



# An exploratory approach to defining and measuring child health and well-being with parents and grandparents

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**Background:** The study engaged parents and grandparents to define child health and well-being in their local context, develop domains, and provide input on appropriate measures.

**Methods:** We employed an exploratory methodological approach that builds off a Community-Based Participatory Research (CBPR) methodology. Parents and grandparents defined child health and well-being using PhotoVoice methodology; outlined key domains together during focus group sessions; and reviewed measures identified by the research team for construct and face validity.

**Results:** Ten parents and grandparents, living in an overburdened and under-resourced community in New York City, were recruited for this study. They defined child health and well-being in terms of three domains: Safety, Love, and Equity. The research team identified three candidate measures that have been developed with or widely used with children from a similar racial and ethnic background as the children from this community. Results showed adequate face validity for each of the three measures and for both English- and Spanish-speaking parents and grandparents. While overall the measures will address the domains they identified, there are some modifications to wording that will be needed before implementing the measures in the community.

**Conclusions:** We found a paucity of child health and well-being measures developed explicitly for and validated with African American and Latinx young children living in low-income urban environments. Therefore, the field needs more validation studies and new measures designed with and for populations from different cultural backgrounds, particularly for younger children

**Keywords:** Child health; parents; grandparents; well-being; measure

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## Introduction

A limited number of studies begin with community resident input and then keep them engaged throughout the research process. Community residents do not generally guide research questions, outline domains of interest, validate measures, engage in data collection, and participate in data interpretation. Perhaps related, there is a general lack of

child health and well-being measures that are culturally grounded and relevant to communities' needs (1).

The omission of community residents as part of the research process is common in overburdened and under-resourced communities that have been and still are marginalized due to structural power issues. Power is generally centered in academic research institutions instead of in the communities they study. In response to this acknowledged

limitation, the New York Academy of Medicine staff launched an action collaborative to build on existing community assets and partnerships, center community resident voice, use health equity as a lens, and employ data, lived experiences, and validated measures to drive a community resident-led research and policy agenda (2).

The East Harlem Action Collaborative for Child Health and Well-being Program (EHAC Program) is a strengths-based, resident-led initiative focused on health equity for children launched at the New York Academy of Medicine in 2019 ([www.nyam.org/ehac](http://www.nyam.org/ehac)). Community residents from public housing, homeless shelters, and supportive housing and direct service providers from institutions serving children in East Harlem aim to identify solutions to seemingly entrenched problems in achieving health equity for their community. They work to define child health and well-being in context, identify community assets, review data, set goals collaboratively, and capitalize on their collective agency and wisdom to propose evidence-informed solutions. A team of technical advisors with expertise in research design and measurement, policy research, and intervention and evaluation research are partners in the process. The EHAC Program invites policymakers, community partners, and all residents to join discussions about child health and well-being and be part of the solution.

As defined by community residents, one goal of the EHAC Program is to develop a contextually grounded definition of child health and well-being. The desired outcome is a resident-led, culturally meaningful definition of child health and well-being informed by evidence. The aim is to ensure the definition is specific to the context in which children grow and develop and matched with a set of measures that can be implemented in the community.

The research objectives are three-fold. First, understand the context from a historical and community resident perspective. Second, gather data on a culturally grounded meaning of child health and well-being in East Harlem. Third, identify a set of measures aligned with the community resident definition of child health and well-being and that have been normed on children demographically similar to children living in East Harlem.

### *The East Harlem context*

Understanding the contextual environment, including assets and barriers and lived experiences, is essential to correctly define domains, identify appropriate measures, and collect the right data necessary to answer research questions.

Otherwise, the research findings may not accurately address the questions at hand, thus raising validity issues.

The East Harlem community is grounded in a historic and vibrant culture (3). The earliest residents living on the land now called East Harlem were the Lenape Indians (<https://native-land.ca/>). Since then, East Harlem has been home to many populations, from Dutch settlers and freed and enslaved African Americans in the 17th century to Italian immigrants in the 1800s. By the late 1800s, East Harlem was home to the largest Italian immigrant community in the U.S. In the early 20th century, migrants from Puerto Rico, the Dominican Republic, and Cuba began to arrive in East Harlem. Today the community, with just over 124,000 residents, is predominantly Latinx and African American. Fifty percent of the population is Latino, 30% Black, 12% White, 6% Asian, and 2% of the population identify as other, according to New York City Department of Health statistics (4).

