

## Introduction

- ◆ Determinants of patient satisfaction vary by disease and facility characteristics.
  - In outpatient clinic patients, the factors they look for when considering satisfaction are the doctor's expertise and communication skills. (Parker et al, Am Surg, 2020)
- ◆ Patient satisfaction is generally concentrated in physical improvement factors and psychological factors.
  - The determinants of customer satisfaction are effectiveness and the relationship between the physiotherapist and the patient/user. (Rossentini et al, Disabil Rehabil, 2020)
- ◆ In addition to physical improvement factors, self-selection factors, relationship with the person in charge, and environmental factors may demand service process rather than medical care.
  - Discrepancies in expectations regarding hip or knee surgery can affect patient satisfaction. (Conner-Spady et al, Health Policy, 2011)

### [Purpose]

To determine the factors influencing customer satisfaction in uninsured rehabilitation and their impact on customer satisfaction retention percentage.

## Methods

- ◆ Study design : Retrospective cohort study
- ◆ Participant: 136 users of uninsured rehabilitation (mean age  $64.2 \pm 15.5$  years, 75 males and 61 females)

### Inclusion Criteria:

Obtained consent from the person/family  
Confirmed use of the service for at least one month  
Completed the first contract between October 2020 and September 2021

### Exclusion Criteria:

Cognitive decline (based on rating scale criteria)  
Left for any reason within 1 month  
Could not obtain consent due to opt-out

- ◆ Date base : original database of a company (October 2020 to September 2021)
  - Customer retention : re-signing 3 months after the first contract
  - Satisfaction (0-100%) : one, two, and three months after the first contract
  - customer participation factors : The Control Preference Scale (CPS) and Shared Decision-Making for Rehabilitation (SDM for Reha)

- ◆ Statistical analysis :
  - Statistical analysis was conducted using structural equation modeling with confounding factors.
  - The analysis followed the concept of expectation disconfirmation theory.
  - The significance level was set at 0.05.

## Methods

### Control Preference Scale (CPS))

- ◆ I prefer to make the final selection about which treatment I will receive.
- ◆ I prefer to make the final selection of my treatment after seriously considering my doctor's opinion.
- ◆ I prefer that my doctor and I share responsibility for deciding which treatment is best for me.
- ◆ I prefer that my doctor make the final decision about which treatment will be used, but seriously considers my opinion.
- ◆ I prefer to leave all decisions regarding my treatment to my doctor.

(Solari A et al, PLoS One. 2013)

### Shared Decision-Making for Rehabilitation

- ◆ The therapist described my disability and symptoms.
- ◆ The therapist informed me that they needed my input to determine my rehabilitation.
- ◆ The therapist confirmed that I wanted to be involved in the rehabilitation decision.
- ◆ The therapist confirmed what my expectations were for rehabilitation.
- ◆ The therapist checked to see if I had any questions about the rehabilitation decisions.
- ◆ The therapist asked me about my wishes regarding the content of my rehabilitation.
- ◆ The therapist presented me with options for my rehabilitation decisions.
- ◆ The therapist took my opinions into consideration when making rehabilitation decisions.
- ◆ The therapist made sure I understood the information presented to me.
- ◆ The therapist made sure that there were no differences between my ideas and theirs.

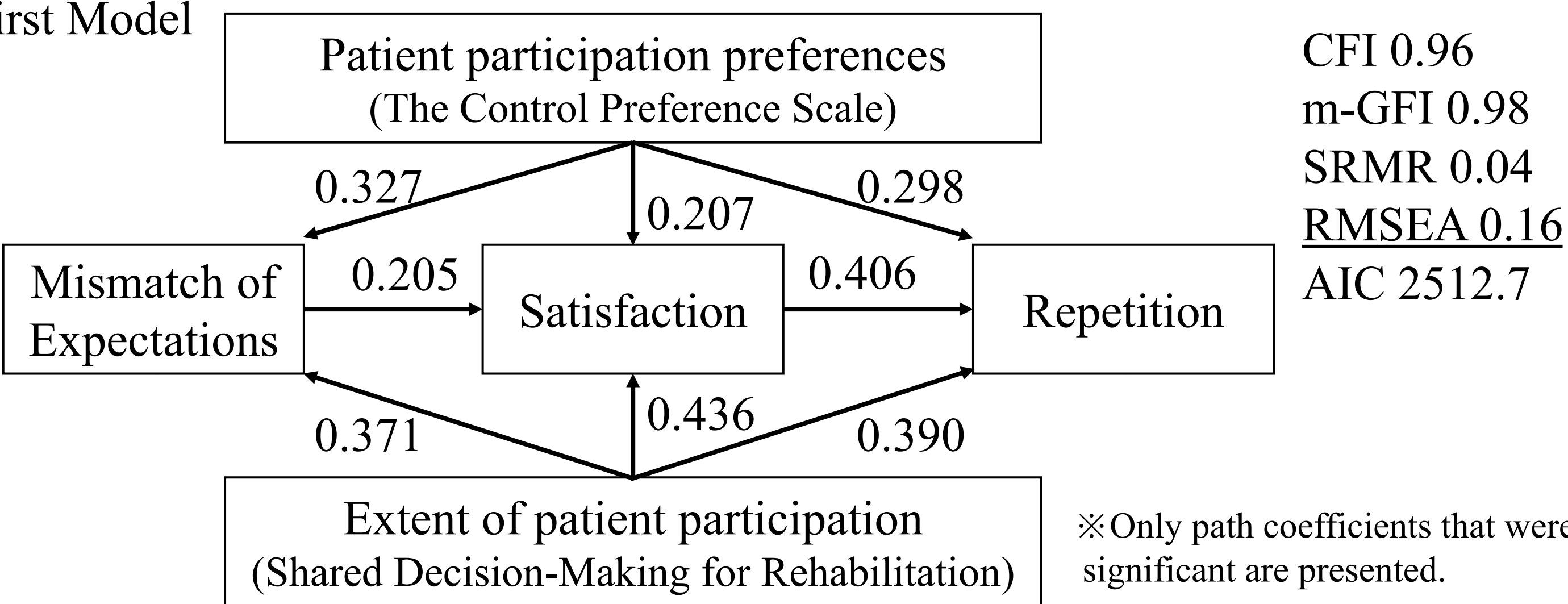
(Ogawa T et al , Journal of the Japan Primary Care.2020 Association)

