**Title:** Promoting Physical Activity for the Blind and Visually Impaired Individuals in the Community: Implementation of the PRECEDE/PROCEED Model of Health Promotion Program Planning During a DPT Student Led Service-Learning Project

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## Purpose:

Demonstrate use of the PRECEDE/PROCEED model to conduct a DPT student-led community health promotion service-learning project that addressed the needs of the blind and visually impaired community in the Houston metro area

# Subjects:

Subjects were the blind and visually impaired members of the Houston community, of which 18 participated in the activities exposition (the EXPO).

### Methods:

The PRECEDE/PROCEED Model is a community-oriented participatory planning model with 8 phases. During phases 1 and 2, stakeholders were interviewed to determine needs, and a literature review was conducted to assess relevant epidemiological factors. Improving physical activity behaviors emerged as a theme. During phase 3 factors influencing physical activity behavior change were identified. Most important and changeable factors were converted to program objectives: increase interest in physical activities, improve current physical activity stage of behavior change, and address lack of targeted physical activity programs for this population in the community. A physical activities exposition was conceived as the intervention to address objectives. During phase 4, administrative, policy and program alignment, resources and space were obtained. Phase 5, implementation, occurred on November 18, 2014. Participants were divided into 4 groups. They were guided through 4 rotations: accessible walking trail, beep baseball/adaptive tennis, Judo, and the fitness gym. Phase 6, process evaluation, occurred throughout the Expo and adjustments were made as needed. Phase 7, impact evaluation, was conducted via informal survey and focus group. One year after the Expo, phase 8, outcome evaluation, will take place to examine long-term impact of this intervention on quality of life issues identified in phase 1.

### **Data Analysis:**

Pre-intervention and post-intervention surveys scores were compared. The difference in scores was used to summarize results of the qualitative study.

### Results:

During phase 1, over 55 surveys were administered, and 30 individuals participated in focus groups. The results indicated that the target population was most interested in learning about physical activity and the availability of classes. Group activities were also highly preferred over individual activities. Barriers to physical activity cited were lack of time, unreliable transportation and decreased motivation. In phase 5, during implementation of the Expo, 18 participants (n=18) with visual impairments attended. At the conclusion of the Expo, there was a 33% increase in interest in becoming more physically active, and a 12% increase in desire to pursue Judo as a physical activity. There was a 50% increase in the number of participants moving from the pre-contemplation stage to the contemplation stage for physical activity behavior change.

### Conclusion:

DPT students successfully used the PRECEDE/PROCEED model to design and implement a health promotion program for the Blind and Visually Impaired community.

#### Clinical Relevance:

Physical therapists can use this example of how to utilize an evidence-based participatory planning model to implement community health promotion programs and facilitate physical activity behavior change in underserved and underrepresented populations.

### References:

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**KEYWORDS:** health promotion, community health, service learning.