prsoc	8.8% Emot 10.8% Cond 6.9% Hyper 11.7% Peer 2.2% Prosoc	8.6% Emot 11.4%Cond 7.2%Hyper 11.7%Peer 2.4% Proso.	8.1% Emot 11.4% Cond 6.7% Hyper 10.9% Peer 2.1% Prosoc	8.1% Emot 11.9% Cond 6.3%Hyper 14.4%Peer 1.5%Prsoc	6.6% Emot 6.1% Conduct 5.3% Hyper 9.5% Peer 1.5% Prosoc	9.7% Emot 7.6% Conduct 5.8% Hyper 11.6% Peer 1.4% Prosoc	13.9% Emot 10.6% Conduc 9.1% Hyper 11.5% Peer 2.9% Prosoc
<b>SDQ Externalizing Score (+)<sup>2</sup></b>	242 (7.2%)	108 (6.3%)	96 (6.7%)	51 (6.7%)	30 (5.8%)	26 (4.2%)	12 (4.3%)	15 (7.2%)
<b>SDQ Internalizing Score (+)<sup>3</sup></b>	204 (6.1%)	95 (5.5%)	81 (5.6%)	37 (4.9%)	29 (5.6%)	25 (4.0%)	15 (5.4%)	15 (7.2%)
<b>SDQ Total Score (+)<sup>4</sup></b>	11.7% total	10.7% total	11.2% total	10.9% total	11.2%total	6.6% total	7.9% total	12.5% total
<b>(+) score on parental psych risk assessment<sup>5</sup></b>	3.7% (+) K6 (12.7% missing)	4.7% (+) K6 (16% missing)	3.9% (+) K6 (15.1% missing)	**	3.6%(+)K6 (14.8% missing)	3.4% (+) K6 (15.5% missing)	3.8% (+) K6 (13.4% missing)	14.5%(+)#1, 6.3% (+) #2, 4.3% (+) #3

<sup>1</sup>Emotional symptoms (SDQ 3+8+3+16+24) ≥ 5; conduct problems (SDQ 5+7rev+12+18+22) ≥ 4; hyperactivity (SDQ 2+10+15+21rev+25) ≥ 7; peer problems (SDQ 6+11rev+14inv+19+23) ≥ 4; prosocial conduct problems (SDQ 1rev+4rev+9rev+17rev+20rev) ≥ 6 (<http://www.sdqinfo.org>)

<sup>2</sup>SDQ conduct problems + SDQ hyperactivity ≥ 11 (derived from original subscales, <http://www.sdqinfo.org>)

<sup>3</sup>SDQ emotional symptoms + SDQ peer problems ≥ 9 (derived from original subscales, <http://www.sdqinfo.org>)

<sup>4</sup>Total score of all SDQ subscales ≥ 17 (<http://www.sdqinfo.org>)

<sup>5</sup> Vista sample data (+) criteria #1 was a positive score ≥ 16 on the CES-D [26]. Criteria #2 referred to a positive score ≥ 24 [37] and criteria #3 referred to a positive score ≥ 27 [38]. NHIS K6 data (+) criteria involved sum total score ≥13 on all six items [39].



**Table 2: CFA of Traditional Factor Constructs**

Sample	5-Factor	Ext/Int 2-Factor	Dickey 2004 3-Factor [17]	Essau 2011 3-Factor [20]	Ext/Int/PrS 3-Factor
<b>NHIS non-Hispanic whites (n=3363)<sup>1</sup></b>	2573.988 242 (.0000) 0.054 (.052-.055, .001); .934, .925, 2.513	2204.426 151 (.0000); 0.064 (.061 - .066, .000); .932, .922, 2.834	2894.636 225 (.0000); 0.059 (.057 - .061, .000); .921, .911, 2.812	3158.714 248 (.0000); 0.059 (.057 - .061, .000); .918, .909, 2.835	3690.697 249 (.0000); 0.064 (.062 - .066, .000) .903, .893, 3.117
<b>NHIS Hispanics (n=1716)<sup>1</sup></b>	1571.778 242 (.0000) 0.057 (.054-.059, .000); .888, .872, 2.058	1009.242 151 (.0000); 0.058 (.054 - .061, .000); .908, .895, 1.957	1239.277 225 (.0000); 0.051 (.048 - .054, .226); .908, .897, 1.920	1410.743 248 (.0000); 0.052 (.050 - .055, .078); .902, .891, 1.974	1850.459 249 (.0000) 0.061 (.059-.064, .000) .865, .850, 2.280
<b>NHIS US-born Hispanics (n=1439)<sup>1</sup></b>	1331.722 242 (.0000) 0.056 (.053 - .059, .000) .896, .881, 1.882	851.779 151 (.0000); 0.057 (.053 - .061, .001); .915, .903, 1.781	1041.109 225 (.0000); .050 (.047 - .053, .450); .916, .906, 1.748	1189.238 248 (.0000); .051 (.048 - .054, .219); .910, .900, 1.800	1551.889 249 (.0000); .060 (.057 - .063, .000); .875, .862, 2.070
<b>NHIS Hispanics (English-language interview) (n=762)<sup>1</sup></b>	800.837 242 (.0000); 0.055 (.051-.059, .024); .892, .877, 1.508	509.258 151 (.0000); .056 (.051-.061, .036); .915, .903, 1.428	670.635 225 (.0000); .051 (.047-.055, .351); .908, .897, 1.454	763.795 248 (.0000); .052 (.048-.056, .186); .900, .889, 1.498	1012.214 249 (.0000); .063 (.059-.068, .000); .852, .836, 1.742
<b>NHIS Hispanics (Spanish-language interview) (n=520)<sup>1</sup></b>	<i>762.402</i> 242 (.0000); .064 (.059-.069, .000); .821, .796, 1.551	471.381 151 (.0000); .064 (.057-.070, .000); .859, .840, 1.421	656.747 225 (.0000); .061 (.055-.066, .001); .842, .822, 1.499	721.829 248 (.0000); .061 (.055-.066, .000); .837, .819, 1.515	833.675 249 (.0000); .067 (.062-.072, .000); .799, .777, 1.647
<b>NHIS ≤10yr US Immigrants (all) (n=619)<sup>1</sup></b>	589.900 242 (.0000) .048 (.043-.053, .720) .884, .868, 1.359	449.988 151 (.0000); .057 (.051-.063, .036); .877, .860, 1.431	495.137 225 (.0000); .044 (.039-.049, .969); .906, .894, 1.287	547.669 248 (.0000); .044 (.039-.049, .973); .900, .889, 1.312	707.896 249 (.0000) .055 (.050-.059, .055) .847, .830, 1.534
<b>NHIS ≤10yr Hispanic- Latino Immigrants (n=277)<sup>1</sup></b>	411.276 242 (.0000); .050 (.042-.058, .470); .849, .828, 1.155	285.993 151 (.0000); .057 (.047-.067, .130); .861, .843, 1.171	363.459 225 (.0000); .047 (.038-.056, .695); .872, .856, 1.129	401.186 248 (.0000); .047 (.039-.056, .699); .863, .848, 1.146	464.425 249 (.0000); .056 (.048-.064, .108); .808, .787, 1.278
<b>Vista Community Clinic (n=208)<sup>1</sup></b>	<i>342.970</i> 242 (.0000); 0.045 (.033-.055, .783) .92, .909, .981	287.839 151 (.0000); 0.066 (.054 - .078, .013); .86, .84, 1.127	369.549 225 (.0000); 0.056 (.045 - .066, .180) .881, .866, 1.098	412.736 248 (.0000); 0.057 (.047 - .066, .132) .869, .855, 1.132	412.615 249 (.0000); .056 (.046-.066, .143) .870, .856, 1.134

<sup>1</sup>Results tabulated in the following manner: Chi-Square Test of Model Fit; Degrees of Freedom (p-value); RMSEA, 90% Confidence Interval, Probability RMSEA <= .05; CFI Index, TLI Index; Weighted Root Mean Square Residual (WRMR). Chi Square difference testing in this context was calculated using the DIFFTEST option in MPLUS, due to the presence of weighted least squares (WLSMV) estimation technique [40]. Other significance cutoffs included RMSEA <0.06, CFI >0.95, TFI >0.95, and WRMR <0.9 per commonly used literature guidelines [41-42].

