



Fitness “Fab Four” for PwP

Theresa Najjar, PT, DPT, MS
11/10/2020



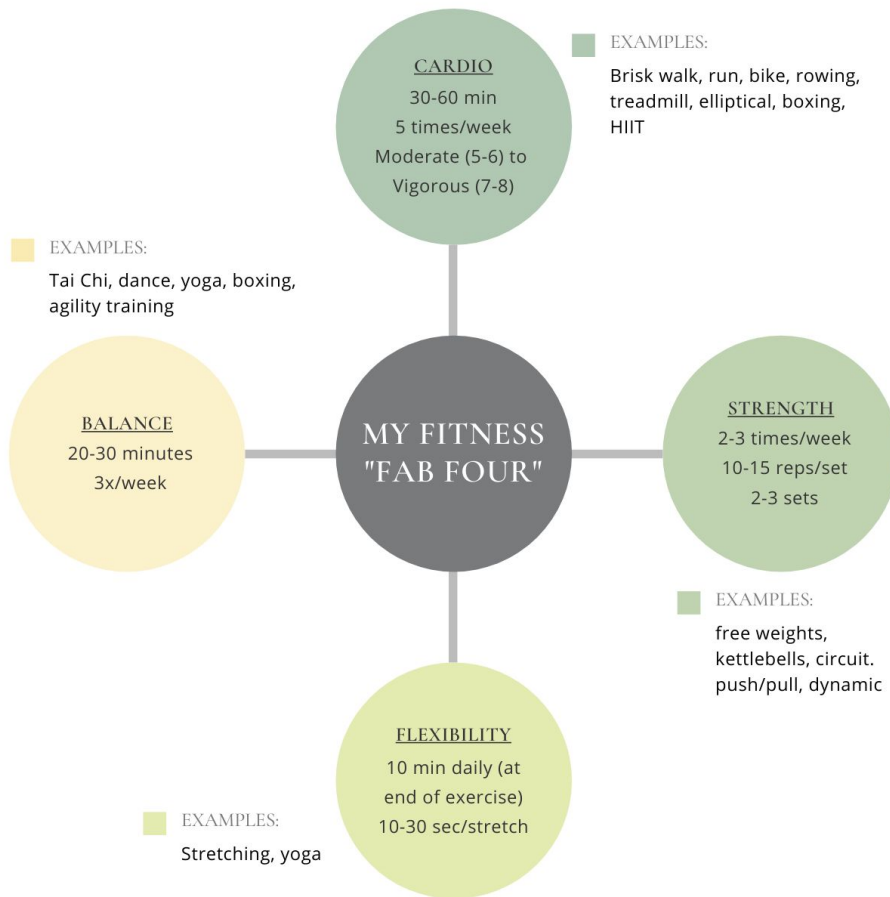
“Fab Four” Fitness Targets for People w/PD

- Many types of fitness activities are beneficial for PwP
 - Ex. Cario, boxing, tango, tai chi, yoga, HIIT
- There is no “**perfect**” exercise for PwP
 - The “BEST” exercise is one you will stick with over the long term

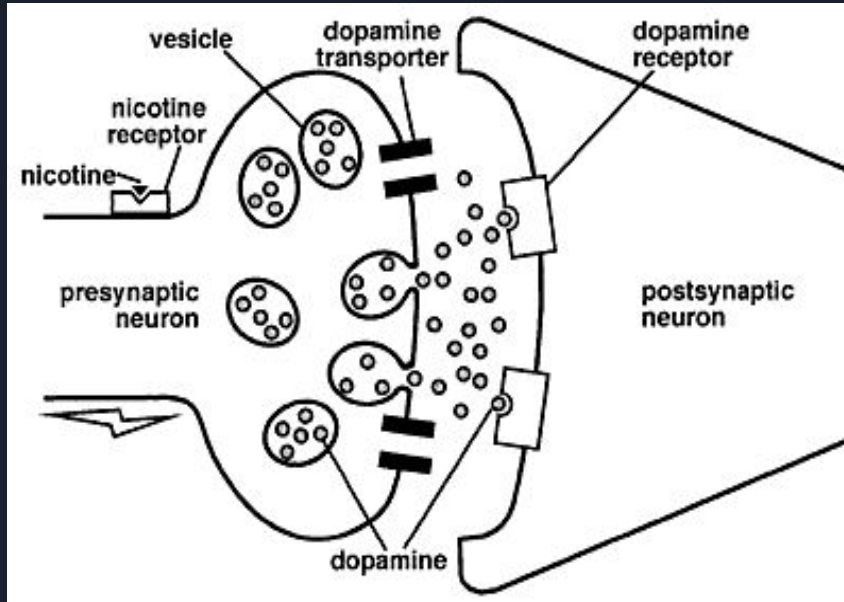
- There are four fitness targets that you may want to try to hit to ensure you have a well rounded fitness program. I call these the “Fab Four”

