

# Enhancing Future Time Perspectives in Older Adults: A Preliminary Intervention Study

Tomoko Ikeuchi, PhD <sup>1)</sup> & Hisao Osada, PhD <sup>2)</sup>

<sup>1)</sup>Tokyo Metropolitan Institute for Geriatrics and Gerontology, Japan; <sup>2)</sup>J.F. Oberlin University, Japan.

Email: ikeuchi@tmig.or.jp

## INTRODUCTION

- **Socioemotional selectivity theory** (Carstensen, 1992) posits that older adults, with limited time perspective, tend to focus on the present rather than the future and engage in emotionally meaningful relationships with close social partners.
- Increased present-focus is associated with feelings of calmness and peacefulness (Jiang et al., 2016).
- However, it remains unclear whether engaging with a wider range of social connections and experiencing excitement (i.e., contrary to calmness) can foster a future-oriented perspective.

## Study Aim

We examined whether participating in a yoga class could enhance the future time perspectives (FTP) of older adults.

## METHODS

1. Our participants had experienced functional declines. Thus, the yoga program was tailored for frail or physically disabled older adults and excluded standing poses.
2. Conducted an intervention study from December 2022 to March 2023, targeting community-living older adults in Tokyo, Japan.
3. Eleven Japanese participants (100% women) aged 70 to 94 (*M* age = 81.0) attended an hour-long yoga class weekly for 11 weeks.
4. The intervention took place during a period when mask-wearing was still strongly advised in Japan due to the COVID-19 pandemic.

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### FINANCIAL DISCLOSURE:

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# Participation in weekly yoga classes influenced the future time perspective of older adults.

