# COMPENSATORY STRATEGY USE DIFFERS BY LEVEL OF SELF-REPORTED COGNITIVE ISSUES: IMPLICATIONS FOR SELF-MANAGEMENT PROGRAM DEVELOPMENT

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Background

- Self-management programs can help persons with multiple sclerosis (MS) improve their quality of life and functioning.
- Up to 70% of persons with MS have cognitive difficulties, but few self-management programs have focused on compensatory skill development.

## Objectives

• To explore 1) which compensatory cognitive strategies are used the most (often or all the time) by persons with MS and 2) whether their usage differs by level of self-reported cognitive issues.

## Methods

#### **Participants:**

- Persons with MS (n = 1,075) recruited nationally through the National MS Society, Mandell MS Center, and University of Washington.
  - 80.6% women
  - 82.5% White/European descent
  - 69.1% relapsing remitting MS
- Level of self-reported cognitive issues determined using the SymptoMScreen.
  - Mild: Frequent adjustments made (n = 549)
  - *Moderate:* Reduce daily activities (*n* = 320)
  - Severe: Gave up some activities (n = 206)

#### **Outcome Measure:**

- 20-item Compensatory Cognitive Strategies Scale
  - Responses aggregated into three categories: Never/Rarely, Sometimes, and Often/All the Time.

# Methods (Cont.)

#### **Statistical Analyses:**

- First chi-squares were used to compare frequencies of usage between the three groups, with Bonferroni corrections for pairwise comparisons.
- If significant differences, then conducted individual logistic regressions with mild group as reference category, adjusting for gender, race, education, disability level (Patient Determined Disease Steps; PDDS) and MS type.

## Results

- Thirteen of the strategies (65.0%) were used ≥50% by at least one subgroup.
  - Establish a routine for placing items and use electronic reminders were the two most frequently used strategies for all three groups.
- No significant difference in usage on three strategies between the mild, moderate, and severe groups:
  - Use electronic reminders (79.3%/83.7%/66.2%)
  - Take notes during presentations (65.2%/68.1%/66.2%)
  - Minimize distractions in the workplace (44.2%/52.2%/53.9%)
- Compared to the mild group, the severe group had higher usage on 17 strategies while the moderate group had higher usage on 15 strategies (**Figure 1**).
  - Differences remained significant after adjusting for demographics and disease-related factors.
- Severe group also had higher usage than the moderate group on three strategies:
  - Slow pace of communication: 41.0% vs. 30.2%, p = .034
  - Request accommodations: 38.4% vs. 26.0%, p = .008
  - Slow down/avoid fast reaction times: 63.4% vs. 46.2%, p < .001

## Conclusions

- Persons with MS-related cognitive issues report the use of compensatory strategies, independent of demographic and disease-related factors.
- Strategies related to information processing (e.g., slowing the pace of communication and avoiding situations with fast reaction times) had the largest increase in usage as self-reported cognitive issues worsened..
- A cognitive-focused self-management program may be beneficial early in the disease process, as well as a therapeutic intervention across the MS continuum.
  - Programs may consider emphasizing strategies that become more frequently used when persons with MS report having more cognitive issues that impact their daily functioning.

## References

Available upon request.

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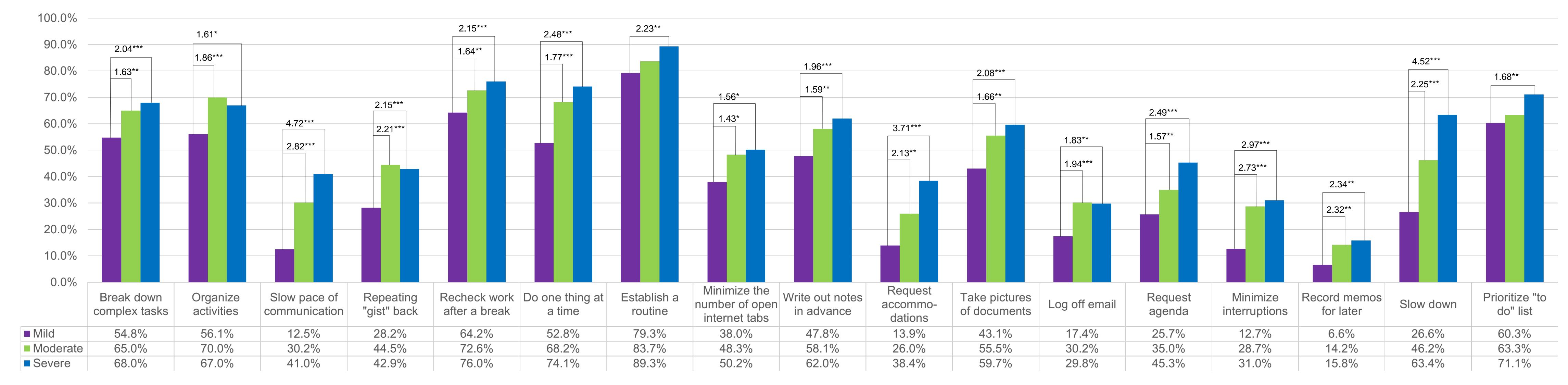


Figure 1: Strategies where the percentage of individuals who used them often or all the time differed between mild group and moderate or severe groups. Adjusted odds ratios (aOR) reported. \* p < .05; \*\* p < .01; \*\*\* p < .001