

An intervention trial tackling inequality in social participation and functional decline among older people

Nihon Fukushi University & AGES project
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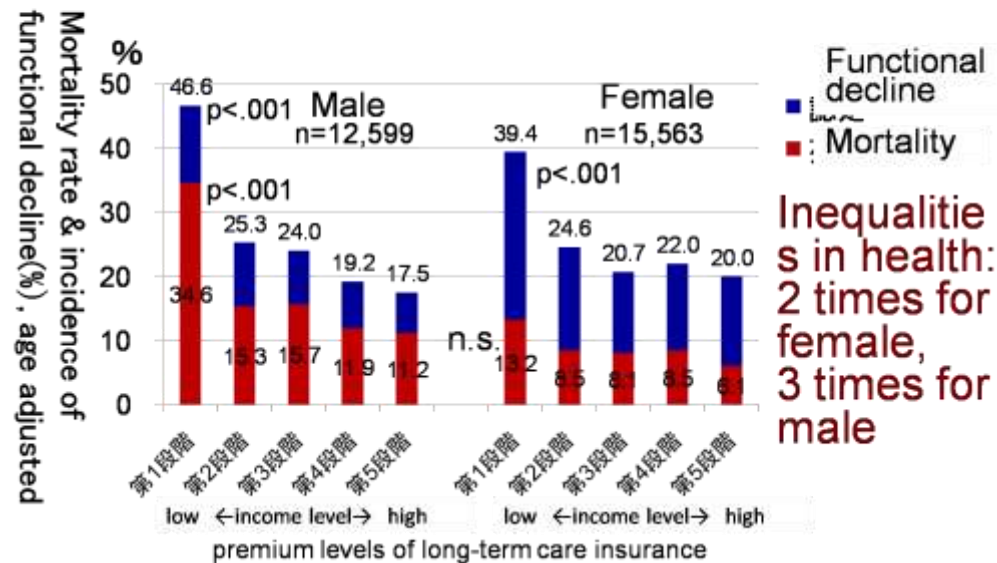
Introductions

- Japanese government introduced preventive programs for the functional decline (PPFD) for older people.
- But, it does not reached the lower SES (socio-economic status) people who are at high-risk.
- They tend to not having health check-up, then they miss the opportunity to be screened as participants for the PPFD.

Introductions

- Health inequalities are observed even in functional decline among older people.
- Therefore, a new intervention program based on population strategy was needed and then recreational “salon project” was developed in Taketoyo town.

