

# AI-assisted cross-cultural training for hotel newcomers: An IT mindfulness-driven perspective on building cultural intelligence and career development confidence

Yao-Chin Wang, Yuetian Zhang, Emily Ma, Lu Zhang, Yuan Zhang, Huan Ning, Jiang Huang, Su-Ying Pan

Department of Tourism, Hospitality and Event Management, University of Florida, Gainesville, FL, USA  
 Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau, PR China  
 School of Hospitality and Tourism Management, University of Surrey, Guildford, UK  
 The School of Hospitality Business, Michigan State University, East Lansing, MI, USA  
 Zhengzhou Tourism College, Zhengzhou, Henan, China  
 Zhejiang Commercial Technician Institute, Ningbo, Zhejiang, China  
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澳門科技大學  
 MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY



酒店與旅遊管理學院  
 Faculty of Hospitality and Tourism Management

## Introduction

During the COVID-19 pandemic, hospitality educators and HR managers adopted online platforms for training, a trend continuing post-pandemic due to labor shortages, cost savings, and alignment with tech-savvy younger generations (Docebo, 2024). **AI-assisted training platforms** have gained prominence, providing personalized learning, scenario simulations, 24/7 access, real-time coaching, and HR integration.

In hospitality, AI applications extend to cross-cultural training. **Cross-cultural service encounters** are crucial for international success, with **cultural intelligence (CQ)** the capability to function in diverse settings essential for serving multicultural customers. However, empirical studies on AI-assisted cross-cultural training in hospitality are scarce.

This research partners with Jorizon, an IT firm offering an English-based AI platform for Chinese hotel newcomers, featuring animated scenarios (e.g., dietary or religious accommodations) and AI-evaluated conversations.

Grounded in **broaden-and-build theory** (Fredrickson, 2001, 2013), it proposes an **IT mindfulness-driven model**. **IT mindfulness** conscious awareness and openness to technology fosters positive evaluations of the platform, broadening thought-action repertoires to build resources like CQ, **career adaptability**, and **career development confidence**.

Data from 484 newcomers showed IT mindfulness positively linked to training experiences, enhancing CQ, which boosted adaptability and confidence. As the first empirical study on such platforms in hospitality, it advances AI training literature and offers practical insights for platform refinement and adoption by hoteliers.

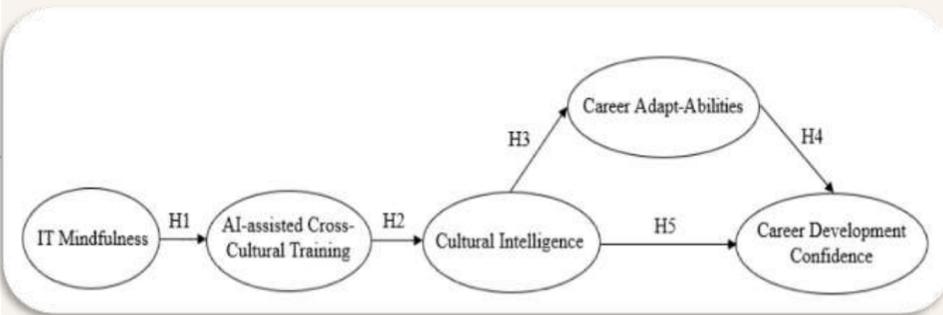


Figure 1. The proposed model

## Hypotheses

**H1:** Hotel newcomers' IT mindfulness is positively related to their experience evaluation on AI-assisted cross-cultural training.

**H2:** Hotel newcomers' experience evaluation on AI-assisted cross-cultural training is positively related to cultural intelligence.

**H3:** Hotel newcomers' cultural intelligence is positively related to their career adaptability.

**H4:** Hotel newcomers' career adaptability is positively related to their career development confidence.

**H5:** Hotel newcomers' cultural intelligence is positively related to their career development confidence.

## Method

### Method

The study employed an empirical quantitative approach using structural equation modeling (SEM). Key elements included confirmatory factor analysis (CFA) for model fit, reliability (composite reliability: 0.87-0.97; Cronbach's  $\alpha > 0.70$ ), and validity (average variance extracted  $> 0.50$ ). Data analysis used SPSS V.28 for cleaning and Mplus 7.2 for SEM with maximum likelihood estimation. Common method variance was checked via Harman's single-factor test (46.382% variance, no bias).

### Data Collection

An online survey in China via WenJuanXing targeted hotel newcomers on Jorizon's AI-assisted platform. Non-random convenience sampling from September 2023 to October 2024 yielded 707 responses; after exclusions, 484 valid responses remained. Expert panel ensured content validity; pilot test (n=20) confirmed readability. Participation was voluntary and anonymous for academic use.



Table 1. Sample Characteristics.