*(Italicized results indicate results with non-positive-definite matrices)*

**Table 3: Factor Loadings in Traditional 5-Factor Model**

SDQ Subscale (5-Factor Model)	NHIS White	NHIS All Hispanic	NHIS US Hispanic	NHIS Hispanic (English)	<i>NHIS Hispanic (Spanish)</i>	NHIS All Immigrants <=10y	NHIS Hisp- Latino Immigrant <10y	<i>Vista Clinic community sample</i>
<b>Emotional</b>								
Headache/stomach/sick <sup>3</sup>	0.568	0.548	0.558	0.464	<i>0.656</i>	0.511	0.451	<i>0.505</i>
Worries/seems worried <sup>8</sup>	0.718	0.685	0.675	0.681	<i>0.602</i>	0.634	0.748	<i>0.828</i>
Unhappy/depressed/tears <sup>13</sup>	0.840	0.757	0.764	0.770	<i>0.669</i>	0.736	0.761	<i>0.897</i>
Nervous/cling/low confid. <sup>16</sup>	0.715	0.743	0.762	0.734	<i>0.787</i>	0.640	0.602	<i>0.518</i>
Many fears/easily scared <sup>24</sup>	0.753	0.691	0.699	0.728	<i>0.692</i>	0.700	0.717	<i>0.647</i>
<b>Conduct</b>								
Often loses temper <sup>5</sup>	0.744	0.741	0.741	0.719	<i>0.691</i>	0.698	0.746	<i>0.605</i>
Generally well behaved <sup>7inv</sup>	0.779	0.732	0.737	0.698	<i>0.702</i>	0.774	0.690	<i>0.692</i>
Fights w children/bullies <sup>12</sup>	0.751	0.706	0.716	0.758	<i>0.673</i>	0.659	0.637	<i>0.497</i>
Often lies or cheats <sup>18</sup>	0.716	0.685	0.711	0.701	<i>0.644</i>	0.548	0.536	<i>0.489</i>
Steals from home/school <sup>22</sup>	N/A	N/A	N/A	N/A	<i>N/A</i>	N/A	N/A	<i>N/A</i>
<b>Hyperactivity</b>								
Restless/overactive <sup>2</sup>	0.835	0.704	0.719	0.723	<i>0.613</i>	0.581	0.599	<i>0.670</i>
Fidgeting/squirming <sup>10</sup>	0.847	0.755	0.750	0.781	<i>0.706</i>	0.735	0.799	<i>0.425</i>
Easily distracted <sup>15</sup>	0.820	0.711	0.722	0.665	<i>0.647</i>	0.681	0.628	<i>0.642</i>
Thinks before acting <sup>21inv</sup>	0.744	0.613	0.625	0.617	<i>0.608</i>	0.652	0.555	<i>0.568</i>
Good attention span <sup>25inv</sup>	0.805	0.659	0.659	0.676	<i>0.634</i>	0.703	0.666	<i>0.642</i>
<b>Peer</b>								
Solitary/plays alone <sup>6</sup>	0.461	0.378	0.348	0.316	<i>0.386</i>	0.518	0.573	<i>0.639</i>
At least one good friend <sup>11inv</sup>	0.686	0.513	0.528	0.487	<i>0.379</i>	0.565	0.443	<i>0.665</i>
Generally liked by others <sup>14inv</sup>	0.860	0.651	0.674	0.682	<i>0.534</i>	0.633	0.538	<i>0.869</i>
Picked on or bullied <sup>19</sup>	0.729	0.628	0.614	0.628	<i>0.559</i>	0.554	0.679	<i>0.529</i>
Gets along better w adults <sup>23</sup>	0.391	0.161	0.181	0.137	<i>-0.037</i>	0.066	0.075	<i>0.611</i>
<b>Prosocial</b>								
Considerate of others <sup>1inv</sup>	0.820	0.651	0.662	0.639	<i>0.542</i>	0.665	0.548	<i>0.613</i>
Shares easily w others <sup>4inv</sup>	0.737	0.652	0.652	0.720	<i>0.647</i>	0.590	0.655	<i>0.727</i>
Helpful if someone is hurt <sup>9inv</sup>	0.631	0.729	0.732	0.732	<i>0.725</i>	0.685	0.718	<i>0.772</i>
Kind to younger kids <sup>17inv</sup>	0.669	0.724	0.721	0.755	<i>0.604</i>	0.787	0.791	<i>0.596</i>
Offers to help others <sup>20inv</sup>	0.640	0.685	0.698	0.692	<i>0.760</i>	0.676	0.586	<i>0.899</i>