Contributing to East Harlem's multicultural abundance, almost one-fourth of residents are foreign-born. Nearly one out of five residents self-identify as having limited English proficiency, and just over half are non-US citizens (4). Also, there are more than 800 documented multi-generational households in East Harlem in which grandparents are raising their grandchildren. While culturally vibrant in terms of food, art, music, and festivals, the community has experienced historic disinvestment.

Almost one-quarter of all residents, and 40% of children under 18, live in poverty (4). The median household income was \$32,803 in 2016, lower than New York City's median household income of \$57,813. Moreover, only 42% of renter-occupied homes are effectively maintained by landlords in East Harlem, and 36% of households report having cockroaches (4). Relatedly, there are more than double the number of asthma-related emergency department visits by children living in East Harlem as compared to the average number across New York City. Also, East Harlem shoulders an inequitable burden of psychiatric, homeless, and drug services that attract residents from across New York City (4).

Safety plays an integral role in the health and development of children. While 67% of adult residents report that their neighbors are willing to help one another (4), the community has witnessed escalating rates of violence and gang activity, especially in public housing developments. In their 2019 Summary of District Needs, Manhattan Community Board 11 reported a need for youth employment, after-school programs, and other activities to

engage youth, specifically geared toward children in public housing developments and other areas with high gang activity (5). With 130 hospitalizations per 100,000 residents, East Harlem has a high rate of non-fatal assault-related hospitalizations (4).

### ***Child health and well-being***

In 1948, the World Health Organization adopted a definition of health more broadly beyond physical health, to include mental health and well-being, “*Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*”. (WHO. Constitution of the World Health Organization. 2006. Available online: [www.who.int/governance/eb/who\\_constitution\\_en.pdf](http://www.who.int/governance/eb/who_constitution_en.pdf)). Similarly, child health was defined in a report of the National Academies that is multi-faceted and integrative (6). The National Academies’ Committee stated that children’s health “*is the extent to which individual children or groups of children are able or enabled to (a) develop and realize their potential, (b) satisfy their needs, and (c) develop the capacities that allow them to interact successfully with their biological, physical, and social environments*”.

“*The committee’s definition views health as a positive resource that gives children the ability to interact with their surroundings and to respond to life’s challenges and changes. Moreover, it incorporates development in the definition and specifies a fundamental principle of development—the optimization and maintenance of function over time. At the same time, it focuses on the intrinsic characteristics of children and their resources for interacting with the environment.*” (p. 33).

While the National Academies’ committee developed a general definition that is comprehensive and conceptually grounded, it also noted the importance of realizing cultural differences in definitions of child health and takes into account community priorities.

“*... social or cultural views on health, as well as the circumstances of a given community, may affect the priorities of that community in terms of what is considered important. It is therefore critical for specific societies and communities to define the measures they deem most salient to their local circumstances and for those working to improve health to take into account cultural differences and the priorities of that community.*” (p. 25).

It is in this spirit that we conceived of and carried out the current research project with parents and grandparents raising young children in East Harlem. The study is exploratory in nature. It provides a proof of concept on a small scale for an innovative approach to fully engage

parents and grandparents in the research process.

### **Methods**

Employing a research approach that draws on Community-Based Participatory Research (CBPR) principles (7) and PhotoVoice methodology (8), parents and grandparents worked closely with the research team over 18 months. Parents and grandparents defined child health and well-being, outlined key domains, and reviewed measures for construct and face validity. This integrative methodological approach builds upon CBPR principles in two specific ways. It centers parents and grandparents who are the primary caregivers of young children in defining child health and well-being, identifying domains, and validating measures; and adds a policy focus and power shift from academic institutions to community residents. Leading with resident voice recognizes parents’ and grandparents’ wisdom and lived experiences, uplifts their leadership capacity, and embeds them in the research process. Technical advisors, consultants, and direct service providers bring their tools and experiences to the table in ways that inform and advance the study’s goals. We call this integrated approach a Resident-led Research, Policy, and Power (RRPP) model.