Mortality & functional decline by income level (age adjusted) Kondo, Hirai 2008



Enjoyable Social Programs



← Ping-Pong

game →



Just chatting is very popular

Various programs

Making short poem
instructed by volunteers



Physical exercise
instructed by volunteers

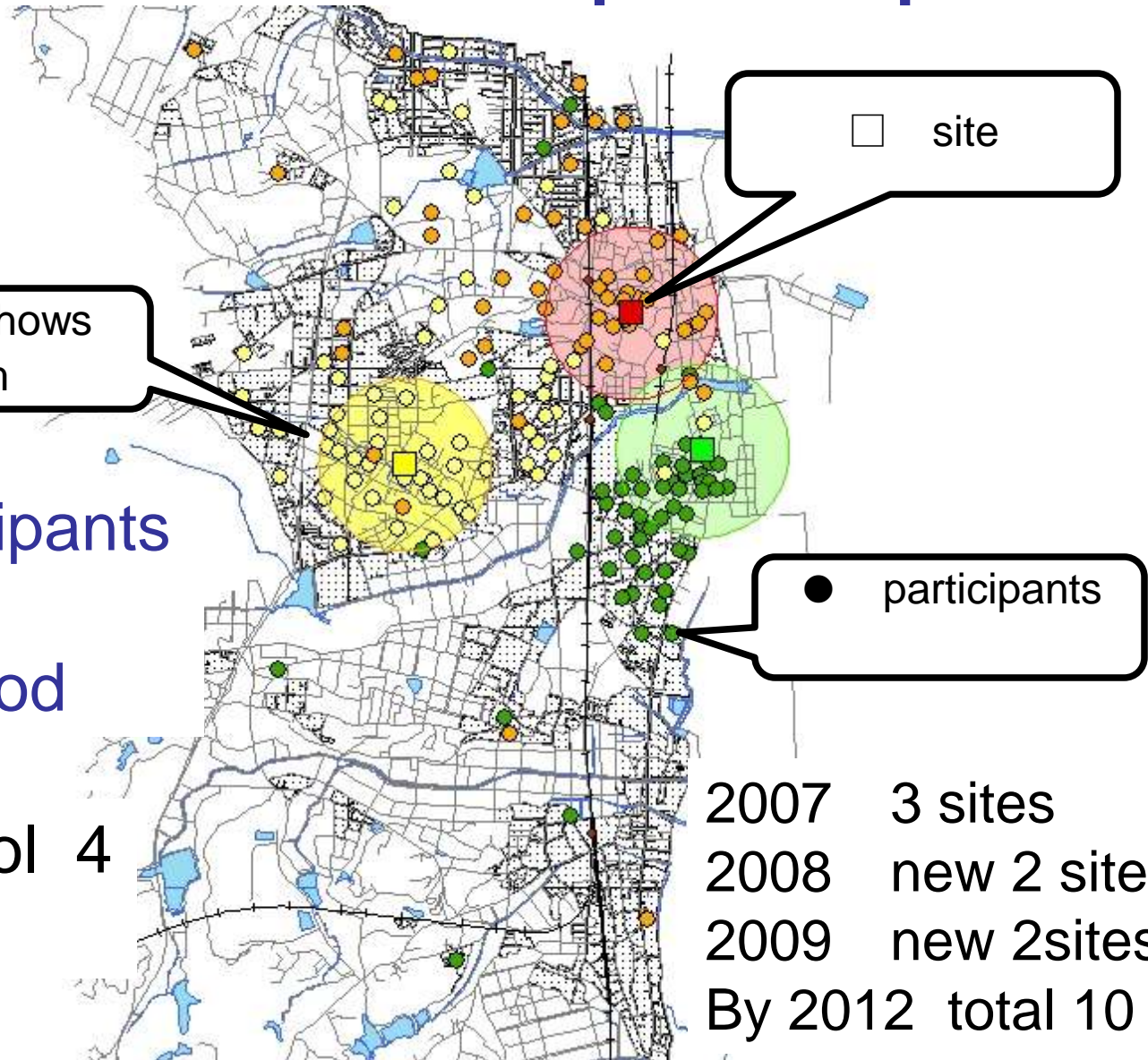
Key concepts of the program

- **Population strategy:** Intervene in social environment. Program sites are called “salon”
- Not only a few sites located in the center of the town but **multi-site programs:** older people easily come to the site on foot
- **Managed by volunteers**, not professionals: multi-site needs many staff members
- **Jointed body of health and social services sectors organized** volunteers and supported through providing public place, financial assistance, and advertisement to citizens etc.
- Not only physical exercise but also a variety of **enjoyable social programs** are provided.

Purpose / Methods

- The purposes of this study are to evaluate the new PPFD developed to tackle the disparity between lower and higher SES people.
- We conducted a self-administered questionnaire twice (pre-/post-intervention) and compare between the intervention group (n=198) and the control group (n=1495).
- The changes in the participation rate of other community-based activity/activities and the degree of perceived social support etc. was measured.