*(Italicized results indicate results with non-positive-definite matrices)*

**Table 4: CFA of ‘Bifactor’ Constructs**

Sample	5-Factor (Bifactor)	Ext/Int 2-Factor (Bifactor)	Dickey 2004 2-Factor (Bifactor) [17]	Essau 2011 2-Factor (Bifactor) [20]	Ext/Int/PrS 3-Factor (Bifactor)
<b>NHIS non-Hispanic whites (n=3363)<sup>1</sup></b>	1319.193 218 (.0000) 0.039 (.037-.041, 1.000) .969, .961, 1.572	2085.23 232 (.0000); 0.049 (.047-.051, .858); .948, .938, 2.116	1998.695 224 (.0000); 0.049 (.047-.051, .889); .950, .938, 2.001	2019.010 224 (.0000); 0.049 (.047-.051, .838); .949, .938, .0000);	1963.472 225 (0.0000); 0.048 (.046-.050, .958) .951, .940, 1.973
<b>NHIS Hispanics (n=1716)<sup>1</sup></b>	585.608 218 (.0000); .031 (.028-.034,1.000); .969, .961, 1.084	831.846 232 (.0000); .039 (.036-.042, 1.000); .949, .940, 1.361	695.017 224 (.0000); .035 (.032-.038, 1.000); .960, .951, 1.220	716.672 224 (.0000); .036 (.033-.039, 1.000); .958, .949, 1.236	753.117 225 (.0000); .037 (.034-.040, 1.000); .955, .945, 1.248
<b>NHIS US-born Hispanics (n=1439)<sup>1</sup></b>	506.989 218 (.0000); .030 (.027-.034, 1.000) .972, .965, .998	709.140 232 (.0000); .038 (.035-.041, 1.000); .954, .946, 1.246	608.668 224 (.0000); .035 (.031-.038, 1.000); .963, .955, 1.129	622.955 224 (.0000); .035 (.032-.038, 1.000); .962, .953, 1.139	637.274 225 (.0000); .036 (.032-.039, 1.000); .961, .952, 1.138
<b>NHIS Hispanics (English interview) (n=762)<sup>1</sup></b>	375.163 218 (.0000); .031 (.025-.036, 1.000) .970, .961, 0.869	486.459 232 (.0000); .038 (.033-.043, 1.000); .951, .941, 1.046	410.182 224 (.0000); .033 (.028-.038, 1.000); .964, .956, .938	415.261 224 (.0000); .033 (.028-.038, 1.000) .963, .954, .943	453.088 225 (.0000); .036 (.032-.041, 1.000); .956, .946, .975
<b>NHIS Hispanics (Spanish interview) (n=520)<sup>1</sup></b>	317.752 218 (.0000); .030 (.022-.037, 1.000) .966, .957, .821	403.024 232 (.0000); .038 (.031-.044, 1.000); .941, .930, .991	344.685 224 (.0000); .032 (.025-.039, 1.000); .958, .949, .891	353.539 224 (.0000); .033 (.027-.040, 1.000); .955, .945, .903	359.018 225 (.0000); .034 (.027-.040, 1.000); .954, .943, .892
<b>NHIS ≤10yr US Immigrants (all) (n=619)<sup>1</sup></b>	365.171 218 (.0000); 0.033 (.027-.039, 1.00); .951, .938, .919	453.869 232 (.0000); 0.039 (.034-.045, 1.000); .926, .912, 1.082	364.516 224 (.0000); .032 (.026-.038, 1.000); .953, .942, .949	371.082 224 (.0000); .033 (.027-.038, 1.000); .951, .939, .959	417.336 225 (0.000); .037 (.032-.043, 1.000); .936, .921, 1.000
<b>NHIS ≤10yr Hispanic-Latino Immigrants (n=277)<sup>1</sup></b>	<i>(latent variable covariance matrix not positive definite)</i>	325.959 232 (.0000); 0.038 (.028-.048, .982); .915, .899, .915	289.785 224 (.0000); .033 (.020-.045, .998); .941, .928, .847	291.809 224 (.0015); .033 (.021-.043, .998); .940, .925, .852	<i>(latent variable covariance matrix not positive definite)</i>
<b>Vista Community Clinic (n=208)<sup>1</sup></b>	252.107 218 (.0563); .027 (.000-.041, .998); .973, .966, .740	294.160 232 (.0035); .036 (.021-.048, .976); .951, .941, .843	299.689 224 (.0005); .040 (.027-.052, .915); .940, .926, 0.856	293.211 224 (.0013); .039 (.025-.050, .946); .945, .932, .838	277.264 225 (.0100); .033 (.017-.046, .988); .959, .949, .789

<sup>1</sup>Results tabulated in the following manner: Chi-Square Test of Model Fit; Degrees of Freedom (p-value); RMSEA, 90% Confidence Interval, Probability RMSEA <= .05; CFI Index, TLI Index; Weighted Root Mean Square Residual (WRMR). Chi Square difference testing in this context was calculated using the DIFFTEST option in MPLUS, due to the presence of weighted least squares (WLSMV) estimation technique [40]. Other significance cutoffs included RMSEA <0.06, CFI >0.95, TFI >0.95, and WRMR <0.9 per commonly used literature guidelines [41-42].

*(Italicized results indicate data with non-positive-definite matrices)*

**Table 5: Factor Loadings in ‘5 Subscales + General Difficulties’ Bifactor Model**

	W	H	USH	HE	HS	10yl	Recl	V
<b>Emotional</b>								
Headache/stomach/sick <sup>3</sup>	0.575	0.537	0.562	0.465	0.605	0.418	0.456	0.454
Worries/seems worried <sup>8</sup>	0.780	0.665	0.692	0.687	0.485	0.493	0.722	0.530
Unhappy/depressed/tears <sup>13</sup>	0.782	0.745	0.748	0.751	0.647	0.624	0.727	0.562
Nervous/cling/low confid. <sup>16</sup>	0.680	0.725	0.748	0.727	0.610	0.480	0.588	0.767
Many fears/easily scared <sup>24</sup>	0.731	0.673	0.705	0.727	0.500	0.502	0.700	0.553
<b>Conduct</b>								
Often loses temper <sup>5</sup>	0.737	0.769	0.773	0.759	0.564	0.668	0.854	0.114
Generally well behaved <sup>7inv</sup>	0.517	0.698	0.647	0.616	0.811	0.833	0.454	-0.041
Fights w children/bullies <sup>12</sup>	0.630	0.723	0.734	0.772	0.583	0.659	0.659	-0.002
Often lies or cheats <sup>18</sup>	0.635	0.707	0.738	0.720	0.540	0.528	0.577	0.131
Steals from home/school <sup>22</sup>	N/A	N/A	N/A			N/A	N/A	N/A
<b>Hyperactivity</b>								
Restless/overactive <sup>2</sup>	0.838	0.729	0.756	0.764	0.461	0.533	0.606	0.486
Fidgeting/squirming <sup>10</sup>	0.848	0.782	0.810	0.846	0.507	0.668	0.870	0.612
Easily distracted <sup>15</sup>	0.805	0.732	0.750	0.685	0.531	0.628	0.680	0.285
Thinks before acting <sup>21inv</sup>	0.533	0.584	0.534	0.532	0.695	0.703	0.410	-0.263
Good attention span <sup>25inv</sup>	0.675	0.624	0.557	0.579	0.741	0.749	0.490	0.061
<b>Peer</b>								
Solitary/plays alone <sup>6</sup>	0.527	0.416	0.417	-0.392	0.334	0.489	0.574	0.782
At least one good friend <sup>11inv</sup>	0.463	0.462	0.398	-0.380	0.544	0.622	0.283	0.687
Generally liked by others <sup>14inv</sup>	0.609	0.625	0.571	-0.568	0.666	0.694	0.393	0.496
Picked on or bullied <sup>19</sup>	0.819	0.689	0.710	-0.728	0.405	0.496	0.770	0.101
Gets along better w adults <sup>23</sup>	0.501	0.198	0.259	-0.233	-0.120	0.021	0.156	0.358
<b>Prosocial</b>								
Considerate of others <sup>1inv</sup>	-0.451	-0.573	-0.570	-0.549	-0.501	-0.620	0.000	0.371
Shares easily w others <sup>4inv</sup>	-0.427	-0.556	-0.535	-0.581	-0.612	-0.543	0.000	0.603
Helpful if someone is hurt <sup>9inv</sup>	-0.099	-0.556	-0.502	-0.483	-0.680	-0.617	0.000	0.615
Kind to younger kids <sup>17inv</sup>	-0.213	-0.602	-0.564	-0.580	-0.559	-0.720	0.000	0.419
Offers to help others <sup>20inv</sup>	-0.106	-0.496	-0.410	-0.369	-0.711	-0.621	0.000	0.568
Considerate of others <sup>1inv</sup>	0.631	0.254	0.313	0.309	0.004	0.114	0.490	0.458
Restless/overactive <sup>2</sup>	0.205	-0.155	-0.060	-0.130	-0.482	-0.268	0.104	0.572
Headache/stomach/sick <sup>3</sup>	0.072	-0.124	-0.067	-0.073	-0.288	-0.309	-0.084	0.288
Shares easily w others <sup>4inv</sup>	0.556	0.316	0.356	0.404	0.156	0.240	0.613	0.472
Often loses temper <sup>5</sup>	0.273	-0.112	0.012	-0.033	-0.486	-0.371	0.051	0.599
Solitary/plays alone <sup>6</sup>	0.056	-0.166	-0.141	-0.120	-0.269	-0.247	0.051	0.309
Generally well behaved <sup>7inv</sup>	0.609	0.344	0.423	0.395	0.092	0.188	0.589	0.769
Worries/seems worried <sup>8</sup>	0.005	-0.246	-0.166	-0.160	-0.359	-0.409	-0.195	0.569
Helpful if someone is hurt <sup>9inv</sup>	0.706	0.501	0.548	0.573	0.272	0.459	0.770	0.516
Fidgeting/squirming <sup>10</sup>	0.203	-0.272	-0.152	-0.210	-0.613	-0.390	-0.008	0.276
At least one good friend <sup>11inv</sup>	0.494	0.405	0.467	0.4010	0.313	0.234	0.346	0.360
Fights w children/bullies <sup>12</sup>	0.421	-0.055	0.044	0.066	-0.396	-0.159	0.139	0.556
Unhappy/depressed/tears <sup>13</sup>	0.220	-0.058	0.042	0.051	-0.256	-0.360	-0.098	0.621
Generally liked by others <sup>14inv</sup>	0.575	0.357	0.447	0.469	0.125	0.276	0.331	0.631
Easily distracted <sup>15</sup>	0.253	-0.109	0.013	0.022	-0.434	-0.343	0.012	0.583
Nervous/cling/low confid. <sup>16</sup>	0.164	-0.110	0.008	-0.102	-0.484	-0.426	-0.191	0.166
Kind to younger kids <sup>17inv</sup>	0.657	0.369	0.429	0.460	0.308	0.235	0.732	0.419
Often lies or cheats <sup>18</sup>	0.357	-0.096	0.017	0.037	-0.427	-0.231	0.068	0.483
Picked on or bullied <sup>19</sup>	0.120	-0.261	-0.159	-0.077	-0.505	-0.344	-0.140	0.463
Offers to help others <sup>20inv</sup>	0.725	0.577	0.668	0.705	0.360	0.291	0.619	0.646
Thinks before acting <sup>21inv</sup>	0.527	0.344	0.422	0.407	0.066	0.127	0.447	0.641
Steals from home/school <sup>22</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gets along better w adults <sup>23</sup>	-0.025	-0.232	-0.203	-0.217	-0.187	-0.207	-0.189	0.448
Many fears/easily scared <sup>24</sup>	0.150	-0.223	-0.101	-0.129	-0.493	-0.519	-0.234	0.384
Good attention span <sup>25inv</sup>	0.426	0.387	0.462	0.461	0.186	0.124	0.510	0.637

