

# Effectiveness of a Training Program to Enhance ACT Skills for Occupational Health Professionals

©Mikihiro Hayashi, M.D., MBA, Certified Psychologist<sup>1</sup>, Kohei Watanabe<sup>2</sup>,  
Kazuya Inoue, Ph.D.<sup>3</sup>, Tomu Ohtsuki, M.A., Ph.D.<sup>2</sup>  
1 VisMed Inc., Study Group on ACT in Workplace 2 Waseda University 3 Ritsumeikan University

## BACKGROUND

- Although ACT skills might be practically useful for occupational health professionals, the opportunities for training them are few, and the effectiveness of ACT in this area is not clear.

## METHODS

- Training Program**
  - Consisted of
    - 5-hour on-demand video lectures on basic knowledge of ACT
    - Intensive residential workshop involving experiential learning of psychological flexibility and intervention in occupational scenarios (2 days, 8 hours in total)
    - Monthly case discussion meetings for 3 months.
- Participants**
  - Fifteen active occupational health practitioners with no formal prior training in ACT
  - Male 3, Female 12, Age 30's to 50's
  - Medical Doctor 5, Nurse 8, Psychologist 1, HR staff 1
- Measurement**
  - Measured scores
    - Competency Scale for Occupational Health Professionals (Competency Scale\*)
    - Psychological flexibility (AAQ-II)
    - Understanding of ACT (ACT Check\*\*)
- Time Points**
  - Baseline (pre-program) (Time 1),
  - Immediately after the two-day intensive workshop (Time 2)
  - After three monthly case discussion meetings (Time 3)

## RESULTS

- A one-way analysis of variance on Competency Scale scores across the three time points revealed a significant main effect ( $F(2, 28) = 7.04$ ,  $p = 0.003$ ).
- Multiple comparisons indicated a significant difference between Time 1 and Time 2, with a medium effect size ( $p = 0.003$ , Cohen's  $d = 0.7244$ ).
- No significant differences were observed between Time 1 and Time 3, or between Time 2 and Time 3.
- For the AAQ-II and ACT Check, no statistically significant changes were observed across the three time points\*\*\*.

## CONCLUSION

- The face-to-face, practice-based training program led to a statistically significant improvement in competencies among occupational health professionals.

## DISCUSSION

- Limitations**
  - Sample size - The number of participants was 15, not enough to discuss in general
  - The study was not designed as Case-Control study
  - The reliability and validity of Competency Scale should be examined
- Psychological flexibility and understanding of ACT were not significantly enhanced by the program
- Despite the entry requirement of no prior formal learning history of ACT, the participants' relatively high scores at Time 1 might have limited the potential for further measurable gains on these scales
- Further development of the training curriculum, validation of the Competency Scale, and accumulation of data are needed to support broader implementation.