The project was implemented in three phases. In Phase 1, parents and grandparents were interviewed individually using a PhotoVoice methodology, which provided the foundation for focus group discussions with all parents, grandparents, frontline workers, and technical advisors. Once the parents and grandparents identified specific areas of child health and well-being important to them, the research team organized the items into three categories. In Phase 2, the research team systematically searched the literature to identify culturally valid measures that mapped onto the specified categories. In Phase 3, the parents and grandparents reviewed a sample of the items from each measure across the categories for face validity. Also, technical advisors and frontline workers reviewed the measures.

The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). The study was approved by institutional review board of The New York Academy of Medicine (IRB00000754), and informed consent was taken from all the participants.

### ***Participants***

Three sets of participants were recruited for the project: (I)

ten parents and grandparents who are primary caregivers of young children, (II) seven technical advisors, and (III) four frontline workers. Parents and grandparents were recruited to define child health and well-being collaboratively and validate the cultural appropriateness of measures. Technical advisors from academia, medical settings, and policy organizations and frontline workers from community-based organizations were recruited to support the research team and inform the project with their unique perspectives and skillsets.

The social worker on the research team, Gloria Maldonado, recruited parents and grandparents by handing out flyers at childcare centers, New York City Housing Authority buildings, and local community meetings. To participate, parents and grandparents had to be at least 18 years old, residents of East Harlem living in subsidized housing, and the caregiver for a child 3–10 years old. Parents and grandparents received a \$75 gift card for each 2.5-hour session they contributed to the project over 18 months (14 meetings). One of the parents could not continue to participate after only a couple of meetings. Therefore, we completed the project with nine parents and grandparents, a group small enough, with whom we could have a close working relationship in this research endeavor.

Gloria passed away on December 7th, 2020, from COVID-19. She was very special to everyone on the team and was the primary contact for our parents and grandparents. Gloria took care to translate all of our written materials for our Spanish-speaking parents and assisted with translation during all meetings.

Technical advisors were selected for their expertise, broadly grounded in equity for children living in low-resource urban settings. Their specific academic areas of expertise include child policy, child and family health and medicine, early childhood education, and child development. Each technical advisor received an honorarium for their participation.

Community-based frontline workers were recruited from four community-based organizations that serve the East Harlem community in housing advocacy, social service delivery, immigrant services, and health care delivery. One frontline worker from each organization was asked to participate. Each organization was compensated for 5% of the frontline workers' time.

A total of nine East Harlem parents and grandparents who are primary caregivers of young children, completed the study. Seven caregivers are mothers of young children ages 3–10 years old, and two are grandmothers. Three

caregivers have children with disabilities (autism, cerebral palsy, attention deficit disorder). Six caregivers live in New York City Housing Authority buildings, and four live in other publicly subsidized housing through a voucher program, called section 8 housing. Four participants are mono-lingual Spanish-speakers. After 18 months, the project team retained nine out of ten caregivers.

### *Procedures*

Three phases of study were conducted over an 18-month period. The purpose of Phase 1 was to define child health and well-being from the perspective of parents and grandparents. In Phase 2 the research team scanned the literature for measures that mapped onto the domains defining child health and well-being from Phase 1. Parents and grandparents provided face validity data on the three measures in Phase 3.

#### **Phase 1: domains of child health and well-being**

Individual interviews were conducted using the PhotoVoice methodology. For monolingual Spanish-speaking participants, a qualified translator was present. We chose a positive, forward-looking theme to guide the process instead of a deficit approach. A team of two, one researcher and one PhotoVoice consultant, asked parents and grandparents about their hopes and dreams for their child's health and well-being. All nine parents and grandparents took photos of something that described their hopes and dreams for their children. The descriptions of the photos were transcribed, and specific quotes were lifted up to bring to the full group during the focus group session.

