PhenX Pediatric Development
Working Group
Household Stability

Michelle Bosquet Enlow
*November 19, 2018*
Household Stability

- Definition: Predictability and consistency of child’s home environment
  - Operationalization of stability may include several components/domains:
    - financial stability
    - stability of housing
    - people in the child’s family/home
    - quality of relationships/conflict among people in home
    - organization of the home environment/activities
Household Stability

- Considerations:
  - Should there be one measure that comprises various domains that may contribute to the construct “household stability?”
  - Or should various measures be kept separate and recommended/linked together, with users having the option to choose those of interest to them?
  - Separate protocols measuring different constructs may be used to develop an assessment of household stability, depending on needs of study, research questions, etc.
Existing measurement protocols in PhenX Toolkit

• **Annual Family Income**
  – from National Health Interview Survey (NHIS) Family Questionnaire, 2007
  – interviewer asks respondent about family's total income from all sources in last calendar year, open-ended question
    • respondents who do not know/refuse are asked a series of bracketing questions to obtain approximate amount
    • interviewer needs to know current poverty levels by household size, updated each year by the U.S. Census Bureau
Description of measurement protocols in PhenX Toolkit

• Family Conflict (Intimate Relationship)
  – Revised Conflicts Tactic Scale (CTS-2)
    • 78-item questionnaire
    • assesses positive and negative behaviors used in response to conflict between *romantic partners* in past year
    • ½ items refer to respondent’s behavior, ½ to partner’s behavior
    • yields "Self" and "Partner" scores for Negotiation, Physical Assault, Injury, Psychological Aggression, Sexual Coercion
    • positive items: demonstrating care during disagreements, showing respect for partner’s point of view, compromising on disagreements
    • negative items: pushing and shoving during disagreements, using hurtful names and terms, making threats with a knife or gun
    • proprietary
Description of measurement protocols in PhenX Toolkit

- **Family Conflict (Parent-Child)**
  - Conflict Tactics Scales: Parent-Child Version (CTS PC)
    - 35-item questionnaire
    - completed by adult parents of children or by children themselves (?)
    - evaluates how parents deal with conflict with their child, including nonviolent discipline, psychological aggression, and physical assault in the parent-child relationship
    - assessed via 8-point Likert scale that best describes strategies used by parent to manage conflict with child over past year
    - subscales available: Nonviolent discipline; Physical assault; Neglect; Psychological aggression; Weekly discipline; Sexual abuse
    - proprietary
Description of measurement protocols in PhenX Toolkit

• Family Control and Organization
  – Family Control and Organization from the Family Environment Scale (FES)
    • 18 self-administered, true/false questions from 2 subscales
      – Organization subscale: whether activities are planned out, the importance of punctuality, and whether duties are clearly defined
      – Control subscale: importance of rules, whether family members are ordered around, and whether family members each have an equal say in family matters
    • can describe respondent’s current or past family environment
    • for adults and children 11y+
    • proprietary
Missing elements

- Limited direct assessment of/from child
- Some measures not written from perspective of child
- No single measure of construct “household stability”
- Existing measures in PhenX Toolkit may be missing constructs important for child development
  - e.g., annual income does not take into account how income meets family needs
Filling in the gaps

- Income, Assistance, Financial Strain Questions (ECHO)
  - Sources: National Children’s Study; National Longitudinal Surveys; American Community Survey; National Health Interview Survey; National Survey of Children’s Health; NHANES, NHIS, BRFSS
  - 9 questions assessing:
    - annual household income
    - # children and total people supported by income
    - sources of income
    - use of government support (e.g., TANF, SNAP, WIC) in prior year
    - ability of income to meet family needs
    - existence of emergency funds
Filling in the gaps

- “Mother and Home” Questionnaire from ALSPAC
  - Specifically written for mothers, most common caregiver respondent in child studies
  - Includes sections relevant for this construct and Household Composition in one questionnaire
  - Sections relevant for Household Stability:
    - Home
      - Physical qualities of home
      - Problems with bugs/rodents
      - Problems with home quality, neighborhood (e.g., safety, noise, dirtiness)
      - Relationship with neighbors
Filling in the gaps

• “Mother and Home” Questionnaire from ALSPAC
  • Household (overlaps with Household Composition)
    – Who lives in home
    – Marital status of mother
    – Child’s relationship with father
    – Complex assessment of children, where they live, relationship to fathers, other relationships
    – Sibling relationship quality
    – Parents’ feelings toward child
  • Work/finances
    – Mother’s work details
    – Income
    – How money is spent
    – Financial insecurity
Filling in the gaps

• “Mother and Home” Questionnaire from ALSPAC
  – Concerns
    • Level of detail in subsections may be excessive for goals of PhenX Toolkit and needs of most studies
    • Needs editing
      – remove unnecessary/irrelevant sections
      – not tie to certain child age
      – change “British” wording
Filling in the gaps

- **PROMIS Family Relationships**
  - assesses experiences of being involved with one’s family, feeling important and accepted and cared for and that family members (esp. parents) can be trusted and depended on for help and understanding
  - asks about prior 4 weeks
  - versions available for child self-report (ages 8-17) and for parents as proxy reporters for child (ages 5-17)
  - 4-item and 8-item versions
    - longer version recommended for more precise measure, shorter if secondary outcome and limited in time
  - can produce T scores using manual
  - free
Filling in the gaps

- PROMIS Family Relationships
  - Concerns
    - Produces one total score without subscales
    - May not produce much value over FES and CTS scales in PhenX Toolkit
      - Exceptions
        » shorter
        » free
        » can be answered by younger children than FES
Filling in the gaps

• Home Observation for Measurement of the Environment (HOME)
  – Measures cognitive and emotional stimulation in home
  – Mixture of parental interview and observation
    • Relatively objective behaviors/features to be observed
  – Different forms for different age groups
  – Short form available
  – Concerns
    • requires in-home visit and observation
    • some questions may be outdated (e.g., access to record/CD player)
    • proprietary
    • may be more appropriate as measure of caregiving quality or other features of child environment than household stability
Recommendations to the WG

• **Recommendation #1: Home Environment, Protocol source: “Mother and Home” Questionnaire from ALSPAC**
  
  – Using sections from “Mother and Home” Questionnaire, create a measure that includes questions that address both household composition and household stability in a way relevant for pediatric populations.
  
  – Certain sections/items would require editing to remove unnecessary/irrelevant items, change “British” wording, etc.
  
  – Because items across sections do not sum to make total scores, sections could be clearly delineated so that investigators could choose only sections of relevance to their study.