

# #2-22 Acceptance and Commitment Therapy for "TOJIKOMORI" in Japanese Older Adults: A Preliminary Investigation

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# INTRODUCTION

#### What is "TOJIKOMORI"?

Tojikomori means being housebound in old age without any deficits in physical or cognitive functioning. Elderly with Tojikomori have **low levels of physical, psychological and social health**, and Tojikomori is a risk factor for disability. Effective psycho-social treatment for Tojikomri is required.

#### Tojikomori and psychological flexibility model: Rationale

Older asults with Tojikomori have psychological problems such as cognitive **fusion** with a damaged conceptualized self (i.e., negative self-stereotype about aging) and feeling they have nothing to live for (i.e., unclear value and persistent inaction). They appear to have psychological inflexibility.

#### Objective

The present study was designed to obtain preliminary data on the effectiveness and process of ACT treatment for elderly with Tojikomori using a non-concurrent multiple baseline across participants design.

### METHOD

#### Participants

Two Japanese elderly woman living in a retirement community with nursing service were treated. However P2 did not complete the treatment because of the request from her family to discontinue the participation.

Participant Characteristics								
ID	Gender	Age	Housemate	Frequency of leaving home	Mobility level	GDS	MMSE	Medical condition
P1	F	78	Solitude	Once a week	Able to go out alone	10	26	OH, LCS
P2	F	83	Solitude	Once a week	Able to go out alone	6	26	Aneurysm (past)

Note. GDS: Short form of Geriatric Depression Scale, MMSE: Mini-Mental State Examination, OH: Orthostatic Hypotension, LCS: Lumbar Canal Stenosis

#### Measures

#### ☐ Outcome measures

1)Interval Percentage of physical activity greater than 1.5METs. 1.5METs denotes a light level of physical activity (e.g. sitting tasks, sitting and talking with a person). A triaxial accelerometer was used to measure participant's physical activity

2)Range of activity. GPS loggers were used to measure participant's position information.

3)Medical Outcome Study 36-Item Short Form Health Survey (SF-36)

Subscale. Physical Function (**PF**), Role Physical (**RP**), Body Pain (**BP**), General Health (**GH**), Vitality (**VT**), Social Function (**SF**), Role Emotional (**RE**), Mental Health (**MH**).

4)GDS. Suggestive of depression: > 5 points, almost always depressed: > 10 points.

#### ☐Process measures

- 1) Acceptance and Action Questionnaire- II (AAQ). Mean score of the college students: 24.9
- 2) Cognitive Fusion Questionnaire-13 (CFQ). Mean score of the college students: **52.09**
- 3) Five Facet Mindfulness Questionnaire (FFMQ) Mean score of the college students: 113.19

#### Procedure

Participants joined more than 2 baseline 90-min sessions, 7 weekly and 2 biweekly 90-min treatment sessions. A 1-month follow-up session was conducted after the treatment sessions were completed.

#### **Baseline**

BL#1 "Making a list of psychological pain" (Hayes & Smith, 2005)

"What do you want to do when you are pain free?" (Hayes & Smith, 2005)

