

Effect Of The U.S. Pointer Lifestyle Intervention On Health-Related Quality Of Life



Poster #3312

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Structured Group showed significantly improved physical health and general health perceptions than self-guided group over two years of intervention

INTRODUCTION

- **Health Related Quality of Life (HRQoL)** reflects individuals’ perceived physical, emotional, and social well-being
- Considered an important secondary outcome of preventive or therapeutic interventions
- U.S. POINTER trial showed significant cognitive benefits over two years in participants (n=2111) randomized to a structured (STR) group targeting diet, physical activity, social and cognitive stimulation, compared to a lower intensity self guided group (SG).¹
- We examined whether intervention group assignment affected HRQoL

METHODS

- **HrQoL Measures**
 - SF36 Physical, Mental Health, and General Health subscales (0-100, higher scores = better health)
 - EQ-5D overall health valuation; (0 (worst possible health state) – 100 (best possible health state)
 - Administered at baseline, 12 months and 24 months
- **Potential Mediators of Change**
 - Geriatric Depression Scale (GDS)
 - Demographic variables (age, sex, race/ethnicity, education)
 - Framingham Risk Score (FRS)
 - Baseline cognitive global score
 - Short Physical Performance Battery (SPPB)
- **Statistical Analysis**
 - Mixed effects models for repeated measures—intention to treat analysis with all available data points
 - Linear contrasts between intervention groups at each time point
 - Subgroup comparisons on potential mediators of change

¹Baker LD, Espeland MA, Whitmer RA, et al. Structured vs Self-Guided Multidomain Lifestyle Interventions for Global Cognitive Function: The US POINTER Randomized Clinical Trial. *JAMA*. 2025;334(8):681–691.

RESULTS

- Well balanced groups after randomization (**Table 1**)
- SF36 General Health scores improved for STR group, but remained stable for SG group (**Figure 1**)
- SF36 Physical Component scores declined more in SG vs STR group (**Figure 2**)
- SF36 Mental Health Component Scores did not differ significantly over time and generally improved (**Figure 3**)

Table 1. Participant Characteristics by Intervention Group		
Characteristic	Structured N=1056	Self-Guided N=1055
Sex		
Female	721 (68%)	734 (70%)
Male	335 (32%)	321 (30%)
Age, years		
60–64	303 (29%)	319 (30%)
65–69	297 (28%)	289 (27%)
70–74	313 (30%)	316 (30%)
75–79	143 (14%)	131 (12%)
Education		
High School or Equivalent or Less	54 (5%)	56 (5%)
Some College	257 (24%)	268 (25%)
College Graduate	240 (23%)	249 (24%)
Post College	498 (47%)	472 (45%)
Other or Not Reported	7 (1%)	10 (1%)
Ethno-Racial Identification*		
American Indian/Alaska Native	11 (1%)	12 (1%)
Asian/Asian American	35 (3%)	26 (2%)
Black/African American/African	167 (16%)	186 (18%)
Hispanic/Latinx/Spanish	75 (7%)	71 (7%)
Middle East/North African	2 (0%)	3 (0%)
Native Hawaiian/Pacific Islander	1 (0%)	0 (0%)
White/European American	787 (75%)	782 (74%)
Other	53 (5%)	43 (4%)
No Response	8 (1%)	8 (1%)
Any Minoritized Group	326 (31%)	321 (31%)
Framingham Risk Score		
Prior CVD		
<10	162 (15%)	119 (11%)
≥10	289 (27%)	331 (31%)
	605 (57%)	602 (57%)
Standardized Cognitive Composite Score	-0.03 (1.00)	0.03 (1.00)
SPPB	10.9 (1.3)	11.0 (1.3)

RESULTS (cont.)

- EQ5D Scores improved significantly in STR compared to SG group (**Figure 4**)
- Changes equivalent across subgroups of interest except for improved mental health scores in men with no change in women
- HRQoL improvements did not account for improved cognitive scores in STR group

