

A Qualitative Analysis of Participant Perceptions of a Human-Centered, Co-Designed Diabetes Prevention Program

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Background: Youth weight management programs are effective for reducing risk factors for type 2 diabetes (T2D) but have poor rates of participation. Little research exists regarding program characteristics that promote engagement and health improvements. We evaluated perceptions of a co-designed youth weight management program (PowerHouse).

Project Methods: We interviewed five mother-child dyads (youth aged 7-18 years) who participated for 6 months in PowerHouse. Youth met criteria for overweight or obesity (BMI $\geq 85^{\text{th}}$ percentile) and had two or more additional risk factors for T2D. One interviewer engaged each dyad separately. Each interview transcript was standardized using a predetermined format and words such as *uhm* and *like* were eliminated. Transcripts were uploaded into Atlas.ti qualitative analysis software. Emergent thematic coding was performed, and broad themes related to participant expectations, likes, and dislikes were identified.

Results: The following themes emerged: 1) Parent expectations focused on their children's actions and behaviors rather than their own. Parents want children to learn to make "good choices now so as they get older, they would potentially be in the situation of not having diabetes"; 2) Participants liked to "learn something new and to try something new" rather than learning didactically and shared meaningful social interactions, realizing "a bunch of us are going through the same things"; 3) taking time away from a busy schedule when the whole family is not engaged is hard.

Potential Impact: This research suggests participants value socially engaging, experiential learning. Parents expect youth will take responsibility for their own health habits, which should be explored more fully in future work. Nonetheless, parental involvement and support is associated with better weight management outcomes in youth; thus, strategies that align parental and youth expectations are needed. Based on these findings, a strategy that includes shared-decision making, managed and aligned expectations, and goal setting with parent-youth dyads could further improve PowerHouse.