The photos from the interviews framed the focus group session with all nine parents and grandparents, four technical advisors, and four frontline workers. The focus group session was launched with the photos and descriptions captured from the interviews. Next, the research staff presented standard definitions of child health and well-being. Parents and grandparents were seated at three tables with frontline workers at each. All participants engaged in small group discussions facilitated by research staff. Two tables had Spanish translators to enable full participation regardless of the language spoken. Each group discussed what was missing from the definitions and the alignment with experiences of children living in East Harlem, culminating in their vision for optimal child health and well-being. The data were transcribed, integrated, and

**Table 1** Hopes and dreams by domain

Domains	Description	Keywords/phrases from parents and grandparents
Safety	Psychological and physical safety	<ul style="list-style-type: none"> <li>• Mental health</li> <li>• Sense of stability</li> <li>• Ability to be a child (not growing up too soon)</li> <li>• Ability to make decisions</li> <li>• Safety in the streets + buildings</li> <li>• Clean environment</li> </ul>
Love	Love for self	<ul style="list-style-type: none"> <li>• A positive sense of self</li> <li>• Comfortable in their skin</li> <li>• Integrity</li> </ul>
Equity	Freedom from interpersonal discrimination	<ul style="list-style-type: none"> <li>• Not segregated or treated unfairly because of skin color, language, ability</li> <li>• Sense of belonging &amp; acceptance</li> <li>• Feeling that their culture is respected</li> <li>• Independence to be who they want to be</li> </ul>

discussed with the full group. The full group discussion led to a list of items indicative of child health and well-being for children living in East Harlem. The items were then classified into three domains: Safety, Love, and Equity.

*Table 1* presents the list of keywords and phrases generated by the parents and grandparents and organized by domain.

### Phase 2: measures of child health and well-being

The second phase of the research project included identifying measures that operationalized the three domains, parents and grandparents highlighted as key to child health and well-being. Four primary databases were used to find relevant measures for this study, PubMed, SCOPUS, Google Scholar, and PsychINFO). Keywords were used to search for relevant measures for each domain, starting with the domain names Safety, Love, and Equity. All searches included the keyword “children” or “child”. Keywords were selected from each domain. The team aimed to stay as close as possible to the terms used by parents and grandparents during the focus group session. For example, for the Safety domain, keywords had “community violence”, “depression”, “anxiety”, “stress”, “trauma”, and “abuse”. Keywords used in the Love domain included “self-esteem”, and “self-perception”. The main keywords used for the Equity domain were “discrimination” and “racism”. The searches

resulted in a total of 101 measures.

A series of literature searches were conducted to identify culturally valid measures that assess child health and well-being in mostly Latinx and African American children. The measures were evaluated for their suitability based on a set of inclusion criteria including information on validity and reliability with children who were: (I) ages 3–10 years old; (II) majority African American and Latinx ethnicity; (III) low income; and (IV) living in an urban geographic area. Other inclusion criteria included child self-report. Exclusion criteria included samples that were: (I) mostly White children; (II) older than 12 years old; (III) high income; and (IV) living outside the U.S. or solely in rural geographies. Articles were included if they were full-text, in English, and measured the domain indicated, focusing on psychometric properties. The search resulted in three measures (*Table 2*).

### Phase 3: face validity

Parents and grandparents met via a video conference cloud platform in October 2020. We presented residents with a sample of items from the measures that could potentially map onto the domains they identified for measuring child health and well-being in East Harlem. Our goal was to obtain feedback to assess the validity and appropriateness of the measures related to children in their community.