**Table 6: Factor Loadings in ‘Externalizing/Internalizing + General Difficulties’ Bifactor Model**

SDQ Subscale (Ext-Int Bifactor)	NHIS White	NHIS All Hispanic	NHIS US Hispanic	NHIS Hispanic (English)	NHIS Hispanic (Spanish)	NHIS All Immigrants <=10y	NHIS Hisp- Latino Immigrant <10y	Vista Community Clinic sample
<b>Externalizing</b>								
Often loses temper <sup>5</sup>	0.489	0.616	0.602	0.623	0.689	0.631	0.702	0.550
Generally well behaved <sup>7inv</sup>	0.279	0.312	0.326	0.340	0.298	0.308	0.238	0.346
Fights w children/bullies <sup>12</sup>	0.363	0.553	0.557	0.593	0.613	0.466	0.530	0.353
Often lies or cheats <sup>18</sup>	0.425	0.569	0.583	0.575	0.624	0.477	0.494	0.569
Steals from home/school <sup>22</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Restless/overactive <sup>2</sup>	0.777	0.659	0.671	0.722	0.637	0.576	0.574	0.633
Fidgeting/squirming <sup>10</sup>	0.784	0.773	0.758	0.825	0.773	0.741	0.844	0.519
Easily distracted <sup>15</sup>	0.741	0.634	0.629	0.583	0.617	0.672	0.651	0.545
Thinks before acting <sup>21inv</sup>	0.413	0.255	0.254	0.279	0.254	0.366	0.270	0.175
Good attention span <sup>25inv</sup>	0.584	0.278	0.276	0.314	0.189	0.405	0.312	0.414
<b>Internalizing</b>								
Headache/stomach/sick <sup>3</sup>	0.529	0.522	0.538	0.461	0.579	0.481	0.443	0.498
Worries/seems worried <sup>8</sup>	0.754	0.719	0.717	0.708	0.618	0.644	0.729	0.698
Unhappy/depressed/tears <sup>13</sup>	0.685	0.664	0.658	0.662	0.621	0.680	0.696	0.794
Nervous/cling/low confid. <sup>16</sup>	0.620	0.669	0.670	0.710	0.771	0.646	0.613	0.675
Many fears/easily scared <sup>24</sup>	0.664	0.689	0.681	0.712	0.709	0.722	0.722	0.670
Solitary/plays alone <sup>6</sup>	0.413	0.385	0.387	0.334	0.444	0.476	0.433	0.073
At least one good friend <sup>11inv</sup>	0.263	0.079	0.076	0.086	0.045	0.180	0.098	-0.010
Generally liked by others <sup>14inv</sup>	0.357	0.225	0.231	0.196	0.277	0.149	0.197	0.231
Picked on or bullied <sup>19</sup>	0.593	0.583	0.576	0.531	0.622	0.550	0.657	0.344
Gets along better w adults <sup>23</sup>	0.389	0.260	0.275	0.254	0.115	0.198	0.170	0.157
<b>General Difficulties</b>								
Considerate of others <sup>1inv</sup>	0.805	0.635	0.648	0.628	0.507	0.642	0.516	0.600
Restless/overactive <sup>2</sup>	0.360	0.289	0.306	0.227	0.142	0.174	0.161	0.313
Headache/stomach/sick <sup>3</sup>	0.202	0.135	0.144	0.071	0.192	0.115	0.027	0.145
Shares easily w others <sup>4inv</sup>	0.727	0.645	0.644	0.709	0.637	0.586	0.650	0.704
Often loses temper <sup>5</sup>	0.529	0.414	0.430	0.373	0.241	0.331	0.308	0.368
Solitary/plays alone <sup>6</sup>	0.203	0.119	0.087	0.112	0.094	0.229	0.315	0.578
Generally well behaved <sup>7inv</sup>	0.732	0.675	0.669	0.617	0.678	0.709	0.694	0.626
Worries/seems worried <sup>8</sup>	0.182	0.085	0.099	0.069	0.021	0.072	-0.015	0.359
Helpful if someone is hurt <sup>9inv</sup>	0.630	0.723	0.724	0.732	0.720	0.693	0.729	0.760
Fidgeting/squirming <sup>10</sup>	0.365	0.243	0.260	0.201	0.116	0.213	0.121	0.082
At least one good friend <sup>11inv</sup>	0.578	0.528	0.547	0.504	0.499	0.533	0.467	0.644
Fights w children/bullies <sup>12</sup>	0.640	0.430	0.440	0.462	0.308	0.437	0.348	0.385
Unhappy/depressed/tears <sup>13</sup>	0.392	0.256	0.291	0.258	0.132	0.157	0.076	0.354
Generally liked by others <sup>14inv</sup>	0.688	0.576	0.599	0.642	0.495	0.615	0.499	0.731
Easily distracted <sup>15</sup>	0.391	0.331	0.357	0.313	0.228	0.221	0.129	0.350
Nervous/cling/low confid. <sup>16</sup>	0.299	0.223	0.265	0.136	0.089	0.071	-0.054	-0.012
Kind to younger kids <sup>17inv</sup>	0.666	0.710	0.707	0.740	0.603	0.760	0.752	0.580
Often lies or cheats <sup>18</sup>	0.550	0.386	0.410	0.400	0.251	0.279	0.232	0.195
Picked on or bullied <sup>19</sup>	0.372	0.252	0.248	0.337	0.158	0.219	0.229	0.321
Offers to help others <sup>20inv</sup>	0.642	0.696	0.707	0.707	0.755	0.674	0.599	0.864
Thinks before acting <sup>21inv</sup>	0.579	0.560	0.575	0.547	0.569	0.486	0.477	0.549
Steals from home/school <sup>22</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gets along better w adults <sup>23</sup>	0.139	-0.036	-0.018	-0.038	-0.188	-0.113	-0.099	0.523
Many fears/easily scared <sup>24</sup>	0.306	0.131	0.173	0.125	0.036	0.052	-0.054	0.159
Good attention span <sup>25inv</sup>	0.513	0.595	0.596	0.589	0.635	0.514	0.574	0.458