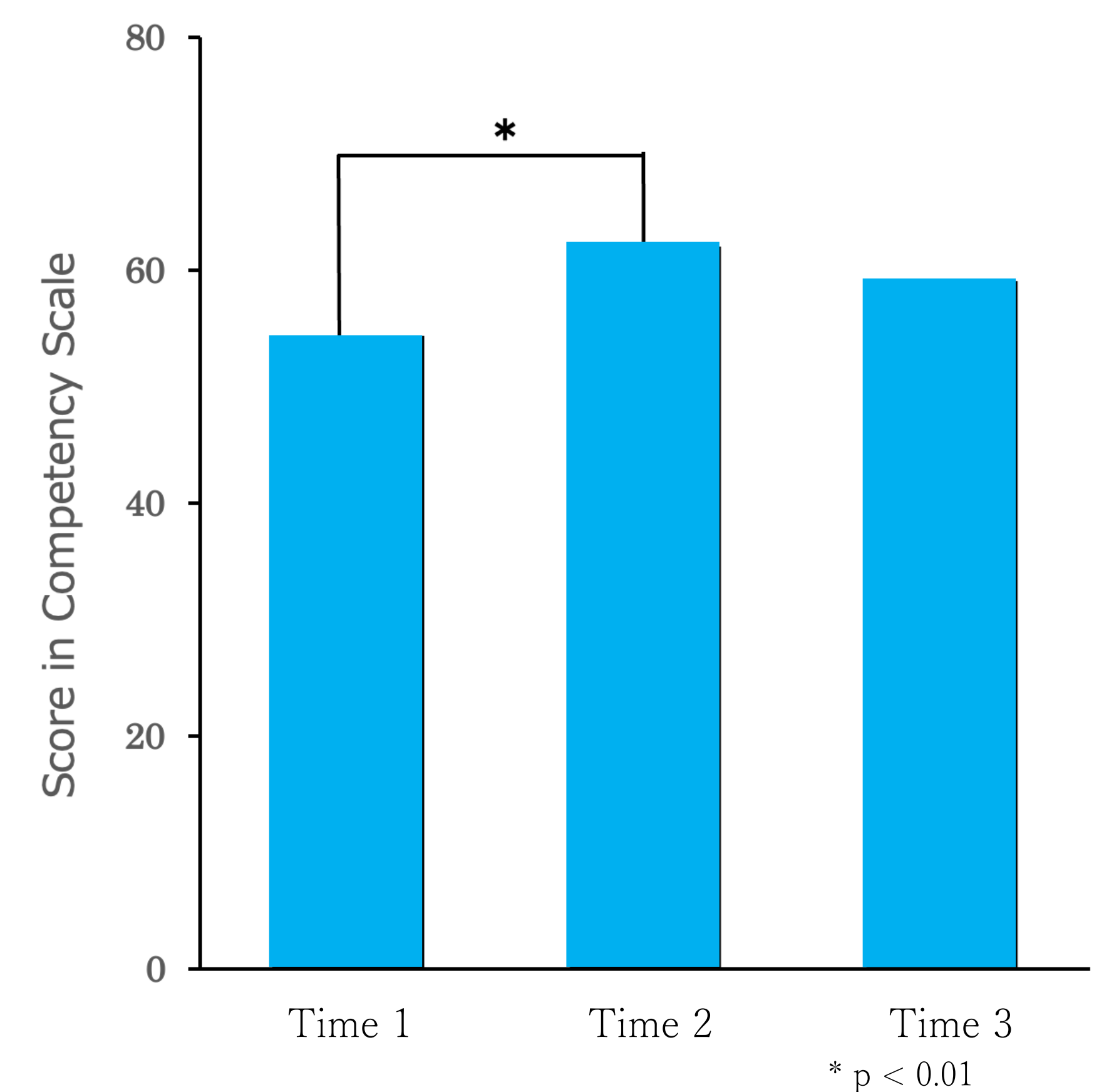


Fig.1  
Participants' Score in Competency Scale

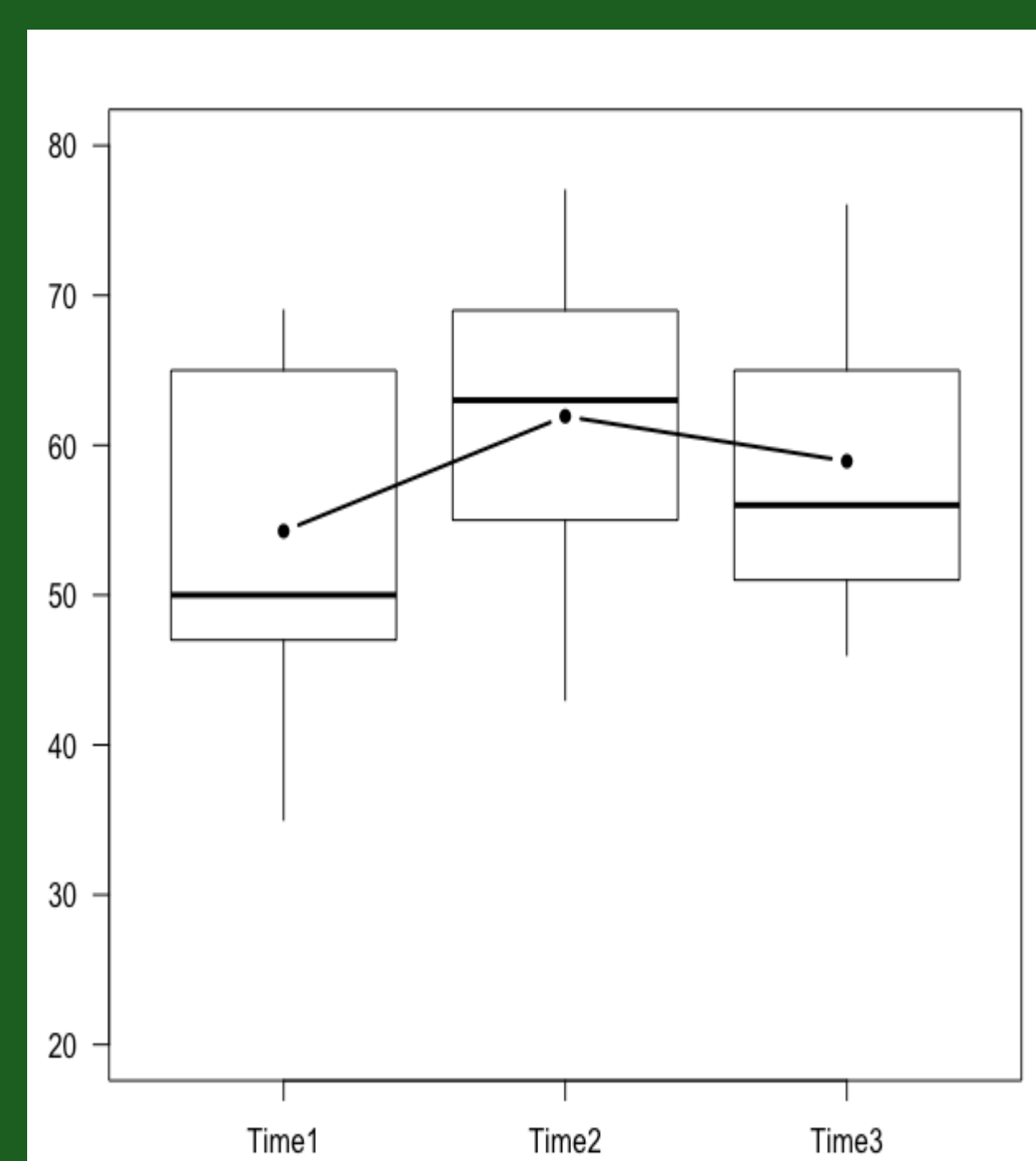


Fig.2  
Scores of Competency Scale;  
Change of means and box whisker  
plot at each time