## Results

### ◆ Satisfaction and Repetition

satisfaction	1 months	2 months	3 months
Repetition +	87.7 ± 12.3	87.3 ± 13.2	89.1 ± 10.6
Repetition -	81.8 ± 18.3	74.0 ± 13.3	66.8 ± 13.6
ALL	85.5 ± 15.0	82.4 ± 14.7	80.9 ± 15.9

### ◆ First Model



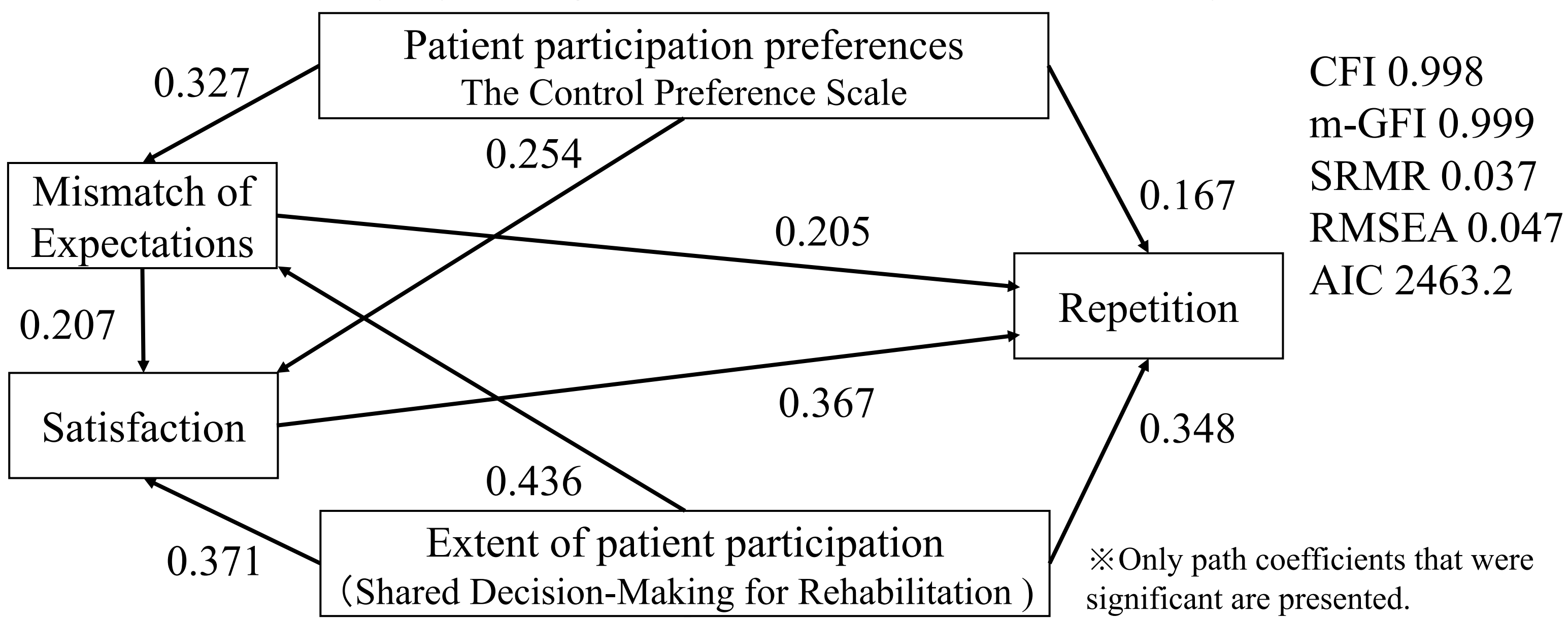
The  $\chi^2$  test of the model was significant at  $p=0.017$ , indicating that the model was not a good fit.

## Results

### ◆ Second Model

Re-examine the model for two reasons

- (1) Satisfaction is constant in the group with continuity and decreases in the group without continuity, according to descriptive statistics.
- (2) Some customers with physical disabilities decide whether to continue based on expectation discrepancy, bypassing satisfaction level, as per preliminary research.



## Discussions

This study shows below;

- 1) The impact of expectation discrepancy on satisfaction.
- 2) Expectation discrepancy related to customer retention via satisfaction.
- 3) Customer participation factors, such as customers' willingness to participate in determining program content (customer participation preferences) and the extent of actual customer participation (actual customer participation), were related to satisfaction and customer retention.

### ◆ Customer satisfaction:

Defined by expectations, outcomes, and their discrepancy (expectation discrepancy), and satisfaction affects repurchase intent. (Oliver RL, Journal of Marketing Research ,1980)

### ◆ Delayed benefits:.

In medical care, benefits accrue some time after treatment, so customers cannot receive them immediately. (Fujimura K, Chikura-shobo, 2020)

In addition to influencing customer retention directly from satisfaction, the model shows that other variables used in the expectation discrepancy theory can also be constructed with relevance to customer retention.

## Conclusion

It was suggested that patient participation preferences and shared decision-making are important to understand the structure of satisfaction and repetition in uninsured rehabilitation.