**Table 7: CFA of ‘Trifactor’ Construct (5-Factor + Externalizing/Internalizing + ‘General Difficulties’ Score)**

Sample	5-Factor (Trifactor)
<b>NHIS non-Hispanic whites (n=3363)<sup>1</sup></b>	680.244 199 (0.000); 0.027 (.025-.029, 1.00); .986, .981, 1.082
<b>NHIS Hispanics (n=1716)<sup>1</sup></b>	447.656 199 (0.0000); .027 (.024-.030, 1.00); .979, .971, 0.913
<b>NHIS US-born Hispanics (n=1439)<sup>1</sup></b>	404.125 199 (.0000); .027 (.023-.031, 1.000) .980, .973, .859
<b>NHIS Hispanics (English interview) (n=762)<sup>1</sup></b>	<i>(latent variable covariance matrix not positive definite)</i>
<b>NHIS Hispanics (Spanish-language interview) (n=520)<sup>1</sup></b>	251.402 199 (.007) .023 (.012-.031, 1.000) .982, .975, .695
<b>NHIS ≤10yr US Immigrants (all) (n=619)<sup>1</sup></b>	330.844 204 (0.000); 0.032 (.025-.038, 1.00); .958, .943, .864
<b>NHIS ≤10yr Hispanic-Latino Immigrants (n=277)<sup>1</sup></b>	221.353 199 (.1326); .020 (.000-.034, 1.00) .980, .972, .675
<b>Vista Community Clinic (n=208)<sup>1</sup></b>	<i>(latent variable covariance matrix not positive definite)</i>

<sup>1</sup>Results tabulated in the following manner: Chi-Square Test of Model Fit; Degrees of Freedom (p-value); RMSEA, 90% Confidence Interval, Probability RMSEA ≤ .05; CFI Index, TLI Index; Weighted Root Mean Square Residual (WRMR). Chi Square difference testing in this context was calculated using the DIFFTEST option in MPLUS, due to the presence of weighted least squares (WLSMV) estimation technique [40]. Other significance cutoffs included RMSEA <0.06, CFI >0.95, TFI >0.95, and WRMR <0.9 per commonly used literature guidelines [41-42].

*(Italicized results indicate results with non-positive-definite matrices)*

**Table 8: Factor Loadings in Trifactor '5-Factor + Externalizing/Internalizing + General Difficulties' Model**

	W	H	USH	HE	HS	Recl	V
<b>Emotional</b>							
Headache/stomach/sick <sup>3</sup>	0.576	0.370	0.387	0.244	-0.057	0.332	0.364
Worries/seems worried <sup>8</sup>	0.746	0.580	0.592	0.511	0.203	0.384	0.457
Unhappy/depressed/tears <sup>13</sup>	0.698	0.441	0.449	0.318	0.105	1.036	0.495
Nervous/cling/low confid. <sup>16</sup>	0.612	0.567	0.550	0.633	0.418	0.182	0.679
Many fears/easily scared <sup>24</sup>	0.663	0.604	0.575	0.607	0.548	0.152	0.556
<b>Conduct</b>							
Often loses temper <sup>5</sup>	-0.636	0.373	0.403	0.004	-0.001	0.458	0.041
Generally well behaved <sup>7inv</sup>	-0.348	0.069	0.084	-0.001	-0.173	0.828	-0.129
Fights w children/bullies <sup>12</sup>	-0.479	0.302	0.338	0.003	-0.030	0.451	0.121
Often lies or cheats <sup>18</sup>	-0.537	0.352	0.400	0.003	-0.002	0.343	0.322
Steals from home/school <sup>22</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Hyperactivity</b>							
Restless/overactive <sup>2</sup>	0.752	0.482	0.502	0.496	0.064	-0.389	0.000
Fidgeting/squirming <sup>10</sup>	0.762	0.619	0.568	0.626	0.145	-0.379	0.000
Easily distracted <sup>15</sup>	0.798	0.544	0.559	0.345	-0.041	-0.293	0.000
Thinks before acting <sup>21inv</sup>	0.424	0.106	0.098	-0.099	-0.545	-0.637	0.000
Good attention span <sup>25inv</sup>	0.589	0.123	0.108	-0.101	-0.669	-0.837	0.000
<b>Peer</b>							
Solitary/plays alone <sup>6</sup>	-0.305	-0.158	-0.177	-0.116	-0.033	0.492	0.385
At least one good friend <sup>11inv</sup>	-0.199	0.244	0.229	0.342	0.612	0.642	0.447
Generally liked by others <sup>14inv</sup>	-0.396	0.140	0.136	0.342	0.538	0.688	0.249
Picked on or bullied <sup>19</sup>	-0.841	-0.416	-0.420	-0.246	-0.146	0.278	-0.280
Gets along better w adults <sup>23</sup>	-0.385	-0.174	-0.205	-0.196	-0.245	-0.094	0.161
<b>Prosocial</b>							
Considerate of others <sup>1inv</sup>	-0.227	0.079	0.095	0.236	0.366	0.513	0.295
Shares easily w others <sup>4inv</sup>	-0.210	0.135	0.138	0.342	0.555	0.646	0.550
Helpful if someone is hurt <sup>9inv</sup>	0.189	0.268	0.301	0.479	0.688	0.774	0.579
Kind to younger kids <sup>17inv</sup>	0.047	0.155	0.171	0.378	0.632	0.740	0.393
Offers to help others <sup>20inv</sup>	0.171	0.256	0.328	0.522	0.770	0.587	0.565
<b>Externalizing</b>							
Often loses temper <sup>5</sup>	-0.062	-0.147	0.114	-0.217	0.131	0.108	0.348
Generally well behaved <sup>7inv</sup>	0.064	0.100	-0.081	0.213	0.047	0.072	0.192
Fights w children/bullies <sup>12</sup>	-0.116	-0.191	0.208	-0.130	0.031	-0.033	-0.029
Often lies or cheats <sup>18</sup>	0.128	-0.067	0.019	-0.001	0.074	0.135	-0.088
Steals from home/school <sup>22</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Restless/overactive <sup>2</sup>	-0.246	-0.211	0.214	-0.010	0.505	0.535	0.589
Fidgeting/squirming <sup>10</sup>	-0.314	-0.278	0.292	0.043	0.595	0.510	0.779
Easily distracted <sup>15</sup>	0.260	0.129	-0.184	0.246	0.231	0.139	0.277
Thinks before acting <sup>21inv</sup>	0.215	0.289	-0.277	0.290	0.307	0.032	-0.070
Good attention span <sup>25inv</sup>	0.339	0.408	-0.344	0.601	0.192	-0.406	0.141
<b>Internalizing</b>							
Headache/stomach/sick <sup>3</sup>	0.013	0.363	0.368	0.487	0.420	0.066	0.238
Worries/seems worried <sup>8</sup>	0.222	0.432	0.401	0.444	0.481	0.365	0.377
Unhappy/depressed/tears <sup>13</sup>	0.196	0.483	0.430	0.559	0.661	0.016	0.078
Nervous/cling/low confid. <sup>16</sup>	0.184	0.274	0.280	0.115	0.332	0.213	0.081
Many fears/easily scared <sup>24</sup>	0.190	0.300	0.308	0.169	0.192	0.252	-0.070
Solitary/plays alone <sup>6</sup>	0.705	0.505	0.510	0.385	0.441	0.382	0.716
At least one good friend <sup>11inv</sup>	0.396	0.335	0.294	0.273	0.265	0.157	0.511
Generally liked by others <sup>14inv</sup>	0.247	0.428	0.420	0.323	0.396	0.117	0.398
Picked on or bullied <sup>19</sup>	0.046	0.318	0.318	0.216	0.005	0.048	0.301
Gets along better w adults <sup>23</sup>	0.361	0.294	0.277	0.300	0.204	0.783	0.297
<b>General Difficulties</b>							
Considerate of others <sup>1inv</sup>	0.740	0.586	0.596	0.542	0.316	-0.019	0.496
Restless/overactive <sup>2</sup>	0.401	0.543	0.551	0.609	0.517	0.343	0.496
Headache/stomach/sick <sup>3</sup>	0.165	0.218	0.237	0.209	0.495	0.329	0.315
Shares easily w others <sup>4inv</sup>	0.670	0.613	0.601	0.598	0.281	-0.046	0.513
Often loses temper <sup>5</sup>	0.465	0.668	0.653	0.759	0.714	0.626	0.583
Solitary/plays alone <sup>6</sup>	0.191	0.151	0.124	0.214	0.320	0.262	0.319
Generally well behaved <sup>7inv</sup>	0.713	0.733	0.739	0.647	0.540	0.081	0.679
Worries/seems worried <sup>8</sup>	0.142	0.202	0.227	0.321	0.394	0.511	0.581
Helpful if someone is hurt <sup>9inv</sup>	0.711	0.720	0.703	0.591	0.244	-0.256	0.554
Fidgeting/squirming <sup>10</sup>	0.407	0.548	0.543	0.645	0.623	0.625	0.151
At least one good friend <sup>11inv</sup>	0.580	0.517	0.538	0.393	0.093	-0.106	0.361
Fights w children/bullies <sup>12</sup>	0.593	0.652	0.647	0.778	0.703	0.497	0.571
Unhappy/depressed/tears <sup>13</sup>	0.349	0.348	0.395	0.445	0.407	0.460	0.686
Generally liked by others <sup>14inv</sup>	0.666	0.588	0.618	0.562	0.278	0.029	0.640
Easily distracted <sup>15</sup>	0.348	0.542	0.552	0.567	0.603	0.573	0.511
Nervous/cling/low confid. <sup>16</sup>	0.277	0.322	0.374	0.411	0.584	0.511	0.271
Kind to younger kids <sup>17inv</sup>	0.698	0.676	0.665	0.620	0.133	-0.043	0.447