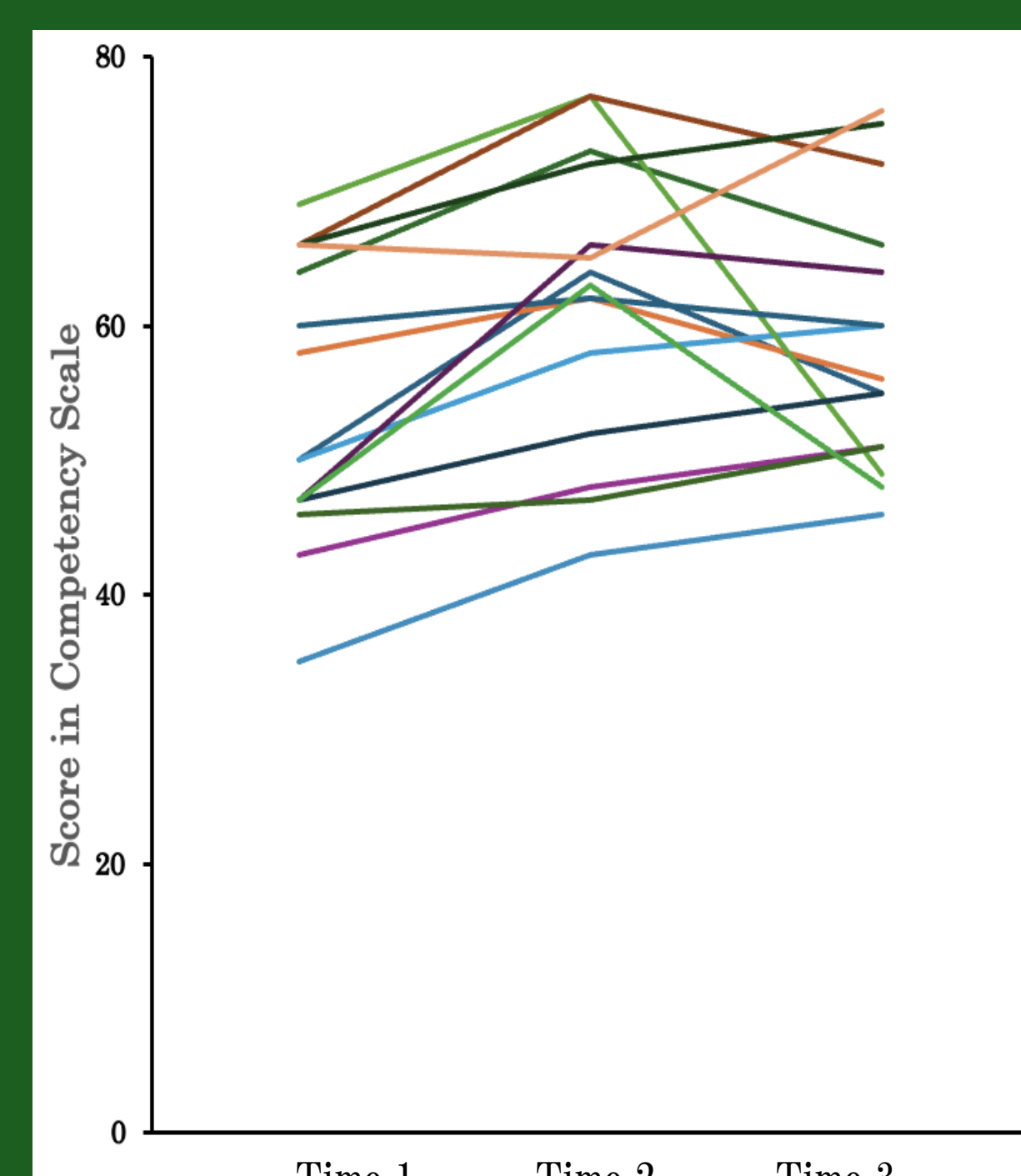


Fig.3  
Personal Score Change for each  
participant in Competency Scale

**Well-designed, intensive ACT training program covering from basic to applied learning, has the potential to lead the occupational health professionals to their high performance.**

Email : hayashi@vismed.jp

### \*Competency Scale for Occupational Health Professionals

-Self-administered questionnaire

-Comprised of the top 11 items from the 50 items in Hayes et al.'s "Core Competencies for ACT Therapists" ("Learning ACT, 2nd edition" p. 414-419), that were rated highly among six experts in terms of "importance in occupational health"

-7-point Likert scale ( always – never ) min 11 – max 77

Questionnaire :

