



PhenX Toolkit

consensus measures for Phenotypes and eXposures

<https://www.phenxtoolkit.org>

Psychosocial Measures for PhenX Toolkit

Measure		Brief Description of Recommended Protocols
1	Acculturation	This protocol is a brief set of questions about how the respondent speaks, reads, and writes English, on a scale of 1 to 4. The respondent is also asked which language he or she uses when speaking with friends or family members and for thinking.
2	Chronic Stress	This scale includes 51 items about common life conditions and situations (e.g., financial issues, work, marriage and relationship, parental, family, social life).
3	a. Adolescent	The Coping Response Inventory (CRI) for Youth includes 48 self-report questions about how a young person copes with problems and stress.
	b. Adult	The Coping Response Inventory (CRI) for Adults includes 48 questions about how an adult copes with problems and stress.
4	a. Adolescent	Using a list of 40 interviewer-administered questions about criminal and delinquent activities, the respondent indicates if he or she has engaged in each activity and, if so, how many times in the past year.
	b. Adult	Using a list of 48 interviewer-administered questions about criminal and delinquent activities, the respondent indicates if he or she has engaged in each activity and, if so, how many times in the past year.
5	Current Quality of Life	A brief set of interviewer-administered questions is used to assess the respondent's physical and mental health during the past 30 days.
6	a. Adult	The UPPS Impulsive Behavior Scale contains 59 self-administered questions that are scored using five subscales (urgency, premeditation, perseverance, sensation seeking, and positive urgency).
	b. Child	The UPPS-P Impulsive Behavior Scale for Children contains 40 self-administered questions that are scored as five subscales (urgency, premeditation, perseverance, sensation seeking, and positive urgency).
7	a. Adult	The Positive Affect and Negative Affect Schedule–Expanded Form (PANAS-X) is a 60-item, self-report scale used to measure the respondent's emotions during the past few weeks.
	b. Child	The Positive Affect and Negative Affect Schedule for Children (PANAS-C) is a 30-item, self-report questionnaire used to measure the respondent's emotions during the past few weeks.
8	a. Adult	The Lifetime Trauma and Victimization History (LTVH)–Child is a set of interviewer-administered questions about trauma and victimization experiences over the respondent's lifetime.
	b. Child	The Lifetime Trauma and Victimization History (LTVH)–Child is a set of interviewer-administered questions about trauma and victimization experiences over the respondent's lifetime.
9	a. Adult	This 10-item, self-administered scale is used to assess self-efficacy.
	b. Child	Three 8-item scales included in this protocol measure academic, social, and emotional self-efficacy.
10	Perceived Social Support/ Conflict	This protocol includes three groups of self-report questions about positive and negative interactions with the respondent's spouse or partner, family, and friends.
11	Perceived Stress	This protocol uses a 10-question, self-administered scale used to measure an individual's level of perceived stress in the past month.
12	Self-esteem	The Rosenberg Self-Esteem Scale is a 10-item assessment used to evaluate a person's general self-worth.
13	Social Capital	The Position Generator from the 2004 and 2006 U.S. Social Capital Surveys is used to gather information about the occupations of relatives, friends, and acquaintances.
14	Social Isolation	The UCLA Loneliness Scale contains 20 self-administered questions used to assess how lonely the respondent feels.
15	a. Childhood	The Children's Behavior Questionnaire (CBQ) is a 36-item, parent-report questionnaire used to measure the temperament of a child (3 years to 7 years old).
	b. Early Childhood	The Early Childhood Behavior Questionnaire (ECBQ) is a 36-item, parent-report questionnaire used to measure the temperament of a young child (18 months to 36 months old).
	c. Infant	The Infant Behavior Questionnaire–Revised (IBQ-R) is a 36-item, parent-report questionnaire used to measure the temperament of an infant (3 months to 12 months old).

NOTE: Complete protocols and links to common data elements and reference surveys are available through the PhenX Survey at <https://www.phenxtoolkit.org>.

What Is PhenX?

PhenX is a collaborative, consensus project between RTI International, the National Human Genome Research Institute (NHGRI) of the National Institutes of Health, and the larger research community. The objective of PhenX is to recommend measures with specified measurement protocols that have a high priority for inclusion in genome-wide association studies (GWAS). The consistent use of some measurement protocols across studies will facilitate cross-study comparisons. High-priority measures are, therefore, those measures that are broadly relevant to multiple health outcomes or assessments of health outcomes, although the measures are not focused on differential diagnosis.

Research Domains

The PhenX Steering Committee (SC) chose 21 research domains. A research domain is a field of research with a unifying theme and easily enumerated quantitative and qualitative measures. Working Groups (WGs) of experts in a specific domain were constituted, and they:

- Evaluated the scope of the domain and the broad elements of that scope, and then
- Recommended potential high-priority measures with specific measurement protocols.

These measures were vetted with the larger research community, and final recommendations from the WGs were reviewed by the SC. The primary goal of the project is to collect these recommendations in a Toolkit that will enable scientists to select measures and implement those measures in studies.

For more information on the PhenX project, please visit the project's website at <https://www.phenx.org/>.

Research Area (Domain)	Status	WG Chair(s)	SC Liaison
Alcohol, Tobacco and Other Substances	In Toolkit	Deborah S Hasin	Erin M Ramos
Anthropometrics	In Toolkit	Michele Forman	Michelle Williams
Cancer	In Toolkit	Neil Caporaso and Christine B Ambrosone	Margaret R Spitz
Cardiovascular	In Toolkit	Thomas A Pearson	William R Harlan
Demographics	In Toolkit	Myles Cockburn	Peter Kraft
Diabetes	In Toolkit	Craig L Hanis	William R Harlan
Environmental Exposures	In Toolkit	Lynn R Goldman	Diane Wagener
Gastrointestinal	In Toolkit	David Whitcomb	William R Harlan
Infectious Diseases and Immunity	In Toolkit	Richard Kaslow	Jonathan Haines
Neurology	In Toolkit	Jeffery M Vance	Lindsay A Farrer
Nutrition and Dietary Supplements	In Toolkit	Patrick J Stover	Jose M Ordovas
Ocular	In Toolkit	Janey L Wiggs	Jonathan Haines
Oral Health	In Toolkit	James Beck and Bryan Michalowicz	Mary L Marazita
Physical Activity and Physical Fitness	In Toolkit	Bill Haskell and Rick Troiano	Jose M Ordovas
Psychiatric	In Toolkit	Jordan Smoller and Kenneth Kendler	Carlos N Pato
Psychosocial	In Toolkit	Bernice Pescosolido	Carlos N Pato
Reproductive Health	In Toolkit	Carol Hogue	Michelle Williams
Respiratory	In Toolkit	Edwin K Silverman	Terri H Beaty
Skin, Bone, Muscle and Joint	In Toolkit	Douglas P Kiel	Lindsay A Farrer
Social Environments	In Toolkit	Barbara Entwisle	Peter Kraft
Speech and Hearing	In Toolkit	Cynthia Morton and Mabel Rice	Mary L Marazita