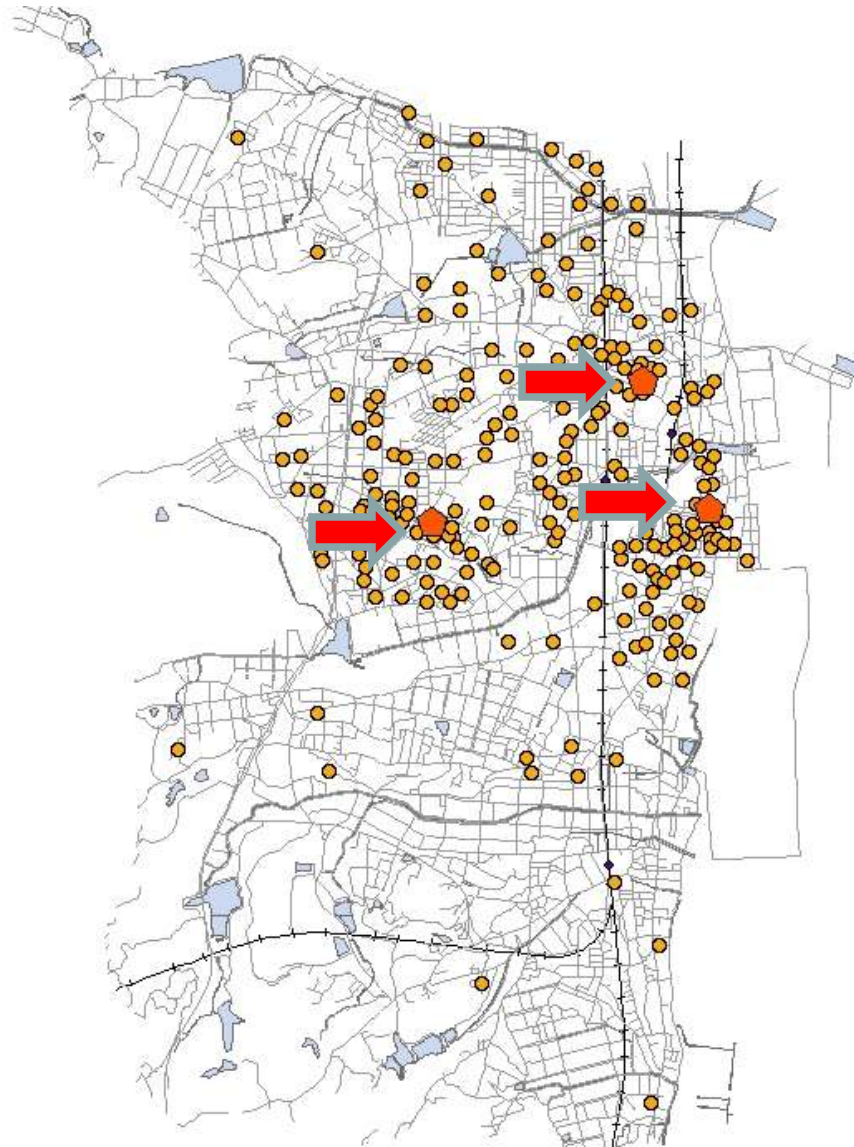
3 sites in 2007 & participants