FITNESS PLAN BENCHMARKS:

Here are the fitness "FAB FOUR" for people with Parkinson's!



Intensive Exercise Changes the Brain



Does **NOT** change amount of dopamine in brain

↑ release of dopamine

↓ re-uptake of dopamine

↑ dopamine receptors
↑ dendritic spines

↓ excitability of GluR2



10	MAXIMAL EFFORT I am completely exhausted and I can't keep going.
9	VERY HARD INTENSITY I can barely breathe or speak a single word. I should slow down.
8	VIGOROUS INTENSITY If you ask me a question, I can say 1-2 words or grunt in response. I can only keep this pace up for a short time.
7	VIGOROUS INTENSITY I can still talk - but I don't really want to! I'm sweating a lot now.
6	MODERATE INTENSITY I can still talk but I'm a little breathless. I'm definitely sweating.
5	MODERATE INTENSITY I'm a little above comfortable. I can still talk easily but I am sweating more.
4	LIGHT MODERATE INTENSITY I'm sweating a little. I feel good and I can chat with others comfortably.
3	LIGHT INTENSITY I'm still comfortable, but am breathing a little bit harder.
2	LIGHT INTENSITY I'm comfortable and can keep up this pace all day long.
1	VERY LIGHT INTENSITY I am lounging on the couch and eating bon bons.



Cardiovascular Training for PwP

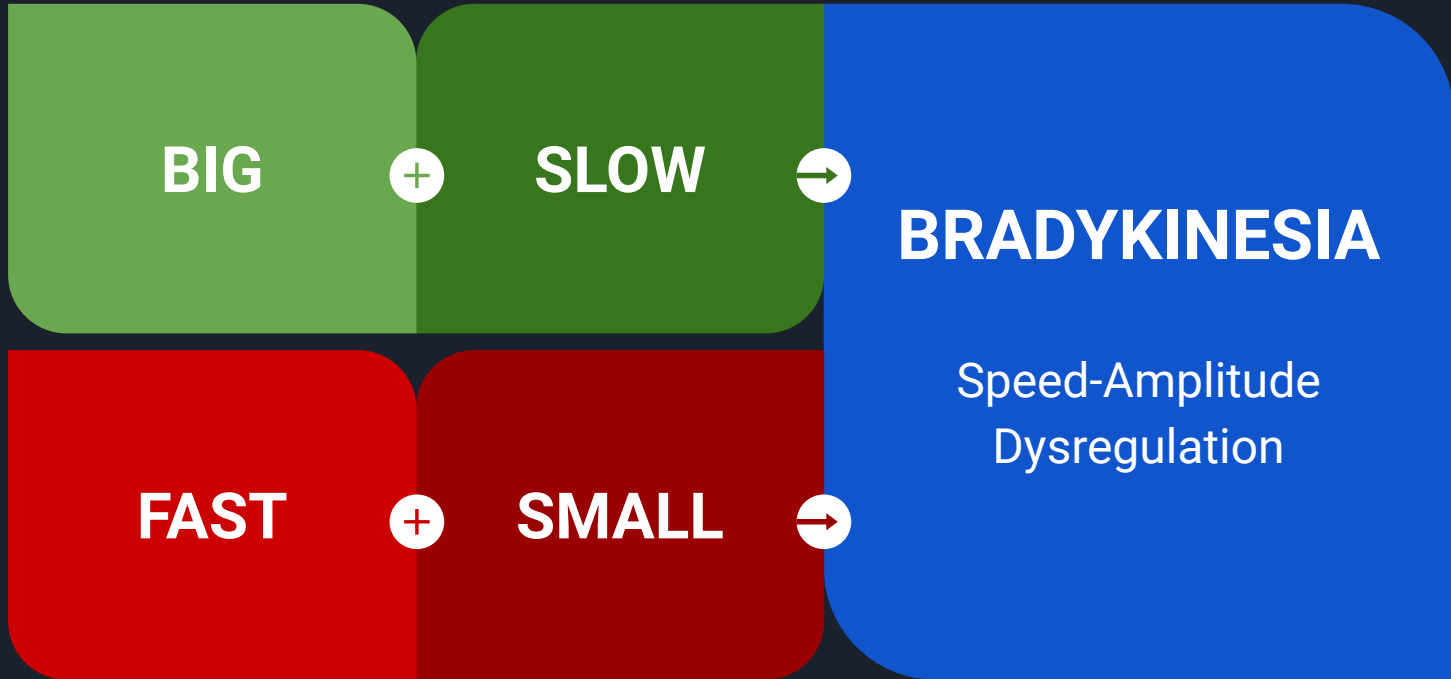
- VO2 Max = max rate of oxygen consumption during incremental exercise (↑ intensity)
 - Measure used to establish aerobic endurance
- VO2 Max is similar between people with PD and age-matched peers, **BUT...**
 - PwP reach their Max VO2 faster with less power output
 - PwP have lower walking economy (less efficient use of energy while walking)
- **EVEN SO...** People with PD have potential to reach **near normal** exercise capacities with cardiovascular training



