

BACKGROUND & PURPOSE

Background

- Alexander technique (AT) is a non-exercise approach that uses attention and inhibition to change functional patterns, reduce excessive muscular co-contraction, and improve coordination in everyday life.
- Previous findings indicated significant improvement in people with Parkinson's disease (PD) relative to control group in balance, mobility, anxiety, and dyskinesia following an AT group course.



Purpose

To measure retention of benefits in functional mobility and symptom management during daily living for people living with PD, 3 - 6 months after the course ended.

DESIGN

Non-randomized controlled trial. 90-minute AT group classes met twice weekly over eight weeks. Care partners participated when possible.



- Experimental group
- Wait-list control group
- Control group

Self-reports and objective assessments were done pre and post course and 3 - 6 months after AT class ended.

PARTICIPANTS

	Experimental Group	Waitlist Control Group	Control Group
N (Men/Women)	6/4	3/2	5/0
Age	65.9 ± 5.4	70.6 ± 9.3	73.5 ± 3.7
Employment	Retired (6) Disabled (4)	Retired (4) Working (1)	Retired (5) Working (1)
Years since diagnosis	5.7 ± 3	7.6 ± 4.5	3.7 ± 3.8
Hoehn & Yahr	2.5 ± 0.8	2 ± 0.9	2 ± 0.6

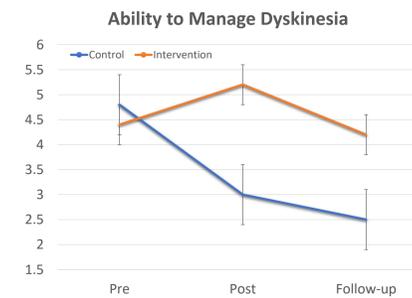
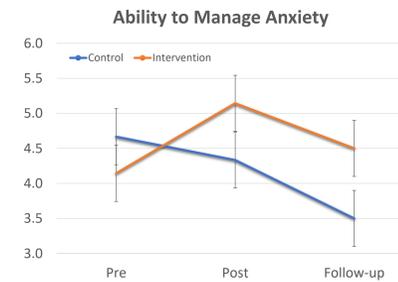
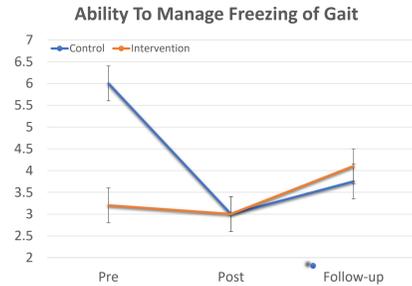


All subjects reported themselves as white, with household incomes of \$50,000-\$75,000.

MEASURES

- Survey about symptom management: Participants with PD and care partners
- Anonymous course evaluations: Participants with PD and care partners
- Physical Performance Test (PPT): Assesses 7 domains of physical function
- BriefBEST: A short, validated version of the Balance Evaluation Systems Test
- Posture angles from photos (tragus-C7-sternal notch)
- Activities Balance Confidence (ABC) Scale

RETENTION RESULTS – SELF-REPORTS



Abilities to manage Parkinson's symptoms were self-rated on a 1-5 scale. At follow-up, the AT intervention group reported significant improvement in freezing, anxiety, and dyskinesia compared to the control group.

Quotes from three-six months after class

"These things have become more natural to do without thinking. I'll be doing my walking or something else and I'll remember: Pause. Poise. Perceive. Proceed." Participant with PD

"If I clear my mind, go through the steps and get my poise, I can walk across a crowded basement floor without tripping over something. I can pick up an object and carry it." Participant with PD

"We know we're there for each other more. There's less of that awkwardness about it. The dance is more graceful between us." Care Partner

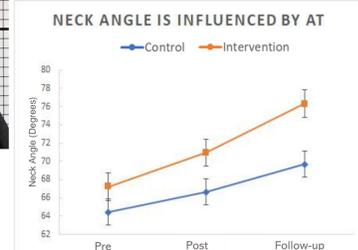


Self-reported improved ability to manage symptom 3-6 months after AT course*

Symptom	Control	AT Class
Anxiety	0%	71%
Depression	0%	60%
Freezing of Gait	0%	60%
Dyskinesia	0%	38%
Upright Posture	40%	60%
Rigidity	20%	40%
Rolling Over	33%	45%
Pain	50%	30%

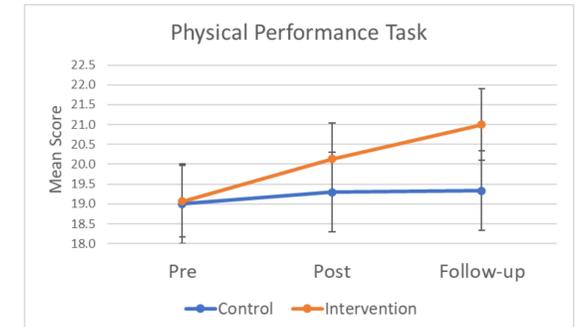
*Only analyzed symptoms/issues reported by at least 8 participants w/ PD

RESULTS – POSTURAL ALIGNMENT



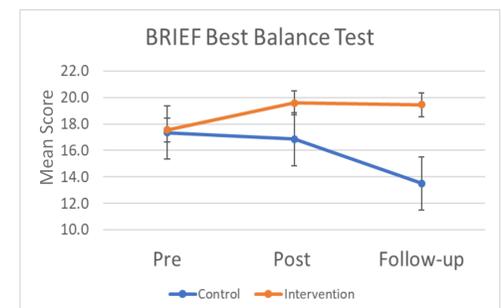
Postural alignment, as assessed by neck angle, became significantly more upright after AT classes (p=.01) and remained more upright after 3 months (p=.02).

RETENTION RESULTS – PHYSICAL PERFORMANCE



- Physical performance improved after the course in the AT intervention group but not in the control group.
- At follow-up, performance continued to improve in the AT intervention group and remained flat in the control group (p<.01).

RETENTION RESULTS – BALANCE



- Balance improved in the AT intervention group but not in the control group.
- At follow-up, balance continued to decline in the control group and remained steady in the AT group (p=.02).

CONCLUSIONS

- Eight weeks of Alexander technique training may provide long-term retention of benefits like physical performance and balance.
- Group courses that include participants with Parkinson's disease and their care partners are cost-effective, with additional social and relationship benefits.

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