Figure 1

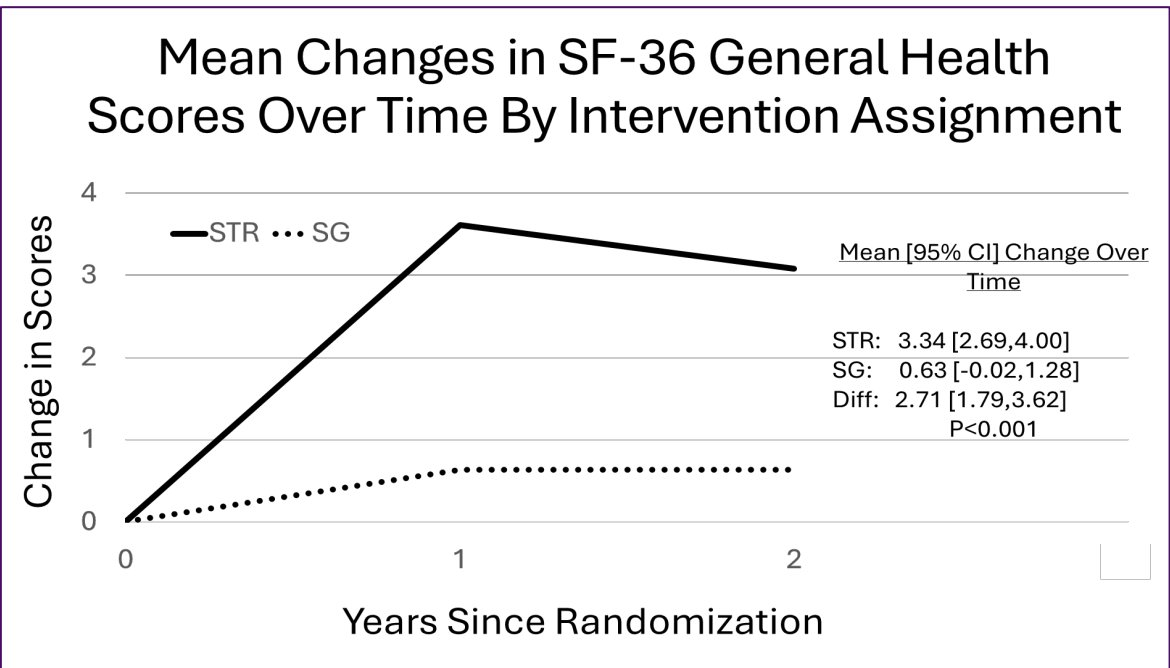
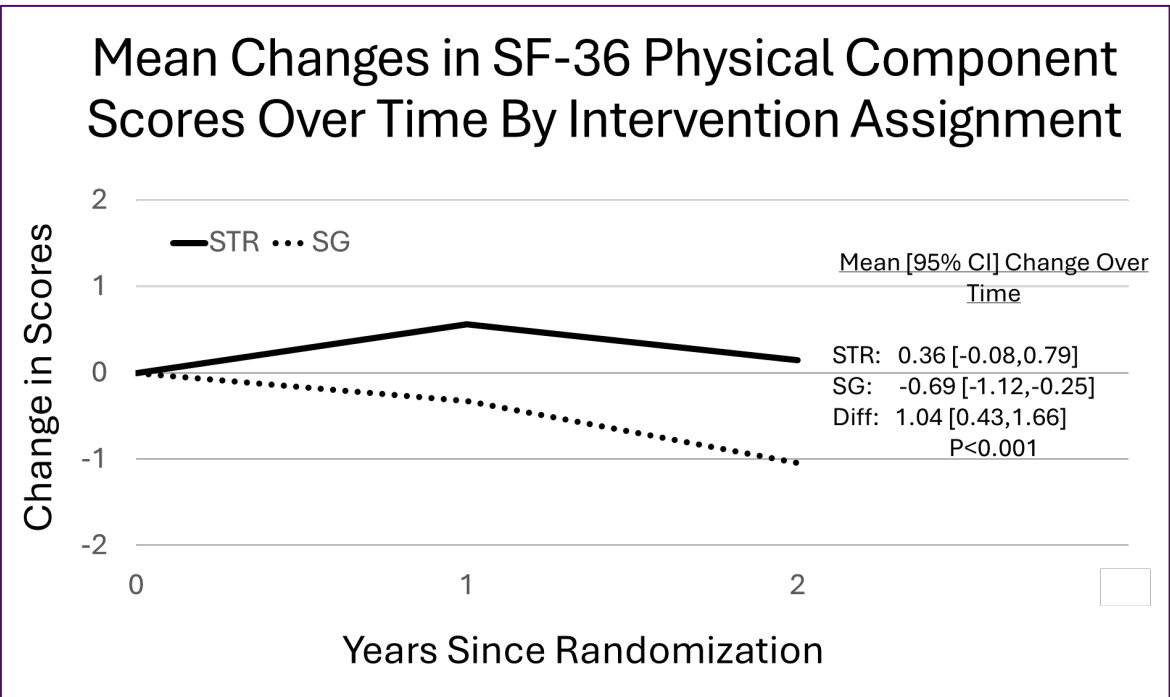


