Figure 1: Individual, Dyadic and Familial Influences on Childhood Obesity

**Family/Home Environment:**
- Family Structure
  - Traditional/Non-traditional
  - Extended Family Members/Multi-generational
- Emotional Environment
  - Emotional Closeness
  - Adjustment/Flexibility
  - Conflict/Crisis
- Food Environment
  - Family Meals
  - Importance of Family Meals
  - Food Preparation/Shopping
  - Food Availability/Accessibility
  - Food Talk/Rules
  - Food Insecurity
- Physical Activity Environment
  - Physical Activity (PA) Resources
  - TV, Computer, Video Games
  - Sedentary Behaviors
  - Engaging in PA Together
- Weight Culture
  - Weight Talk/Teasing
- Family Stress
  - Work/Family Balance
- Neighborhood
  - Built Environment
  - Social Capital

**Parental Domain:**
- General Parenting
  - Parenting Style
  - Parenting Self-efficacy
- Personal Health Behaviors
  - Modeling PA and Sedentary Behaviors
  - Modeling Healthy and Unhealthy Eating
  - Encouraging PA
  - Encouraging Healthy Eating
  - Parent Weight/Health
  - Emotional Health (depression, anxiety, self-esteem)
  - Parent Stress/Time Scarcity
  - Trauma/Resilience
  - Coping Skills
  - Overall general health
  - Sleep
- Parent Perceptions
  - Attitudes about Weight & Health
  - Concern about Child Weight & Health
  - Weight Talk/Teasing

**Sibling Domain:**
- Interpersonal Relationship
  - Closeness
  - Support System/Religion/Faith

**Social Demographics:**
- SES, Public Assistance
- Ethnicity/Race
- Parent Education
- Parent Acculturation
- Discrimination

**Child Outcomes:**
- BMI
- Dietary Intake
- Eating Behaviors/Pickiness
- PA
- Sedentary Behavior
- Emotional Health
- Sleep
- Temperament
- General Quality of Life

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**Figure 2: Phase I and II Incremental Study Components and Time Line**

**Phase I**
- In-home visits with diverse families (n=150)

1. **Home Visit 1:** Conducted with research staff & SoLaHmo partners
   - 1. Child dietary recall with primary parent
   - 2. Video-recorded interactive family task
   - 3. Anthropometry collection
   - 4. EMA and accelerometry training
   - 5. HFI and Block Audit

2. **Family Observation Period (8 days):**
   - 1. EMA data collection; both parents
   - 2. Accelerometry collection on child
   - 3. Phone dietary recall on child with primary parent

3. **Home Visit 2:** Conducted with research staff & SoLaHmo partners
   - 1. Child dietary recall with primary parent
   - 2. Parent qualitative interview
   - 3. Validity sub-study measures (n=75 kids)
   - 4. Collect equipment

**Phase II**
- Longitudinal survey data with diverse caregivers (n=1200)

1. **Data Analysis:** Conducted with SoLaHmo partners & research staff
   - **Qualitative**
     - 1. Coding family & child interviews
     - 2. Coding interactive family task
   - **Quantitative**
     - 1. EMA analysis

2. **Time I Data Collection**
   - 1. Recruitment through ePCRN
   - 2. Time I online survey data collection
   - 3. Child height & weight collected via ePCRN

   **Time I Data Collection**
   - Months 24 - 36

3. **Data Analysis & Tracking:** Conducted with SoLaHmo partners & research staff
   - 1. Database management
   - 2. Longitudinal aims data analysis
   - 3. Writing manuscripts
   - 4. Presentations
   - 5. NIH grant summary
   - 6. Tracking for follow-up grant

4. **Data Analysis & Tracking**
   - Months 50 - 60

5. **Survey Development:** Conducted with SoLaHmo partners and research staff
   - 1. Draft of survey
   - 2. Pilot test and Test-retest with Phase I families (n=120; 60 caregiver dyads)
   - 3. Revise survey

**Time II Data Collection**
- Months 42 - 54

6. **Tracking for**
   - Months 19 - 24

7. **Tracking Data Collection**
   - 1. Child height & weight collected via ePCRN
   - Months 36 - 42

**Time II Data Collection**
- Months 42 - 54

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18 Months

42 Months