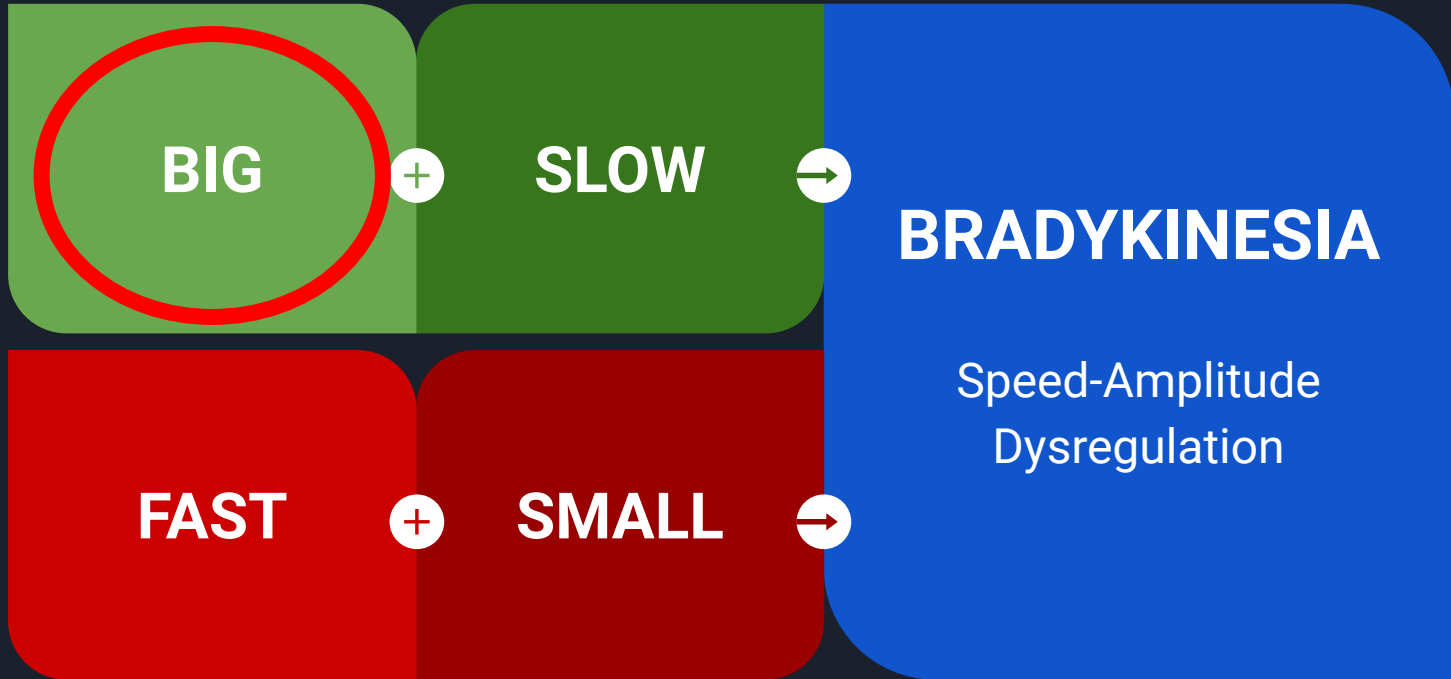
Cardiovascular Training for PwP

- Endurance training is **well tolerated**
- No serious adverse events reported
 - Non-serious adverse events = soreness, pain, orthostatic hypotension
- Recommended intensity:
 - 60 - 80% Peak HR