Figure 2



Acknowledgements

The U. S. POINTER trial was funded by the Alzheimer's Association

Figure 3

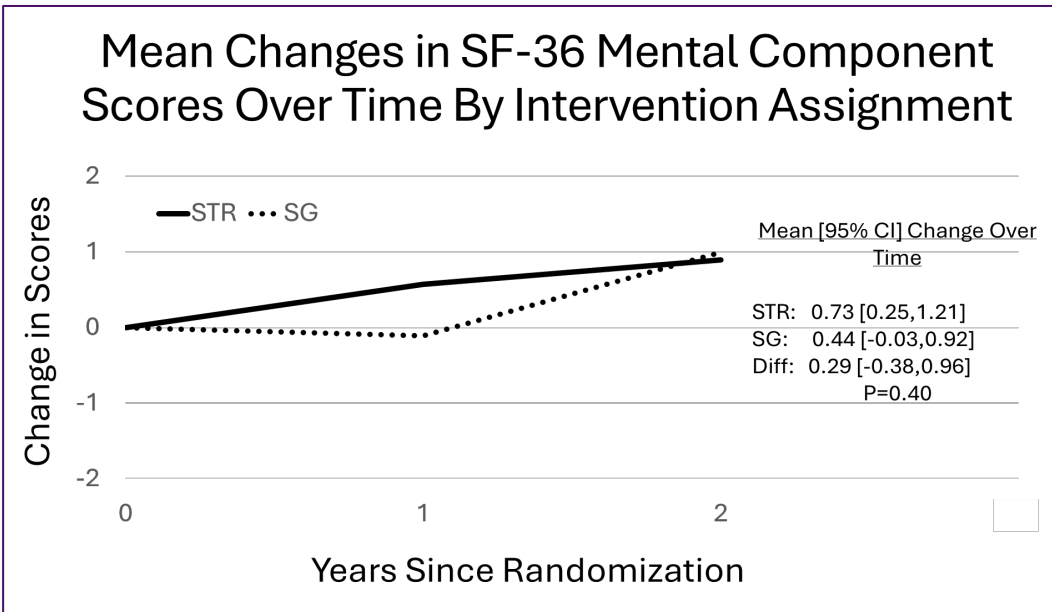
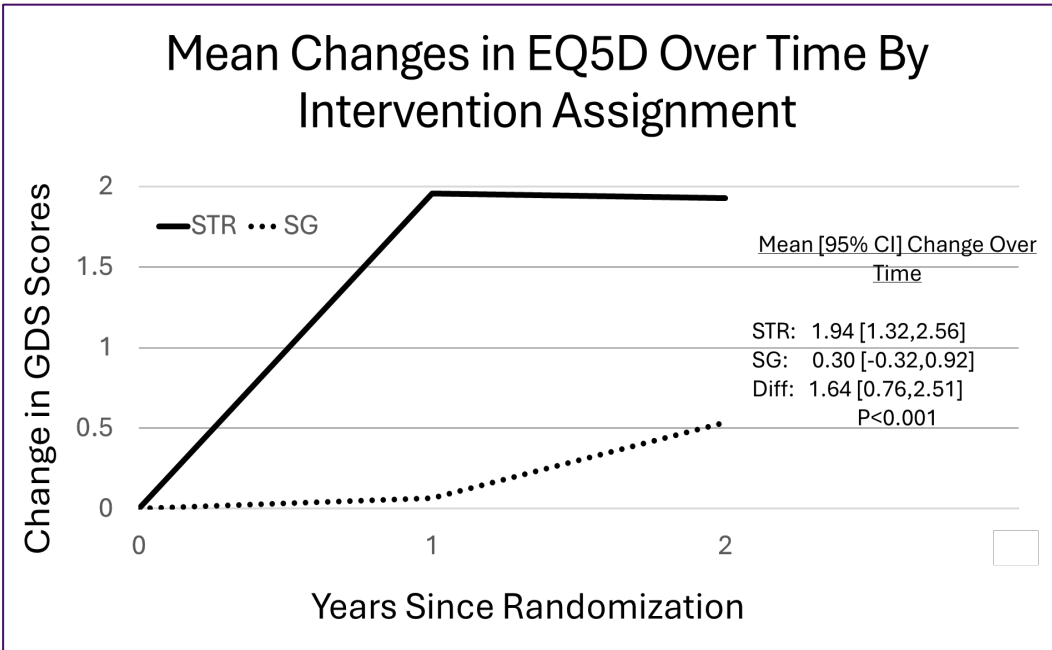


Figure 4



CONCLUSIONS

- STR group participants had significant improvements in HRQoL general health and physical health perceptions compared to SG group.
- HRQoL improvements were independent of cognitive improvements
- Comparison with FINGER trial HRQoL results² suggests that physical and overall health ratings can be expected from successful multidomain lifestyle interventions, but mental health benefits may be limited to specific subgroups

²Ngandu T, Lehtisalo J, Solomon A, et al. A 2 year multidomain intervention of diet, exercise, cognitive training, and vascular risk monitoring versus control to prevent cognitive decline in at-risk elderly people (FINGER): a randomised controlled trial. *Lancet*. 2015;385(9984):2255-2263