**Table 2** Selected measures by domain

Domain	Measure	Author	Grade/age	Race/ethnicity	Geography	Socioeconomic
Safety	Community Experiences Questionnaire (CEQ) (25 items)	Schwartz D & Proctor LJ (2000)	4 <sup>th</sup> to 6 <sup>th</sup> grade (9–12 years old)	64% Hispanic, 27% African American, 9% European American or Other	South Central Los Angeles, CA, USA	Neighborhood poverty 44.4%
Love	Self-Esteem Inventory (SEI) (58 items); SEI Short Form (25 items)	Coopersmith S (1981) (2002)	3 <sup>rd</sup> to 10 <sup>th</sup> grade (8–15 years old)	Latinx, Native American Indian, Black, White	Multiple regions across the U.S.	Mostly public school students representative of local, state, or national demographics
Equity	Perceptions of Racism in Children and Youth (PRaCY)	Pachter LM, Szalachac LA, Bernsteind B, and Garcia Coll C (2010)	3 <sup>rd</sup> to 12 <sup>th</sup> grade (8–18 years old)	42.7% Latino(a), 30% African American, 8.7% West Indian/Caribbean, 16.7% Multicultural, 1.3% Other	Connecticut & Rhode Island	Low-income, urban settings

The research team created a live Zoom survey given the remote nature of the data collection. The group was divided by primary language (English and Spanish) during the survey administration, and the Spanish group had live interpretation during survey administration.

The survey consisted of a description of the domain and a few questions from each measure. Only a sample of questions from each measure was included to reduce the time burden on parents and grandparents. For each question, participants were asked, “Do you feel this question is appropriate to measure [domain name] for children in your community? Yes, No, or I Don’t Know”. After the polls were complete, parents and grandparents were asked to provide their feedback overall, and their responses were transcribed to identify themes that emerged.

### Statistical analysis

Given the small sample size ( $n=9$ ), descriptive statistics were planned. English- and Spanish-speaking group responses are reported separately. Means and standard deviations are presented in the results section for each of the three measures by language group.

## Results

The results are presented as Phase 2 and Phase 3. In Phase 2, measures are presented with their sample and psychometric information, and the Phase 3 results include data from a face validity exercise with parents and

grandparents.

### Phase 2: measures of child health and well-being

Table 2 lists three promising measures that map onto each of the three domains: Safety, Love, and Equity. The measures have been validated on the population of interest with good psychometric properties or have been used extensively with multicultural populations of children with good internal consistency.

#### Safety

According to parents’ and grandparents’ comments and descriptions, Safety is composed of neighborhood safety and psychological safety. Neighborhood safety is focused on the prevalence of violence and crime within a community, and psychological safety is the level of comfort in taking an interpersonal risk. Psychological safety is co-dependent with the context where children grow and develop (9). Both constructs influence each other in mutually reinforcing ways. Keywords and phrases from parents and grandparents describing Safety included: “safety in the streets and buildings”, “mental health”, “sense of stability”, “ability to be a child (not growing up too soon)”, “ability to make decisions”, “clean environment”.

The Community Experiences Questionnaire (CEQ) (10) is a 25-item self-report assessment of exposure to community violence. The CEQ draws many items from the 54-item Survey of Exposure to Community Violence (SECV) (11) and relies on its general psychometric properties. The authors

changed some of the wording to improve comprehension for children learning English as a second language. The CEQ was implemented with 285 children attending elementary school in fourth through sixth grades in South Central Los Angeles, California. They identified primarily as Hispanic (64%) and African American (27%), with 9% of the sample identifying as European American or Other. The schools serve economically disadvantaged communities, with an overall poverty rate of 44.4%.

Children were asked to recall their experiences with events tied with violent or criminal behavior such as being chased, serious accidents, threats, shootings, and stabbings that they either witnessed or experienced themselves in the community. They were instructed to rate how often they experience each item on a 4-point scale (1= never, 2= once, 3= a few times, 4= lots of times). The instructions are as follows:

*“Please report incidents that have occurred at any point in the past except for incidents with family members or other adults who live with you. Only report real-life events in your neighborhood and community. Do not report incidents from movies or television, or conflicts with children at school.”*

There are two subscales. One assesses exposure to community violence through victimization (CEQ-VIC;  $\alpha=0.81$ ), and the other assesses exposure through witnessing violence (CEQ-WIT;  $\alpha=0.89$ ). The two scales are correlated (0.54;  $P<0.0001$ ). Researchers have used the measure to assess child victimization in third, fourth, and fifth grades in an economically poor urban community (12).

