

114-2 運動休閒與餐旅管理專題討論

# Guest Perception in Using Service Robots in the Restaurant Industry

餐飲業使用服務型機器人之顧客感知

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Commentor: Tzu-Yu Chen

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聽完歐傑非的發表，  
在師長與同學們提問之前，  
我們先再次梳理這份研究的  
核心脈絡。

To kick off our discussion, I would  
like to briefly recap the core  
framework of this study before  
opening the floor for questions.



# 研究摘要

Research Abstract

## Guest Perception in Using Service Robots in the Restaurant Industry

### 研究目的 Aim

透過 SOR 框架，研究顧客對餐廳服務型機器人的心理反應，以及這些反應如何塑造他們的行為意圖。

To examine how diners psychologically respond to service robots in restaurants and how these responses shape their behavioral intention through SOR framework.

### 研究方法 Method

網路問卷調查

Convenience online survey

### 研究結論 Conclusion

在應用服務型機器人時，餐廳經營者應優先考慮可信度、能力和可見的衛生狀況，以建立信任，同時因為過度擬人化的特徵可能會增加人們對餐廳營運風險的感知，應仔細考慮擬人化設計的程度。

When applying the service robot, restaurant operators should prioritize reliability, competence, and visible hygiene cues to foster trust, while carefully considering the degree of anthropomorphic design, as excessive human-like characteristics may elevate perceived performance risk.

# 研究亮點

## Research Highlights

本研究擴展了餐飲服務型機器人研究中的SOR框架，將衛生、可信度、能力和擬人化程度作為影響績效風險、信任、態度和行為意圖的刺激因素。

This study extends the SOR framework in restaurant service-robot research by integrating hygiene, reliability, competence, and anthropomorphism as stimuli that shape performance risk, trust, attitude, and behavioral intention

提供餐飲經營者在設計與應用服務型機器人時應注意的面向。

Provides aspects that restaurant operators should pay attention to when designing and applying service robots.

為餐飲業設計與採用服務型機器人提供實用建議。

Providing practical suggestions for the industry on designing and implementing service robots.



## Q & A Time

簡單回顧後，是否有師長或同學  
想先詢問或與歐傑非討論的問題呢？

Any comments, questions, or insights from the professors and peers in the audience are most welcome.

# 提問一：文獻回顧引用

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## 想請教： Question 1

在文獻回顧「衛生－績效風險與信任」的部分，引用了「送錯餐點的績效風險」之內容，跟衛生有何關聯呢？

In the literature review section tracking "Hygiene → Performance Risk & Trust," the text cites "the performance risk of delivering incorrect meals." Could the author clarify the conceptual link between meal delivery errors and hygiene?

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## 建議方向 Suggestion

### (一) 放入「可信度」或「能力」中

- 因引用的文獻較接近與機器人的可信度或能力有關，可避免概念混淆。
- It is highly recommended to reposition this literature under "Reliability" or "Competence" to ensure construct clarity and avoid conceptual overlap.

### (二) 針對「可見清潔度」說明

- 因文中提及的「可見清潔度（環境、設備和服務介面的清潔程度）」同樣較難看出與服務型機器人的直接關聯
- Please elaborate further on "visible cleanliness." As currently written, the direct relationship between general environment/equipment cleanliness and the specific attributes of service robots remains somewhat ambiguous.

# 提問二：問卷內容

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## 想請教： Question 2

因為並未看到問卷內容是否明確說明回答「應以擬人化/非擬人化的機器人」為對象作答，要如何在其他的題項判斷填答者並未因擬人化的因素而影響衛生、可信度等填答？

Since the survey did not explicitly prompt respondents to distinguish between "anthropomorphic" and "non-anthropomorphic" robots, how did the researcher control for the potential confounding effects of anthropomorphism when participants evaluated hygiene and reliability?

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## 建議方向 Suggestion

### (一) 作為控制變數納入

- 如果資料允許，可考慮將受訪者回想起的特定機器人類型作為控制變數納入模型，或在PLS-SEM中進行多組分析（MGA）。
- If data permits, consider incorporating the specific types of robots recalled by respondents as a control variable or conducting a Multi-Group Analysis (MGA) in PLS-SEM.

### (二) 闡述方法論上的局限性

- 可在討論部分闡述此方法論上的局限性，並建議未來的研究採用實驗設計來交叉驗證這些發現。
- Alternatively, address this methodological limitation in the discussion section, suggesting that future research utilize an experimental design to cross-validate these findings.

# 研究建議一：研究樣本的限制

## Suggestion 1

Regarding the sample, it is mentioned in the limitation that “Future studies should include broader samples from different regions and restaurant types.”

### 可以在標題加上in Taiwan，更精準說明研究範疇

- It is suggested to include "in Taiwan" in the title to more precisely delineate the geographical scope of the study.

關於研究中性別樣本數落差，在避免性別刻板印象的情形下，是否也會對研究結果產生影響，須納入考慮。

- Additionally, given the asymmetry in gender distribution within the sample, the author might want to discuss whether this imbalance introduces potential response biases and how it might impact the generalizability of the findings.

# 研究建議二：名詞使用

## Suggestion 2

在文中的最後提及研究「聚焦於送餐機器人」，雖然屬於前文中服務型機器人中的其中一種，但似乎未與前文一致，且在問卷中的用詞可能影響填答者的判讀與回應。

→建議依照研究主旨，統一使用「送餐機器人」或「服務型機器人」，避免概念混淆或影響問卷的研究結果。

- The suggestion shift toward focusing specifically on "delivery robots," creating a minor discrepancy with the broader term "service robots" used initially.
- It is recommended to maintain terminological consistency (either "service robots" or "delivery robots") throughout the paper to prevent conceptual confusion and ensure that the questionnaire items align perfectly with the core research objective.



# Q & A Final Discussion

評論尾聲，是否還有師長或同學想向歐傑非提問或交流呢？

Any comments, questions, or insights from the professors and peers in the audience are most welcome.

THANK  
YOU