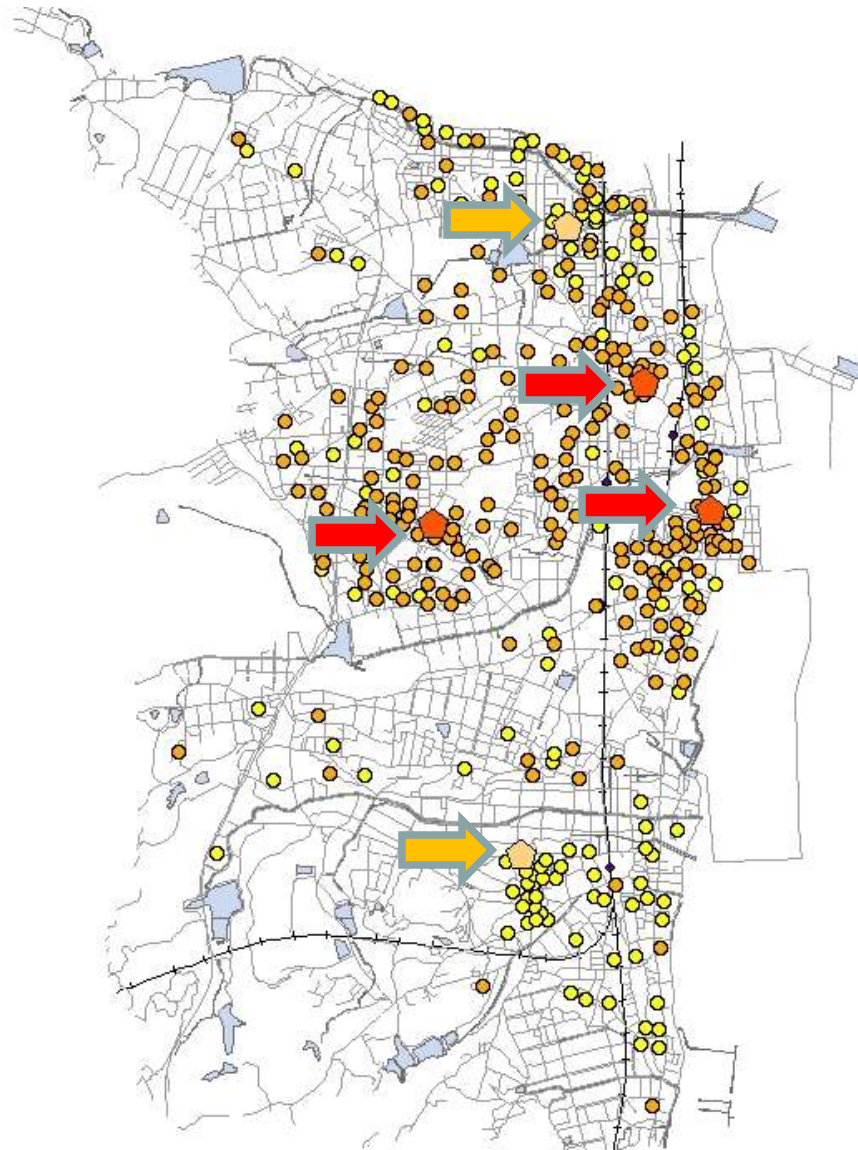
more participants
come from
neighborhood