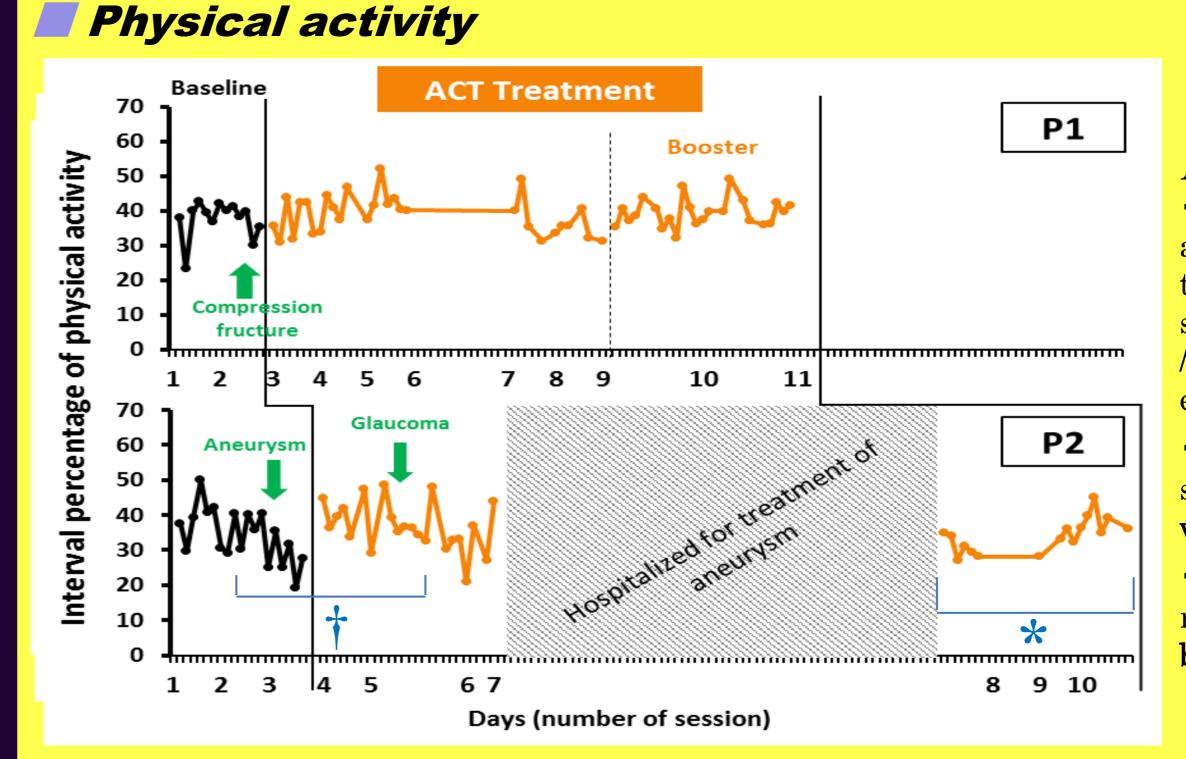
BL#2,3 • Confirmation of participant's social/family history

#### **ACT treatment** Explaining the direction of the ACT Values ACT#1 "Attending your own eulogy" (Hayes et al., 1999) "Compass" metaphor (Harris, 2009) Differences between values and goals (Hayes & Smith, 2005) ACT#2 Values Assessment work sheet about values (Hayes et al, 2012) "Ranking your Values" (Hayes & Smith, 2005) "Join the DOTS" (Harris, 2009) ACT#3 "Demons on the boat" metaphor (Harris, 2009) Acceptance Normalizing the control agenda Mindfulness "Drinking tea mindfully" (Hayes & Smith, 2005) ACT#4 Defusion "Floating leaves on a moving" (Hayes & Smith, 2005) "Telling your story once again" (Hayes & Smith, 2005) Self ACT#5 "The sky and the weather" metaphor (Harris, 2009) Commitment "Goals work sheet" Expected barriers" (Hayes & Smith, 2005) ACT#7 Reviewing the previous sessions showing the hexaflex model. Review Booster Evaluating their psychological flexibility themselves. ACT#8,9

# *Note*. BL#N; the number of the session during the baseline phase. ACT#N: the number of the session during the treatment phase.

(Biweekly)

## RESULTS&DISCUSSION



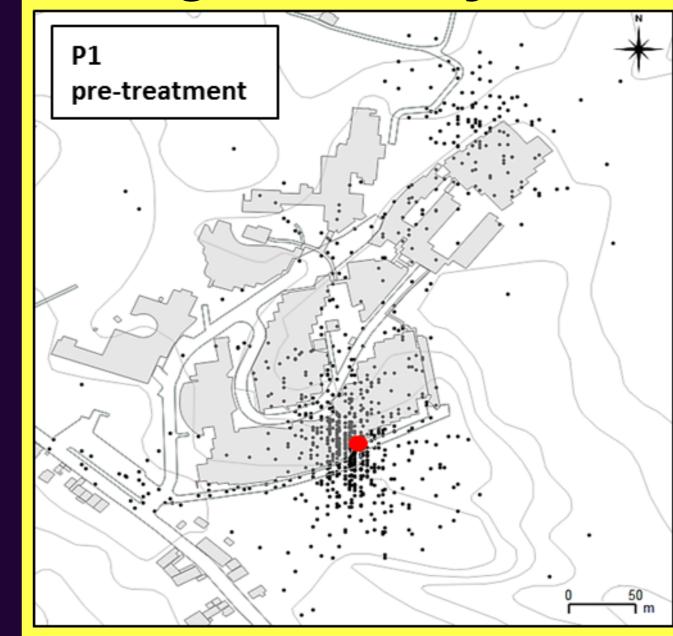
Note.