## Love

Love represents parents' and grandparents' hope that their children love themselves, including their physical and cultural characteristics and traits. In the literature, self-esteem and self-concept are constructs that aligned with self-love. Coopersmith (2002) defines self-esteem as “... a judgment of worthiness that is expressed by the attitudes he or she holds toward the self”. Keywords and phrases from parents and grandparents included: “a positive sense of self”, “comfortable in their skin”, and “integrity” (13).

The Coopersmith Scale of Self Esteem Inventory (SEI) (13) was first developed in 1967 as part of an extensive study on children's self-esteem. The SEI was designed to assess attitudes regarding social, academic, family, and personal experiences in terms of “... an expression of approval or disapproval, indicating the extent to which a person believes him- or herself competent, successful, significant, and worthy” (p. 5).

The SEI has been administered to thousands of children

from 8–15 years old in schools. Children from various backgrounds and abilities have taken the SEI, including Mexican American, Native Indian, Black children, and children with disabilities. Studies show adequate validity and reliability with few exceptions. Children respond to short statements with either “like me” or “unlike me”. There are four subscales: General self, social self-peers, home-parents, and school-academic.

The SEI was developed after a review of predictors and correlates of self-esteem. The language level of the items was developed for children 8–10 years old. A few psychologists scored items in terms of high and low self-esteem, and thirty children were recruited to test comprehension levels. The measure was eventually implemented with 1,748 children attending public school in Connecticut. The sample was described as diverse in terms of ability and social background. Mean scores were skewed positive, and there were no gender differences. Test-retest reliability estimates were 0.70.

Two versions of this measure were created, one contains 50 questions (The School Form), and the other, called The School Short Form, including the 25 items with the highest correlations with the total score from the longer measure. The School Short Form does not allow for subscale differentiation and results in a total score. The total score correlation of the School Form with the School Short Form is 0.86.

Reliability estimates across more than 7,500 students from different racial and ethnic backgrounds in grades 4–8 range from 0.87 to 0.92. Studies also demonstrate construct validity, concurrent validity, and predictive validity (13). Even though normative data show no significant gender, age, or ethnic differences from grades 3 through 8, the authors caution that researchers should develop local norms.

## Equity

The parents and grandparents defined equity as freedom from interpersonal discrimination. According to the National Academies, “The mechanisms by which discrimination operate include overt, intentional treatment as well as inadvertent, subconscious treatment of individuals in ways that systematically differ so that minorities are treated worse than non-minorities . . . [this treatment] has deleterious effects on the physical and mental health of individuals.” (14).

Keywords and phrases from parents and grandparents included: “not segregated or mistreated because of skin color, language, ability”, “sense of belonging and acceptance”, “feeling that their culture is respected”, and

“independence to be who they want to be”.

The Perceptions of Racism in Children and Youth (PRaCY) was developed to measure self-reported racism and discrimination with children and youth 8–18 years old (15,16). The measure was validated with a predominantly Latinx and African American sample (38% Latino/a, 31% African American, 19% multiracial/multicultural, 7% West Indian/Caribbean, and 5% Other). The PRaCY measures both the frequency and psychological dimensions of racism and discrimination, including emotional response and attribution.

Items for the PRaCY were developed from 14 open-ended interviews with 14 African American, Latinx, and multicultural youth living in urban and suburban environments. Twenty-three situations were taken from the interviews and turned into a questionnaire with the following guidance:

*“When people are racially discriminated against, they are treated badly, not given respect, or are considered inferior because of the color of their skin, because they speak a different language or have an accent, or because they come from a different country or culture. For each of the following situations, think whether you have ever in your life felt discriminated against because of your color, language or accent, or because of your culture or country of origin, and answer the following:”.*

The measure was validated with 227 youth 7–18 years old (2nd–12th grade) who attended after school and enrichment programs serving predominantly low-income populations in cities across Connecticut and Rhode Island. The analyses showed the best fit for two instruments, with ten items each, which would be used with two different age groups, 7–13 and 14–18. Both versions showed strong internal reliability and model fit for a single underlying factor of perceived racism. A differential item functioning analysis provided evidence there is no bias in responses by age, gender, or cultural identity group. Predictive validity was supported with measures of depressive and anxiety symptoms. Higher scores on the PRaCY were positively correlated with self-reported symptoms of both depression and anxiety in the younger cohort of children from 7–13 years old.