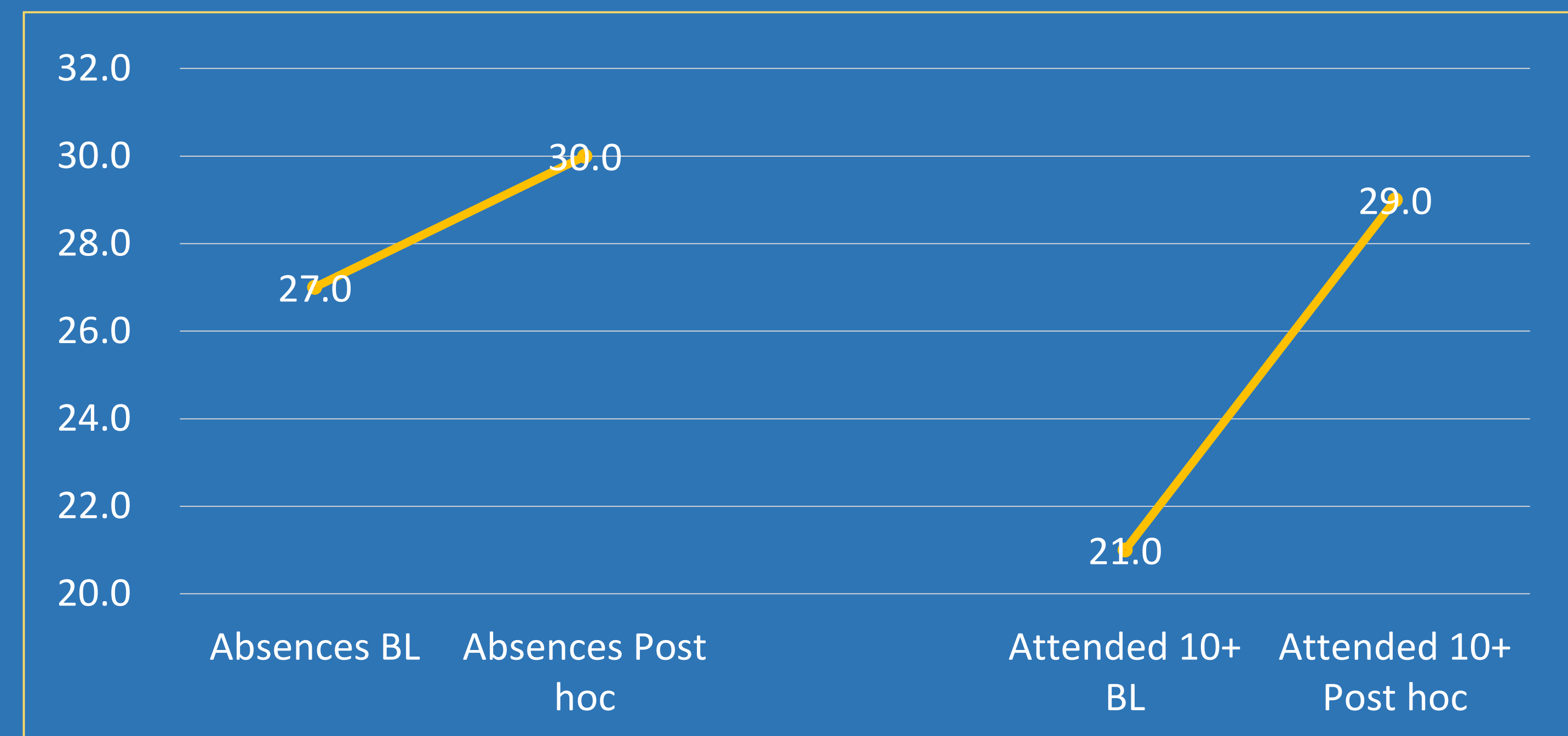


Figure 1. Scores of FTP: Baseline (BL) scores compared with post hoc scores, those with absences (left) and those who attended 10+ classes (right).

	Baseline			Post hoc			Z	p
	N	Mdn	Range (0-10)	N	Mdn	Range (0-10)		
Participants with absences	5	27.0	24-31	5	30.0	28-32	-2.02	0.043
Participants who attended 10+ classes	6	21.0	18-28	6	29.0	21-31	-2.04	0.041

Table 1. Results of Baseline and Post hoc test and Wilcoxon signed-ranks test of FTP.