Often lies or cheats <sup>18</sup>	0.493	0.613	0.618	0.708	0.682	0.433	0.592
Picked on or bullied <sup>19</sup>	0.259	0.283	0.290	0.519	0.658	0.664	0.464
Offers to help others <sup>20inv</sup>	0.726	0.694	0.697	0.565	0.214	-0.051	0.667
Thinks before acting <sup>21inv</sup>	0.580	0.589	0.608	0.567	0.350	0.120	0.684
Steals from home/school <sup>22</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gets along better w adults <sup>23</sup>	0.105	-0.015	0.005	0.066	-0.005	-0.009	0.456
Many fears/easily scared <sup>24</sup>	0.274	0.242	0.293	0.398	0.554	0.626	0.465
Good attention span <sup>25inv</sup>	0.505	0.634	0.640	0.610	0.331	0.232	0.606

**Table 9: Chi-Square Difference Tests of Factor Loadings/Item Thresholds Between Groups**

Hypothesis ( <i>Chi-sq, df, p</i> )	NHIS White vs. NHIS Hispanic	NHIS White vs. NHIS HL Immigrant <10y	NHIS All Recent Immigrants vs. NHIS HL Imm <10yr	NHIS USH vs. HL immigrant <10y	NHIS HL English Survey vs. NHIS HL Spanish survey	NHIS HL Immigrant <10y vs. Vista sample
<b>All equal</b>	3845.114, 532 (.000)	2239.542, 532 (.0000)	933.340, 532 (.0000)	1483.658, 532 (.0000)	1430.962, 532 (.0000)	848.195, 532 (.0000)
<b>All unequal</b>	4212.12, 503 (.0000)	2417.112, 503 (.0000)	995.702, 503 (.0000)	1587.438, 503 (.0000)	1490.320, 503 (.0000)	819.185, 503 (.0000)
<b>Delta</b>	367.006, 29 (.0000)	177.57, 29 (.0000)	62.362, 29 (.0000)	103.78, 29 (.0000)	59.358, 29 (.0000)	29.01, 29 (.0000)
<b>Emotion equal</b>	4081.498, 509 (.000)	2370.664, 509 (.0000)	987.520, 509 (.0000)	1567.167, 509 (.0000)	1468.060, 509 (.0000)	822.568, 509 (.0000)
<b>All unequal</b>	4212.12, 503 (.0000)	2417.112, 503 (.0000)	995.702, 503 (.0000)	1587.438, 503 (.0000)	1490.320, 503 (.0000)	819.185, 503 (.0000)
<b>Delta</b>	130.622, 6 (.0000)	46.448, 6 (.0000)	8.182, 6 (.0000)	20.271, 6 (.0000)	22.26, 6 (.0000)	3.383, 6 (.0000)
<b>Conduct equal</b>	4109.841, 508 (.000)	2356.007, 508 (.0000)	983.043, 508 (.0000)	1567.377, 508 (.0000)	1467.200, 508 (.0000)	826.008, 508 (.0000)
<b>All unequal</b>	4212.12, 503 (.0000)	2417.112, 503 (.0000)	995.702, 503 (.0000)	1587.438, 503 (.0000)	1490.320, 503 (.0000)	819.185, 503 (.0000)
<b>Delta</b>	102.279, 5 (.000)	61.105, 5 (.0000)	12.659, 5 (.0000)	20.061, 5 (.0000)	23.12, 5 (.0000)	6.823, 5 (.0000)
<b>Hyperact equal</b>	4360.464, 509 (.000)	2481.422, 509 (.0000)	985.206, 509 (.0000)	1596.749, 509 (.0000)	1545.671, 509 (.0000)	835.827, 509 (.0000)
<b>All unequal</b>	4212.12, 503 (.0000)	2417.112, 503 (.0000)	995.702, 503 (.0000)	1587.438, 503 (.0000)	1490.320, 503 (.0000)	819.185, 503 (.0000)
<b>Delta</b>	148.344, 6 (.0000)	64.31, 6 (.0000)	10.496, 6 (.0000)	9.311, 6 (.0000)	55.351, 6 (.0000)	16.642, 6 (.0000)
<b>Peer equal</b>	3983.784, 509 (.000)	2323.745, 509 (.0000)	972.750, 509 (.0000)	1535.529, 509 (.0000)	1450.467, 509 (.0000)	817.162, 509 (.0000)
<b>All unequal</b>	4212.12, 503 (.0000)	2417.112, 503 (.0000)	995.702, 503 (.0000)	1587.438, 503 (.0000)	1490.320, 503 (.0000)	819.185, 503 (.0000)
<b>Delta</b>	228.336, 6 (.0000)	93.367, 6 (.0000)	22.952, 6 (.0000)	51.909, 6 (.0000)	39.853, 6 (.0000)	2.023, 6 (.0000)
<b>Prosocial equal</b>	4111.107, 509 (.000)	2342.666, 509 (.0000)	976.726, 509 (.0000)	1545.022, 509 (.0000)	1451.203, 509 (.0000)	823.912, 509 (.0000)
<b>All unequal</b>	4212.12, 503 (.0000)	2417.112, 503 (.0000)	995.702, 503 (.0000)	1587.438, 503 (.0000)	1490.320, 503 (.0000)	819.185, 503 (.0000)
<b>Delta</b>	101.05, 6 (.0000)	74.446, 6 (.0000)	18.976, 6 (.0000)	42.416, 6 (.0000)	39.117, 6 (.0000)	4.727, 6 (.0000)