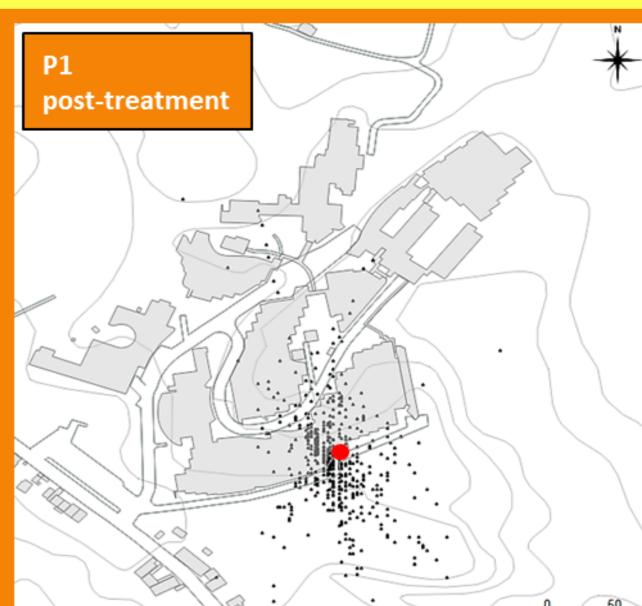
•Nonparametric Tau-U analyses were conducted to assess the statistical significance within /between phase and effect sizes.

• The \* represents significant differences within a phase (p < .05).

• The  $\dagger$  represents marginal differences between phases (p < .10).

#### Range of Activity





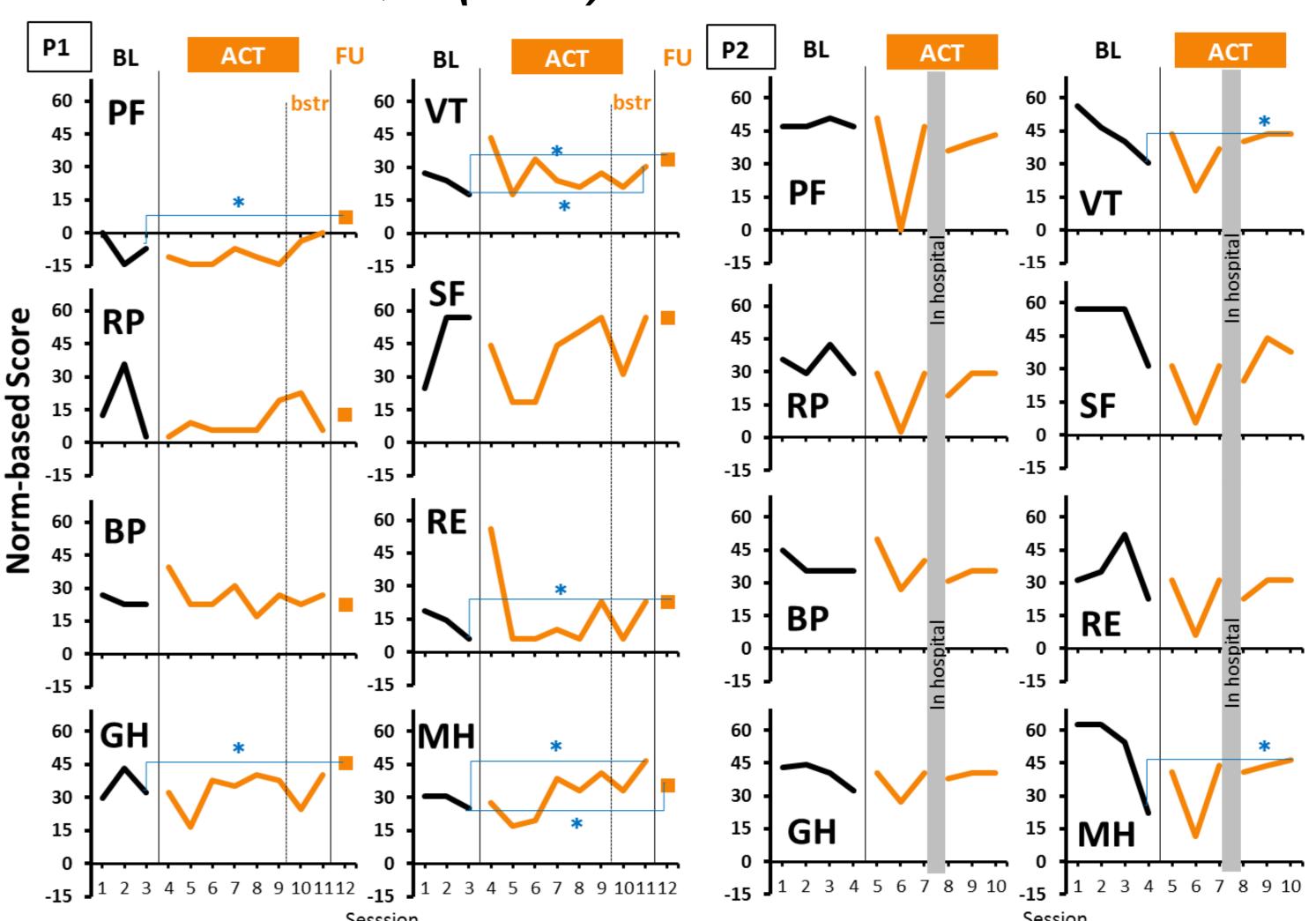
Note.