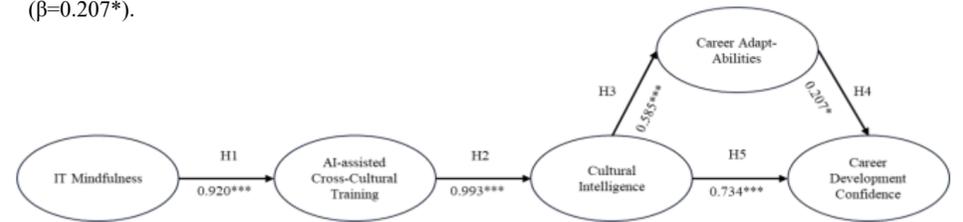
Descriptive statistics (n=484).			
Variable		Frequency	Percent
Age	16	122	25.2%
	17	53	11.0%
	18	59	12.2%
	19	106	21.9%
	20	107	22.1%
	21	26	5.4%
	22	4	0.8%
Gender	Male	153	31.6%
	Female	331	68.4%
How long you use Jorizon	Less than 3 months	448	92.6%
	3-6 months	17	3.5%
	Over 1 semester	19	3.9%
Do you consider yourself a person who likes new technology	Yes	174	36.0%
	No	310	64.0%
Learning preference	Natural	279	57.6%
	I have no preference	31	6.4%
	I prefer traditional classrooms	267	55.2%
	I prefer Jorizon	82	16.9%
		135	27.9%
<b>Total</b>		<b>484</b>	<b>100</b>

## Data Analysis

Data analysis employed SPSS V.28 for cleaning, yielding 484 valid responses. SEM via Mplus 7.2 and SPSS tested hypotheses: CFA confirmed reliability (CR: .87-.97,  $\alpha > .70$ ) and validity (AVE  $> .50$ ); maximum likelihood estimated relationships. CMV bias was absent.

## Results

The SEM results (n=484) confirmed good model fit ( $\chi^2/df=2.460$ , CFI=0.898, RMSEA=0.055). All hypotheses supported: IT mindfulness strongly predicts AI-assisted cross-cultural training ( $\beta=0.920***$ ); training enhances cultural intelligence ( $\beta=0.993***$ ); cultural intelligence boosts career adaptability ( $\beta=0.585***$ ) and confidence ( $\beta=0.734***$ ); adaptability increases confidence ( $\beta=0.207*$ ).



## Hypothesis testing results of the Structural Equation Model (n=484).

Hypotheses	Paths	Standardized Estimate	t-Values	P-Values	Decision
H1: ITM	→ CCT	0.920	16.067***	<0.001	Accept
H2: CCT	→ CQ	0.993	16.207***	<0.001	Accept
H3: CQ	→ CAA	0.585	10.769***	<0.001	Accept
H4: CAA	→ CDC	0.207	5.232*	<0.05	Accept
H5: CQ	→ CDC	0.734	14.264***	<0.001	Accept

Note: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ ;  $\chi^2/df = 2.460$ ,  $p = .000$ , CFI = .898, TLI = .894, NFI = .839, SRMR = .0473, RMSEA = .055

## Contributions

### Theoretical Contributions

- ◆ **Pioneering empirical study:** This is the first investigation of an AI-assisted cross-cultural training platform in hospitality, filling knowledge gaps on AI applications for employee development
- ◆ **IT mindfulness-driven model:** Introduces a framework based on broaden-and-build theory, demonstrating how IT mindfulness enhances training experiences, cultural intelligence, career adaptability, and development confidence.
- ◆ **Mechanisms of resource building:** Reveals pathways from positive emotions in training to enduring personal resources, advancing understanding of human-AI interactions in hospitality education.

### Managerial Implications

- ◆ **Guidance for technology firms:** Provides insights to refine AI platforms, emphasizing features like scenario simulations and real-time grading to boost user engagement and outcomes.
- ◆ **Benefits for hoteliers and HR managers:** Highlights advantages in training newcomers under labor shortages, including cost savings, personalized learning, and improved cross-cultural competencies.
- ◆ **Career development strategies:** Informs adoption of AI tools to foster employee confidence and adaptability, supporting talent retention in diverse hospitality environments.

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## Authors

**Yao-Chin Wang (First Author)**  
 Position: Assistant Professor in University of Florida  
 Email: [wang.yaochin@ufl.edu](mailto:wang.yaochin@ufl.edu)  
**Yuetian Zhang (Second Author and Corresponding Author)**  
 Email: [2109853dbt30001@student.must.edu.mo](mailto:2109853dbt30001@student.must.edu.mo)

**Student Name: Yuetian Zhang (張岳天)**  
**Program: Ph.D. in Tourism Management**  
**Email: [2109853dbt30001@student.must.edu.mo](mailto:2109853dbt30001@student.must.edu.mo)**

**Supervisor: Dr. Su-Ying Pan**  
**Email: [sypan@must.edu.mo](mailto:sypan@must.edu.mo)**