**Table 10 – Factor Intercorrelations (Phi) for 5-Factor Model**

	<b>Emotional Sx</b>	<b>Conduct Sx</b>	<b>Hyperactivity</b>	<b>Peer Issues</b>
<b>Conduct Sx</b>				
NHIS White	0.690			
NHIS All Hisp	0.652			
NHIS US Hisp	0.685			
NHIS Eng Hisp	0.653			
NHIS Span Hisp	0.646			
NHIS All Immig	0.548			
NHIS Recent Imm	0.450			
Vista Clinic	0.812			
<b>Hyperactivity</b>				
NHIS White	0.583	0.817		
NHIS All Hisp	0.609	0.879		
NHIS US Hisp	0.640	0.885		
NHIS Eng Hisp	0.591	0.885		
NHIS Span Hisp	0.533	0.874		
NHIS All Immig	0.506	0.813		
NHIS Recent Imm	0.431	0.840		
Vista Clinic	0.710	1.049*		
<b>Peer Issues</b>				
NHIS White	0.754	0.724	0.632	
NHIS All Hisp	0.751	0.760	0.670	
NHIS US Hisp	0.768	0.776	0.697	
NHIS Eng Hisp	0.678	0.782	0.678	
NHIS Span Hisp	0.875	0.854	0.687	
NHIS All Immig	0.727	0.734	0.555	
NHIS Recent Imm	0.636	0.712	0.563	
Vista Clinic	0.561	0.670	0.549	
<b>Prosocial Issues</b>				
NHIS White	0.369	0.799	0.578	0.628
NHIS All Hisp	0.253	0.696	0.596	0.678
NHIS US Hisp	0.284	0.699	0.616	0.685
NHIS Eng Hisp	0.196	0.660	0.569	0.785
NHIS Span Hisp	0.152	0.618	0.597	0.712
NHIS All Immig	0.189	0.685	0.483	0.742
NHIS Recent Imm	0.074	0.660	0.422	0.669
Vista Clinic	0.281	0.748	0.628	0.734

**Table 11 – Composite Reliability Coefficients (CR) and Average Explained Variance (AVE) for 5-Factor Model**

	<b>NHIS White</b>	<b>NHIS All Hisp</b>	<b>US-Born Hisp</b>	<b>Hisp Eng-Lang</b>	<b>Span Hispanic</b>	<b>All Imm &lt;10yrs</b>	<b>Recent Immig</b>	<b>Vista Clinic</b>
	<b>CR, AVE</b>							
<b>Emotional</b>	0.845, 0.524	0.817, 0.474	0.823, 0.484	0.811, 0.468	0.813, 0.468	0.782, 0.421	0.794, 0.444	0.818, 0.486
<b>Conduct</b>	0.835, 0.559	0.808, 0.513	0.817, 0.528	0.811, 0.518	0.773, 0.459	0.767, 0.455	0.750, 0.431	0.661, 0.333
<b>Hyperactivity</b>	0.906, 0.658	0.819, 0.476	0.824, 0.485	0.822, 0.483	0.778, 0.413	0.804, 0.452	0.787, 0.429	0.729, 0.355
<b>Peer Issues</b>	0.800, 0.452	0.592, 0.250	0.595, 0.253	0.572, 0.243	0.447, 0.178	0.596, 0.260	0.589, 0.256	0.800, 0.452
<b>Prosoc Issues</b>	0.848, 0.533	0.818, 0.475	0.822, 0.481	0.834, 0.502	0.792, 0.436	0.813, 0.467	0.796, 0.443	0.848, 0.533

## REFERENCES

1 Foy JM. Introduction. *Pediatrics* 2010;**1**(Supplement 3).

2 Office of the Surgeon General; Center for Mental Health Services, National Institute of Mental Health. Mental Health: Culture, Race, and Ethnicity. A Supplement to Mental Health: A Report of the Surgeon General. Rockville: Substance Abuse and Mental Health Services Administration, 2001.

3 Flores L, Kaplan A. Addressing the Mental Health Problems of Border and Immigrant Youth. National Child Traumatic Stress Network 2000. Accessed December 2011.

[http://www.nctsn.org/nctsn\\_assets/pdfs/BorderlandersSpecialReport\\_Final\\_0.pdf](http://www.nctsn.org/nctsn_assets/pdfs/BorderlandersSpecialReport_Final_0.pdf)

3 Child Maltreatment. Washington DC: US Department of Health and Human Services, Administration for Children and Families. 2008.

4 Livingston G, Minushkin S, Cohn D. Hispanics and Health Care in the United States: Access, Information, and Knowledge. Washington DC: Pew Hispanic Center. Princeton, NJ: Robert Wood Johnson Foundation, 2008. Page 3-4.

5 Aguilar-Gaxiola S et al. California Reducing Disparities Project. Community-Defined Solutions for Latino Mental Health Care Disparities. Sacramento: UC Davis, 2012.

6 Foy JM, Perrin J. Enhancing Pediatric Mental Health Care: Strategies for Preparing a Community. *Pediatrics* 2010;125(Supplement 3).

7 Foy JM, Kelleher KJ, Laraque D. Enhancing Pediatric Mental Health Care: Strategies for Preparing a Primary Care Practice. *Pediatrics* 2010; **125**(Supplement 3).

8 Birman D. Ethical issues in research with immigrants and refugees. In: Trimble JE, Fisher CB, eds. The Handbook of Ethical Research with Ethnocultural Populations & Communities. Thousand Oaks: SAGE Publications Inc 2005:155-77.

9 Achenbach TM, Becker A, Döpfner M et al. Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ instruments: research findings, applications, and future directions. *J Child Psychol Psychiatry* 2008;**49**(3):251-75.