- The therapist actively uses the mindset of "whether it will be useful (work) or not"
- The therapist notices the fusion that is happening in front of them and encourages the client to notice it as well
- The therapist can defuse from what the client is saying and directly pay attention to the present
- The therapist notices when the client is stuck in rumination or worry about the past or future and teaches how to return to the present
- The therapist helps the client clarify the direction of life that is in line with their values
- The therapist helps the client take small steps while feeling the goodness of commitment (such as a sense of growth)
- The therapist speaks to the client in an equal, compassionate and sincere manner, with respect for the client's inherent ability to change behavior
- The therapist avoids formal ACT interventions and always changes to appropriate methods to meet the client's individual needs
- The therapist tailors metaphor, exercise and/or behavioral tasks to the client's experience and socio-cultural background
- The therapist does not argue, preach, force or try to persuade the client
- The therapist recognizes the core processes of ACT and immediately uses them in the therapeutic relationship when appropriate

### \*\*ACT Check

Inoue, K., Shindo, K., Muramatsu, H., Hayashi, M., & Otsuki, T. (2022). Developing a test for assessing knowledge of Acceptance and Commitment Therapy. *Japanese Journal of Behavioral Medicine*, 27(1), 39–51.

-Test for assessing knowledge and understanding of ACT and the Psychological Flexibility Model

### \*\*\*Result in Psychological Flexibility and Understanding of ACT

-No significant differences were found in AAQ- II nor in ACT Check.