 - Moderate to Vigorous on the RPE scale
- Get a pre-screening by a fitness coach or physical therapist for exercise tolerance
- Monitor vitals during exercise

Other Fitness Considerations: Bradykinesia



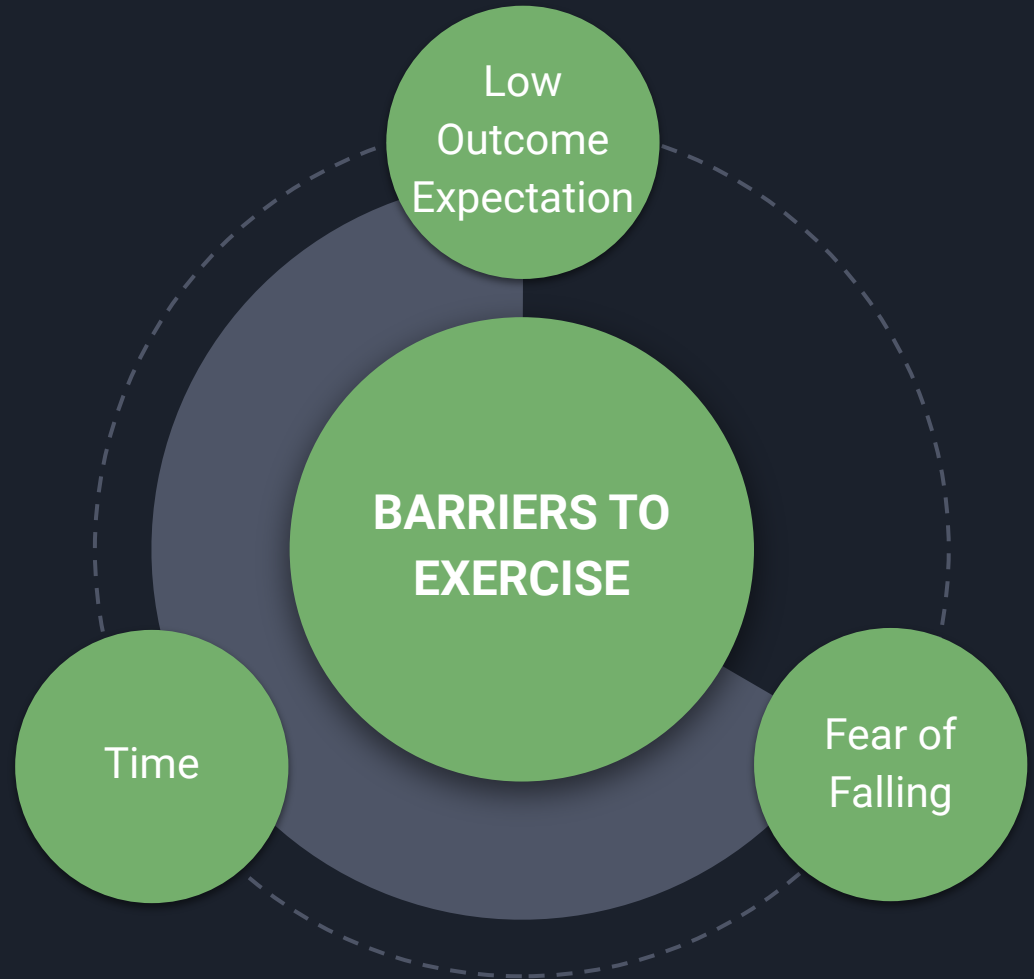
Other Fitness Considerations: Bradykinesia