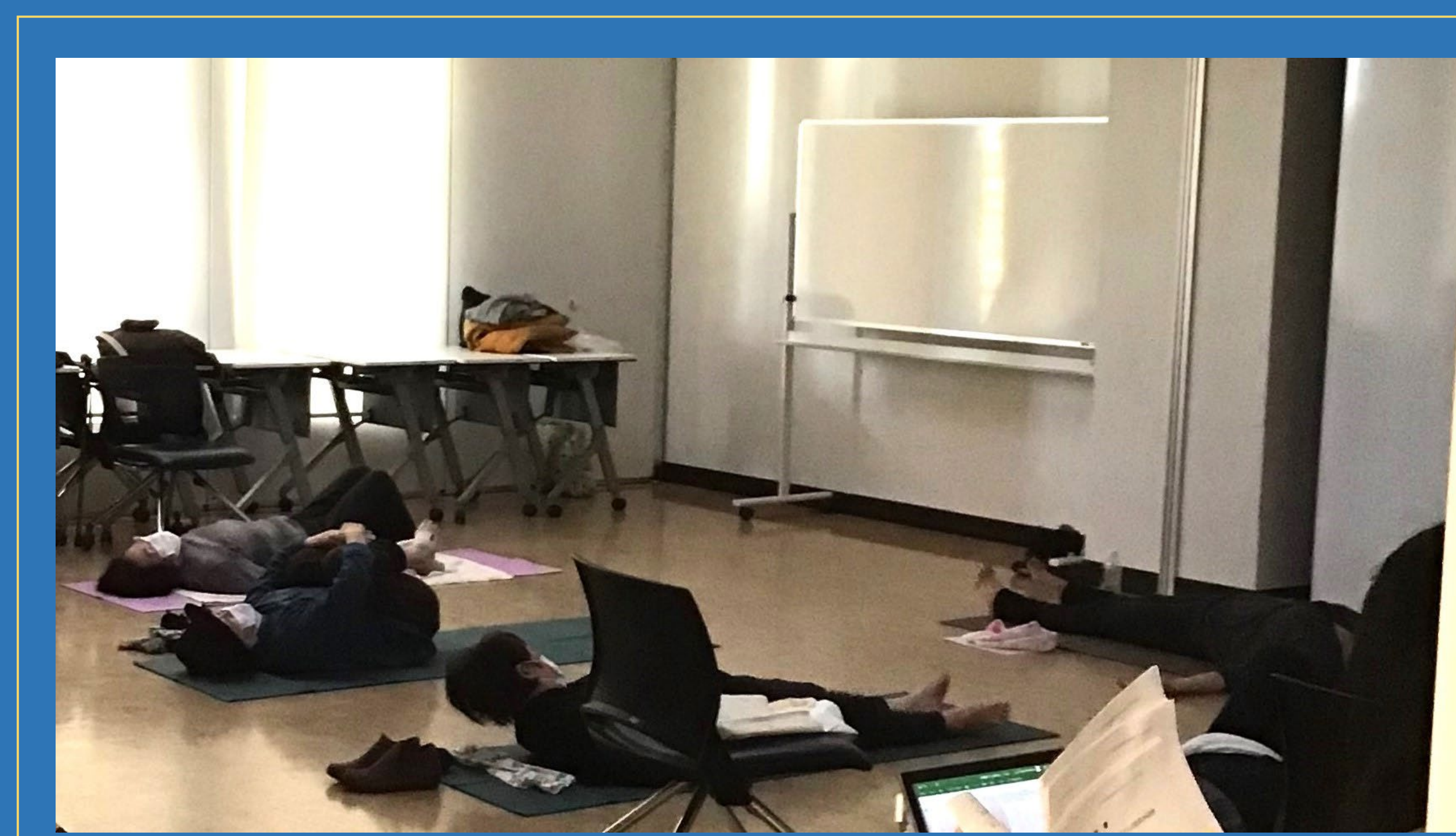


Figure 2. Participants attending a yoga class at a community center.

## Measurement

- The future time perspectives (FTP) were assessed using the Japanese version of the FTP scale at baseline and after completing a 11-week yoga class.

### Future Time Perspective Scale (Carstensen & Lang, 1996):

The FTP scale includes ten items answered by indicating agreement on a 7-point Likert-type scale (from 1= very untrue, to 7 = very true).

- 1) Many opportunities await me in the future.
- 2) I expect that I will set many new goals in the future.
- 3) My future is filled with possibilities.
- 4) Most of my life lies ahead of me.
- 5) My future seems infinite to me.
- 6) I could do anything I want in the future.
- 7) There is plenty of time left in my life to make new plans.
- 8) I have the sense time is running out. \*
- 9) There are only limited possibilities in my future. \*
- 10) As I get older, I begin to experience time as limited. \*

\*Reversed items

## Statistical analysis

- Performed the Wilcoxon signed-ranks test separately for participants with absences and those who attended 10+ classes.

## RESULTS

- For participants who attended 10 or more classes, the Wilcoxon signed-ranks tests indicated that the median post-test ranks were statistically significantly higher than baseline test ranks (see Figure 1).
- The increase in difference was greater among those who attended 10 or more classes than among those with absences (see Table 1).

## DISCUSSION

- The yoga program was designed to allow older adults who have experienced functional declines to relax and enjoy yoga more comfortably.
- However, the FTP of participants increased significantly after attending 10+ yoga classes. This suggests that participants may have experienced more excitement than calmness.
- Interacting with other participants and the instructor may have elicited excitement in participants who had not engaged in such activities for a long time due to the pandemic.
- Our findings suggest that **interventions facilitating social interaction among older adults could potentially influence their FTP in later life.**
- Further research with a larger sample size should replicate this study to examine its impact on well-being.

