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Background

- The ability to transfer to and from the floor in PwP's is an important skill to test and train over time because it inevitably deteriorates, secondary to the multiple motor and non-motor symptoms of PD. The loss of this skill in human aging is strongly associated with sit to stand outcomes, frailty and disability. In PwP, it especially interferes with functional mobility at home and participation in community exercise programs.
- Many exercise instructors will avoid floor activities, or assign those individuals to a sitting only class, even when that person may be able to perform the skill with minimal assist. This may partially be due to not understanding how to screen, adapt, cue or instruct participants in getting to and from the floor safely and efficiently.
- This "forced nonuse" results in lost opportunities to participate in physically and cognitively challenging floor exercises that are not only safe for PwP, but they benefit sensori-integration, visual perceptual processing, strength, balance, cognition, sit to stand performance, reduced fear of falling and more!
- Despite its clinical and community importance, validated, standardized methods for assessing floor transfer ability are limited. There is also a critical need for community exercise instructors to have a practical screening tool to determine how best to assist individuals in safely getting to and from the floor.
- Our previous research* established retrospective cutoff scores using common physical therapy outcome measures (including the original SPS-FTT), as part of a decision-making tool for stratifying persons with Parkinson disease into multilevel exercise classes*.
- We have since revised the scoring of the SPS-FTT to standardize our process for characterizing the qualitative aspects of assist required (adaptations, cueing, physical assist) and the movement deficits impacting quality and safety.
- We propose others use this tool for stratifying group classes, identifying early decline, documenting outcomes, or predicting falls. We welcome feedback and look forward to documenting reliability!

Purpose

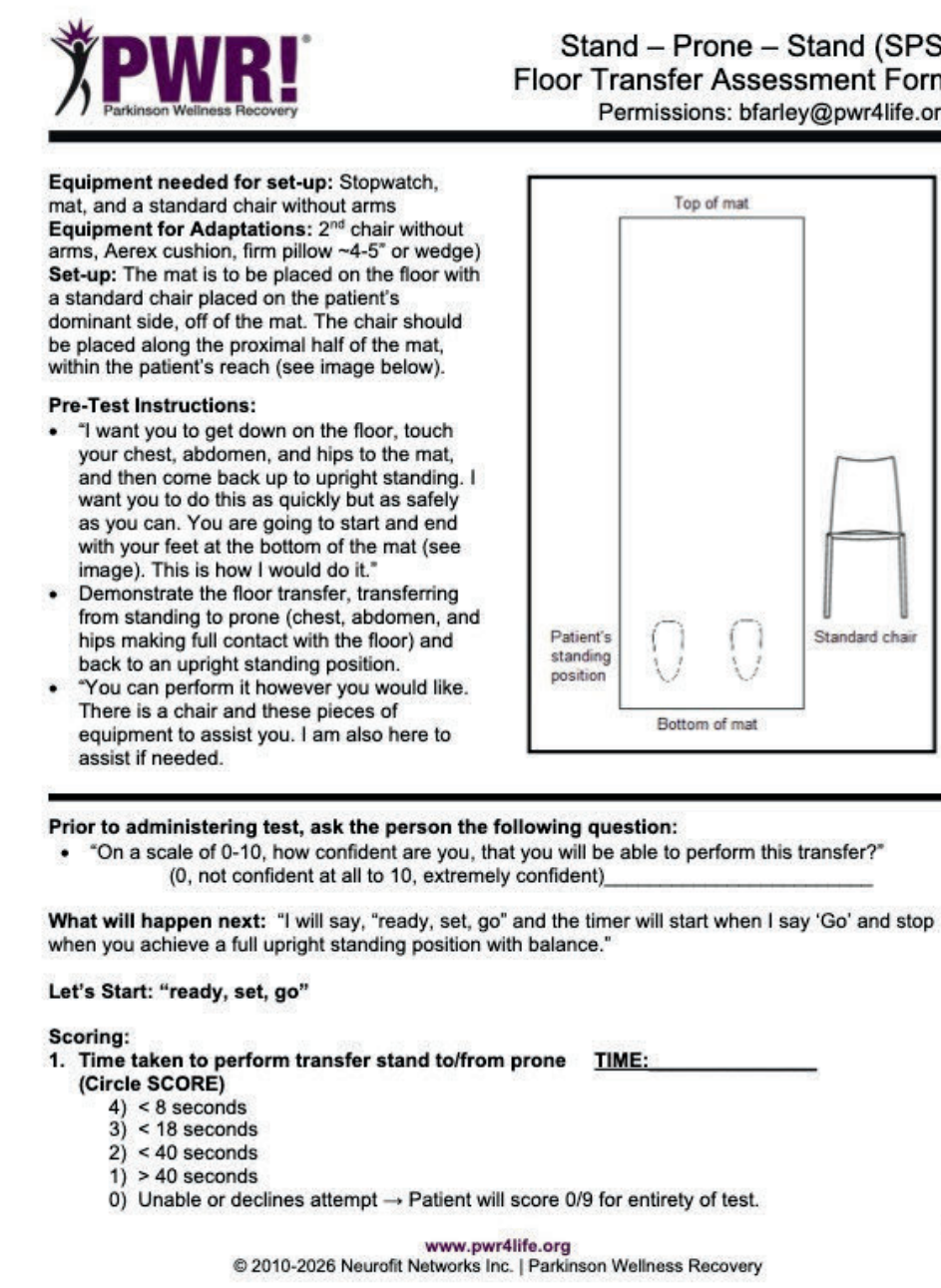
- Validate the use of our cut-off scores using the Revised SPS-FTT based upon the Total Time score for stratifying group fitness and mobility levels in a large prospective community cohort.
- Understand how the qualitative insights captured in our Combined score (time+total assist+deficits) may be helpful to guide instructors in how to adapt, cue, instruct and design floor exercise for PwP.