### **Other promising measures**

Although many measures did not meet all of the inclusion criteria, we wanted to highlight some that are promising. The following measures may have been validated with

an older sample, be missing validity studies, or were not employed with a diverse sample. They are promising because they have qualities that meet the definitions of child health and well-being as defined by the parents and grandparents in this study.

### **Safety**

In a validation study with slightly older children 9–15 years old who were mostly African American (75%), Cooley *et al.* reported reliability and validity estimates of the Children’s Report of Exposure to Violence (CREV) in an urban and rural school district in South Carolina (17). The CREV is a child self-report measure with 32 items that assess community violence exposure across four areas: in the media, as reported to the child, as a witness, and directly as a victim. The measure has good test-retest reliability ( $r=0.75$ ), internal consistency (Cronbach’s  $\alpha=0.78$ ), and construct validity.

The Things I Have Seen and Heard (18) is a 15-question structured interview that assesses young children’s exposure to violence with children as young as six years old. The interviewer describes different forms of violence, and children respond on a scale of 1–4 (“never” to “many times”). The measure has good test-retest reliability ( $r=0.81$ ). Validity data are limited.

### **Love**

The Berkeley puppet interview (BPI) is a semi-structured interview where children from 4–8 years old are presented with two opposite statements by two puppets. For example, “I’m good at making friends”/“I’m not good at making friends”. After each puppet makes their statement, they turn to the child and asks, “How about you, [child’s name]?”. The measure has been validated with a sample of 97 children who were transitioning from preschool to kindergarten (19). The authors reported the sample’s sociodemographic characteristics as 21% African American, Hispanic, or Asian American and 79% Anglo children living in mostly lower- to upper-middle-class households in the San Francisco Bay area. The BPI exhibited good psychometric properties, and the authors reported that children as young as four years old could reliably report on their self-perceptions. A factor analysis confirmed six scales were reliably measured and showed some stability across preschool, kindergarten, and first grade. The scales consist of two academic self-perception scales (academic competence and achievement motivation),



**Table 3** Face validity for three measures of Safety, Love, and Equity

Participants	Yes		No		Don't know	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Spanish speakers						
Safety (n=3)	2.00	1.00	0.40	0.55	0.60	0.55
Love (n=4)	3.11	0.93	0.33	0.50	0.56	0.73
Equity (n=4)	3.11	0.60	0.67	0.71	0.22	0.44
English speakers						
Safety (n=5)	3.80	0.63	0.30	0.48	0.90	0.57
Love (n=5)	4.67	0.50	0.00	0.00	0.33	0.50
Equity (n=5)	4.44	0.53	0.00	0.00	0.56	0.53

two social self-perception scales (social competence and peer acceptance), and two symptom-related scales (depression-anxiety and aggression-hostility).

### Equity

The Culture of Wisdom's Culturally Affirming Climate Survey (CACS) was developed for youth of color in 6th to 12th grade to "extract" their racialized experiences. The survey is administered in schools, and six domains are assessed through youth report of their perceptions of (I) teacher's awareness of student interests, (II) teacher expectations, (III) racial identity affirmation and racial discrimination, (IV) multicultural navigation-learning about other "non-white" cultures, (V) selective vulnerability and trust, and (VI) promotion of social justice and fairness by teachers. The measure was piloted in five schools with over 1,000 students. The CACS has not been implemented or validated with young children. Still, it is a promising measure for children living in East Harlem, given its focus on "minoritized" children's experiences.

### Phase 3: face validity

The face validity findings are separated into qualitative findings and quantitative findings.

### Qualitative findings

Overall, the parents and grandparents felt that the items they reviewed would adequately address each domain. Several members in the group mentioned the possible re-traumatization that could occur with some "scary" questions. They said that while children are aware of

the safety issues in their community, answering specific questions about unsafe behaviors towards them could exacerbate existing fears or re-traumatize children if they had experienced the untoward actions in their community. Other issues that were raised included the wording of some of the questions that may not be appropriate for younger children and children not feeling comfortable responding to the questions if they were told not to talk about some of the issues. A few items did not translate well from the English version to Spanish. Back translation will help ensure authenticity in the meaning of each item (1).