Junior school 4
Nursery 11

2007 : 3 sites



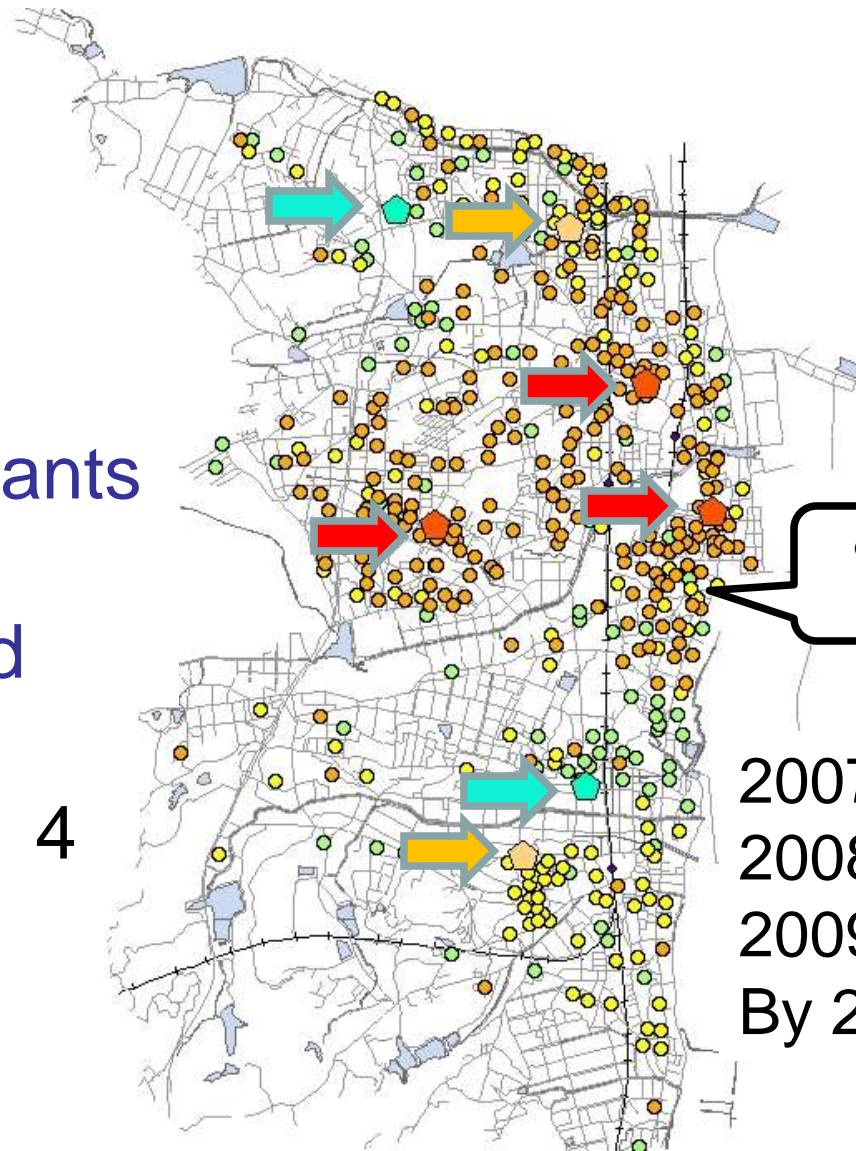
2007+2008: 5 sites



2007+2008+2009: 7 sites

more participants
come from
neighborhood

Junior school 4
Nursery 11



● participants

2007 3 sites
2008 new 2 sites
2009 new 2 sites
By 2012 total 10 sites

Comparisons between 2006 and 2007

2006 (12 months): Pre-intervention

- All 13 programs including non-active ones such as lectures
 - 4191 person-time, Real # of participants 1830
- 6 active programs like new programs by high risk strategy
 - 328 person-time, Real # of participants 93

2007 (8 months): Post-intervention

- 1555 person-time, Real # of participants 412

2007/2006 Ratio (per one month)

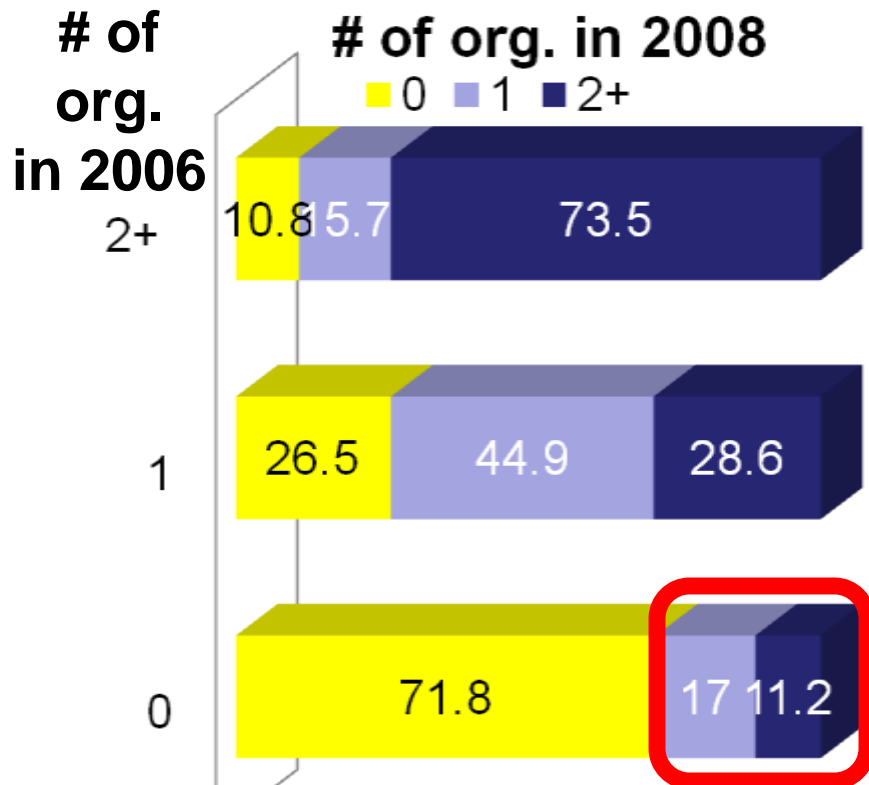
- 7.1 times for person-time,
- 6.6 times for real # of participants

of organizations participated

residents' association, sports, hobby's, religious, volunteer, political, industrial or civic organizations.