Methods

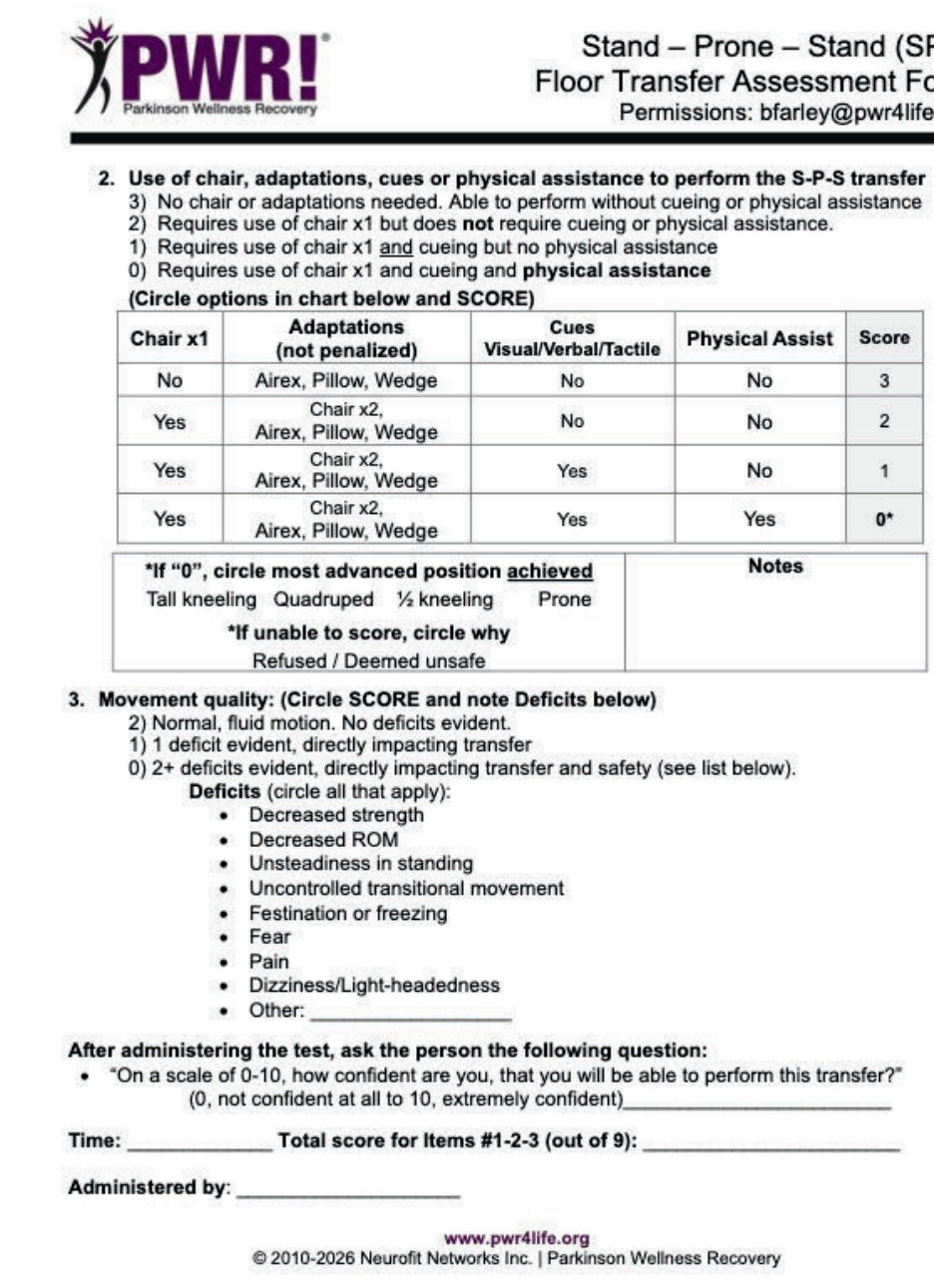
Participants: Baseline assessment data from N=838 PwP at the Kirk Gibson Center for Parkinson's Wellness (KGC) was used for this analysis. Data was collected to stratify participants into PD-specific exercise classes based upon four color levels (Yellow, Green, Orange, Blue) from lowest to highest level of fitness/functional mobility. This cohort is larger than the preliminary N=333 reported in our original abstract submission.

