

Being Served by Humanoid Service Robots: Antecedents of Individuals' Willingness To Use in Restaurants Settings

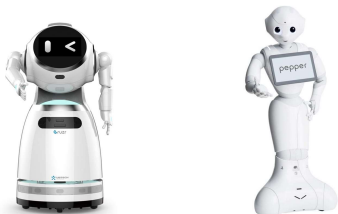
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INTRODUCTION

- Rising trend in the hospitality sector
 - 85% Service Robots ↗ (2021)
- Different types of robots
 - Humanoid, robotic arm, wheeled robot etc.

FOCUS OF THE STUDY

- Factors determining the willingness to use service robots?
 - In quick service and traditional restaurants
 - **Low** and **High** degrees of humanlikeness
- Low-Humanlike (**LH**)



- High-Humanlike (**HH**)



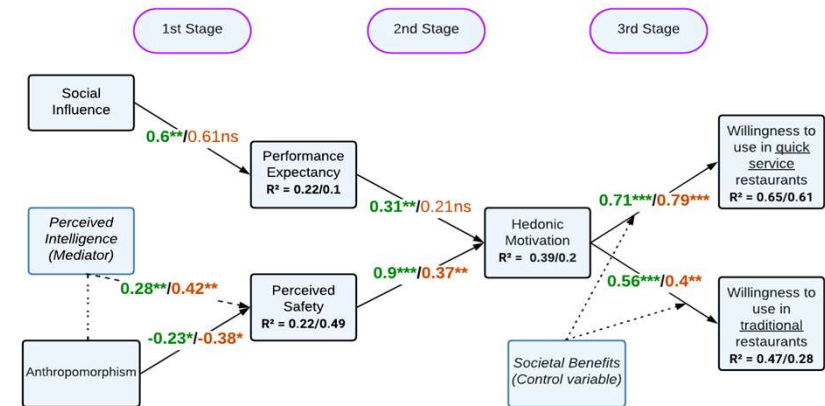
MODEL OVERVIEW

- Theoretical model background
 - Human-Robot Interaction
 - Technology Acceptance
- Appraisal theory
 - 1st stage : Relevance
 - 2nd stage : Costs and benefits
 - 3rd stage : Willingness to use
- Hypotheses (1-5)
 - Social influence
 - Anthropomorphism
 - Performance expectancy
 - Perceived safety
 - Hedonic motivation
 - ✓ **Positively** related to the Willingness to use service robots

METHODOLOGY

- 9 factors with 3-4 items each
- Measurement model
 - ✓ Cronbach's Alpha
 - ✓ AVE's
 - ✓ Composite reliability
- 170 individuals
 - Europeans
 - 18-65 years
 - No previous experience
- 2 scenarios
 - **LH** (n=90)
 - **HH** (n=80)

MAIN RESULTS (**LH/HH**)



- 2 Structural Equation Models (**LH/HH**)
 - Social influence and Performance expectancy not significant for **HH** model
 - Significant relationships for **LH** model

CONCLUSION

- Concerning **LH** and **HH** robots
 - Anthropomorphism, Safety and Hedonic Motivation are **reliable** factors
 - Willingness to use in quick service restaurants ↗
- **LH** robots
 - Individuals relying on their Social influence
 - The Performance determines the Hedonic motivation of using the robot
- **HH** robots
 - Effects of Social influence and Performance expectancy unknown
- Valuable for experts and managers
 - Limitation : No real experience