



The Effect of ACT-Enhanced DANCE Treatment for Reducing Burden of Caring in Japanese Family Caregivers of Dementia: A Single-Case Experimental Design

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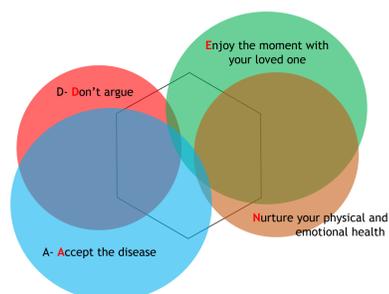
PURPOSE

McCurry (2006) proposed that a contextual behavioral treatment model of DANCE which is an acronym for five core principles for family caregivers of dementia. However, the DANCE treatment has had little evidence and reports applied in non-western country.

DANCE Model for Family Caregivers

- D- Don't argue
- A- Accept the disease
- N- Nurture your physical and emotional health
- C- use Creative problem solving
- E- Enjoy the moment with your loved one

Relations between DANCE and Hexaflex Model



The purpose of this study was to evaluate the effects of ACT-enhanced DANCE treatment for reducing burden of caring in Japanese family caregivers of dementia. In this study, 5 Japanese non-professional family caregivers of dementia were treated 6-12 weekly or biweekly sessions of treatment.

METHOD

Participants

Table 1. Characteristics of Participants and Their Family-member of Dementia

Participant (Care giver)	A	B	C	D	E
Age	92	55	78	32	67
Sex	Male	Female	Male	Female	Female
Occupation	Retired	Homemaker	Retired	Homemaker	Homemaker
Relationship to family-member with dementia (care recipient)	Spouse	Daughter in law	Spouse	Daughter in law	Spouse
Age of family-member with dementia	92	86	77	73	70
Sex of family-member with dementia	Female	Female	Female	Female	Female
Type and severity of dementia	Alzheimer (severe)	Alzheimer (moderate)	Alzheimer (severe)	Alzheimer (mild)	Fronto-temporal (severe)
Agression to others	Verbal (mild)	Verbal (severe)	Verbal (mild)	N/A	Verbal (severe)

Measures (Questionnaire)

- 1) Japanese version of the Zarit Caregiver Burden Interview (J-ZBI_8)
- 2) WHO Quality-of-Life 26 (QOL)
- 3) General Health Questionnaire 30 (GHQ)

Design

A concurrent multiple baseline design across participants.

Procedure

- 1) **The structure of each session:** Events since the last session and homework were reviewed, new topic was presented, and a new homework and exercise was assigned and agreed on.

- 2) **Baseline (BL):** Trends of their score of J-ZBI were monitored during BL phase.
- 3) **ACT-DANCE Treatment:** 6-12 biweekly sessions of treatment 60-min sessions of ACT-enhanced DANCE treatment were implemented during treatment phase.
- 4) **Follow-up (FU):** 1-5 biweekly or monthly sessions were implemented during FU phase.

RESULTS & DISCUSSION

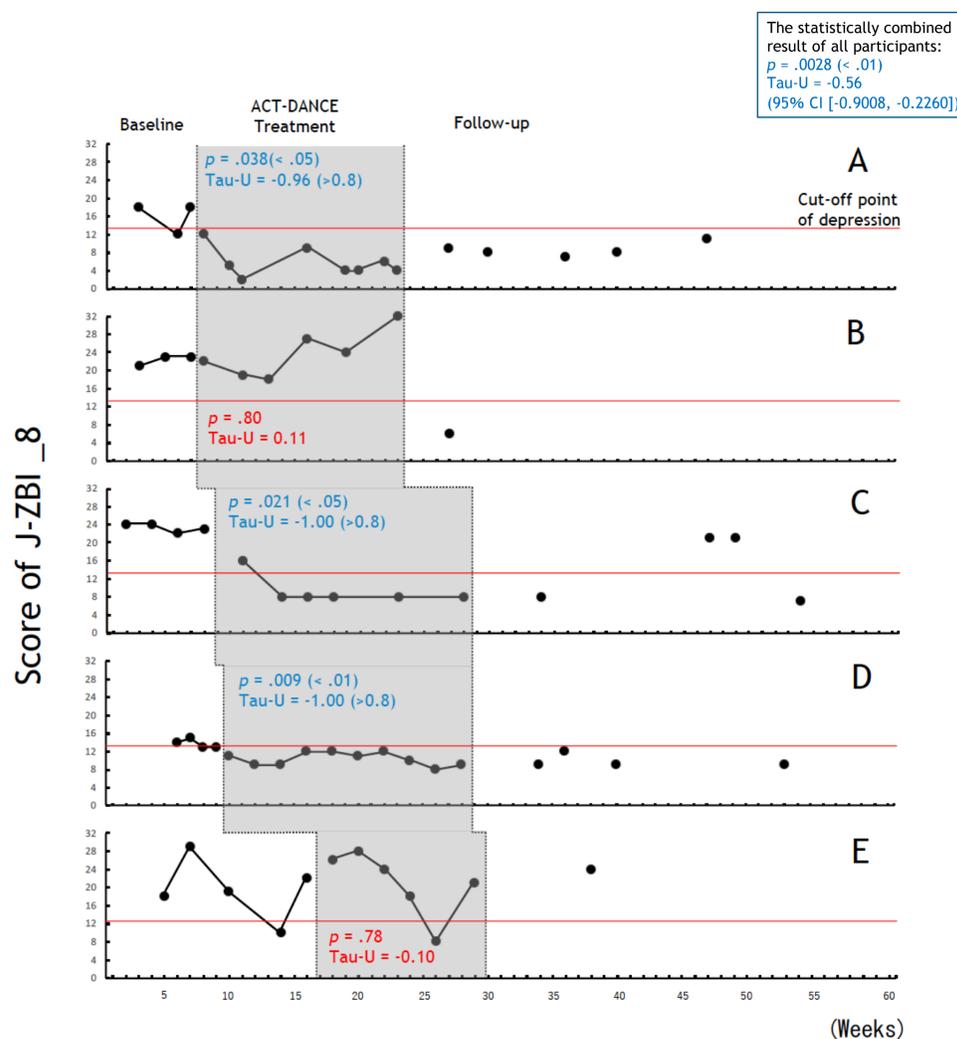


Figure. Weekly scores of Zarit Caregiver Burden Interview for five participants in baseline, treatment, and follow-up phases.

The p -values and effect sizes (Tau-U) between baseline and treatments/follow-up phases were analyzed by Tau-U Calculator (<http://www.singlecaseresearch.org/calculators/tau-u>).

Table 2. Scores of QOL and GHQ questionnaires for 4 participants (without A).

Participant	Questionnaire	Pre	Mid	Post	FU
B	QOL	3.88	4.08	2.89	3.62
	GHQ	15	4	25	11
C	QOL	3.27	4.04	4.00	4.00
	GHQ	6	3	0	0
D	QOL	3.31	3.19	3.08	3.73
	GHQ	10	1	1	1
E	QOL	2.42	2.38	2.39	2.58
	GHQ	20	14	2	16

Note. The colored numbers indicate the statistically reliable change between Pre and other time point (i. e., RCI values are more than 1.96) .

These findings suggest that ACT-enhanced DANCE treatment might be effective for reducing burden of caring in Japanese family caregivers of dementia. However, we might need further investigations for different courses of "process" for improvement.