Outcome Measures: This abstract is only reporting on the Personal Factors and the Revised Standing-Prone-Stand Floor Transfer Test (RevSPS-FTT) outcomes. KGC stratification outcomes for the complete dataset can be viewed at **Poster #45.39**.

Statistics: A one-way ANOVA was conducted to examine differences between the four groups on age, years since PD diagnosis, and number of falls in the past 6 months. Paired-sample t-tests were conducted to examine changes in floor transfer confidence within each exercise class group.



Use QR Code for link to:
 References
 Test Forms
 "How to Test" videos
 & more!



Quantitative Results

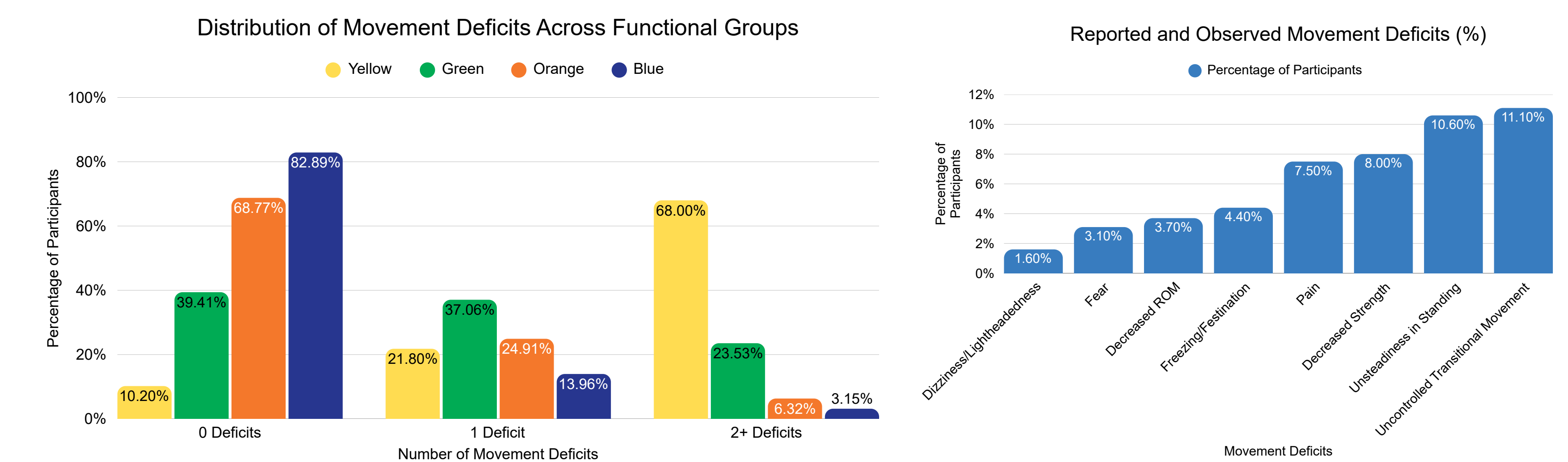
Personal_Factors (Mean)	Yellow (n=153)	Green (n=191)	Orange (n=272)	Blue (n=222)	p-value
Age	76.95	74.07	70.24	66.02	$p < .001$
Years_since DX_2025	7.66	6.02	5.88	5.33	$p < .001$
6-month Fall Frequency	9.82	3.72	1.99	0.83	$p < .001$
Floor Transfer Outcomes (Mean)	Yellow	Green	Orange	Blue	p-value
Time Score (s)	38.47	23.46	13.74	8.63	$p < .001$
Combined Score (0-9) (time+total assist+deficits)	1.29	4.73	7.10	8.30	$p < .001$
Pre Transfer Confidence	3.82	6.34	8.3	9.18	$p < .001$
Post Transfer Confidence	4.54	7.3	8.93	9.47	$p < .001$
Transfer Confidence Change Score (Mean/SD)	0.61/1.7	0.96/1.7	0.63/1.5	0.25/1.3	$p < .001$

- Stratified groups were significantly different from one another in personal factors.
- Both the Time Score and the Combined Score were statistically different across all class levels.
- Floor transfer confidence scores (pre and post) decreased progressively from highest- to lowest-functioning groups (Blue = highest, Yellow = lowest; Blue > Orange > Green > Yellow).
- Floor transfer confidence change scores increased slightly, and differed across groups, with the Green group showing the largest improvement, but clinical significance not determined.

Qualitative Results