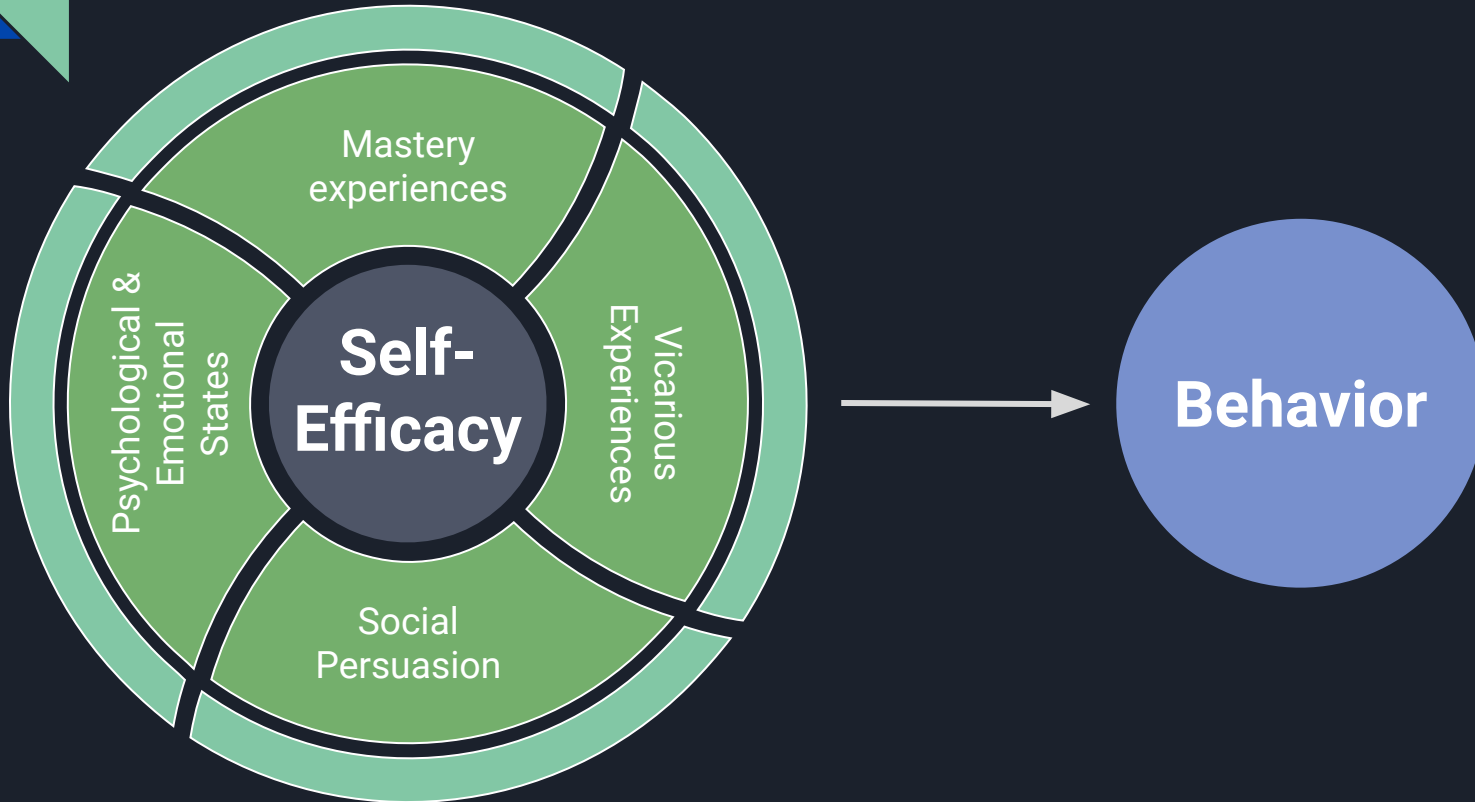


Other Fitness Considerations:

- Long Term Engagement!!!



Other Fitness Considerations:





In Summary:

- Try to fit in your “Fab Four” each week
- Think about exercise intensity, especially during cardio
 - Aim for Moderate to Vigorous (Use RPE Scale)
- Intense exercise literally changes the brain
- Do a self-audit on your own barriers to exercise
- What are ways you can stay engaged in exercise long term?

Thank you!!!

Theresa Najjar, PT, DPT, MS
Board Certified Neurologic Clinical Specialist
Synaptic Physical Therapy, Inc.
Ph: 408-724-8466
Em: theresa@synapticpt.com
Instagram: @synaptic.pt
Website: synapticpt.com