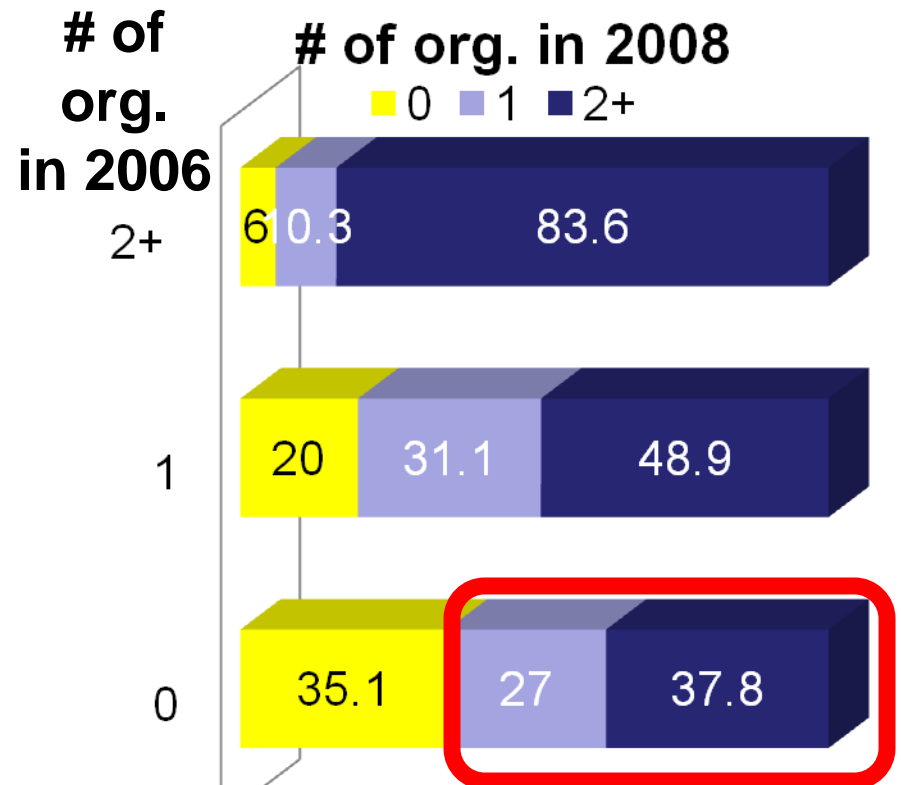
Non-PTs in the program

(n=1495)