### Quantitative findings

Results showed parents and grandparents generally endorsed items on all three measures. There were differences between "Yes/No" responses within both English- and Spanish-speaking groups, with "Yes" responses reported higher on average for all three measures. For the Safety measure, CEQ, the mean "Yes" responses among English speakers was 3.80 (SD =0.63), compared to the mean number of "No" responses, which was 0.30 (SD =0.63). Similarly, for Spanish speakers there were more "Yes" responses with a mean of 2.0 (SD =1.00) compared to the mean number of "No" responses, which was 0.40 (SD =0.55). The results were similar for the Love measure, SEI, and Equity measure, PrACY, for both groups (Table 3).

### Discussion

There are multiple challenges to identify culturally

validated measures to assess Safety, Love, and Equity with young children of color. Many measures we identified as promising had limited information on the demographics of children. Specifically, they were missing data on socioeconomic status (household income, poverty level, etc.) and racial composition. Psychometric properties were also missing from many of the measures explored. Also, some of the measures were not published, restricting the ability to include them in a review of face validity.

There were few measures of Safety, Love, and Equity validated with younger children who identify as African American and Latinx. Many measures we found were developed for adolescents. For some measures that included a younger sample, the wording had to be changed and more time allocated for instructions and questions from the children to complete the assessments (15). For the Safety measures, researchers warned about possible trauma associated with the questions, particularly for younger children, and suggested proper follow up resources and services are available to support children (18). These recommendations for working with younger children are aligned with our parents' and grandparents' suggestions during the face validity discussions.

We found Safety and Equity measures validated with minoritized populations, although mostly with older children. The preponderance of measures we identified for Love were developed with white, middle-class children. When measures are not designed for or normed with diverse populations, items may not reflect the values of specific subgroups, and therefore may not adequately reflect the domain being measured.

As a group, these candidate measures we identified were developed in regions across the U.S., and normative studies using the measures were also broad in their geographic span. There is still a need to establish local norms and reliability and validity tests in the community, driven by resident-defined constructs to ensure validity.

While the face validity data indicated all three of the selected measures to assess Safety (CEQ), Love (SEI) and Equity (PRaCY) were adequate; the qualitative data pointed to changing some of the wording of the measures to reduce any re-traumatization, particularly for the Safety measure (CEQ), and to ensure the items are well understood by younger children. Before implementing these measures, we will need to engage a larger sample of parents and grandparents to work with us on the wording of some of the items.

## Conclusions

The research team approached this project with respect, humility, and power, which are inherent in the RRPP approach to conducting research and applying findings to the local context. Respect for the wisdom and lived experiences of parents and grandparents raising young children in a historically disinvested community that is overburdened and under-resourced is a perspective that drove study decisions. Having humility as researchers by acknowledging the need to partner with community residents to learn about the local context where children grow and develop was central to the design of definitions, domains, and measurement selection. Working with community residents as equal partners stretched how we think about defining child health and well-being. The residents deconstructed these terms into meaningful domains relevant to the context in which parenting takes place and where children grow and develop. In addition, whether different communities have different definitions of child health and well-being is an empirical question that is worthy of exploring.

Power has traditionally centered on the researcher, by the researcher. Shifting who is at the center of the research process, from the researcher to the participants guiding every step of the process, is a newer phenomenon. While researchers come to the table with a set of tools and expertise in methodology and a general understanding of the literature, community residents bring their everyday experiences. Power shifting entails people most impacted by the research and its implications to take the lead while researchers support their capacity to engage from start to finish.

The measures presented in this paper should not be considered an exhaustive list, but rather promising candidate measures driven by parent and grandparent definitions of child health and well-being in East Harlem, New York, meeting specific inclusion and exclusion criteria. As measured by parents and grandparents, face validity showed more work needs to be done on wording for younger children, back translation for Spanish speakers, and additional face validity tests in the community to ensure items are not triggers for re-traumatization.

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