- 10 McClellan J, Bresnahan MA, Echeverria D et al. Approaches to psychiatric assessment in epidemiological studies of children. *J Epidemiol Community Health* 2009;**63**:i4-i14.
- 11 Goodman, R. The Strength and Difficulties Questionnaire: A research note. *J Child Psychol Psychiatry* 2000;**38**:581-86.
- 12 Goodman R, Meltzer H, Baily V. The Strength and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *Eur Child Adolesc Psychiatry* 2000;**7**:125-30.
- 13 Vostanis P. Strengths and Difficulties Questionnaire: research and clinical applications. *Curr Opin Psychiatry* 2006;**19**(4):367-72.
- 14 SDQ – Information for researchers and professionals about the Strengths & Difficulties Questionnaires. Website. <http://www.sdqinfo.org>. Accessed March 2014.
- 15 Stone LL, Otten R, Engels RC et al. Psychometric properties of the parent and teacher versions of the strengths and difficulties questionnaire for 4- to 12-year-olds: a review. *Clin Child Fam Psychol Rev* 2010;**13**(3):254-74.
- 16 He JP, Burstein M, Schmitz et al. The Strengths and Difficulties Questionnaire (SDQ): the factor structure and scale validation in US adolescents. *J Abnorm Child Psychol* 2013;**41**(4):583-95.
- 17 Dickey WC, Blumberg SJ. Revisiting the Factor Structure of the Strengths and Difficulties Questionnaire: United States, 2001. *J Am Acad Child Adolesc Psychiatry* 2004;**43**(9):1159-67.
- 18 Muris P, Meesters C, van den Berg F. The Strengths and Difficulties Questionnaire (SDQ) – further evidence for its reliability and validity in a community sample of Dutch children and adolescents. *Eur Child Adolesc Psychiatry* 2003;**12**(1):1-8.
- 19 Goodman A, Lamping DL, Ploubidis GB. When to use broader internalizing and externalizing subscales instead of the hypothesized five subscales on the Strengths and Difficulties Questionnaire (SDQ): data from British parents, teachers and children. *J Abnorm Child Psychol* 2010;**38**(8):1179-91.
- 20 Essau CA, Olaya B, Anastassiou-Hadjicharalambous X et al. Psychometric properties of the Strength and Difficulties Questionnaire from five European countries. *Int J Methods Psychiatr Res* 2012;**21**(3):232-45.

- 21 Kobor A, Takacs A, Urban R. The Bifactor Model of the Strengths and Difficulties Questionnaire. *Eur J Psychol Assess* 2013;**29**(4):299-307.
- 22 Muris P, Meesters C, Eijkelenboom A et al. The self-report version of the Strengths and Difficulties Questionnaire: its psychometric properties in 8- to 13-year-old non-clinical children. *Br J Clin Psychol* 2004;**43**(Pt 4):437-48.
- 23 Du Y, Kou J, Coghill D. The validity, reliability, and normative scores of the parent, teacher, and self-report versions of the strengths and difficulties questionnaire in China. *Child Adolesc Psychiatry Ment Health* 2008;**2**:8.
- 24 Matsuishi T, Nagano M, Araki Y et al. Scale properties of the Japanese version of the Strengths and Difficulties Questionnaire (SDQ): a study of infant and school children in community samples. *Brain Dev* 2008;**30**:410-5.
- 25 Mieloo CL, Bevaart F, Donker MCH et al. Validation of the SDQ in a multi-ethnic population of young children. *Eur J Public Health* 2013;**24**(1):26-32.
- 26 Thabet AA, Stretch D, Vostanis P. Child mental health problems in Arab children: application of the strengths and difficulties questionnaire. *Int J Soc Psychiatry* 2000;**46**:266-80.
- 27 Kashala E, Elgen I, Sommerfelt K et al. Teacher ratings of mental health among school children in Kinshasa, democratic Republic of Congo. *Eur Child Adolesc Psychiatry* 2005;**14**:208-15.
- 28 Richter J, Sagatun Å, Heyerdahl S et al. The Strengths and Difficulties Questionnaire (SDQ) – Self-Report. An analysis of its structure in a multiethnic urban adolescent sample. *J Child Psychol Psychiatry* 2011;**52**(9):1002-1011.
- 29 Pastor PN, Reuben CA, Duran CR. Identifying emotional and behavioral problems in children aged 4-17 years: United States, 2001-2007. *Natl Health Stat Report* 2012;**24**(48):1-17.
- 30 Radloff LS. The CES-D scale: a self-report depression scale for research in general population. *Appl Psych Meas* 1977;**1**:385-401.
- 31 Hertzog C, Van Alstine J, Usala PD. Measurement properties of the Center for Epidemiological Studies Depression Scale (CES-D) in older populations. *Psychol Assessment* 1990;**2**(1):64-72.

- 32 Radloff LS. The use of the Center for Epidemiologic Studies Depression Scale in adolescents and young adults. *J Youth Adolesc* 1991;**20**(2):149-66.
- 33 Tatar A, Kayiran SM, Saltukoglu G. Analysis of the Center for Epidemiologic Studies Depression Scale (CES-D) in Children and Adolescents from the Perspective of the Item Response Theory. *Bulletin of Clinical Psychopharmacology* 2013;**23**(3):242-53.
- 34 Knight RG, Williams S, McGee R et al. Psychometric Properties of the Centre for Epidemiologic Studies Depression Scale (CES-D) in a Sample of Women in Middle Life. *Behav Res Ther* 1997;**35**(4):373-80.
- 35 Van de Velde S, Levecque K, Bracke P. Measurement equivalence of the CES-D 8 in the general population in Belgium: a gender perspective. *Arch Public Health* 2009;**67**:15-29.
- 36 Mui AC, Burnette D, Chen LM. Cross-Cultural Assessment of Geriatric Depression: A Review of the CES-D and GDS. In: Levinson RW, Skinner JH, Teresi JA eds. *Multicultural Measurement in Older Populations*. New York: Springer Publishing Company, 2002:147-79.
- 37 Mogos MF. Translation and Adaptation of the Center for Epidemiologic Studies-Depression (CES-D) Scale Into Tigrigna Language for Tigrigna Speaking Eritrean Immigrants in the United States. *Graduate School Theses and Dissertations* 2011. <http://scholarcommons.usf.edu/etd/3251> (accessed March 8, 2014).
- 38 McDowell I. Depression. In: *Measuring Health: A Guide to Rating Scales and Questionnaires*, Third Edition. New York: Oxford University Press, 2006:350-59.
- 39 Ruiz-Grosso P, Loret de Mola C, Vega-Dienstmaier JM et al. Validation of the Spanish Center for Epidemiological Studies Depression and Zung Self-Rating Depression Scales: a comparative validation study. *PLoS One* 2012;**7**(10):e45413.
- 40 Centers for Disease Control and Prevention (CDC). Module 18: Intimate Partner Violence. *Behavioral Risk Factor Surveillance System Survey Questionnaire*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.
- 41 Zich JM, Attkisson CC, Greenfield TK. Screening for depression in primary care clinics: the CES-D and the BDI. *Int J Psychiatry Med* 1990;**20**(3):259-77.

- 42 Data File Documentation, National Health Interview Survey, 2004 (machine readable data file and documentation). Maryland: National Center for Health Statistics, Centers for Disease Control and Prevention 2005. Accessed from web March 2014, <http://www.icpsr.umich.edu/icpsrweb/landing.jsp>
- 43 Kessler RC, Barker PR, Colpe LJ et al. Screening for serious mental illness in the general population. *Arch Gen Psychiatry* 2003;**60**(2):184-89.
- 44 Muthen LK, Muthen BO. Mplus User's Guide. Seventh Edition. Los Angeles CA: Muthen & Muthen 2012.
- 45 Hu L, Bentler PM. Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Struct Equ Modeling* 1999;**6**(1):1-55.
- 46 Yu CY, Muthen B. Evaluating Cutoff Criteria of Model Fit Indices for Latent Variable Models with Binary and Continuous Outcomes. 2002. <http://statmodel2.com/download/Yudissertation.pdf> (accessed March 19, 2014).
- 47 Hair JF, Tatham RL, Anderson RE et al. Multivariate data analysis. New Jersey: Prentice Hall, 1998
- 48 de Winter JCF, Doudou D, Wieringa PA. Exploratory Factor Analysis with Small Sample Sizes. *Multivariate Behavioral Research*;**44**:147-181.