Overall most advanced final position achieved (% by group)	Yellow	Green	Orange	Blue
Unsafe to try/Declined	49.02%	10.99%	1.10%	0%
Tall kneeling	3.27%	1.57%	0%	0%
All 4's	5.88%	0.52%	0%	0%
½ kneeling	0.65%	0%	0%	0%
Prone w/ PA	9.80%	4.19%	1.10%	0%
Prone w/o PA	31.38%	82.73%	97.80%	100%
Use of adaptations (cushions, chairs) in attempted transfers (% by group)	Yellow	Green	Orange	Blue
Cushions (wedge/aerex/pillows for knees/abdomen)	8.97%	11.18%	4.46%	2.70%
No chair	19.23%	35.29%	72.50%	92.34%
Chairx1	47.44%	47.65%	20.07%	6.31%
Chairx2	33.33%	17.06%	7.43%	1.35%

- More than half of Yellow group attempted transfer; all Blue members attempted transfer
- Chair requirement decreased with increasing functional level (Yellow to Blue)



- Participants with higher functional levels exhibited fewer movement deficits (Blue 9% to Orange 31%) compared to lower functional levels (Green 61% to Yellow 90%).
- Uncontrolled transitional movement and unsteadiness in standing were the most frequently observed movement deficit across all groups.

Clinical Implications

- As in our previous retrospective publication*, the Time score for the SPS-FTT was sensitive to class level, this time in a larger prospective study.
- The pre/post change in confidence levels suggest that the process of testing may increase their self-efficacy to participate in floor activities in community exercise or rehab.
- The insights gained from the new qualitative outcomes captured in the Combined score suggest that adaptations may be needed across all functional group levels.
- Additional rehabilitation may be beneficial to address the use of adaptations, movement deficits, and situations in which participants were unsafe to attempt or declined the floor transfer.
- The SPS - FTT may be a useful screening tool to develop stratified classes and train instructors in how to adapt, cue, and instruct, and how to design floor exercises in a community setting.