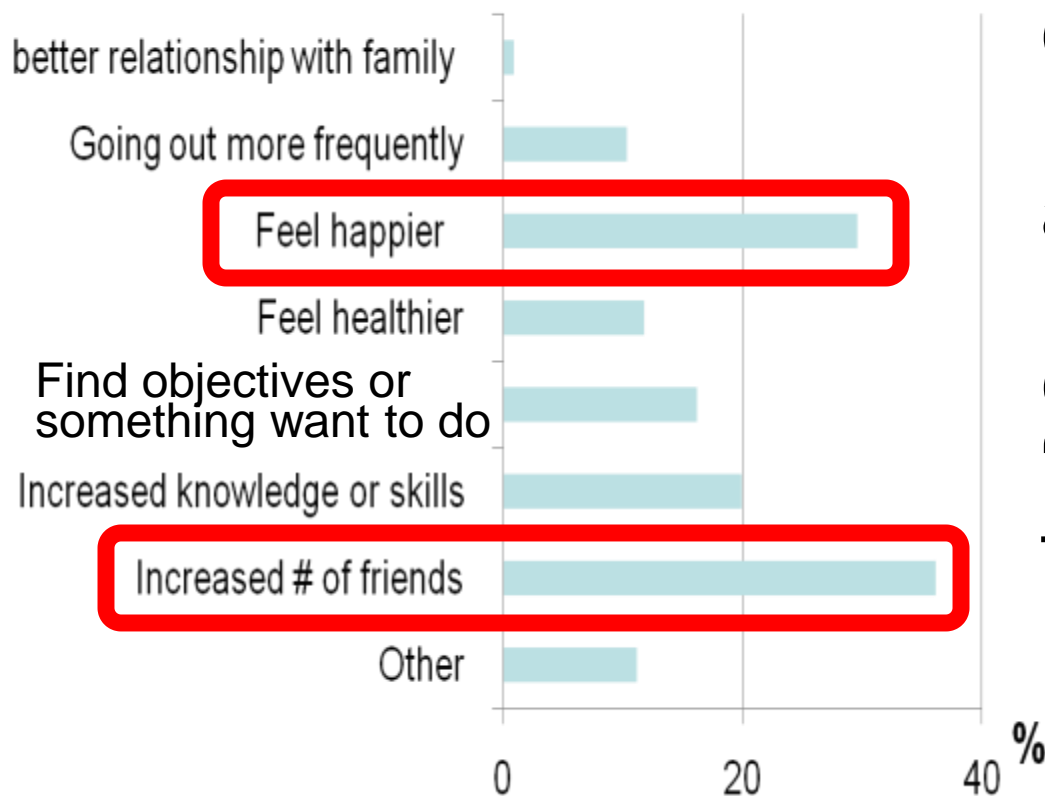
PTs in the program

(n=198)



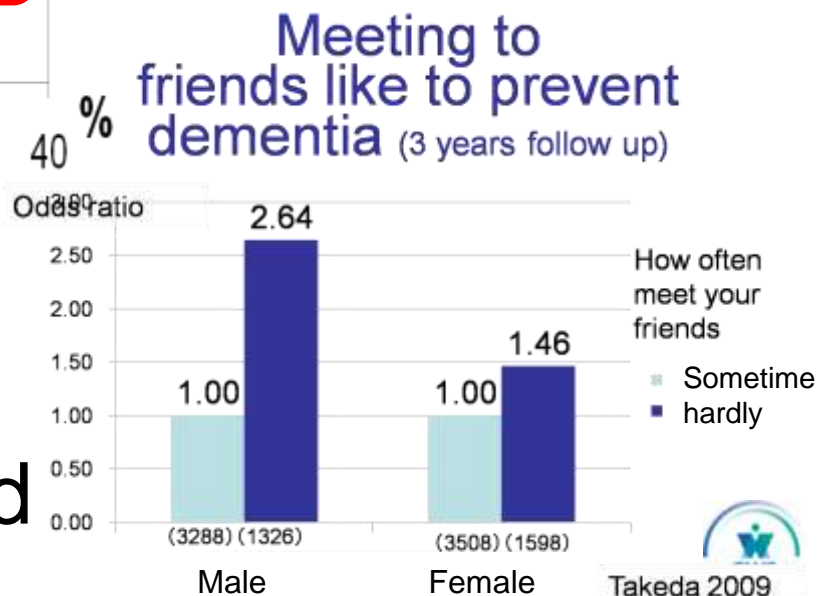
Participant(PT)s increase the # of org. participated in 2008 in same strata in 2006

