**Background**

- Multiple Sclerosis (MS) is an auto-immune system disease that is estimated to affect 1 in 1000 people in the US.
  - It results in a variety of associated (e.g., fatigue, spasticity) and secondary conditions (e.g., depression).
- Physical activity (PA) is linked to improved performance of activities of daily living, reduced severity of secondary conditions related to MS, and improvements in quality of life.
- There is little translational research and health promotion programs on increasing PA in this population.

**Purpose**

- To pilot the effectiveness of Health Education for Persons with Multiple Sclerosis (HEMS) on increasing PA and constructs of the Social Cognitive Theory (SCT).
  - Self-efficacy
  - Outcome expectations
  - Social support
  - Goal achievement

**Methods**

- Recruitment: Existing MS Exercise Program at Oregon State University
- Participants:
  - 21 participants (ages 31-74)
  - Average years of MS =14 years
  - 63% had Relapsing Remitting MS; 32% Secondary Progressive MS; 5% Primary Progressive MS
- Procedures:
  - Pre-experimental design (single group pre-test/post-test design) consisting of 8 week periods of assessment.
  - Analysis: One-way ANOVA utilizing STATA 11.2 Statistical Program

**Results**

- Table 1: HEMS Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Pre-Assessment</th>
<th>Post-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td><strong>SD</strong></td>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>6.06</td>
<td>3.30</td>
</tr>
<tr>
<td>Social Support</td>
<td>2.83</td>
<td>1.22</td>
</tr>
<tr>
<td>Outcome Expectations</td>
<td>4.07</td>
<td>0.71</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>2.52</td>
<td>1.01</td>
</tr>
<tr>
<td>Pedometer Steps</td>
<td>4845</td>
<td>3537</td>
</tr>
</tbody>
</table>

- Table 1 displays the results of the intervention.
- None of the outcomes were statistically significant between pre and post assessment, but self-efficacy (p=0.08) was approaching significance.

**Conclusion**

- With modifications (e.g., frequency and mode of data assessment), we believe the HEMS program can increase PA and SCT constructs in a larger scale study with more participants.