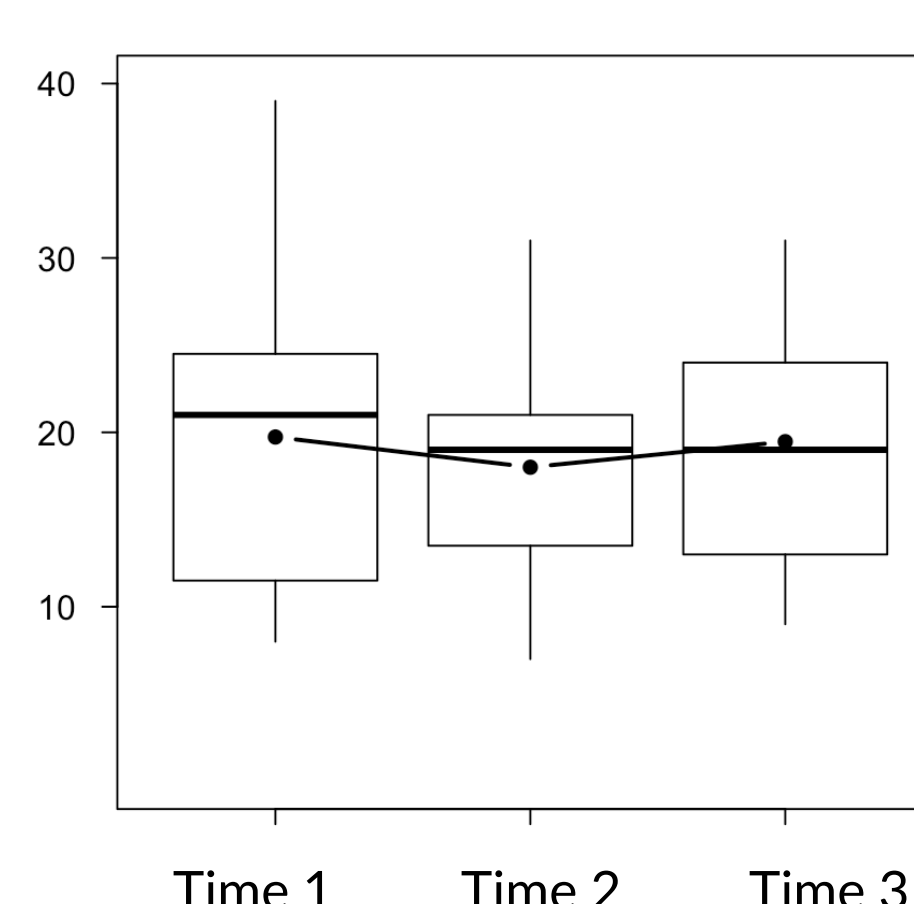


Fig.4  
Scores of AAQ- II;  
Change of means and box whisker  
plot at each time

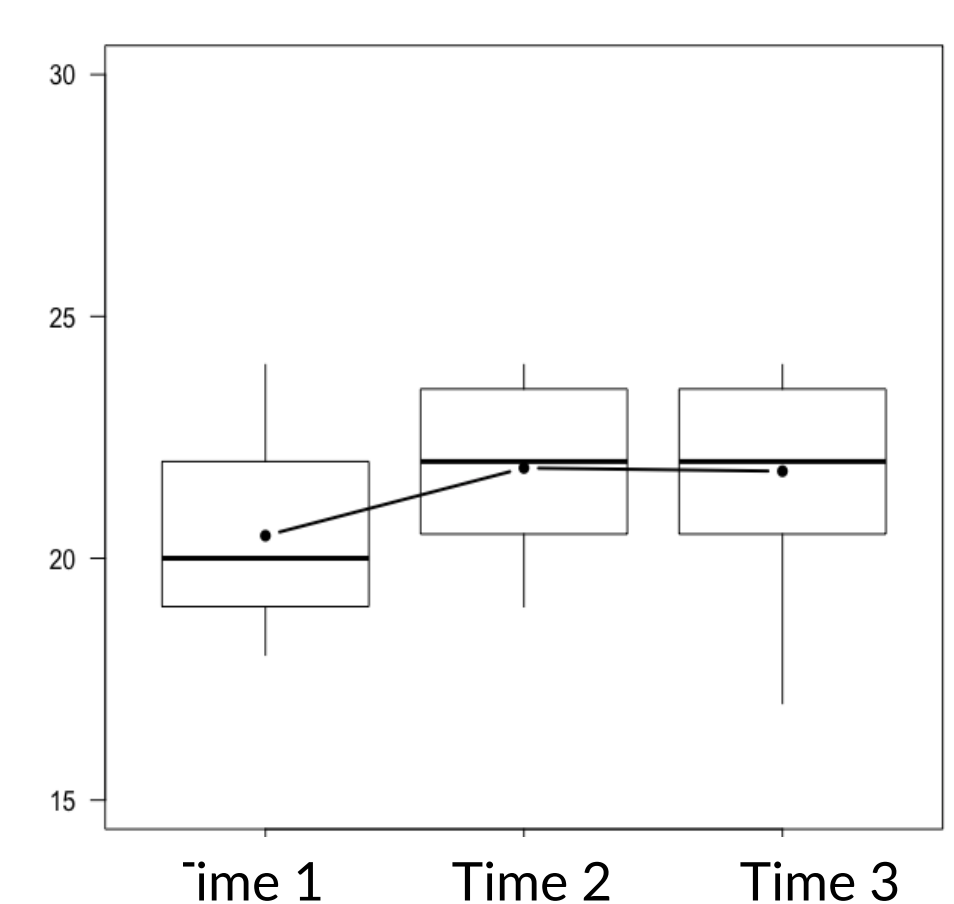
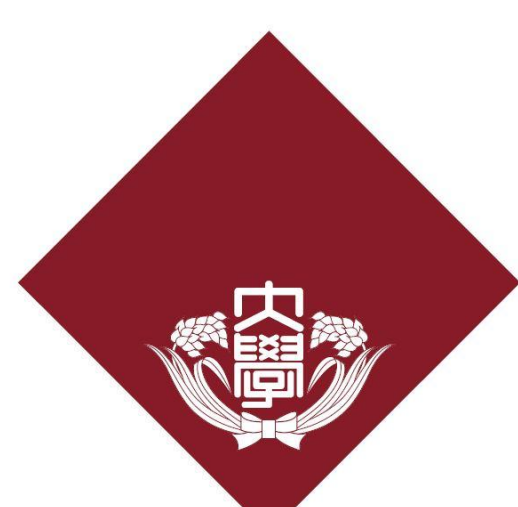


Fig.5  
Scores of ACT Check;  
Change of means and box whisker  
plot at each time



VisMed