Changes reported by participants



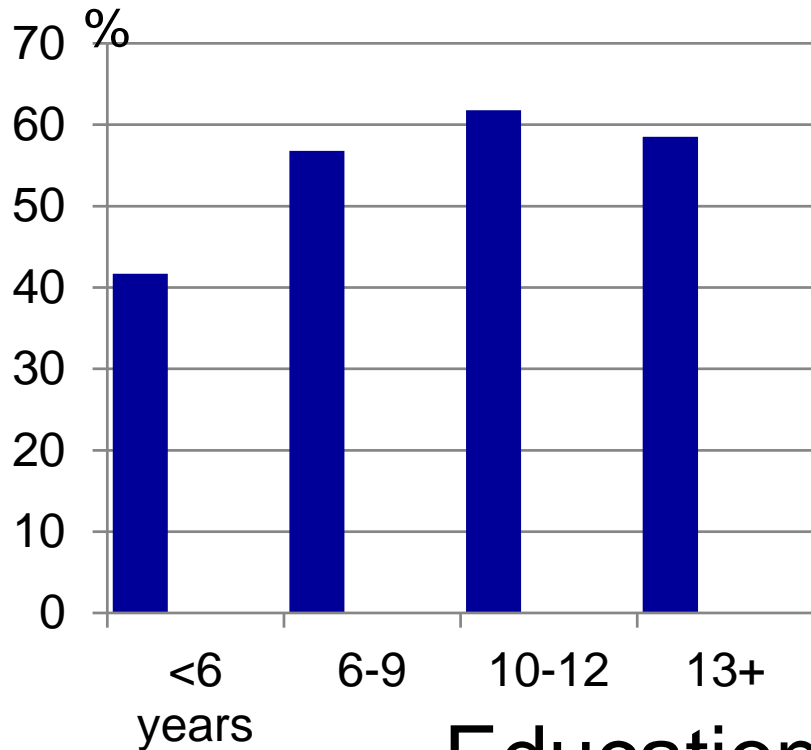
Of 321 participants in the program, about 30-40% reported some changes, such as “increased # of friends”

As a cohort study showed the lower odds ratio for “meeting to friends”, the new PPFD is expected to prevent dementia

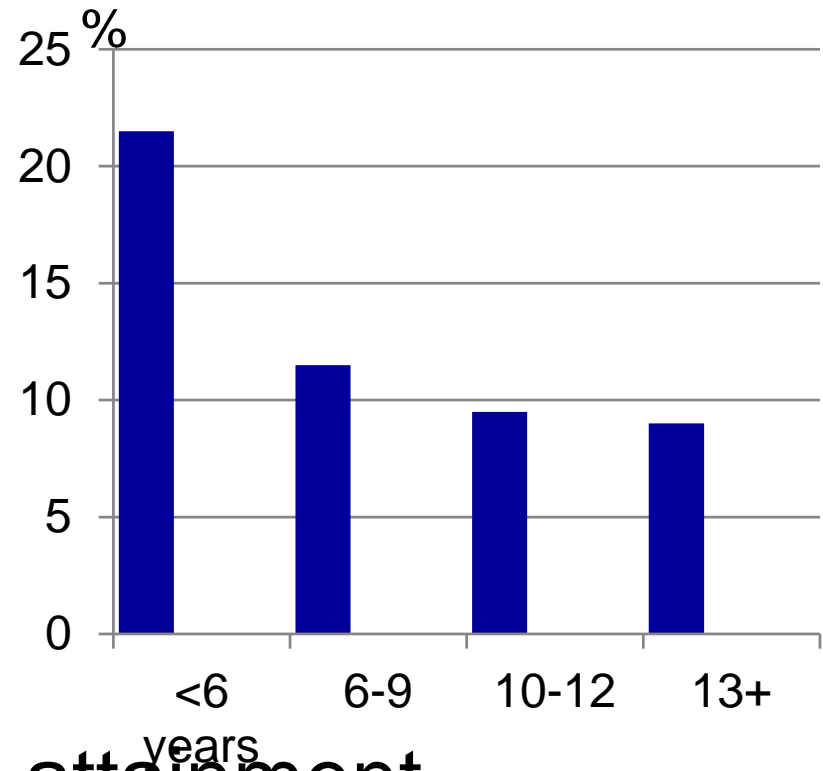


Participants rate by education

Health check up



The new PPFD



Educational attainment

The new PPFD might suppress inequalities in health

Conclusions

- Although this is an intermediate outcomes evaluation, the new intervention program showed more favorable results.
- Much more people participated in the new PPFDD in comparison with the previous one.
- The new PPFDD is expected to prevent the functional decline of participants.
- It might be possible narrowing inequality in functional decline among older people by the new PPFDD, because we got more participants from lower SES people compared with the previous one.