This figure shows P1's location in the retirement community.

The Scale bar shows 50 meters.

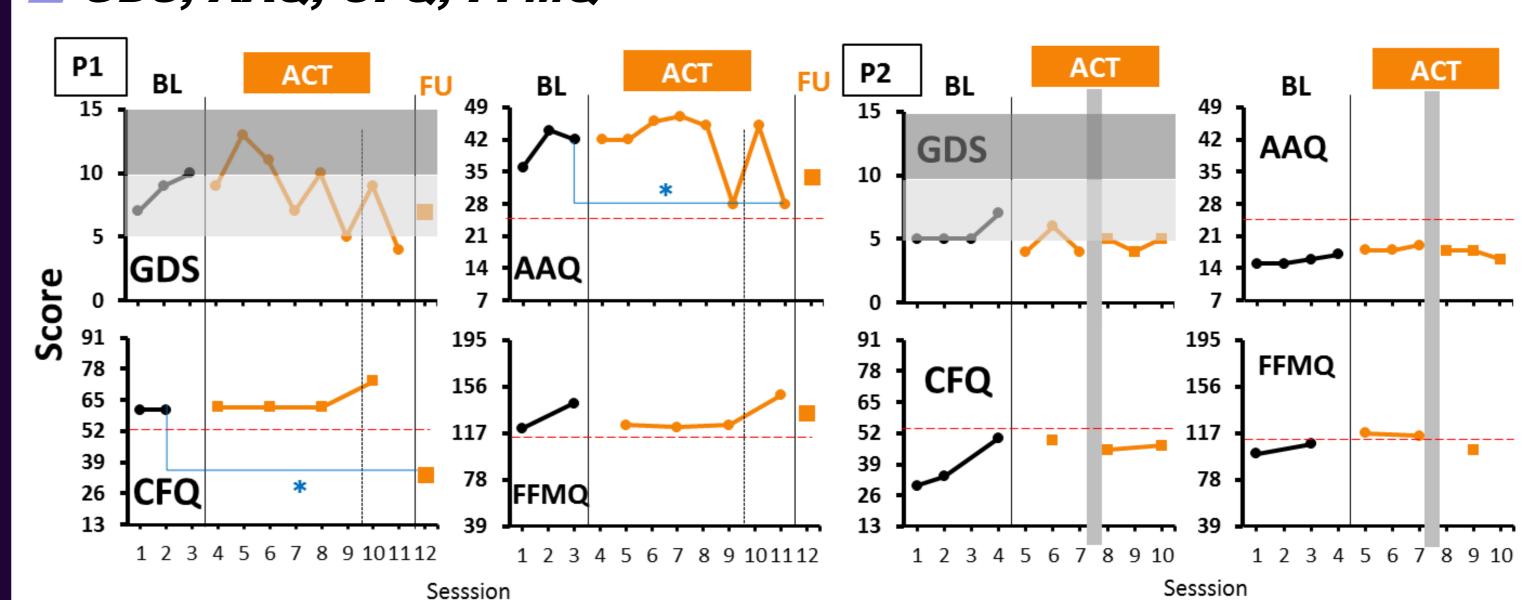
indicate P1's home.

#### Health Related QOL (SF-36)



*Note.* Norm-based score is a standardized score for which the Japanese mean = 50, SD = 10. The asterisks represent statistically reliable changes (i.e. RCI > 1.96) between end of baseline and end of treatment / follow-up.

#### GDS, AAQ, CFQ, FFMQ



*Note.* The asterisks represent statistically reliable changes (i.e. RCI > 1.96) between end of baseline and end of treatment / follow-up. Red broken lines represent mean scores for each questionnaire.

- 1. P1, whose mindfulness and acceptance processes (i.e., the left side of the hexaflex model) were non-optimal at baseline, showed positive changes in psychological flexibility and psychological health. However, no improvements were observed in physical activity and activity range. A factor that possibly inhibited the effectiveness of ACT for behavioral activation was a decline in physical function across during the study.
- 2. P2, whose mindfulness and acceptance processes were optimal at baseline, showed positive change in physical activity.